



Compilation of Henry's law constants (version 5.0.0) for water as solvent

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Abstract. Many atmospheric chemicals occur in the gas phase as well as in liquid cloud droplets and aerosol particles. Therefore, it is necessary to understand their distribution between the phases. According to Henry's law, the equilibrium ratio between the abundances in the gas phase and in the aqueous phase is constant for a dilute solution. Henry's law constants of trace gases of potential importance in environmental chemistry have been collected and converted into a uniform format. The compilation contains 46 434 values of Henry's law constants for 10 173 species, collected from 995 references. It is also available on the internet at <https://www.henrys-law.org> (last access: October 2023). This article is a living review that supersedes the now obsolete publication by Sander (2015).

1 Introduction

Henry's law is named after the English chemist William Henry, who studied the topic in the early 19th century. In his publication about the quantity of gases absorbed by water (Henry, 1803), he described the results of his experiments:

“[...] water takes up, of gas condensed by one, two, or more additional atmospheres, a quantity which, ordinarily compressed, would be equal to twice, thrice, &c. the volume absorbed under the common pressure of the atmosphere.”

In other words, the amount of dissolved gas is proportional to its partial pressure in the gas phase. The proportionality factor is called a Henry's law constant. In atmospheric chemistry, these constants are needed to describe the exchange of trace species between the air and liquid cloud droplets, aerosol particles, oceans, and other bodies of water. In other areas of environmental research, the constants are needed to calculate the vaporization of contaminants, e.g., from rivers and during waste water treatment (e.g., Shen, 1982; Hawthorne et al., 1985; David et al., 2000).

Section 2 provides theoretical background about Henry's law and commonly used quantities and units. In Sect. 3, the compilation of Henry's law constants is described in de-

tail. Additional information can be found in the Supplement, which is described in Sect. 4.

This article is a living review describing version 5.0.0. Compared to the now obsolete version 4.0 (Sander, 2015), the compilation contains 29 084 additional values of Henry's law constants for 5541 additional species, collected from 306 additional references. In cases where experimental data are available for a large temperature range, the values were re-fitted to a three-parameter equation in addition to the two-parameter fits that were used previously. The symbols of the Henry's law constants have been adjusted in order to follow the new recommendations of the International Union of Pure and Applied Chemistry (IUPAC) by Sander et al. (2022). In addition to the CAS registry numbers, chemical species are now also identified by their InChIKeys (Heller et al., 2015).

2 Theoretical background

2.1 Fundamental types of Henry's law constants

There are many variants of Henry's law constants which can all be classified into two fundamental types: one possibility is to put the aqueous phase into the numerator and the gas phase into the denominator, i.e., define the constant as the quotient A/G . Here, A and G are quantities describing the equilib-

Table 1. Variants of Henry's law constants H .

Symbol	Definition ^a	SI unit	Other commonly used (non-SI) units ^b	Conversion ^c from H_s^{cp}
Henry's law solubility constants H_s				
H_s^{cp}	c_a/p	$\text{mol m}^{-3} \text{Pa}^{-1}$	M atm^{-1}	
H_s^{xp}	x/p	Pa^{-1}	atm^{-1}	$H_s^{xp} = H_s^{cp} \times M_{\text{H}_2\text{O}}/\rho_{\text{H}_2\text{O}}$
H_s^{bp}	b/p	$\text{mol kg}^{-1} \text{Pa}^{-1}$	$\text{mol kg}^{-1} \text{atm}^{-1}$	$H_s^{bp} = H_s^{cp}/\rho_{\text{H}_2\text{O}}$
H_s^{cc}	c_a/c_g	1 (dimensionless)		$H_s^{cc} = H_s^{cp} \times RT$
Henry's law volatility constants H_v				
H_v^{pc}	p/c_a	$\text{Pa m}^3 \text{mol}^{-1}$	$\text{atm m}^3 \text{mol}^{-1}$	$H_v^{pc} = 1/H_s^{cp}$
H_v^{px}	p/x	Pa	atm	$H_v^{px} = (\rho_{\text{H}_2\text{O}}/M_{\text{H}_2\text{O}})/H_s^{cp}$
H_v^{pw}	p/w	Pa	atm	$H_v^{pw} = (\rho_{\text{H}_2\text{O}}/M_B)/H_s^{cp}$
H_v^{cc}	c_g/c_a	1 (dimensionless)		$H_v^{cc} = 1/(H_s^{cp} \times RT)$

^a The definitions apply only at equilibrium and in the limit of infinite dilution.

^b Here, $\text{M} = \text{mol L}^{-1}$ and $\text{atm} = 101\,325 \text{ Pa}$.

^c Here, $M_{\text{H}_2\text{O}}$ and $\rho_{\text{H}_2\text{O}}$ are the molar mass and density of water, respectively. M_B is the molar mass of the solute. The simplified conversion formulas are valid only for binary solutions and ideal gases. More conversion formulas can be found in Table 2 of Sander et al. (2022).

rium composition (at infinite dilution) of the aqueous phase and the gas phase, respectively. Alternatively, the Henry's law constant can be defined as the quotient G/A , which results in the inverse value. There is no advantage or disadvantage in using one or the other; the two types exist purely for historical reasons. Unfortunately, the name "Henry's law constant" is used for both types. Therefore, expressions like "a large Henry's law constant" are meaningless unless the type is specified. Especially the dimensionless constants are very error-prone because their type cannot be deduced from the unit. In order to have a consistent terminology, the name "Henry's law solubility constant" (or "Henry solubility" for conciseness) should be used when referring to A/G . When referring to G/A , the name "Henry's law volatility constant" (or "Henry volatility") should be used.

2.2 Variants of Henry's law constants

For both of the fundamental types described in the previous section, there are several variants. This results from the multiplicity of quantities that can be chosen to describe the composition of the two phases. Typical choices for the aqueous phase are molar concentration (c_a), molality (b), and amount fraction (x). For the gas phase, molar concentration (c_g) and partial pressure (p) are often used. Note, however, that it is not possible to use the gas-phase amount fraction (y). At a given gas-phase amount fraction, the aqueous-phase concentration c_a depends on the total pressure, and thus the ratio y/c_a is not a constant.

There are numerous combinations of these quantities. The eight variants recommended by IUPAC are summarized in Table 1. Numerical values of conversion factors between them are shown in Tables 2, 3, and 4.

2.3 Symbols

In the current literature, a plethora of different symbols is used for Henry's law constants. Several symbols are used for the same variant, and sometimes the same symbol is used for different variants. However, for this work a consistent terminology is indispensable. Here, the IUPAC recommendations by Sander et al. (2022) are used: for Henry's law solubility constants, the symbol H_s is used, and for Henry's law volatility constants, the symbol H_v is used.

To specify the exact variant of the Henry's law constant, two superscripts are used. They refer to the numerator and the denominator of the definition. For example, H_s^{cp} refers to the Henry solubility defined as c/p . If H_s refers to the reference temperature $T^\ominus = 298.15 \text{ K}$, it will be denoted as H_s^\ominus . A summary of the symbols is shown in Table 5.

2.4 Temperature dependence of Henry's law constants

In spite of the name Henry's law *constant*, it should be kept in mind that its value still depends on some parameters, e.g., the temperature T . The temperature dependence of equilibrium constants can be described with the van't Hoff equation, which also applies to Henry's law:

$$\frac{d \ln H_s}{d(1/T)} = \frac{-\Delta_{\text{sol}} H}{R}, \quad (1)$$

where $\Delta_{\text{sol}} H$ is the enthalpy of dissolution, and R is the gas constant. Note that the letter H in the symbol $\Delta_{\text{sol}} H$ refers to enthalpy and is not related to the letter H for Henry's law constants. Integrating the above equation leads to

$$\ln H_s = \frac{-\Delta_{\text{sol}} H}{R} \frac{1}{T} + \text{const.} \quad (2)$$

Table 2. Conversion factors between several Henry's law solubility constants H_s (at $T^\ominus = 298.15$ K and $\rho^\ominus = 997$ kg m $^{-3}$). For example, the second table entry indicates that $H_s^{cp} = 1$ mol m $^{-3}$ Pa $^{-1} \Leftrightarrow H_s^{cp} = 101.325$ M atm $^{-1}$.

	$H_s^{cp} = \dots \frac{\text{mol}}{\text{m}^3 \text{Pa}}$	$H_s^{cp} = \dots \frac{\text{M}}{\text{atm}}$	$H_s^{cc} = \dots$	$H_s^{bp} = \dots \frac{\text{mol}}{\text{kg Pa}}$	$H_s^{bp} = \dots \frac{\text{mol}}{\text{kg atm}}$	$H_s^{xp} = \dots \frac{1}{\text{atm}}$	$\alpha = \dots$
$H_s^{cp} = 1 \frac{\text{mol}}{\text{m}^3 \text{Pa}}$	1.00000	101.325	2478.96	1.00301×10^{-3}	101.630	1.83089	2271.10
$H_s^{cp} = 1 \frac{\text{M}}{\text{atm}}$	9.86923×10^{-3}	1.00000	24.4654	9.89893×10^{-6}	1.00301	0.0180695	22.4140
$H_s^{cc} = 1$	4.03395×10^{-4}	0.0408740	1.00000	4.04609×10^{-7}	0.0409970	7.38573×10^{-4}	0.916150
$H_s^{bp} = 1 \frac{\text{mol}}{\text{kg Pa}}$	997.000	1.01021×10^5	2.47152×10^6	1.00000	1.01325×10^5	1825.40	2.26428×10^6
$H_s^{bp} = 1 \frac{\text{mol}}{\text{kg atm}}$	9.83962×10^{-3}	0.997000	24.3920	9.86923×10^{-6}	1.00000	0.0180153	22.3467
$H_s^{xp} = 1 \frac{1}{\text{atm}}$	0.546182	55.3419	1353.96	5.47826×10^{-4}	55.5084	1.00000	1240.43
$\alpha = 1$	4.40316×10^{-4}	0.0446150	1.09152	4.41641×10^{-7}	0.0447493	8.06171×10^{-4}	1.00000

Table 3. Conversion factors between several Henry's law volatility constants H_v (at $T^\ominus = 298.15$ K and $\rho^\ominus = 997$ kg m $^{-3}$). For example, the second table entry indicates that $H_v^{px} = 1$ atm $\Leftrightarrow H_v^{pc} = 1.83089$ m 3 Pa mol $^{-1}$.

	$H_v^{px} = \dots \text{atm}$	$H_v^{pc} = \dots \frac{\text{m}^3 \text{Pa}}{\text{mol}}$	$H_v^{pc} = \dots \frac{\text{m}^3 \text{atm}}{\text{mol}}$	$H_v^{cc} = \dots$
$H_v^{px} = 1 \text{ atm}$	1.00000	1.83089	1.80695×10^{-5}	7.38573×10^{-4}
$H_v^{pc} = 1 \frac{\text{m}^3 \text{Pa}}{\text{mol}}$	0.546182	1.00000	9.86923×10^{-6}	4.03395×10^{-4}
$H_v^{pc} = 1 \frac{\text{m}^3 \text{atm}}{\text{mol}}$	55341.9	1.01325×10^5	1.00000	40.8740
$H_v^{cc} = 1$	1353.96	2478.96	0.0244654	1.00000

Table 4. Products of Henry's law solubility constants H_s and Henry's law volatility constants H_v (at $T^\ominus = 298.15$ K and $\rho^\ominus = 997$ kg m $^{-3}$). For example, if $H_v^{px} = 5$ atm, then $H_s^{bp} \approx 11$ mol kg $^{-1}$ atm $^{-1}$ because $5 \times 11 \approx 55.5084$.

	$\frac{H_s^{cp}}{\text{mol m}^{-3} \text{Pa}^{-1}}$	$\frac{H_s^{cp}}{\text{M atm}^{-1}}$	$\frac{H_s^{cc}}{1}$	$\frac{H_s^{bp}}{\text{mol kg}^{-1} \text{Pa}^{-1}}$	$\frac{H_s^{bp}}{\text{mol kg}^{-1} \text{atm}^{-1}}$	$\frac{H_s^{xp}}{\text{atm}^{-1}}$	$\frac{\alpha}{1}$
$\frac{H_v^{px}}{\text{atm}}$	0.546182	55.3419	1353.96	5.47826×10^{-4}	55.5084	1.00000	1240.43
$\frac{H_v^{pc}}{\text{m}^3 \text{Pa mol}^{-1}}$	1.00000	101.325	2478.96	1.00301×10^{-3}	101.630	1.83089	2271.10
$\frac{H_v^{pc}}{\text{m}^3 \text{atm mol}^{-1}}$	9.86923×10^{-6}	1.00000×10^{-3}	0.0244654	9.89893×10^{-9}	1.00301×10^{-3}	1.80695×10^{-5}	0.0224140
$\frac{H_v^{cc}}{1}$	4.03395×10^{-4}	0.0408740	1.00000	4.04609×10^{-7}	0.0409970	7.38573×10^{-4}	0.916150

Table 5. List of symbols.

Symbol	Quantity	SI unit*
ρ	density	kg m ⁻³
A	parameter for the temperature dependence of H_s	1
b	molality	mol kg ⁻¹
B	parameter for the temperature dependence of H_s	K
C	parameter for the temperature dependence of H_s	1
c_a	aqueous-phase concentration	mol m ⁻³
c_g	gas-phase concentration	mol m ⁻³
D	parameter for the temperature dependence of H_s	K ⁻¹
$\Delta_{\text{sol}}G$	free energy of dissolution	J mol ⁻¹
$\Delta_{\text{sol}}H$	molar enthalpy of dissolution	J mol ⁻¹
H_s	Henry solubility (all variants)	miscellaneous
H_s^\ominus	Henry solubility at the reference temperature T^\ominus	miscellaneous
H_s^{bp}	Henry solubility (defined as b/p)	mol kg ⁻¹ Pa ⁻¹
H_s^{cc}	Henry solubility (defined as c/c)	1
H_s^{cp}	Henry solubility (defined as c/p)	mol m ⁻³ Pa ⁻¹
$H_{s,\text{eff}}$	effective Henry solubility	miscellaneous
H_s'	$H_s \times K_A$ (for strong acids)	miscellaneous
H_v	Henry volatility (all variants)	miscellaneous
H_v^\ominus	Henry volatility at the reference temperature T^\ominus	miscellaneous
H_v^{cc}	Henry volatility (defined as c/c)	1
H_v^{pc}	Henry volatility (defined as p/c)	Pa m ³ mol ⁻¹
H_v^{px}	Henry volatility (defined as p/x)	Pa
K_A	acid constant	mol m ⁻³
K_s	Sechenov parameter	miscellaneous
M	molar mass	kg mol ⁻¹
p	partial pressure = $c_g RT$	Pa
p_{sat}	saturation vapor pressure of water	Pa
p_{tot}	total pressure (solute + water)	Pa
R	gas constant	8.314 J mol ⁻¹ K ⁻¹
T	temperature	K
T^\ominus	reference temperature	298.15 K
w	mass fraction in the aqueous phase	kg kg ⁻¹ (dimensionless)
x	amount fraction (molar mixing ratio) in the aqueous phase	mol mol ⁻¹ (dimensionless)
y	amount fraction (molar mixing ratio) in the gas phase	mol mol ⁻¹ (dimensionless)

* A unit of "1" denotes a quantity of dimension 1, commonly called "dimensionless quantity".

Calling the constant of integration A , and defining the parameter $B = -\Delta_{\text{sol}}H/R$, we get

$$\ln H_s = A + \frac{B}{T} \quad (3)$$

or

$$H_s = \exp(A) \times \exp\left(\frac{B}{T}\right). \quad (4)$$

To determine the parameters A and B experimentally, Henry's law constants are measured at several temperatures, and the method of least squares is used to fit the points to a function. Note that functions (3) and (4) produce slightly different fit parameters because the logarithmic function (3) puts less weight on errors of large Henry's law constants than

the linear function (4) does. In this work, linear regression is performed using Eq. (3).

Thermodynamic data are often available at the temperature $T^\ominus = 298.15$ K. To present Henry's law constants at T^\ominus and also show their temperature dependence, an alternative form of Eq. (4) can be used:

$$H_s = H_s^\ominus \times \exp\left(B\left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right). \quad (5)$$

where $H_s^\ominus = \exp(A) \times \exp(B/T^\ominus)$. The enthalpy of dissolution $\Delta_{\text{sol}}H$ is independent of temperature here:

$$\frac{-\Delta_{\text{sol}}H}{R} = \frac{d \ln H_s}{d(1/T)} = B. \quad (6)$$

In this work, the values H_s^\ominus and $d \ln H_s / d(1/T)$ are tabulated.

Table 6. Temperature-dependent terms and their analytical derivatives. Here, C , C_1 , and C_2 are the empirical fit parameters defining $\ln H_s$. See Sect. 2.4 for details.

$\ln H_s$	$\frac{d \ln H_s}{d(1/T)}$
C	0
C/T	C
CT	$-CT^2$
CT^2	$-2CT^3$
C/T^2	$2C/T$
C/T^3	$3C/T^2$
$C \ln(T)$	$-CT$
$C_1 \ln(C_2 T)$	$-C_1 T$ (independent of C_2)
$C \log_{10}(T)$	$-CT/\ln(10)$

A simple equation based on the two parameters A and B is valid only for a limited temperature range, in which the enthalpy of dissolution $\Delta_{\text{sol}}H$ can be considered constant. To accommodate a larger temperature range, a third parameter C is often added:

$$\ln H_s = A + \frac{B}{T} + C \times \ln T. \quad (7)$$

Here, the fit parameters A and B are different from those calculated for function (3). The enthalpy of dissolution $\Delta_{\text{sol}}H$ changes linearly with temperature in the three-parameter fit:

$$\frac{-\Delta_{\text{sol}}H}{R} = \frac{d \ln H_s}{d(1/T)} = B - CT. \quad (8)$$

To cover an even larger temperature range with an empirical formula, the dependence of $\ln H_s$ on T can be expressed as the sum of several terms. For example, Wilhelm et al. (1977) used the following formula:

$$\ln H_s = A + B \times T^{-1} + C \times \ln T + D \times T. \quad (9)$$

The analytical derivative is simply the sum of the derivatives of the individual terms. Using the derivatives from Table 6, the temperature dependence of this expression can be calculated as

$$\frac{d \ln H_s}{d(1/T)} = 0 + B - C \times T - D \times T^2. \quad (10)$$

When reporting Henry's law constants as such a function, it is important to present sufficient significant digits because H_s depends exponentially on the parameters.

Note that the temperature dependences for H_s^{cp} and H_s^{cc} are different since the conversion factor between them in-

cludes the temperature:

$$\begin{aligned} H_s^{cp} &= H_s^{cc} / (RT) \\ \Leftrightarrow \ln H_s^{cp} &= \ln H_s^{cc} + \ln(1/R) + \ln(1/T) \\ \Rightarrow \frac{d \ln H_s^{cp}}{d(1/T)} &= \frac{d \ln H_s^{cc}}{d(1/T)} + \frac{d \ln(1/T)}{d(1/T)} \\ &= \frac{d \ln H_s^{cc}}{d(1/T)} + T. \end{aligned} \quad (11)$$

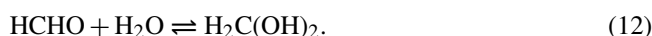
2.5 Effective Henry's law solubility constants $H_{s,\text{eff}}$

The Henry's law constants mentioned so far describe the equilibrium between a chemical species in the gas phase and exactly the same species in the aqueous phase. This type is called the "intrinsic" Henry's law constant.

Once transferred, some species react in the aqueous phase. If these chemical reactions are fast and result in irreversible destruction, Henry's law cannot be applied. If, however, the species enters a fast equilibrium in the aqueous phase, it is possible to define an "effective" Henry's law constant $H_{s,\text{eff}}$, using a "total concentration" c_{tot} . Depending on the chemical class, there are different ways to define such a total concentration.

2.5.1 $H_{s,\text{eff}}$ for aldehydes

Aldehydes can be hydrated, forming geminal diols. For example, methanal (HCHO) is almost completely hydrated in aqueous solution:



The total concentration of dissolved methanal is

$$c_{\text{tot}} = c(\text{HCHO}) + c(\text{H}_2\text{C}(\text{OH})_2). \quad (13)$$

The intrinsic Henry's law solubility constant of HCHO is

$$H_s = \frac{c(\text{HCHO})}{p(\text{HCHO})}. \quad (14)$$

In contrast, the effective Henry's law constant $H_{s,\text{eff}}$ is defined as

$$H_{s,\text{eff}} = \frac{c_{\text{tot}}}{p(\text{HCHO})} = \frac{c(\text{HCHO}) + c(\text{H}_2\text{C}(\text{OH})_2)}{p(\text{HCHO})}. \quad (15)$$

2.5.2 $H_{s,\text{eff}}$ for acids and bases

Acids and bases undergo ionic dissociation upon dissolution, e.g.,



Defining the total concentration c_{tot} as

$$c_{\text{tot}} = c(\text{HCl}) + c(\text{Cl}^-), \quad (17)$$

the effective Henry's law constant is

$$H_{s,\text{eff}} = \frac{c_{\text{tot}}}{p(\text{HCl})} = \frac{c(\text{HCl}) + c(\text{Cl}^-)}{p(\text{HCl})}. \quad (18)$$

Considering the acidity constant

$$K_a = \frac{c(\text{H}^+)c(\text{Cl}^-)}{c(\text{HCl})}, \quad (19)$$

the relation between the intrinsic and the effective Henry's law constant for HCl can be written as

$$H_{s,\text{eff}} = H_s \times \left(1 + \frac{K_a}{c(\text{H}^+)}\right). \quad (20)$$

Since the factor on the right-hand side contains $c(\text{H}^+)$, the conversion between the intrinsic and the effective Henry's law constant is pH-dependent. Thus, effective Henry's law constants of acids and bases are not material constants but depend on solution pH. Proportionality between $p(\text{HCl})$ and c_{tot} is restricted to conditions under which the uptake of gaseous HCl does not affect the acidity of the solution.

In order to obtain a pH-independent constant, the product of the intrinsic Henry's law constant H_s^{cp} and the acidity constant K_a is often used for HCl and other strong acids:

$$H'_s = H_s^{cp} \times K_a = \frac{c(\text{H}^+) \times c(\text{Cl}^-)}{p(\text{HCl})}. \quad (21)$$

Although H'_s is usually also called a Henry's law constant, it should be noted that it is a different quantity, and it has different units than H_s^{cp} .

2.5.3 $H_{s,\text{eff}}$ for halogens

In the aqueous phase, halogens are in equilibrium with their hypohalous acids, e.g.,



The equilibrium constant is

$$K = \frac{c(\text{HOCl})c(\text{H}^+)c(\text{Cl}^-)}{c(\text{Cl}_2)}. \quad (23)$$

Since the sum of Cl_2 and HOCl is not affected by this equilibrium, a "total chlorine concentration" c_{tot} can be defined as

$$c_{\text{tot}} = c(\text{Cl}_2) + c(\text{HOCl}). \quad (24)$$

Using c_{tot} , it is formally possible to define an effective Henry's law constant as

$$H_{s,\text{eff}} = \frac{c_{\text{tot}}}{p(\text{Cl}_2)} = \frac{c(\text{Cl}_2) + c(\text{HOCl})}{p(\text{Cl}_2)}. \quad (25)$$

However, this definition is problematic because it does not work at infinite dilution. With decreasing Cl_2 concentration,

the equilibrium in Eq. (22) will shift to the right (Le Chatelier's principle), i.e., $c(\text{HOCl}) \gg c(\text{Cl}_2)$, and the effective Henry's law solubility constant goes to infinity (see, e.g., Fig. 2 in Jones, 1911 or Fig. A1 in Lin and Pehkonen, 1998). Therefore, the intrinsic Henry's law constant should be used for halogens, and the term "effective Henry's law constant" should be avoided here.

Instead of extrapolating to infinite dilution, the total chlorine solubility is sometimes reported at the fixed partial pressure of $p(\text{Cl}_2) = 101\,325\text{ Pa}$. However, even in the vicinity of $101\,325\text{ Pa}$, the total chlorine concentration c_{tot} is not proportional to $p(\text{Cl}_2)$.

In order to convert experimentally determined chlorine solubilities to the intrinsic constant $H_s(\text{Cl}_2)$, additional processes may have to be considered, e.g., aqueous-phase diffusion (Brian et al., 1962; Leaist, 1986) and the formation of chlorine hydrates (Adams and Edmonds, 1937; Young, 1983).

2.6 Dependence of Henry's law constants on the composition of the solution

Values of Henry's law constants for aqueous solutions depend on the composition of the solution, i.e., on its ionic strength and on dissolved organics. In general, the solubility of a gas decreases with increasing salinity ("salting out"). However, a "salting in" effect has also been observed, e.g., for the effective Henry's law constant of glyoxal (Kampf et al., 2013; Kurtén et al., 2015). The effect can be described with the Sechenov equation (Setschenow, 1889). Note that the scientific transliteration from Cyrillic is "Sechenov", but the original article was written in German and used the German transliteration "Setschenow". There are many alternative ways to define the Sechenov equation, depending on how the aqueous-phase composition is described (based on concentration, molality, or amount fraction) and which variant of the Henry's law constant is used. Describing the solution in terms of molality is preferred because molality is invariant to temperature and to the addition of dry salt to the solution (see Sander, 1999 for details). Thus, the Sechenov equation can be written as

$$\log_{10} \left(\frac{H_{s0}^{bp}}{H_s^{bp}} \right) = K_s \times b(\text{salt}), \quad (26)$$

where H_{s0}^{bp} is Henry's law constant in pure water, H_s^{bp} is Henry's law constant in the salt solution, K_s is the molality-based Sechenov parameter for a given salt, and $b(\text{salt})$ is the molality of the salt. For mixed electrolyte solutions with more than one salt, an extension of the Sechenov equation developed by Schumpe (1993) and Weisenberger and Schumpe (1996) can be used. Sechenov parameters are not suitable for systems in which a species reacts irreversibly with the salt (e.g., $\text{N}_2\text{O}_5 + \text{Cl}^-$).

Since the atmosphere contains very dilute cloud droplets as well as highly concentrated aerosols, adequate values of Henry's law constants should be used. Unfortunately, Sechenov parameters are unknown for many species.

3 Values of Henry's law constants

3.1 The data compilation

The compilation of Henry's law constants is presented in the Appendix, and it is also available online at <https://www.henrys-law.org> (last access: October 2023). It contains Henry's law constants for inorganic and organic species of potential importance in environmental chemistry. Most data were measured at ambient conditions (around 298 K and 1 atm). Data at high temperatures are excluded or (if possible) extrapolated to $T^\ominus = 298.15$ K. The data refer to aqueous solutions; octanol and other solvents are not considered. The constants refer to pure water as solvent unless noted otherwise (e.g., sea water).

All Henry's law constants have been converted to a uniform format: H_s^{cp} with the unit $\text{mol m}^{-3} \text{Pa}^{-1}$. In cases where the conversion involves the temperature-dependent density of water, the parameterization by Bettin and Spieweck (1990) was used to calculate $\rho_{\text{H}_2\text{O}}$ at the temperature T . The temperature-dependent vapor pressure of water p_{sat} was calculated using the parameterization by Buck (1981).

Inorganic substances are sorted according to the elements they contain. The order chosen is O, H, N, F, Cl, Br, I, S, rare gases, and others. Compounds with several of these elements are put into the last of the applicable sections. For example, nitryl chloride, which contains O, N, and Cl, is listed in the Cl section. Carbon-containing compounds (including CO and CO₂) are sorted somewhat arbitrarily by increasing chain length and complexity. Heteroatoms (O, N, F, Cl, Br, I, S, P, etc.) are sorted in the same order as for inorganic compounds. The table contains the following groups of species:

Inorganic species	10911
Oxygen (O)	10911
Hydrogen (H)	10913
Nitrogen (N)	10915
Fluorine (F)	10920
Chlorine (Cl)	10921
Bromine (Br)	10924
Iodine (I)	10926
Sulfur (S)	10928
Rare gases (He, Ne, Ar, Kr, Xe, Rn)	10931
Other elements (B, Se, P, As, Hg)	10934
Hydrocarbons (C, H)	10936
Alkanes	10936
Cycloalkanes	11040
Aliphatic alkenes and cycloalkenes	11062

Aliphatic alkynes	11103
Mononuclear aromatics	11114
Terpenes and terpenoids	11154
Polynuclear aromatics	11160

Organic species with oxygen (O)	11190
Carbon oxides	11190
Alcohols (ROH)	11192
Polyols (R(OH) _n)	11277
Peroxides (ROOH) and peroxy radicals (ROO)	11294
Aldehydes (RCHO)	11323
Ketones (RCOR)	11358
Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH)	11457
Esters (RCOOR)	11490
Ethers (ROR)	11564
Heterocycles with oxygen	11600
Oxidized terpenoids	11609
Miscellaneous	11611

Organic species with nitrogen (N)	11640
Amines (C, H, N)	11640
Heterocycles with nitrogen (C, H, N)	11676
Nitriles (C, H, N)	11694
Amines, amides, amino acids (C, H, O, N)	11701
Heterocycles with oxygen and nitrogen (C, H, O, N)	11730
Nitrates (RONO ₂)	11750
Nitriles with oxygen (C, H, O, N)	11835
Nitro compounds (RNO ₂)	11837

Organic species with fluorine (F)	11868
Organic fluorine	11868

Organic species with chlorine (Cl)	11904
Chlorocarbons (C, H, Cl)	11904
Polychlorinated naphthalenes (PCNs)	11973
Polychlorinated biphenyls (PCBs)	11980
Oxygenated chlorocarbons (C, H, O, Cl)	12036
Polychlorinated diphenyl ethers (PCDEs)	12071
Polychlorinated dibenzofuranes (PCDFs)	12087
Polychlorinated dibenzo- <i>p</i> -dioxins (PCDDs)	12105
Chlorocarbons with nitrogen (C, H, O, N, Cl)	12118
Chlorofluorocarbons (C, H, O, N, F, Cl)	12158

Organic species with bromine (Br)	12178
Bromocarbons (C, H, O, N, Br)	12178
Polychlorinated diphenyl ethers (PBDEs)	12205
Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br)	12240

Organic species with iodine (I)	12253
Iodocarbons (C, H, O, Cl, I)	12253

Organic species with sulfur (S)	12262
Sulfur (C, H, O, N, Cl, S)	12262

Organic species with phosphorus (P)	12333
Phosphorus (C, H, O, N, Cl, Br, S, P)	12333
Organic species with other elements	12357
Sodium (Na)	12357
Aluminum (Al)	12359
Silicon (Si)	12360
Calcium (Ca)	12368
Zinc (Zn)	12369
Arsenic (Sn)	12370
Selenium (Se)	12372
Tin (Sn)	12373
Mercury (Hg)	12374
Lead (Pb)	12377

The first column of the table shows the systematic name, the chemical formula, trivial names (if any), the CAS registry number (in square brackets), and the InChIKey.

The column labeled " H_s^{cp} " contains Henry's law solubility constants at the reference temperature $T^\ominus = 298.15$ K. Values are rounded to two significant digits and given in the unit $\text{mol m}^{-3} \text{Pa}^{-1}$.

The column labeled " $d \ln H_s/d(1/T)$ " contains the temperature dependence of the Henry solubility as defined in Eq. (5), rounded to two significant digits and given in the unit K. If the term $\Delta_{\text{sol}}H$ is temperature-dependent, the value of $d \ln H_s/d(1/T)$ is calculated at $T^\ominus = 298.15$ K. If a three-parameter fit according to Eq. (7) allows the parameterization over a larger temperature range, it is presented in the notes.

For each table entry, the column labeled "type" denotes how the Henry's law constant was obtained in the given reference. Literature reviews are usually most reliable, followed by original publications of experimental determinations of H_s . Other data have to be treated more carefully. The types listed here are roughly ordered by decreasing reliability. Note, however, that recent measurements which are newer than the latest review article should always be considered.

- “L” The cited paper is a *literature* review.
- “M” The cited paper presents the original *measurements*.
- “V” The *vapor* pressure of the pure substance was divided by its aqueous solubility (sometimes called the “VP/AS” method).
- “R” The cited paper presents a *recalculation* of previously published material (e.g. extrapolation to a different temperature or concentration range).
- “T” The value was obtained from a *thermodynamical* calculation ($\Delta_{\text{sol}}G = -RT \ln H$; see Sander, 1999 for details).
- “X” The original paper was not available for this study. The data listed here were found in a secondary source.

“C” The paper is a *citation* of a reference which I could not obtain (personal communication, PhD theses, grey literature).

“Q” The value was calculated using a “*quantitative* structure–property relationship” (QSPR) or a similar theoretical method.

“E” The value is an *estimate*. Estimates are listed only if no reliable data are available.

“?” The cited paper does not clearly state how the value was obtained.

“W” The value is probably *wrong*. It is not listed in the table, in order to avoid spreading of erroneous data. More information can be found in the notes.

In some cases there might be good agreement between different authors. However, if the original work they refer to is not known, one has to be careful when evaluating the reliability. It is possible that they were recalculating data from the same source. The similarity in that case would not be due to independent investigations.

The table entries in the pdf of this document are hyperlinked to endnotes with additional information. Symbols and acronyms used here refer to those in the original publications.

The CAS numbers in the tables are hyperlinked to the NIST Chemistry WebBook.

3.2 Further sources of information

3.2.1 Review articles

Several reviews about Henry's law have been published, starting with Markham and Kobe (1941) up to more recent publications such as Wilhelm et al. (1977), Mackay and Shiu (1981), Staudinger and Roberts (1996), Staudinger and Roberts (2001), Fogg and Sangster (2003), and Burkholder et al. (2019). Practical guidance on the use of Henry's law has been published by Smith and Harvey (2007).

Experimental methods to obtain Henry's law constants as well as indirect (theoretical) methods have been described and compared by several authors. Only a brief summary of some articles is given here. For details, the reader is referred to the original publications:

- Battino and Clever (1966) – miscellaneous methods, partially of historical interest;
- Betterton (1992) – head-space method, bubble column method, thermodynamic cycles, calculation from vapor pressure and solubility, linear correlations;
- Turner et al. (1996) – static methods, mechanical recirculation methods, separate measurement of solubility and pure species vapor pressure, ebulliometry, perturbation chromatography;

- Staudinger and Roberts (1996) – batch air stripping, concurrent flow technique, Equilibrium Partitioning in Closed Systems (EPICS), calculation via quantitative property–property relationships (QPPRs), quantitative structure–property relationships (QSPRs), UNiversal quasichemical Functional group Activity Coefficients (UNIFAC);
- Brennan et al. (1998) – comparison of predictive methods;
- Sander (1999) – QPPR, QSPR, thermodynamic calculations;
- Fogg and Sangster (2003) – miscellaneous methods;
- Dupeux et al. (2022) – QSPR.

3.2.2 Internet

On the internet, several pages provide Henry's law constants, e.g., the following:

- the PubChem database at <https://pubchem.ncbi.nlm.nih.gov> (last access: 16 September 2023)
- the NIST Chemistry WebBook at <https://webbook.nist.gov/chemistry> (last access: 16 September 2023)
- the ChemSpider database at <https://www.chemspider.com> (last access: 16 September 2023)
- the Generator for Explicit Chemistry and Kinetics of Organics in the Atmosphere (GECKO-A), which provides Henry's law constants on the basis of experimental data and structure–activity relationships, at https://geckoa.lisa.u-pec.fr/generateur_form.php (last access: 16 September 2023)
- the Pesticide Properties Database (PPD) at <https://www.ars.usda.gov/Services/docs.htm?docid=14199> (last access: 16 September 2023)
- HENRYWIN, a program to calculate Henry's law constants, at <https://www.epa.gov/tsca-screening-tools/epi-suitetm-estimation-program-interface> (last access: 16 September 2023)
- vapor–liquid equilibrium data (mostly at elevated temperatures) from the Dortmund Data Bank at <http://www.ddbst.com/en/EED/VLE/VLEindex.php> (last access: 16 September 2023)
- EPI Suite estimates from the Arctic Monitoring and Assessment Programme (AMAP) database at <https://chemicals.amap.no/about> (last access: 16 September 2023).

3.2.3 Vapor–liquid equilibrium data

Henry's law constants can be obtained from vapor–liquid equilibrium (VLE) data. For example, consider a binary mixture that consists of a solute dissolved in water. The total pressure p_{tot} over the solution is the sum of the partial pressures of the components. The partial pressure of the solute can be defined via Henry's law, and the partial pressure of the water can be defined via Raoult's law:

$$\begin{aligned} p_{\text{tot}} &= p_{\text{solute}} + p_{\text{water}} \\ &= x H_{\text{V}}^{px} + (1-x) p_{\text{sat}} \\ &= x(H_{\text{V}}^{px} - p_{\text{sat}}) + p_{\text{sat}} \end{aligned} \quad (27)$$

where p_{sat} is the saturation vapor pressure of water. If VLE data with the total pressure at several small solute fractions x are available, the derivative dp_{tot}/dx (i.e., the slope of a plot p_{tot} vs x) can be used to obtain the Henry's law constant:

$$\frac{dp_{\text{tot}}}{dx} = H_{\text{V}}^{px} - p_{\text{sat}} \Rightarrow H_{\text{V}}^{px} = \frac{dp_{\text{tot}}}{dx} + p_{\text{sat}}. \quad (28)$$

4 The electronic supplement

The Supplement contains several files with additional information about the compiled Henry's law constants. It includes a README file with a detailed description. Here, only a short summary is given:

- The files `henry_*.f90` contain the Fortran 90 code that was used to convert the values from the original publications to the uniform format H_{s}^{cp} with the unit $\text{mol m}^{-3} \text{Pa}^{-1}$. The code and the comments in the code can be used to double-check that the conversion was done correctly.
- If the original publications contain measurements at different temperatures, the code often contains all individual data points, not just the regression line that was used to calculate the temperature dependence. In addition, the Supplement contains data files with the temperature-dependent values of H_{s}^{cp} in `output/Tdep_data/*.dat` and plots of the data points as well as the regression lines according to Eqs. (5) and (7) in `output/gnuplot/Tdep.pdf`.
- If the Henry's law constants are needed in electronic form, it is cumbersome to extract them from the pdf of this article. Therefore, the Supplement contains the files `output/*.f90` with declarations of the Henry's law constants (H_{s}^{cp} , H_{s}^{xp} , H_{s}^{bp} , H_{s}^{cc} , H_{V}^{pc} , H_{V}^{px} , and H_{V}^{cc}) in Fortran 90 syntax.
- For some references, the `util/` directory contains Python scripts that preprocess input and perform other calculations related to the original data.

5 Summary and outlook

An updated and extended version of a compilation of Henry's law constants has been presented. The collection, which is also available at <https://www.henrys-law.org>, will be continuously maintained, updated, and extended in the future. If necessary, errata will be posted on the web page. In addition to providing a source of information, I hope that this work will help to identify gaps in our current knowledge and stimulate research projects. In particular, it seems that even for some well-known chemicals like isoprene, HCl, Br₂, or BrCl, there is a large uncertainty in the value of the Henry's law constants. I always welcome emails informing me about new measurements of Henry's law constants to be included in the table.

Appendix A: Appendix with data tables

A1 Inorganic species

A1.1 Oxygen (O)

Table A1.1: Oxygen (O)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
oxygen	1.3×10^{-5}	1500	Burkholder et al. (2019)	L	1
O ₂ [7782-44-7]	1.3×10^{-5}	1500	Burkholder et al. (2015)	L	1
			Clever et al. (2014)	L	2
MYMOFIZGZYHOMD-UHFFFAOYSA-N	1.2×10^{-5}	1700	Warneck and Williams (2012)	L	
	1.3×10^{-5}	1500	Sander et al. (2011)	L	1
	1.3×10^{-5}	1500	Sander et al. (2006)	L	1
	1.3×10^{-5}	1400	Fernández-Prini et al. (2003)	L	3
	1.3×10^{-5}	1500	Battino et al. (1983)	L	
	1.3×10^{-5}	1500	Battino (1981)	L	1
	1.3×10^{-5}	1500	Wilhelm et al. (1977)	L	
	1.2×10^{-5}	1400	Himmelblau (1960)	L	1
	1.2×10^{-5}	1600	Millero et al. (2002a)	M	4, 5
	1.2×10^{-5}	1600	Millero et al. (2002b)	M	6, 7
	1.3×10^{-5}	1500	Rettich et al. (2000)	M	8
	1.3×10^{-5}	1400	Sherwood et al. (1991)	M	9
	1.3×10^{-5}	1500	Rettich et al. (1981)	M	10
	1.3×10^{-5}	1500	Cosgrove and Walkley (1981)	M	11
	1.2×10^{-5}		da Silva et al. (1980)	M	12
	1.3×10^{-5}	1400	Cramer (1980)	M	
	1.3×10^{-5}	1400	Benson et al. (1979)	M	
	1.4×10^{-4}		Razumovskii and Zaikov (1971)	M	13
	1.1×10^{-5}		Power and Stegall (1970)	M	14
	1.3×10^{-5}	1500	Murray and Riley (1969)	M	15
	1.2×10^{-5}	1200	Shoor et al. (1969)	M	16
	1.2×10^{-5}	1600	Carpenter (1966)	M	17
	1.3×10^{-5}	1500	Morrison and Billett (1952)	M	18
	1.2×10^{-5}		Orcutt and Seevers (1937a)	M	
	1.3×10^{-5}	1500	Fox (1909)	M	
	1.2×10^{-5}	1700	Geffcken (1904)	M	
	1.3×10^{-5}	1400	Winkler (1891b)	M	19
	1.3×10^{-5}	1400	Bohr and Bock (1891)	M	
	1.2×10^{-5}	1800	Timofejew (1890)	M	
	1.2×10^{-5}	1200	Bunsen (1855a)	M	
	1.2×10^{-5}	1600	Wauchope and Haque (1972)	V	
	1.2×10^{-5}	1600	Wauchope and Haque (1972)	V	
	1.3×10^{-5}	1500	Wauchope and Haque (1972)	V	
	1.3×10^{-5}		Pierotti (1965)	T	
	1.4×10^{-5}		Nunn (1958)	C	12
	7.9×10^{-6}		Hayer et al. (2022)	Q	20
	1.3×10^{-5}	1500	Yaws et al. (1999)	?	21

Table A1.1: Oxygen (O) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1×10^{-5}		Abraham and Weathersby (1994)	?	21
	1.2×10^{-5}	1500	Dean and Lange (1999)	?	22, 23
	1.3×10^{-5}		Seinfeld (1986)	?	21
	1.3×10^{-4}		Smith and Bomberger (1980)	?	24
ozone	1.0×10^{-4}	2800	Burkholder et al. (2019)	L	
O ₃	1.0×10^{-4}	2800	Burkholder et al. (2015)	L	
[10028-15-6]			Clever et al. (2014)	L	25
CBENFWSGALASAD-UHFFFAOYSA-N	1.0×10^{-4}	2800	Sander et al. (2011)	L	
	1.0×10^{-4}	2800	Sander et al. (2006)	L	
	7.6×10^{-5}	3700	Biń (2005)	L	
	1.1×10^{-4}	2400	Warneck (2003)	L	
			Battino (1981)	L	26
	1.3×10^{-4}	2000	Wilhelm et al. (1977)	L	
	1.1×10^{-4}		Levanov et al. (2008)	M	12
	1.1×10^{-4}	2300	Gershenson et al. (2001)	M	
	9.9×10^{-5}	2600	Rischbieter et al. (2000)	M	
	9.2×10^{-5}	2600	Andreozzi et al. (1996)	M	
	1.2×10^{-4}	1400	Sotelo et al. (1989)	M	
	1.1×10^{-4}	2300	Kosak-Channing and Helz (1983)	M	
	1.7×10^{-4}		Gurol and Singer (1982)	M	12
			Roth and Sullivan (1981)	M	27
	1.2×10^{-4}	1900	Stumm (1958)	M	
	9.9×10^{-5}	2600	Kilpatrick et al. (1956)	M	
	1.3×10^{-4}	2000	Briner and Perrottet (1939)	M	
	2.0×10^{-4}		Fischer and Tropsch (1917)	M	
	8.0×10^{-5}	2900	Luther (1905)	M	
	1.2×10^{-4}	4100	Mailfert (1894)	M	
	1.2×10^{-4}		Schöne (1873)	M	28
	1.1×10^{-4}	2600	Chameides (1984)	T	
	1.2×10^{-4}		Perry and Chilton (1973)	X	29
	1.2×10^{-4}		Hayer et al. (2022)	Q	20
			Lide and Frederikse (1995)	?	30
	9.3×10^{-5}	2500	Seinfeld (1986)	?	21
	9.3×10^{-5}	2500	Hoffmann and Jacob (1984)	?	21

A1.2 Hydrogen (H)

Table A1.2: Hydrogen (H)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hydrogen atom	2.6×10^{-6}		Burkholder et al. (2019)	L	
H	2.6×10^{-6}		Burkholder et al. (2015)	L	
[12385-13-6]	2.6×10^{-6}		Sander et al. (2011)	L	
YZCKVEUIGOORGS-UHFFFAOYSA-N	2.6×10^{-6}		Sander et al. (2006)	L	
	3.1×10^{-6}		Armstrong et al. (2015)	T	
	3.4×10^{-6}		Parker (1992)	E	31
			Roduner and Bartels (1992)	?	32
hydrogen	7.8×10^{-6}	530	Fernández-Prini et al. (2003)	L	3
H ₂	7.7×10^{-6}	490	Young (1981a)	L	1
[1333-74-0]	7.7×10^{-6}	490	Wilhelm et al. (1977)	L	
UFHFLCQGNINRNP-UHFFFAOYSA-N	7.8×10^{-6}	600	Himmelblau (1960)	L	1
	7.8×10^{-6}	620	Schmidt (1979)	M	33, 34
	7.7×10^{-6}	480	Gordon et al. (1977)	M	35
	7.7×10^{-6}	520	Crozier and Yamamoto (1974)	M	36
	7.2×10^{-6}		Longo et al. (1970)	M	14
	7.2×10^{-6}		Power and Stegall (1970)	M	14
			Shoor et al. (1969)	M	37
	7.5×10^{-6}		Ruetschi and Amlie (1966)	M	38
	7.8×10^{-6}	510	Morrison and Billett (1952)	M	39
	7.8×10^{-6}	540	Geffcken (1904)	M	
	7.7×10^{-6}	1500	Braun (1900)	M	40
	7.7×10^{-6}	500	Winkler (1891a)	M	41
	7.5×10^{-6}	550	Bohr and Bock (1891)	M	
	7.8×10^{-6}	610	Timofejew (1890)	M	
	8.5×10^{-6}	20	Bunsen (1855a)	M	42, 43
	7.8×10^{-6}	500	Wauchope and Haque (1972)	V	
	7.7×10^{-6}		Hine and Weimar (1965)	R	
	8.3×10^{-6}		Pierotti (1965)	T	
	6.4×10^{-6}		Hayer et al. (2022)	Q	20
	7.7×10^{-6}	490	Yaws et al. (1999)	?	21
	7.7×10^{-6}		Abraham and Weathersby (1994)	?	21
	7.7×10^{-6}	500	Dean and Lange (1999)	?	44, 23
deuterium			Young (1981a)	L	45
D ₂	7.9×10^{-6}	720	Muccitelli and Wen (1978)	M	46
[7782-39-0]	7.9×10^{-6}	720	Muccitelli and Wen (1978)	M	
UFHFLCQGNINRNP-VVKOMZTBSA-N	8.2×10^{-6}		Hayer et al. (2022)	Q	20

Table A1.2: Hydrogen (H) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hydroxyl radical OH	3.8×10^{-1}		Burkholder et al. (2019)	T	47
[3352-57-6]	3.8×10^{-1}		Burkholder et al. (2015)	T	47
TUJKJAMUKRIRHC-UHFFFAOYSA-N	3.8×10^{-1}		Sander et al. (2011)	T	47
	3.8×10^{-1}		Sander et al. (2006)	T	47
	2.9×10^{-1}	4300	Hanson et al. (1992)	T	
	3.2×10^{-1}		Mozurkewich (1986)	T	
	2.9×10^{-1}	3100	Berdnikov and Bazhin (1970)	T	48
	2.5×10^{-1}		Lelieveld and Crutzen (1991)	C	
	2.0		Lelieveld and Crutzen (1991)	C	
	8.9×10^1		Lelieveld and Crutzen (1991)	C	
	2.5×10^{-1}	5300	Jacob (1986)	C	49
hydroperoxy radical HO ₂	5.7×10^1		Régimbal and Mozurkewich (1997)	R	
[3170-83-0]	6.8		Burkholder et al. (2019)	T	47
MHAJPDJPQMIIY-UHFFFAOYSA-M	6.8		Burkholder et al. (2015)	T	47
	6.8		Sander et al. (2011)	T	47
	6.8		Sander et al. (2006)	T	47
	3.8×10^1	5900	Hanson et al. (1992)	T	
	8.9×10^1		Weinstein-Lloyd and Schwartz (1991)	T	
	8.9×10^1		Chameides (1984)	T	
	1.2×10^1		Schwartz (1984)	T	50
	4.6×10^1	4800	Berdnikov and Bazhin (1970)	T	48
		6600	Jacob (1986)	E	51
hydrogen peroxide H ₂ O ₂	8.6×10^2	7300	Burkholder et al. (2019)	L	
[7722-84-1]	8.6×10^2	7300	Burkholder et al. (2015)	L	
MHAJPDJPQMIIY-UHFFFAOYSA-N	9.5×10^2	7200	Brockbank (2013)	L	
	9.1×10^2	6600	Warneck and Williams (2012)	L	
	8.3×10^2	7600	Sander et al. (2011)	L	
	7.6×10^2	7300	Sander et al. (2006)	L	
	9.8×10^2	6100	Fogg and Sangster (2003)	L	52
	1.2×10^3	5900	Rivera-Rios (2018)	M	
	1.1×10^3	7000	Huang and Chen (2010)	M	
	8.2×10^2	7400	O'Sullivan et al. (1996)	M	
	9.9×10^2	6300	Lind and Kok (1994)	M	53
			Staffelbach and Kok (1993)	M	54
	8.5×10^2	6500	Zhou and Lee (1992)	M	
	6.7×10^2	7900	Hwang and Dasgupta (1985)	M	
	1.4×10^3		Yoshizumi et al. (1984)	M	12
	9.6×10^2	6600	Chameides (1984)	T	
	7.0×10^2	7000	Martin and Damschen (1981)	T	
	6.4×10^1		Hilal et al. (2008)	Q	
	7.0×10^2	7300	Seinfeld (1986)	?	21
	7.0×10^2	7300	Hoffmann and Jacob (1984)	?	21
			Pandis and Seinfeld (1989)	W	55

A1.3 Nitrogen (N)

Table A1.3: Nitrogen (N)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
nitrogen	6.4×10^{-6}	1300	Burkholder et al. (2019)	L	1
N ₂	6.4×10^{-6}	1300	Burkholder et al. (2015)	L	1
[7727-37-9]	6.4×10^{-6}	1600	Warneck and Williams (2012)	L	
IJGRMHOSHXDMSA-UHFFFAOYSA-N	6.4×10^{-6}	1300	Sander et al. (2011)	L	1
	6.4×10^{-6}	1300	Sander et al. (2006)	L	1
	6.5×10^{-6}	1200	Fernández-Prini et al. (2003)	L	3
	6.5×10^{-6}	1200	Battino et al. (1984)	L	
	6.5×10^{-6}	1200	Battino (1982)	L	1
	6.4×10^{-6}	1300	Wilhelm et al. (1977)	L	
	5.4×10^{-6}		Steward et al. (1973)	L	14
	6.5×10^{-6}	1400	Allott et al. (1973)	L	
	6.3×10^{-6}	1300	Himmelblau (1960)	L	1
	6.4×10^{-6}	1300	Rettich et al. (1984)	M	56
	6.6×10^{-6}	1300	Cosgrove and Walkley (1981)	M	11
	5.5×10^{-6}		Power and Stegall (1970)	M	14
	6.4×10^{-6}	1300	Murray et al. (1969)	M	57
	6.5×10^{-6}	1400	Morrison and Billett (1952)	M	58
	6.6×10^{-6}		Orcutt and Seevers (1937a)	M	
	6.5×10^{-6}	1100	Van Slyke et al. (1934)	M	
	5.6×10^{-6}		Grollman (1929)	M	59
	6.4×10^{-6}	1200	Fox (1909)	M	
	6.3×10^{-6}	2200	Braun (1900)	M	60
	6.3×10^{-6}	1300	Winkler (1891b)	M	61
	6.7×10^{-6}	1400	Bohr and Bock (1891)	M	
	5.8×10^{-6}	1200	Bunsen (1855a)	M	43
	6.4×10^{-6}	1300	Wauchope and Haque (1972)	V	
	6.5×10^{-6}	1300	Wauchope and Haque (1972)	V	
	6.5×10^{-6}		Pierotti (1965)	T	
	7.2×10^{-6}		Nunn (1958)	C	12
	5.6×10^{-6}		Hayer et al. (2022)	Q	20
	6.4×10^{-6}	1600	Battino et al. (2018)	?	
	6.3×10^{-6}	1200	Yaws et al. (1999)	?	21
	5.7×10^{-6}		Abraham and Weathersby (1994)	?	21
	6.3×10^{-6}	1300	Dean and Lange (1999)	?	62, 23
ammonia	5.9×10^{-1}	4200	Burkholder et al. (2019)	L	
NH ₃	5.9×10^{-1}	4200	Burkholder et al. (2015)	L	
[7664-41-7]	5.9×10^{-1}	4200	Sander et al. (2011)	L	
QGZKDFVQNNNGYKY-UHFFFAOYSA-N	5.9×10^{-1}	4200	Sander et al. (2006)	L	
	5.8×10^{-1}	4400	Yoo et al. (1986)	L	1
	6.0×10^{-1}	4200	Edwards et al. (1978)	L	1
	1.0×10^{-1}	1500	Wilhelm et al. (1977)	L	
	2.8×10^{-1}	3200	Shi et al. (1999)	M	
	9.9	6600	Tsuji et al. (1990)	M	63

Table A1.3: Nitrogen (N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.0×10^{-1}	4200	Clegg and Brimblecombe (1989)	M	
	5.5×10^{-1}	4100	Dasgupta and Dong (1986)	M	
	7.7×10^{-1}		Holzwarth et al. (1984)	M	
	7.4×10^{-1}	3700	Hales and Drewes (1979)	M	
	5.6×10^{-1}	4200	Dasgupta and Dong (1986)	T	
	5.7×10^{-1}	4100	Chameides (1984)	T	
	5.9×10^{-1}	4100	Edwards et al. (1975)	T	1
	6.1×10^{-1}		Van Krevelen et al. (1949)	X	64
	2.9×10^{-1}		Hayer et al. (2022)	Q	20
	2.7×10^{-1}	2400	Dean and Lange (1999)	?	65, 23
	5.7×10^{-1}		Abraham et al. (1990)	?	
	6.1×10^{-1}	4100	Seinfeld (1986)	?	21
	5.8×10^{-1}	4100	Hoffmann and Jacob (1984)	?	21
	5.2×10^{-1}		Bone et al. (1983)	?	66
hydrazoic acid HN ₃ [7782-79-8] JUINSXZKUKVTMD-UHFFFAOYSA-N	1.2×10^{-1}	3800	Sander et al. (2011)	L	67
	9.8×10^{-2}	3100	Wilhelm et al. (1977)	L	
	1.2×10^{-1}	3700	Betterton and Robinson (1997)	M	
	9.9×10^{-2}		Templeton and King (1971)	M	38
	1.2×10^{-1}	4200	D'Orazio and Wood (1963)	M	
	7.6×10^{-1}		Modarresi et al. (2007)	Q	68
			Burkholder et al. (2019)	W	69
			Burkholder et al. (2015)	W	70
hydrazine H ₄ N ₂ [302-01-2] OAKJQQAXSVQMHS-UHFFFAOYSA-N	1.6×10^1		HSDB (2015)	V	
dinitrogen monoxide N ₂ O (nitrous oxide; laughing gas) [10024-97-2] GQPLMRYTRLFLPF-UHFFFAOYSA-N	2.4×10^{-4}	2600	Burkholder et al. (2019)	L	1
	2.1×10^{-4}	2600	Burkholder et al. (2019)	L	71
	2.4×10^{-4}	2600	Burkholder et al. (2015)	L	1
	2.1×10^{-4}	2600	Burkholder et al. (2015)	L	71
	2.4×10^{-4}	2700	Warneck and Williams (2012)	L	
	2.4×10^{-4}	2600	Sander et al. (2011)	L	1
	2.4×10^{-4}	2600	Sander et al. (2006)	L	1
	2.4×10^{-4}	2500	Young (1981b)	L	1
	2.4×10^{-4}	2600	Wilhelm et al. (1977)	L	
	1.8×10^{-4}		Steward et al. (1973)	L	14
	2.5×10^{-4}	2500	Allott et al. (1973)	L	
	2.4×10^{-4}	2500	Weiss and Price (1980)	M	72
	2.5×10^{-4}	2300	Gabel and Schultz (1973)	M	
	2.4×10^{-4}		Joosten and Danckwerts (1972)	M	
	1.9×10^{-4}		Bachofen and Farhi (1971)	M	14
	2.4×10^{-4}	2400	Saidman et al. (1966)	M	
	1.4×10^{-4}		Sy and Hasbrouck (1964)	M	14
	2.2×10^{-4}		Nunn (1958)	M	73

Table A1.3: Nitrogen (N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.4×10^{-4}		Orcutt and Seevers (1937a)	M	
	2.4×10^{-4}	2500	Kunerth (1922)	M	
	2.4×10^{-4}	2400	Siebeck (1909)	M	
	2.4×10^{-4}	2700	Geffcken (1904)	M	
	2.3×10^{-4}	2900	Roth (1897)	M	74
	2.5×10^{-4}	2600	Carius (1855)	M	
	2.6×10^{-4}	2500	Gordon (1895)	X	75
	1.7×10^{-4}		Harris (1951)	X	14, 76
	3.0×10^{-4}		Macintosh et al. (1958)	X	12, 76
	1.7×10^{-4}		Orcutt and Seevers (1937b)	X	59, 76
	2.8×10^{-4}		Nunn (1958)	C	12
	2.2×10^{-4}		Hayer et al. (2022)	Q	20
		3600	Kühne et al. (2005)	Q	
		2700	Kühne et al. (2005)	?	
	2.4×10^{-4}	2500	Yaws et al. (1999)	?	21
	1.8×10^{-4}		Abraham and Weathersby (1994)	?	21
	2.4×10^{-4}	2800	Dean and Lange (1999)	?	23
	2.5×10^{-4}		Seinfeld (1986)	?	21
	2.5×10^{-4}		Liss and Slater (1974)	?	
nitrogen monoxide	1.9×10^{-5}	1600	Warneck and Williams (2012)	L	
NO	1.9×10^{-5}	1600	Sander et al. (2011)	L	77, 1
(nitric oxide)	1.9×10^{-5}	1600	Sander et al. (2006)	L	78, 1
[10102-43-9]	1.9×10^{-5}	1500	Schwartz and White (1981)	L	
MWUXSHHQAYIFBG-UHFFFAOYSA-N	1.9×10^{-5}	1400	Young (1981b)	L	79, 1
	1.3×10^{-5}		Zafiriou and McFarland (1980)	M	80
	2.3×10^{-5}		Komiyama and Inoue (1980)	M	81
	1.9×10^{-5}	1500	Komiyama and Inoue (1978)	M	
	1.9×10^{-5}	1400	Winkler (1901)	M	82
	3.4×10^{-5}		Pierotti (1965)	T	
	1.9×10^{-5}	1300	Loomis (1928)	C	83
	1.5×10^{-5}		Hayer et al. (2022)	Q	20
		1500	Kühne et al. (2005)	Q	
		1600	Kühne et al. (2005)	?	
	1.9×10^{-5}	1400	Yaws et al. (1999)	?	21
	1.9×10^{-5}	1500	Dean and Lange (1999)	?	84, 23
	1.9×10^{-5}		Seinfeld (1986)	?	21
	1.9×10^{-5}		Andrew and Hanson (1961)	?	
			Burkholder et al. (2019)	W	85
			Burkholder et al. (2015)	W	86
			Wilhelm et al. (1977)	W	87

Table A1.3: Nitrogen (N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
nitrogen dioxide NO ₂ [10102-44-0] JCXJVPUVTGWSNB-UHFFFAOYSA-N	1.2×10^{-4}	2400	Burkholder et al. (2019)	L	
	1.2×10^{-4}	2400	Burkholder et al. (2015)	L	
	9.9×10^{-5}		Warneck and Williams (2012)	L	
	1.2×10^{-4}	2400	Sander et al. (2011)	L	
	1.4×10^{-4}		Sander et al. (2006)	L	
	1.2×10^{-4}		Schwartz and White (1981)	L	
	1.2×10^{-4}	2400	Cheung et al. (2000)	M	
	6.9×10^{-5}		Lee and Schwartz (1981)	M	88
	2.3×10^{-4}		Komiyama and Inoue (1980)	M	81
	1.2×10^{-4}	2500	Chameides (1984)	T	
	3.4×10^{-4}	1800	Berdnikov and Bazhin (1970)	T	48
9.9×10^{-5}		Pandis and Seinfeld (1989)	?	89	
9.9×10^{-5}		Seinfeld (1986)	?	21	
4.0×10^{-4}		Andrew and Hanson (1961)	?		
nitrogen trioxide NO ₃ (nitrate radical) [12033-49-7] YPJKMVATUPSWOH-UHFFFAOYSA-N	1.8×10^{-2}		Thomas et al. (1998)	M	
	5.9×10^{-3}		Rudich et al. (1996)	M	90
	3.8×10^{-4}		Burkholder et al. (2019)	T	47
	3.8×10^{-4}		Burkholder et al. (2015)	T	47
	3.8×10^{-4}		Sander et al. (2011)	T	47
	3.8×10^{-4}		Sander et al. (2006)	T	47
	1.2×10^{-1}	1900	Chameides (1986)	T	
	3.4×10^{-4}	2000	Berdnikov and Bazhin (1970)	T	48
dinitrogen trioxide N ₂ O ₃ [10544-73-7] LZDSILRDTDCIQT-UHFFFAOYSA-N	5.9×10^{-3}		Schwartz and White (1981)	L	
	2.5×10^{-1}		Komiyama and Inoue (1978)	M	
			Seinfeld and Pandis (1997)	?	92
dinitrogen tetroxide N ₂ O ₄ [10544-72-6] WFPZPJASADLPSON-UHFFFAOYSA-N	1.4×10^{-2}		Schwartz and White (1981)	L	
	2.0×10^{-2}		Komiyama and Inoue (1980)	M	81
	1.6×10^{-2}	3500	Komiyama and Inoue (1978)	M	
	3.1×10^{-2}		Andrew and Hanson (1961)	M	
dinitrogen pentoxide N ₂ O ₅ (nitric anhydride) [10102-03-1] ZWWCURLKEXEFQT-UHFFFAOYSA-N	1.3×10^{-2}	1100	Kramers et al. (1961)	M	
	3.0×10^{-2}		Cruzeiro et al. (2022)	T	93
	3.9×10^{-3}		Galib and Limmer (2021)	T	94
	4.9×10^{-3}		Hirshberg et al. (2018)	T	95
	8.7×10^{-4}	3600	Fried et al. (1994)	T	96
	3.9×10^{-2}	4300	Robinson et al. (1997)	Q	97
4.9×10^{-2}		Mentel et al. (1999)	E	98	
∞		Sander and Crutzen (1996)	E	99	
∞		Jacob (1986)	E	99	

Table A1.3: Nitrogen (N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hydroxylamine H_3NO [7803-49-8] AVXURJPOCDRRFD-UHFFFAOYSA-N	1.4×10^3		HSDB (2015)	Q	100
nitrous acid HNO_2 [7782-77-6] IOVCWXUNBOPUCH-UHFFFAOYSA-N	4.8×10^{-1} 4.7×10^{-1} 4.7×10^{-1} 4.8×10^{-1} 3.7×10^{-1} 4.7×10^{-1} 4.8×10^{-1} 4.8×10^{-1}	4800 4900 4900 4900 9000 4700 4800 4800	Schwartz and White (1981) Becker et al. (1998) Becker et al. (1996) Park and Lee (1988) Komiyama and Inoue (1978) Martin (1984) Chameides (1984) Seinfeld (1986)	L M M M M T T ?	21
nitric acid HNO_3 [7697-37-2] GRYLNZFGIOXLOG-UHFFFAOYSA-N	8.8×10^2 2.1×10^3 2.6×10^4 2.1×10^3 2.1×10^3 2.1×10^3 3.4×10^3	8700 8700 8700 8700 8700 8800	Durham et al. (1981) Lelieveld and Crutzen (1991) Clegg and Brimblecombe (1990) Brimblecombe and Clegg (1989) Chameides (1984) Schwartz and White (1981) Pandis and Seinfeld (1989) Seinfeld (1986) Hoffmann and Jacob (1984) Brimblecombe and Clegg (1988)	V R T T T T ? ? ? W	101 102, 1 103 104 21 21 105
pernitric acid HNO_4 [26404-66-0] UUZZMWZGAGZGSF-UHFFFAOYSA-N	3.9×10^{-1} 3.9×10^1 1.2×10^2 1.4×10^2 2.0×10^2	8400 6900 0	Leu and Zhang (1999) Amels et al. (1996) Régimbal and Mozurkewich (1997) Warneck (1999) Jacob et al. (1989) Möller and Mauersberger (1992)	L M T C C E	106

A1.4 Fluorine (F)

Table A1.4: Fluorine (F)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
fluorine atom F [14762-94-8] YCKRFDGAMUMZLT-UHFFFAOYSA-N	2.0×10^{-4}	400	Berdnikov and Bazhin (1970)	T	48
hydrogen fluoride HF [7664-39-3] KRHYFYGTRYWZRS-UHFFFAOYSA-N	1.3×10^2 6.8×10^{-4}		Fredenhagen and Wellmann (1932a) Brimblecombe and Clegg (1989) Hayer et al. (2022) Brimblecombe and Clegg (1988)	M T Q W	 107 20 105
difluorine monoxide F ₂ O [7783-41-7] UJMWVICAENGCRF-UHFFFAOYSA-N	2.9×10^{-5}		Schäfer and Lax (1962)	C	
nitrogen trifluoride NF ₃ [7783-54-2] GVGCUCJTUSOZKP-UHFFFAOYSA-N	7.9×10^{-6} 7.9×10^{-6} 7.9×10^{-6} 7.9×10^{-6}	1900 1900 1900 1900	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Wilhelm et al. (1977)	L L L L	1 1 1 108 109
dinitrogen tetrafluoride N ₂ F ₄ (tetrafluorohydrazine) [10036-47-2] GFADZIUESKAXAK-UHFFFAOYSA-N	8.4×10^{-6} 8.4×10^{-6} 8.4×10^{-6} 8.4×10^{-6} 8.4×10^{-6}	2500 2500 2500 2500 2400	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Wilhelm et al. (1977) Dean et al. (1973)	L L L L M	1 1 1 1 110

A1.5 Chlorine (Cl)

Table A1.5: Chlorine (Cl)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
chlorine (molecular)			Burkholder et al. (2019)	L	111
Cl ₂			Burkholder et al. (2015)	L	111
[7782-50-5]			Sander et al. (2011)	L	111
KZBUYRJDOAKODT-UHFFFAOYSA-N			Sander et al. (2006)	L	111
			Young (1983)	L	112
	6.1×10^{-4}	3200	Aieta and Roberts (1986)	M	
	6.2×10^{-4}	3500	Whitney and Vivian (1941a)	M	113
			Jones (1911)	M	111
			Winkler (1907)	M	111
	6.0×10^{-4}	3000	Yakovkin (1900)	M	114
			Bakhuis Roozeboom (1884)	M	111
			Goodwin (1883)	M	111
			Schoenfeld (1855)	M	111
	7.4×10^{-4}	2600	Lin and Pehkonen (1998)	R	
	5.9×10^{-4}		Leaist (1986)	R	115
		3200	Brian et al. (1962)	R	
			Adams and Edmonds (1937)	R	116
			Arkadiev (1918)	R	117
	6.1×10^{-4}	2800	Wagman et al. (1982)	T	
	8.7×10^{-4}		Hayer et al. (2022)	Q	20
			Bartlett and Margerum (1999)	?	111, 21, 118
			Yaws et al. (1999)	?	111
			Dean and Lange (1999)	?	111
			Wilhelm et al. (1977)	?	119, 111
chlorine atom	2.3×10^{-2}		Burkholder et al. (2019)	T	47
Cl	2.3×10^{-2}		Burkholder et al. (2015)	T	47
[22537-15-1]	2.3×10^{-2}		Sander et al. (2011)	T	47
ZAMOUSCENKQFHK-UHFFFAOYSA-N	2.3×10^{-2}		Sander et al. (2006)	T	47
	2.0×10^{-3}		Mozurkewich (1986)	T	120
	1.5×10^{-4}	1500	Berdnikov and Bazhin (1970)	T	48
hydrogen chloride			Clegg and Brimblecombe (1986)	L	121
HCl	1.5×10^1		Chen et al. (1979)	R	
[7647-01-0]			Carslaw et al. (1995)	T	122, 1
VEZXGXHMUGYJMC-UHFFFAOYSA-N			Brimblecombe and Clegg (1989)	T	123
	1.1×10^{-2}	2300	Marsh and McElroy (1985)	T	
			Wagman et al. (1982)	T	124
	2.0×10^{-1}		Graedel and Goldberg (1983)	C	
	2.4×10^{-1}		Hayer et al. (2022)	Q	20
			Seinfeld and Pandis (1997)	?	92
	1.9×10^{-1}	620	Dean and Lange (1999)	?	125, 23
	7.2	2000	Pandis and Seinfeld (1989)	?	126
	2.5×10^1		Seinfeld (1986)	?	21

Table A1.5: Chlorine (Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
			Brimblecombe and Clegg (1988)	W	105
hypochlorous acid HOCl [7790-92-3] QWPPOHNGKGFJK-UHFFFAOYSA-N	6.5 6.5 6.5 6.5 6.5	5900 5900 5900 5900	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Sander et al. (2006) Huthwelker et al. (1995)	L L L L L	
	9.1		Blatchley et al. (1992)	M	12
	4.7	1600	Hanson and Ravishankara (1991)	M	127
	9.0		McCoy et al. (1990)	M	12
	6.0	4900	Holzwarth et al. (1984)	M	128
	1.2×10^1	5200	Imagawa (1950)	M	11
	6.4	8900	Ourisson and Kastner (1939)	M	
	2.6	5100	Wagman et al. (1982)	T	
	5.4		Hilal et al. (2008)	Q	
perchloric acid HClO ₄ [7601-90-3] VLTRZXGMWDSKGL-UHFFFAOYSA-N	9.9×10^3		Jaeglé et al. (1996)	E	129
monochlorine monoxide ClO [14989-30-1] MLWGAEVSWJXOQJ-UHFFFAOYSA-N	7.0×10^{-3} 7.0×10^{-3} 7.0×10^{-3} 7.0×10^{-3}		Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Sander et al. (2006)	T T T T	47 47 47 47
dichlorine monoxide Cl ₂ O [7791-21-1] RCJVRSBWZCANNQT-UHFFFAOYSA-N	3.4×10^{-2} 7.6×10^{-2} 7.0×10^{-2}	5900 5600	Secoy and Cady (1941) Ourisson and Kastner (1939) this work this work Roth (1942) Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Sander et al. (2006) Young (1983) Wilhelm et al. (1977)	M M R R R ? ? ? ? ? ? W	130 131 132, 133, 134 133, 135 136 137 137 137 137 138 139
chlorine dioxide ClO ₂ [10049-04-4] OSVXSBDYLRLYLIG-UHFFFAOYSA-N	1.0×10^{-2} 1.0×10^{-2} 1.0×10^{-2} 1.0×10^{-2} 1.0×10^{-2} 1.0×10^{-2} 1.1×10^{-2} 1.0×10^{-2} 6.6×10^{-3}	3500 3500 3500 3500 3300 3300 3200 3100 3200 1200	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Sander et al. (2006) Young (1983) Wilhelm et al. (1977) Kepinski and Trzeszczynski (1964) Ishi (1958) Taube and Dodgen (1949) Bigorgne (1947)	L L L L L L M M M M	1

Table A1.5: Chlorine (Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	9.7×10^{-3}	3600	Holst (1944)	M	
			Haller and Northgraves (1955)	C	140
	1.1×10^{-2}	3100	Mavu (2011)	?	
	9.7×10^{-3}		Morrow et al. (2006)	?	
	1.0×10^{-2}	3300	Yaws et al. (1999)	?	21
perchloryl fluoride ClO ₃ F [7616-94-6] XHFXMNZYIKFCPN-UHFFFAOYSA-N	4.4×10^{-5}		Hayer et al. (2022)	Q	20
nitrosyl chloride NOCl [2696-92-6] VPCDQGACGWYTMU-UHFFFAOYSA-N	$>4.9 \times 10^{-4}$		Burkholder et al. (2019)	L	
	$>4.9 \times 10^{-4}$		Burkholder et al. (2015)	L	
	$>4.9 \times 10^{-4}$		Scheer et al. (1997)	M	
nitryl chloride ClNO ₂ [13444-90-1] HSSFHZJIMRUXDM-UHFFFAOYSA-M	4.5×10^{-4}		Frenzel et al. (1998)	E	
	2.4×10^{-4}		Behnke et al. (1997)	E	141
	3.9×10^{-4}		Roberts et al. (2008)	?	
chlorine nitrate ClNO ₃ [14545-72-3] XYLGPCWDPLOBGP-UHFFFAOYSA-N	7.0×10^{-2}	4500	Robinson et al. (1997)	Q	142
	∞		Sander and Crutzen (1996)	E	99
chloramine NH ₂ Cl (chloramide) [10599-90-3] QDHHCCQZDFGDHMP-UHFFFAOYSA-N	8.6×10^{-1}	6000	Burkholder et al. (2019)	L	
	8.6×10^{-1}	6000	Burkholder et al. (2015)	L	
	8.6×10^{-1}	6000	Sander et al. (2011)	L	
	8.6×10^{-1}	6000	Sander et al. (2006)	L	
	9.2×10^{-1}	4800	Holzwarth et al. (1984)	M	
	4.6×10^{-5}		Hayer et al. (2022)	Q	20
dichloramine NHCl ₂ (chlorimide) [3400-09-7] JSYGRUBHOCKMGQ-UHFFFAOYSA-N	2.9×10^{-1}	4200	Burkholder et al. (2019)	L	
	2.9×10^{-1}	4200	Burkholder et al. (2015)	L	
	2.9×10^{-1}	4200	Sander et al. (2011)	L	
	2.9×10^{-1}	4200	Sander et al. (2006)	L	
	2.8×10^{-1}	4200	Holzwarth et al. (1984)	M	
nitrogen trichloride NCl ₃ [10025-85-1] QEHBKHWUEUPXBCW-UHFFFAOYSA-N	9.9×10^{-4}	4100	Burkholder et al. (2019)	L	
	9.9×10^{-4}	4100	Burkholder et al. (2015)	L	
	9.9×10^{-4}	4100	Sander et al. (2011)	L	
	9.9×10^{-4}	4100	Sander et al. (2006)	L	
	9.9×10^{-4}	4100	Holzwarth et al. (1984)	M	

A1.6 Bromine (Br)

Table A1.6: Bromine (Br)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
bromine (molecular)	7.2×10^{-3}	4400	Burkholder et al. (2019)	L	
Br ₂	7.2×10^{-3}	4400	Burkholder et al. (2015)	L	
[7726-95-6]	7.2×10^{-3}	4400	Sander et al. (2011)	L	
GDTBXPJZTBHREO-UHFFFAOYSA-N	7.2×10^{-3}	4400	Sander et al. (2006)	L	
	1.8×10^{-2}	3600	Dubik et al. (1987)	M	143
	6.8×10^{-3}		Hill et al. (1968)	M	
	9.6×10^{-3}		Jenkins and King (1965)	M	12
	7.0×10^{-3}	4100	Kelley and Tartar (1956)	M	
	1.4×10^{-2}		Jones (1911)	M	81
	7.8×10^{-3}	3800	Winkler (1906)	M	
	7.9×10^{-3}	3600	Winkler (1899)	M	
	8.3×10^{-3}	4100	Fogg and Sangster (2003)	V	
	7.9×10^{-3}	3900	Jenkins and King (1965)	R	
	7.2×10^{-3}	4000	Wagman et al. (1982)	T	
	9.2×10^{-3}		Giona et al. (1969)	X	144, 12
	7.6×10^{-3}		Bartlett and Margerum (1999)	?	21, 118
	7.5×10^{-3}	3900	Dean and Lange (1999)	?	145, 23
bromine atom	1.2×10^{-2}		Mozurkewich (1986)	T	120
Br	3.4×10^{-4}	1800	Berdnikov and Bazhin (1970)	T	48
[10097-32-2] WKBOTKDWSSQWDR-UHFFFAOYSA-N					
hydrogen bromide			Carslaw et al. (1995)	T	146, 1
HBr			Brimblecombe and Clegg (1989)	T	147
[10035-10-6]			Wagman et al. (1982)	T	148
CPELXLSAUQHCOX-UHFFFAOYSA-N	6.8×10^{-2}		Hayer et al. (2022)	Q	20
			Chameides and Stelson (1992)	?	149
	2.4×10^{-1}	250	Dean and Lange (1999)	?	150, 23
			Brimblecombe and Clegg (1988)	W	105
hypobromous acid	$> 1.3 \times 10^1$		Burkholder et al. (2019)	L	
HOBr	$> 1.3 \times 10^1$		Burkholder et al. (2015)	L	
[13517-11-8]	$> 1.9 \times 10^1$		Blatchley et al. (1992)	M	12
CUILPNURFADTPE-UHFFFAOYSA-N	1.9×10^1		McCoy et al. (1990)	M	12
	1.8×10^{-2}	4000	Mozurkewich (1995)	T	151
	6.0×10^1		Frenzel et al. (1998)	E	
	9.1×10^{-1}		Vogt et al. (1996)	E	
			Sander et al. (2011)	W	152
			Sander et al. (2006)	W	152
			Fickert (1998)	W	153

Table A1.6: Bromine (Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
nitryl bromide BrNO ₂ [13536-70-4] SEYAFXCQVVHRPY-UHFFFAOYSA-M	3.0×10^{-3}		Frenzel et al. (1998)	E	
bromine nitrate BrNO ₃ [40423-14-1] RRTWEEAEXPZMPY-UHFFFAOYSA-N	∞		Sander and Crutzen (1996)	E	99
bromine chloride BrCl [13863-41-7] CODNYICXDISAEA-UHFFFAOYSA-N	9.7×10^{-3} 9.7×10^{-3} 9.7×10^{-3} 9.7×10^{-3} $<6.2 \times 10^{-2}$ 1.5×10^{-2} 9.3×10^{-3} 4.2×10^{-2} 1.1×10^{-2} 6.9×10^{-4} 5.8×10^{-3}	5600 5600 5600 5600	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Sander et al. (2006) Katrib et al. (2001) Disselkamp et al. (1999) Bartlett and Margerum (1999) Dubik et al. (1987) this work Ordóñez et al. (2012) Frenzel et al. (1998)	L L L L M M M M T E E	154 155 143 156

A1.7 Iodine (I)

Table A1.7: Iodine (I)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
iodine (molecular)	2.8×10^{-2}	4300	Eguchi et al. (1973)	M	
I ₂	2.8×10^{-2}	3900	Fogg and Sangster (2003)	V	
[7553-56-2]	3.0×10^{-2}	4400	Palmer et al. (1985)	R	1
PNDPGZBMCMUPRI-UHFFFAOYSA-N	3.1×10^{-2}	4600	Berdnikov and Bazhin (1970)	R	
	3.2×10^{-2}	4800	Wagman et al. (1982)	T	
	1.1×10^{-2}		Thompson and Zafiriou (1983)	C	157
iodine atom	7.9×10^{-4}		Mozurkewich (1986)	T	158
I	6.2×10^{-5}	2300	Berdnikov and Bazhin (1970)	T	48
[14362-44-8] ZCYVEMRRCGMTRW-UHFFFAOYSA-N					
hydrogen iodide			Brimblecombe and Clegg (1989)	T	159
HI			Wagman et al. (1982)	T	160
[10034-85-2]	2.5×10^{-1}	9800	Ordóñez et al. (2012)	E	
XMBWDFGMSWQBCA-UHFFFAOYSA-N	∞		Vogt et al. (1999)	E	99
			Brimblecombe and Clegg (1988)	W	105
iodine monoxide	4.4		Saiz-Lopez et al. (2014)	?	161
IO [14696-98-1] AFSVSXMRDKPOEW-UHFFFAOYSA-N					
iodine dioxide	9.9×10^1		Saiz-Lopez et al. (2014)	?	161
OIO [13494-92-3] WXDJHDMIIZKXSK-UHFFFAOYSA-N					
diiodine dioxide	∞		Badia et al. (2019)	E	162, 163
I ₂ O ₂	∞		Vogt et al. (1999)	E	162, 99
[215239-62-6]	9.9×10^1		Saiz-Lopez et al. (2014)	?	162, 161
IELAHHPSAVYAOC-UHFFFAOYSA-N					
diiodine trioxide	∞		Badia et al. (2019)	E	162, 163
I ₂ O ₃	9.9×10^1		Saiz-Lopez et al. (2014)	?	162, 161
[11085-17-9] NMNCVPLBOKQA-UHFFFAOYSA-N					
diiodine tetroxide	∞		Badia et al. (2019)	E	162, 163
I ₂ O ₄	9.9×10^1		Saiz-Lopez et al. (2014)	?	162, 161
[1024652-24-1] XHTWXUOEQMOFEJ-UHFFFAOYSA-N					
hypoiodous acid	>4.1		Palmer et al. (1985)	C	
HOI			Thompson and Zafiriou (1983)	E	164
[14332-21-9] GEOVEUCEIQCBKH-UHFFFAOYSA-N					

Table A1.7: Iodine (I) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
iodine nitrite INO ₂ [15465-40-4] PSZTWRLUACEPOW-UHFFFAOYSA-N	3.0×10^{-3} ∞		Badia et al. (2019) Vogt et al. (1999)	E E	165 99
iodine nitrate INO ₃ [14696-81-2] CCJHDZZUWZIVJF-UHFFFAOYSA-N	∞		Vogt et al. (1999)	E	99
iodine chloride ICl [7790-99-0] QZRGKCOWNLSUDK-UHFFFAOYSA-N	1.1		Wagman et al. (1982)	T	
iodine bromide IBr [7789-33-5] CBEQRNSPHCCXSH-UHFFFAOYSA-N	2.4×10^{-1}		Wagman et al. (1982)	T	

A1.8 Sulfur (S)

Table A1.8: Sulfur (S)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
sulfur S [7704-34-9] NINIDFKCEFEMDL-UHFFFAOYSA-N	2.0×10^1		Maniere et al. (2011)	?	12, 166
hydrogen sulfide H ₂ S [7783-06-4] RWSOTUBLDIXVET-UHFFFAOYSA-N	1.0×10^{-3}	2100	Burkholder et al. (2019)	L	1
	1.0×10^{-3}	2100	Burkholder et al. (2015)	L	1
	1.0×10^{-3}	2100	Sander et al. (2011)	L	1
	1.0×10^{-3}	2100	Sander et al. (2006)	L	1
	1.0×10^{-3}	2000	Fernández-Prini et al. (2003)	L	3
	1.0×10^{-3}	2200	Carroll and Mather (1989)	L	
	1.0×10^{-3}	2000	Fogg and Young (1988)	L	1, 167
	1.0×10^{-3}	2000	Yoo et al. (1986)	L	1
	1.0×10^{-3}	2100	Edwards et al. (1978)	L	1
	1.0×10^{-3}	2100	Wilhelm et al. (1977)	L	
	9.1×10^{-4}	1700	Rinker and Sandall (2000)	M	
	9.2×10^{-4}	1600	Munder et al. (2000)	M	
	8.6×10^{-4}	2100	De Bruyn et al. (1995b)	M	
	1.1×10^{-3}	2300	Suleimenov and Krupp (1994)	M	1
	1.2×10^{-3}	1700	Tsuji et al. (1990)	M	63
	9.4×10^{-4}	2300	Barrett et al. (1988)	M	
	1.0×10^{-3}	2100	Clarke and Glew (1971)	M	168
	1.0×10^{-3}	2300	Winkler (1907)	M	
	1.0×10^{-3}	2100	Winkler (1906)	M	
	1.1×10^{-3}	2000	Schoenfeld (1855)	M	169
	9.6×10^{-4}	2000	Iliuta and Larachi (2007)	R	1
	1.0×10^{-3}		Hine and Weimar (1965)	R	
	1.0×10^{-3}	2300	Edwards et al. (1975)	T	1
	7.0×10^{-4}		Hayer et al. (2022)	Q	20
	1.0×10^{-3}	2000	Yaws et al. (1999)	?	21
	1.0×10^{-3}	2100	Dean and Lange (1999)	?	170, 23
			Chapoy et al. (2005)	W	171, 1
deuterium sulfide D ₂ S [13536-94-2] RWSOTUBLDIXVET-ZSJDYOACSA-N	9.9×10^{-4}	2100	Clarke and Glew (1971)	M	172, 173
sulfur dioxide SO ₂ [7446-09-5] RAHZWNYVWXNFOC-UHFFFAOYSA-N	1.3×10^{-2}	2900	Burkholder et al. (2019)	L	1
	1.3×10^{-2}	2900	Burkholder et al. (2015)	L	1
	1.3×10^{-2}	2900	Sander et al. (2011)	L	1
	1.3×10^{-2}	2900	Sander et al. (2006)	L	1
	1.2×10^{-2}	3100	Yoo et al. (1986)	L	1
	1.3×10^{-2}	2900	Young (1983)	L	1
	1.2×10^{-2}	3200	Maahs (1982)	L	

Table A1.8: Sulfur (S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.4×10^{-6}	2400	Yaws et al. (1999)	?	21
	1.9×10^{-6}		Abraham and Weathersby (1994)	?	21
sulfuryl fluoride	8.9×10^{-5}	3100	Cady and Misra (1974)	M	
SO ₂ F ₂	7.3×10^{-5}		Duchowicz et al. (2020)	V	187
[2699-79-8]	3.2		Duchowicz et al. (2020)	Q	
OBTWBSRJZRCYQV-UHFFFAOYSA-N	6.3×10^{-6}		Maniere et al. (2011)	?	12, 166

A1.9 Rare gases (He, Ne, Ar, Kr, Xe, Rn)

Table A1.9: Rare gases (He, Ne, Ar, Kr, Xe, Rn)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
helium	3.9×10^{-6}	15	Fernández-Prini et al. (2003)	L	3
He	3.8×10^{-6}	83	Abraham and Matteoli (1988)	L	
[7440-59-7]	3.8×10^{-6}	83	Clever (1979a)	L	1
SWQXJJOGLNCZEY-UHFFFAOYSA-N	3.8×10^{-6}	92	Wilhelm et al. (1977)	L	
	3.7×10^{-6}	320	Himmelblau (1960)	L	1
	3.9×10^{-6}	69	Krause and Benson (1989)	M	
			Shoor et al. (1969)	M	188
	3.7×10^{-6}	120	Morrison and Johnstone (1954)	M	189
	3.8×10^{-6}		Friedman (1954)	M	
	3.8×10^{-6}	210	Lannung (1930)	M	190
	3.7×10^{-6}	380	Cady et al. (1922)	M	
	6.3×10^{-6}	-700	von Antropoff (1910)	M	42
	3.7×10^{-6}	220	Wauchope and Haque (1972)	V	
	5.3×10^{-6}		Pierotti (1965)	T	
	4.5×10^{-6}		Hayer et al. (2022)	Q	20
	3.3×10^{-6}	4	Linnemann et al. (2020)	Q	42
	3.3×10^{-6}	71	Linnemann et al. (2020)	Q	42, 191
	3.9×10^{-6}		Warr et al. (2015)	Q	12
	3.8×10^{-6}	83	Yaws et al. (1999)	?	21
	3.9×10^{-6}		Abraham and Weathersby (1994)	?	21
	3.7×10^{-6}	200	Dean and Lange (1999)	?	192, 23
	3.8×10^{-6}		Abraham et al. (1990)	?	
neon	4.5×10^{-6}	430	Fernández-Prini et al. (2003)	L	3
Ne	4.4×10^{-6}	470	Abraham and Matteoli (1988)	L	
[7440-01-9]	4.5×10^{-6}	470	Clever (1979a)	L	1
GKAOGPPIIYCISHV-UHFFFAOYSA-N	4.4×10^{-6}	450	Wilhelm et al. (1977)	L	
	4.5×10^{-6}	440	Krause and Benson (1989)	M	
	4.4×10^{-6}	510	Crovetto et al. (1982)	M	
	4.3×10^{-6}		Power and Stegall (1970)	M	14
	4.5×10^{-6}	460	Morrison and Johnstone (1954)	M	193
	4.6×10^{-6}	37	Lannung (1930)	M	194
	6.6×10^{-6}	-990	von Antropoff (1910)	M	
	4.5×10^{-6}	510	Wauchope and Haque (1972)	V	
	8.8×10^{-6}		Pierotti (1965)	T	
	4.5×10^{-6}		Hayer et al. (2022)	Q	20
	3.4×10^{-6}	250	Linnemann et al. (2020)	Q	33
	4.7×10^{-6}	470	Linnemann et al. (2020)	Q	33, 191
	3.6×10^{-6}		Warr et al. (2015)	Q	12
	4.5×10^{-6}	470	Yaws et al. (1999)	?	21
	4.4×10^{-6}		Abraham and Weathersby (1994)	?	21
	4.5×10^{-6}	550	Dean and Lange (1999)	?	195, 23
	4.4×10^{-6}		Abraham et al. (1990)	?	

Table A1.9: Rare gases (He, Ne, Ar, Kr, Xe, Rn) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
argon	1.4×10^{-5}	1700	Warneck and Williams (2012)	L	
Ar	1.4×10^{-5}	1400	Fernández-Prini et al. (2003)	L	3
[7440-37-1]	1.4×10^{-5}	1500	Abraham and Matteoli (1988)	L	
XKRFYHLGVUSROY-UHFFFAOYSA-N	1.4×10^{-5}	1500	Clever (1980)	L	1
	1.4×10^{-5}	1500	Wilhelm et al. (1977)	L	
	1.4×10^{-5}	1400	Rettich et al. (1992)	M	196
	1.4×10^{-5}	1400	Krause and Benson (1989)	M	
	1.4×10^{-5}		Park et al. (1982)	M	
	1.4×10^{-5}	1500	Crovetto et al. (1982)	M	
	1.4×10^{-5}	1200	Cosgrove and Walkley (1981)	M	11
	1.4×10^{-5}	1300	Potter II and Clyne (1978)	M	
	1.4×10^{-5}	1500	Murray and Riley (1970)	M	197
	1.4×10^{-5}	1600	Shoor et al. (1969)	M	198
	1.4×10^{-5}	1500	Ashton et al. (1968)	M	199
	1.3×10^{-5}	1500	Morrison and Johnstone (1954)	M	200
	1.4×10^{-5}	1800	Friedman (1954)	M	
	1.4×10^{-5}	1400	Lannung (1930)	M	201
	1.6×10^{-5}	1300	von Antropoff (1910)	M	
	1.5×10^{-5}	1400	Winkler (1906)	M	
	1.4×10^{-5}	1400	Wauchope and Haque (1972)	V	
	1.4×10^{-5}	1400	Wauchope and Haque (1972)	V	
	1.8×10^{-5}		Pierotti (1965)	T	
	9.5×10^{-6}		Hayer et al. (2022)	Q	20
	7.8×10^{-6}	1200	Linnemann et al. (2020)	Q	191
	1.1×10^{-5}	1100	Linnemann et al. (2020)	Q	202
	1.2×10^{-5}		Warr et al. (2015)	Q	12
	1.4×10^{-5}	1500	Yaws et al. (1999)	?	21
	1.2×10^{-5}		Abraham and Weathersby (1994)	?	21
	1.4×10^{-5}	1500	Dean and Lange (1999)	?	203, 23
	1.4×10^{-5}		Abraham et al. (1990)	?	
krypton	2.5×10^{-5}	1700	Fernández-Prini et al. (2003)	L	3
Kr	2.5×10^{-5}	1900	Abraham and Matteoli (1988)	L	
[7439-90-9]	2.5×10^{-5}	1900	Clever (1979b)	L	1
DNNSSWSSYDEUBZ-UHFFFAOYSA-N	2.5×10^{-5}	1900	Wilhelm et al. (1977)	L	
	2.0×10^{-5}		Steward et al. (1973)	L	14
	2.5×10^{-5}	2000	Allott et al. (1973)	L	
	2.5×10^{-5}	1800	Krause and Benson (1989)	M	
	2.5×10^{-5}	1900	Crovetto et al. (1982)	M	
	2.6×10^{-5}	1800	Cosgrove and Walkley (1981)	M	11
	2.4×10^{-5}	1700	Morrison and Johnstone (1954)	M	204
	3.4×10^{-5}	1400	von Antropoff (1910)	M	205
	2.8×10^{-5}	1900	von Antropoff (1910)	M	205
	2.4×10^{-5}	1800	Wauchope and Haque (1972)	V	
	4.4×10^{-5}		Pierotti (1965)	T	
	2.6×10^{-5}		Hayer et al. (2022)	Q	20

Table A1.9: Rare gases (He, Ne, Ar, Kr, Xe, Rn) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.5×10^{-5}	1600	Linnemann et al. (2020)	Q	191
	1.6×10^{-5}	1400	Linnemann et al. (2020)	Q	202
	2.5×10^{-5}		Warr et al. (2015)	Q	12
	2.5×10^{-5}	1900	Yaws et al. (1999)	?	21
	2.0×10^{-5}		Abraham and Weathersby (1994)	?	21
	2.5×10^{-5}	1800	Dean and Lange (1999)	?	206, 23
	2.5×10^{-5}		Abraham et al. (1990)	?	
xenon	4.4×10^{-5}	2200	Fernández-Prini et al. (2003)	L	3
Xe	4.3×10^{-5}	2300	Abraham and Matteoli (1988)	L	
[7440-63-3]	4.3×10^{-5}	2300	Clever (1979b)	L	1
FHNFHKCVQCLJFQ-UHFFFAOYSA-N	4.2×10^{-5}	2200	Wilhelm et al. (1977)	L	
	3.3×10^{-5}		Steward et al. (1973)	L	14
	4.5×10^{-5}	2400	Allott et al. (1973)	L	
	4.0×10^{-5}	2400	Himmelblau (1960)	L	1, 207
	4.3×10^{-5}	2300	Krause and Benson (1989)	M	
	4.2×10^{-5}	2400	Crovetto et al. (1982)	M	
	4.2×10^{-5}	2200	Morrison and Johnstone (1954)	M	208
	4.4×10^{-5}	2500	von Antropoff (1910)	M	
	4.2×10^{-5}	2200	Wauchope and Haque (1972)	V	
	5.5×10^{-5}		Pierotti (1965)	T	
	2.5×10^{-5}		Hayer et al. (2022)	Q	20
	7.0×10^{-5}	2300	Linnemann et al. (2020)	Q	191
	2.9×10^{-5}	1800	Linnemann et al. (2020)	Q	202
	8.2×10^{-5}		Warr et al. (2015)	Q	12
	4.3×10^{-5}	2300	Yaws et al. (1999)	?	21
	3.4×10^{-5}		Abraham and Weathersby (1994)	?	21
	4.9×10^{-5}	2200	Dean and Lange (1999)	?	209, 23
	4.3×10^{-5}		Abraham et al. (1990)	?	
xenon-133 ^{133}Xe [14932-42-4] FHNFHKCVQCLJFQ-NJFSPNSNSA-N	3.2×10^{-5}		Ercan (1979)	M	14
radon	9.1×10^{-5}	2900	Abraham and Matteoli (1988)	L	
Rn	9.1×10^{-5}	2600	Clever (1979b)	L	1
[10043-92-2]	9.2×10^{-5}	2600	Wilhelm et al. (1977)	L	
SYUHGPVQQRZVTB-UHFFFAOYSA-N	9.4×10^{-5}	2600	Lewis et al. (1987)	M	210
	1.0×10^{-4}	2700	Ramstedt (1911)	M	
	1.2×10^{-4}		Pierotti (1965)	T	
	1.0×10^{-4}		Hayer et al. (2022)	Q	20
	7.4×10^{-5}	2400	Linnemann et al. (2020)	Q	211
	9.1×10^{-5}	2600	Yaws et al. (1999)	?	21
	8.3×10^{-5}	2800	Dean and Lange (1999)	?	212, 23
	9.1×10^{-5}		Abraham et al. (1990)	?	

A1.10 Other elements (B, Se, P, As, Hg)

Table A1.10: Other elements (B, Se, P, As, Hg)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
boric acid H_3BO_3 [10043-35-3] KGBXLFKZBHKPEV-UHFFFAOYSA-N	3.8×10^6		HSDB (2015)	V	
selenium hydride H_2Se [7783-07-5] BUGBHKTXTAQXES-UHFFFAOYSA-N	8.1×10^{-4} 8.3×10^{-4} 8.3×10^{-4}	1700 1900 1900	Fogg and Young (1988) Wilhelm et al. (1977) Sisi et al. (1971)	L L M	1 213
phosphorus trihydride PH_3 (phosphine) [7803-51-2] XYFCBTPGUUZFHU-UHFFFAOYSA-N	8.1×10^{-5} 5.9×10^{-5} 8.1×10^{-5}	2000 3000 2000	Wilhelm et al. (1977) Fu et al. (2013) Yaws et al. (1999)	L M ?	 214 21
arsenic hydride AsH_3 (arsine) [7784-42-1] RQNWIZPPADIBDY-UHFFFAOYSA-N	8.8×10^{-5}	2100	Wilhelm et al. (1977)	L	
mercury Hg [7439-97-6] QSHDDOUJBYECFT-UHFFFAOYSA-N	1.3×10^{-3} 1.3×10^{-3} 1.2×10^{-3} 1.1×10^{-3} 1.3×10^{-3} 1.3×10^{-3} 8.7×10^{-4} 1.1×10^{-3} 1.2×10^{-3} 1.4×10^{-3} 1.4×10^{-3} 1.3×10^{-3} 1.3×10^{-3} 9.2×10^{-4}	2600 2600 5400 4800 2600 2500 5700 5700 2300 2700 2700 2700 2700 2700	Burkholder et al. (2019) Burkholder et al. (2015) Clever (1987) Clever et al. (1985) Andersson et al. (2008) Sanemasa (1975) Mackay and Leinonen (1975) Glew and Hames (1971) Shon et al. (2005) WHO (1990) Abraham et al. (2008) Schroeder and Munthe (1998) Schroeder and Munthe (1998) Petersen et al. (1998) Brimblecombe (1986)	L L L L M M V V C C Q ? ? ? ?	 1 1 1 12 215 12, 21 21 216 81
mercury(II) oxide HgO [21908-53-2] UKWHYYKOEPR TIC-UHFFFAOYSA-N	3.2×10^4 2.7×10^{10} 1.4×10^4		Shon et al. (2005) Schroeder and Munthe (1998) Petersen et al. (1998)	? ? ?	217 21 216

Table A1.10: Other elements (B, Se, P, As, Hg) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
mercury dihydroxide Hg(OH) ₂ [12135-13-6] VLKXDXDVIWIBHHS-UHFFFAOYSA-L	1.3×10^2 1.3×10^2	4200 4200	WHO (1990) Lindqvist and Rodhe (1985)	C C	
mercury dichloride HgCl ₂ [7487-94-7] LWJROJJCJINYWOX-UHFFFAOYSA-L	1.0×10^3 1.6×10^4 4.2×10^4 1.3×10^4 2.4×10^5 1.4×10^4 1.4×10^4 4.2×10^4 2.7×10^4 1.4×10^4 6.3×10^2	7400 7400 7400 7400 9500	Severit (1997) Abraham et al. (2008) Abraham et al. (2008) Kanefke (2008) Shon et al. (2005) WHO (1990) Lindqvist and Rodhe (1985) Abraham et al. (2008) Schroeder and Munthe (1998) Braun and Dransfeld (1989) Iverfeldt and Persson (1985)	M V V R C C C Q ? ? ?	218 219 12, 21 11 220
mercury dibromide HgBr ₂ [7789-47-1] NGYIMTKLQULBOO-UHFFFAOYSA-L	1.2×10^3 9.6×10^2 4.4×10^3 2.7×10^4 5.2×10^1	7400 7100	Abraham et al. (2008) Kanefke (2008) Abraham et al. (2008) Hedgecock et al. (2005) Iverfeldt and Persson (1985)	V C Q ? ?	 219 221 220
mercury diiodide HgI ₂ [7774-29-0] YFDLHELOZYVNJE-UHFFFAOYSA-L	5.7×10^1 2.0×10^2 1.9	6700	Abraham et al. (2008) Abraham et al. (2008) Iverfeldt and Persson (1985)	V Q ?	 219 220

A2 Hydrocarbons (C, H)

A2.1 Alkanes

Table A2.1: Alkanes

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methane	1.4×10^{-5}	1600	Burkholder et al. (2019)	L	1
CH ₄	1.2×10^{-5}	1100	Burkholder et al. (2019)	L	71
[74-82-8]	1.4×10^{-5}	1600	Burkholder et al. (2015)	L	1
VNWK TOKETHGBQD-UHFFFAOYSA-N	1.2×10^{-5}	1100	Burkholder et al. (2015)	L	71
	1.4×10^{-5}	1900	Warneck and Williams (2012)	L	
	1.4×10^{-5}	1600	Sander et al. (2011)	L	1
	1.4×10^{-5}	1600	Sander et al. (2006)	L	1
	1.4×10^{-5}	1500	Fernández-Prini et al. (2003)	L	3
	1.4×10^{-5}	1600	Plyasunov and Shock (2000)	L	
	1.4×10^{-5}	1600	Abraham and Matteoli (1988)	L	
			Clever and Young (1987)	L	222
	1.5×10^{-5}		Mackay and Shiu (1981)	L	
	1.4×10^{-5}	1700	Wilhelm et al. (1977)	L	
	1.3×10^{-5}	1500	Himmelblau (1960)	L	1
	1.6×10^{-5}		Liu et al. (2021)	M	
	1.4×10^{-5}	1800	Lutsyk et al. (2005)	M	
	1.2×10^{-5}	2400	Lekvam and Bishnoi (1997)	M	
	1.3×10^{-5}	1400	Reichl (1995)	M	223
	1.4×10^{-5}	1600	Scharlin and Battino (1995)	M	224
	1.2×10^{-5}		Guitart et al. (1989)	M	14
	1.4×10^{-5}	1800	Ben-Naim and Battino (1985)	M	
	1.4×10^{-5}	1600	Crovetto et al. (1982)	M	
	1.4×10^{-5}	1600	Rettich et al. (1981)	M	
	1.4×10^{-5}	1600	Cosgrove and Walkley (1981)	M	11
	1.3×10^{-5}	1700	Shoor et al. (1969)	M	225
	1.5×10^{-5}		McAuliffe (1966)	M	226
	1.4×10^{-5}	1600	Wetlaufer et al. (1964)	M	
	1.5×10^{-5}		McAuliffe (1963)	M	227
	1.3×10^{-5}	1600	Morrison and Billett (1952)	M	228
	1.3×10^{-5}	1700	Winkler (1901)	M	229
	1.5×10^{-5}		Duchowicz et al. (2020)	V	187
	1.5×10^{-5}		HSDB (2015)	V	
	1.5×10^{-5}		Meylan and Howard (1991)	V	
	1.5×10^{-5}		Hine and Mookerjee (1975)	V	
	1.3×10^{-5}	1600	Wauchope and Haque (1972)	V	
	9.2×10^{-5}		Butler and Ramchandani (1935)	V	
	1.4×10^{-5}		Hine and Weimar (1965)	R	
	1.4×10^{-5}		Pierotti (1965)	T	
	9.6×10^{-6}		Liss and Slater (1974)	C	
	1.3×10^{-5}		Deno and Berkheimer (1960)	C	
	1.1×10^{-5}		Hayer et al. (2022)	Q	20
	3.4×10^{-3}		Duchowicz et al. (2020)	Q	

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.0×10^{-7}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-5}	2300	Hilal et al. (2008)	Q	
			Kühne et al. (2005)	Q	
	3.0×10^{-5}		Yao et al. (2002)	Q	230
	3.0×10^{-5}		English and Carroll (2001)	Q	231, 232
	8.6×10^{-6}		Katritzky et al. (1998)	Q	
	1.6×10^{-5}		Nirmalakhandan et al. (1997)	Q	
	2.1×10^{-5}		Suzuki et al. (1992)	Q	233
	2.4×10^{-5}	1700	Meylan and Howard (1991)	Q	
			Kühne et al. (2005)	?	
	1.6×10^{-5}		Yaws (1999)	?	21
	1.4×10^{-5}	1600	Yaws et al. (1999)	?	21
	1.2×10^{-5}		Abraham and Weathersby (1994)	?	21
	1.3×10^{-5}	1700	Dean and Lange (1999)	?	234, 23
	1.5×10^{-5}		Yaws and Yang (1992)	?	21
	1.4×10^{-5}		Abraham et al. (1990)	?	
ethane	1.9×10^{-5}	2400	Burkholder et al. (2019)	L	1
C_2H_6	1.9×10^{-5}	2400	Burkholder et al. (2015)	L	1
[74-84-0]	1.9×10^{-5}	2400	Sander et al. (2011)	L	1
OTMSDBZUPAUJEDD-UHFFFAOYSA-N	1.9×10^{-5}	2400	Sander et al. (2006)	L	1
	1.9×10^{-5}	2400	Fernández-Prini et al. (2003)	L	3
	1.9×10^{-5}	2300	Plyasunov and Shock (2000)	L	
	1.9×10^{-5}	2300	Abraham and Matteoli (1988)	L	
	1.9×10^{-5}	2300	Hayduk (1982)	L	1
	2.0×10^{-5}		Mackay and Shiu (1981)	L	
	1.8×10^{-5}	2400	Wilhelm et al. (1977)	L	
	2.0×10^{-5}	2300	Reichl (1995)	M	235
	1.3×10^{-5}		Guitart et al. (1989)	M	14
	1.8×10^{-5}	2700	Ben-Naim and Battino (1985)	M	
	1.9×10^{-5}	2300	Rettich et al. (1981)	M	
	1.8×10^{-5}	2700	Cosgrove and Walkley (1981)	M	11
	2.0×10^{-5}		McAuliffe (1966)	M	226
	2.0×10^{-5}	2400	Wetlaufer et al. (1964)	M	
	2.0×10^{-5}		McAuliffe (1963)	M	227
	1.7×10^{-5}	2100	Morrison and Billett (1952)	M	236
	1.8×10^{-5}	2400	Winkler (1901)	M	237
	2.0×10^{-5}		Duchowicz et al. (2020)	V	187
	2.0×10^{-5}		HSDB (2015)	V	
	2.0×10^{-5}		Hine and Mookerjee (1975)	V	
	1.7×10^{-5}	2000	Wauchope and Haque (1972)	V	
	1.0×10^{-4}		Butler and Ramchandani (1935)	V	
	4.0×10^{-5}		Pierotti (1965)	T	
	2.0×10^{-5}		Yaws (2003)	X	238
	1.8×10^{-5}		Deno and Berkheimer (1960)	C	
	1.8×10^{-5}		Hayes et al. (2022)	Q	20

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.3×10^{-3}		Duchowicz et al. (2020)	Q	
	1.1×10^{-4}		Wang et al. (2017)	Q	81, 239
	1.1×10^{-5}		Wang et al. (2017)	Q	81, 240
	2.0×10^{-5}		Wang et al. (2017)	Q	81, 241
	2.0×10^{-5}		Li et al. (2014)	Q	242
	3.3×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	4.1×10^{-5}		Gharagheizi et al. (2010)	Q	247
	2.0×10^{-5}		Hilal et al. (2008)	Q	
	7.8×10^{-6}		Modarresi et al. (2007)	Q	68
		2600	Kühne et al. (2005)	Q	
	4.6×10^{-6}		Modarresi et al. (2005)	Q	248
	2.1×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	2.1×10^{-5}		Yao et al. (2002)	Q	230
	1.8×10^{-5}		English and Carroll (2001)	Q	231, 232
	1.5×10^{-5}		Katritzky et al. (1998)	Q	
	2.4×10^{-5}		Suzuki et al. (1992)	Q	233
	2.2×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	1.1×10^{-5}		Irmann (1965)	Q	
		2500	Kühne et al. (2005)	?	
	2.0×10^{-5}		Yaws (1999)	?	21
	1.9×10^{-5}	2300	Yaws et al. (1999)	?	21
	1.5×10^{-5}		Abraham and Weathersby (1994)	?	21
	1.8×10^{-5}	2400	Dean and Lange (1999)	?	251, 23
	2.0×10^{-5}		Yaws and Yang (1992)	?	21
	1.9×10^{-5}		Abraham et al. (1990)	?	
propane	1.5×10^{-5}	2700	Burkholder et al. (2019)	L	1
C ₃ H ₈	1.5×10^{-5}	2700	Burkholder et al. (2015)	L	1
[74-98-6]	1.5×10^{-5}	2700	Sander et al. (2011)	L	1
ATUOYWHBWRKTHZ-UHFFFAOYSA-N	1.5×10^{-5}	2700	Sander et al. (2006)	L	1
	1.5×10^{-5}	2800	Plyasunov and Shock (2000)	L	
	1.5×10^{-5}	2800	Abraham and Matteoli (1988)	L	
	1.5×10^{-5}	2700	Hayduk (1986)	L	1
	1.4×10^{-5}		Mackay and Shiu (1981)	L	
	1.5×10^{-5}	2700	Wilhelm et al. (1977)	L	
	1.6×10^{-5}	2700	Chapoy et al. (2004)	M	1
	1.5×10^{-5}	2700	Reichl (1995)	M	252
	9.7×10^{-6}		Guitart et al. (1989)	M	14
	1.4×10^{-5}	3000	Ben-Naim and Battino (1985)	M	
	1.4×10^{-5}		McAuliffe (1966)	M	226
	1.6×10^{-5}	2700	Wetlaufer et al. (1964)	M	
	1.4×10^{-5}		McAuliffe (1963)	M	227
	1.5×10^{-5}	2600	Morrison and Billett (1952)	M	253

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.4×10^{-5}		Duchowicz et al. (2020)	V	187
	1.4×10^{-5}		HSDB (2015)	V	
	1.4×10^{-5}		Hine and Mookerjee (1975)	V	
	1.5×10^{-5}	2600	Wauchope and Haque (1972)	V	
	1.5×10^{-5}	2700	Wauchope and Haque (1972)	V	
	1.3×10^{-5}		Irmann (1965)	V	
	1.4×10^{-5}		Yaws (2003)	X	238
	1.4×10^{-5}		Deno and Berkheimer (1960)	C	
	1.7×10^{-5}		Hayer et al. (2022)	Q	20
	4.4×10^{-4}		Duchowicz et al. (2020)	Q	
	8.7×10^{-5}		Wang et al. (2017)	Q	81, 239
	9.3×10^{-6}		Wang et al. (2017)	Q	81, 240
	1.9×10^{-5}		Wang et al. (2017)	Q	81, 241
	4.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	2.4×10^{-5}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-5}		Hilal et al. (2008)	Q	
	7.2×10^{-6}		Modarresi et al. (2007)	Q	68
		2900	Kühne et al. (2005)	Q	
	3.7×10^{-6}		Modarresi et al. (2005)	Q	248
	1.4×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	2.0×10^{-5}		Yao et al. (2002)	Q	230
	1.4×10^{-5}		English and Carroll (2001)	Q	231, 232
	1.5×10^{-5}		Katritzky et al. (1998)	Q	
	1.7×10^{-5}		Suzuki et al. (1992)	Q	233
	1.6×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	1.3×10^{-5}		Irmann (1965)	Q	
		2800	Kühne et al. (2005)	?	
	1.4×10^{-5}		Yaws (1999)	?	21
	1.5×10^{-5}	4500	Yaws et al. (1999)	?	21
	1.4×10^{-5}		Yaws and Yang (1992)	?	21
	1.5×10^{-5}		Abraham et al. (1990)	?	
butane	1.2×10^{-5}	3100	Burkholder et al. (2019)	L	254, 1
C_4H_{10}	1.2×10^{-5}	3100	Burkholder et al. (2015)	L	255, 1
[106-97-8]	1.2×10^{-5}	3100	Sander et al. (2011)	L	256, 1
IJDNQMDRQITEOD-UHFFFAOYSA-N	1.2×10^{-5}	3100	Sander et al. (2006)	L	257, 1
	1.2×10^{-5}	3100	Plyasunov and Shock (2000)	L	
	1.3×10^{-5}	3100	Abraham and Matteoli (1988)	L	
	1.2×10^{-5}	3000	Hayduk (1986)	L	1
	1.0×10^{-5}		Mackay and Shiu (1981)	L	
	1.2×10^{-5}	3100	Wilhelm et al. (1977)	L	
	1.3×10^{-5}	2300	Carroll et al. (1997)	M	1
	8.0×10^{-6}		Guitart et al. (1989)	M	14

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^{-5}	3200	Ben-Naim and Battino (1985)	M	
	1.1×10^{-5}		McAuliffe (1966)	M	226
	1.3×10^{-5}	3200	Wetlaufer et al. (1964)	M	
	1.1×10^{-5}		McAuliffe (1963)	M	227
	1.1×10^{-5}	2900	Morrison and Billett (1952)	M	258
	1.0×10^{-5}		Duchowicz et al. (2020)	V	187
	1.0×10^{-5}		HSDB (2015)	V	
	1.0×10^{-5}		Mackay et al. (2006a)	V	
	1.0×10^{-5}		Mackay et al. (1993)	V	
	9.6×10^{-6}		Hwang et al. (1992)	V	
	1.1×10^{-5}		Hine and Mookerjee (1975)	V	
	1.1×10^{-5}	2900	Wauchope and Haque (1972)	V	
	1.2×10^{-5}	3100	Wauchope and Haque (1972)	V	
	1.2×10^{-5}		Irmann (1965)	V	
	4.8×10^{-5}		Butler and Ramchandani (1935)	V	
	1.1×10^{-5}		Yaws (2003)	X	259
	1.1×10^{-5}		Yaws (2003)	X	238
	1.1×10^{-5}		Deno and Berkheimer (1960)	C	
	1.6×10^{-5}		Dupeux et al. (2022)	Q	260
	1.6×10^{-5}		Hayer et al. (2022)	Q	20
	4.4×10^{-4}		Duchowicz et al. (2020)	Q	
	7.8×10^{-5}		Wang et al. (2017)	Q	81, 239
	1.1×10^{-5}		Wang et al. (2017)	Q	81, 240
	1.8×10^{-5}		Wang et al. (2017)	Q	81, 241
	1.1×10^{-5}		Li et al. (2014)	Q	242
	4.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-5}		Raventos-Duran et al. (2010)	Q	243, 244
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-6}		Raventos-Duran et al. (2010)	Q	246
	1.4×10^{-5}		Gharagheizi et al. (2010)	Q	247
	1.2×10^{-5}		Hilal et al. (2008)	Q	
		3300	Kühne et al. (2005)	Q	
	3.5×10^{-6}		Modarresi et al. (2005)	Q	248
	1.1×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	1.6×10^{-5}		Yao et al. (2002)	Q	230
	1.0×10^{-5}		English and Carroll (2001)	Q	231, 261
	1.5×10^{-5}		Katritzky et al. (1998)	Q	
	1.3×10^{-5}		Suzuki et al. (1992)	Q	233
	1.2×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	1.2×10^{-5}		Irmann (1965)	Q	
		3300	Kühne et al. (2005)	?	
	1.1×10^{-5}		Yaws (1999)	?	21
	1.2×10^{-5}	3000	Yaws et al. (1999)	?	21
	1.1×10^{-5}		Yaws and Yang (1992)	?	21
	1.2×10^{-5}		Abraham et al. (1990)	?	

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methylpropane	9.1×10^{-6}	2700	Burkholder et al. (2019)	L	262, 1
HC(CH ₃) ₃	9.1×10^{-6}	2700	Burkholder et al. (2015)	L	263, 1
(isobutane)	9.1×10^{-6}	2700	Sander et al. (2011)	L	264, 1
[75-28-5]	9.1×10^{-6}	2700	Sander et al. (2006)	L	265, 1
NNPPMTNAJDCUHE-UHFFFAOYSA-N			Fogg and Sangster (2003)	L	266
	9.2×10^{-6}	2900	Plyasunov and Shock (2000)	L	
	9.1×10^{-6}	2700	Hayduk (1986)	L	267, 1
	8.3×10^{-6}		Mackay and Shiu (1981)	L	
	8.0×10^{-6}	2700	Wilhelm et al. (1977)	L	
	1.1×10^{-4}	5100	Mohebbi et al. (2012)	M	
	8.5×10^{-6}		McAuliffe (1966)	M	226
	9.9×10^{-6}	2700	Wetlaufer et al. (1964)	M	
	8.5×10^{-6}		McAuliffe (1963)	M	227
	8.3×10^{-6}		Duchowicz et al. (2020)	V	187
	8.3×10^{-6}		HSDB (2015)	V	
	8.3×10^{-6}		Mackay et al. (2006a)	V	
	8.3×10^{-6}		Mackay et al. (1993)	V	
	8.4×10^{-6}		Hine and Mookerjee (1975)	V	
	9.7×10^{-6}		Irmann (1965)	V	
	8.5×10^{-6}		Yaws (2003)	X	238
	1.3×10^{-5}		Hayer et al. (2022)	Q	20
	1.7×10^{-4}		Duchowicz et al. (2020)	Q	
	8.3×10^{-5}		Wang et al. (2017)	Q	81, 239
	5.3×10^{-6}		Wang et al. (2017)	Q	81, 240
	2.0×10^{-5}		Wang et al. (2017)	Q	81, 241
	3.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-5}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-6}		Raventos-Duran et al. (2010)	Q	246
	1.5×10^{-5}		Gharagheizi et al. (2010)	Q	247
	5.6×10^{-6}		Hilal et al. (2008)	Q	
	5.8×10^{-6}		Modarresi et al. (2007)	Q	68
		3300	Kühne et al. (2005)	Q	
	3.7×10^{-6}		Modarresi et al. (2005)	Q	248
	8.4×10^{-6}		Yaffe et al. (2003)	Q	249, 250
	8.4×10^{-6}		Yaffe et al. (2003)	Q	249, 250
	9.8×10^{-6}		Yao et al. (2002)	Q	230, 268
	1.0×10^{-5}		English and Carroll (2001)	Q	231, 232
	1.5×10^{-5}		Katritzky et al. (1998)	Q	
	1.1×10^{-5}		Suzuki et al. (1992)	Q	233
	1.0×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	1.1×10^{-5}		Irmann (1965)	Q	
		2900	Kühne et al. (2005)	?	
	8.6×10^{-6}		Yaws (1999)	?	21
	9.1×10^{-6}	2700	Yaws et al. (1999)	?	21
	8.5×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	8.0×10^{-6}		Abraham et al. (1990)	?	
	7.9×10^{-6}		Abraham (1979)	?	
pentane C_5H_{12} [109-66-0] OFBQJSOFQDEBGM-UHFFFAOYSA-N	7.2×10^{-6}	3900	Brockbank (2013)	L	1, 269
	8.7×10^{-6}	3500	Plyasunov and Shock (2000)	L	
	8.0×10^{-6}	3400	Abraham and Matteoli (1988)	L	
	8.0×10^{-6}		Mackay and Shiu (1981)	L	
	8.7×10^{-6}	3400	Jou and Mather (2000)	M	270, 271
	8.2×10^{-6}	3600	Jönsson et al. (1982)	M	
	7.8×10^{-6}		Rytting et al. (1978)	M	
	7.8×10^{-6}		Mackay et al. (2006a)	V	
	7.8×10^{-6}		Mackay et al. (1993)	V	
	8.3×10^{-6}		Eastcott et al. (1988)	V	
	7.8×10^{-6}		Amoore and Buttery (1978)	V	
	7.9×10^{-6}		Hine and Mookerjee (1975)	V	
	8.3×10^{-6}		McAuliffe (1966)	V	226
	8.3×10^{-6}		McAuliffe (1963)	V	227
		3000	Gill et al. (1976)	T	
	7.8×10^{-6}		Yaws (2003)	X	259
	7.8×10^{-6}		Yaws (2003)	X	238
	1.3×10^{-5}		Dupeux et al. (2022)	Q	260
	4.9×10^{-5}		Keshavarz et al. (2022)	Q	
	4.4×10^{-4}		Duchowicz et al. (2020)	Q	185
	6.5×10^{-5}		Wang et al. (2017)	Q	81, 239
	9.3×10^{-6}		Wang et al. (2017)	Q	81, 240
	1.7×10^{-5}		Wang et al. (2017)	Q	81, 241
	4.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-6}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-6}		Raventos-Duran et al. (2010)	Q	246
	8.3×10^{-6}		Gharagheizi et al. (2010)	Q	247
	9.9×10^{-6}		Hilal et al. (2008)	Q	
	6.6×10^{-6}		Modarresi et al. (2007)	Q	68
		3600	Kühne et al. (2005)	Q	
	3.1×10^{-6}		Modarresi et al. (2005)	Q	248
	8.4×10^{-6}		Yaffe et al. (2003)	Q	249, 250
	1.5×10^{-5}		Yao et al. (2002)	Q	230
	8.0×10^{-6}		English and Carroll (2001)	Q	231, 232
	1.5×10^{-5}		Katritzky et al. (1998)	Q	
	1.0×10^{-5}		Suzuki et al. (1992)	Q	233
	9.9×10^{-6}		Nirmalakhandan and Speece (1988)	Q	
	7.9×10^{-6}		Duchowicz et al. (2020)	?	186, 21
		4200	Kühne et al. (2005)	?	
	7.8×10^{-6}		Yaws (1999)	?	21
	5.1×10^{-6}		Abraham and Weathersby (1994)	?	21
	7.8×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.1×10^{-6}		Wang et al. (2017)	Q	81, 240
	2.5×10^{-5}		Wang et al. (2017)	Q	81, 241
	2.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-6}		Raventos-Duran et al. (2010)	Q	243, 244
	2.5×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-6}		Raventos-Duran et al. (2010)	Q	246
	8.3×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.5×10^{-6}		Hilal et al. (2008)	Q	
	5.3×10^{-6}		Modarresi et al. (2007)	Q	68
		3600	Kühne et al. (2005)	Q	
	3.6×10^{-6}		Modarresi et al. (2005)	Q	248
	4.6×10^{-6}		Yaffe et al. (2003)	Q	249, 250
	3.8×10^{-6}		Yao et al. (2002)	Q	230, 268
	8.0×10^{-6}		English and Carroll (2001)	Q	231, 275
	1.4×10^{-5}		Katritzky et al. (1998)	Q	
	7.3×10^{-6}		Suzuki et al. (1992)	Q	233
	6.2×10^{-6}		Nirmalakhandan and Speece (1988)	Q	
		3100	Kühne et al. (2005)	?	
	4.7×10^{-6}		Yaws (1999)	?	21
	4.7×10^{-6}		Yaws and Yang (1992)	?	21
	5.8×10^{-6}		Abraham et al. (1990)	?	
	5.9×10^{-6}		Abraham (1979)	?	
hexane C_6H_{14} [110-54-3] VLKZOEYOYAKHREP-UHFFFAOYSA-N	5.7×10^{-6}	4400	Brockbank (2013)	L	1, 276
	6.9×10^{-6}	3800	Plyasunov and Shock (2000)	L	
	6.1×10^{-6}	3800	Abraham and Matteoli (1988)	L	
	5.9×10^{-6}		Mackay and Shiu (1981)	L	
	6.1×10^{-6}		Ryu and Park (1999)	M	
	7.4×10^{-6}		Park et al. (1997)	M	277
	2.4×10^{-4}	8700	Kolb et al. (1992)	M	278
	6.7×10^{-6}		Guitart et al. (1989)	M	14
	9.9×10^{-6}	7500	Ashworth et al. (1988)	M	279
	6.7×10^{-6}	4200	Tsonopoulos and Wilson (1983)	M	1
	5.9×10^{-6}	4000	Jönsson et al. (1982)	M	
	5.4×10^{-6}		Rytting et al. (1978)	M	
	5.5×10^{-6}		Duchowicz et al. (2020)	V	187
	5.5×10^{-6}		HSDB (2015)	V	
	5.5×10^{-6}		Mackay et al. (2006a)	V	
	5.5×10^{-6}		Mackay et al. (1993)	V	
	5.5×10^{-6}		Hwang et al. (1992)	V	
	7.1×10^{-6}		Eastcott et al. (1988)	V	
	6.1×10^{-6}		Cabani et al. (1981)	V	
	5.4×10^{-6}		Hine and Mookerjee (1975)	V	
	5.9×10^{-6}		McAuliffe (1966)	V	226
	5.9×10^{-6}		McAuliffe (1963)	V	227
	6.7×10^{-6}	3800	Plyasunov et al. (2001)	T	

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
		3800	Gill et al. (1976)	T	
	7.6×10^{-6}		Yaws (2003)	X	259
	7.6×10^{-6}		Yaws (2003)	X	238
	1.0×10^{-5}		Dupeux et al. (2022)	Q	260
	5.7×10^{-6}		Hayer et al. (2022)	Q	20
	4.4×10^{-4}		Duchowicz et al. (2020)	Q	
	5.0×10^{-5}		Wang et al. (2017)	Q	81, 239
	6.9×10^{-6}		Wang et al. (2017)	Q	81, 240
	1.6×10^{-5}		Wang et al. (2017)	Q	81, 241
	2.3×10^{-5}		Li et al. (2014)	Q	242
	4.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	243, 244
	9.9×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	246
	5.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	7.7×10^{-6}		Hilal et al. (2008)	Q	
	5.2×10^{-6}		Modarresi et al. (2007)	Q	68
		4000	Kühne et al. (2005)	Q	
	2.9×10^{-6}		Modarresi et al. (2005)	Q	248
	5.8×10^{-6}		Yaffe et al. (2003)	Q	249, 273
	6.0×10^{-6}		Yao et al. (2002)	Q	230
	6.2×10^{-6}		English and Carroll (2001)	Q	231, 232
	1.4×10^{-5}		Katritzky et al. (1998)	Q	
	1.4×10^{-5}		Russell et al. (1992)	Q	280
	7.9×10^{-6}		Suzuki et al. (1992)	Q	233
	7.9×10^{-6}		Nirmalakhandan and Speece (1988)	Q	
		4100	Kühne et al. (2005)	?	
	7.6×10^{-6}		Yaws (1999)	?	21
	3.4×10^{-6}		Abraham and Weathersby (1994)	?	21
	7.6×10^{-6}		Yaws and Yang (1992)	?	21
	6.1×10^{-6}		Abraham et al. (1990)	?	
2-methylpentane C_6H_{14} (isohexane) [107-83-5] AFABGHUZZDYHJO-UHFFFAOYSA-N	6.4×10^{-6}	4500	Brockbank (2013)	L	1
	5.7×10^{-6}	3900	Plyasunov and Shock (2000)	L	
	5.9×10^{-6}		Mackay and Shiu (1981)	L	
	1.3×10^{-5}	960	Ashworth et al. (1988)	M	42, 279
	5.8×10^{-6}		Duchowicz et al. (2020)	V	187
	5.8×10^{-6}		HSDB (2015)	V	
	5.7×10^{-6}		Mackay et al. (2006a)	V	
	5.7×10^{-6}		Mackay et al. (1993)	V	
	5.7×10^{-6}		Eastcott et al. (1988)	V	
	5.7×10^{-6}		Hine and Mookerjee (1975)	V	
	6.0×10^{-6}		McAuliffe (1966)	V	226
	6.0×10^{-6}		McAuliffe (1963)	V	227
			Staudinger and Roberts (1996)	R	281
	5.7×10^{-6}		Yaws (2003)	X	238

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.2×10^{-6}		Hilal et al. (2008)	C	
	1.7×10^{-4}		Duchowicz et al. (2020)	Q	
	6.0×10^{-5}		Wang et al. (2017)	Q	81, 239
	4.5×10^{-6}		Wang et al. (2017)	Q	81, 240
	1.9×10^{-5}		Wang et al. (2017)	Q	81, 241
	3.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	246
	5.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	4.8×10^{-6}		Hilal et al. (2008)	Q	
	5.9×10^{-6}		Modarresi et al. (2007)	Q	68
		4000	Kühne et al. (2005)	Q	
	3.9×10^{-6}		Modarresi et al. (2005)	Q	248
	5.8×10^{-6}		Yaffe et al. (2003)	Q	249, 250
	8.0×10^{-6}		Yao et al. (2002)	Q	230
	6.1×10^{-6}		English and Carroll (2001)	Q	231, 232
	1.4×10^{-5}		Katritzky et al. (1998)	Q	
	7.0×10^{-6}		Suzuki et al. (1992)	Q	233
	6.7×10^{-6}		Nirmalakhandan and Speece (1988)	Q	
		4000	Kühne et al. (2005)	?	
	5.7×10^{-6}		Yaws (1999)	?	21
	3.6×10^{-6}		Abraham and Weathersby (1994)	?	21
	5.7×10^{-6}		Yaws and Yang (1992)	?	21
3-methylpentane C_6H_{14} [96-14-0] PFE0ZHBOMNWTJB-UHFFFAOYSA-N	5.9×10^{-6}		Brockbank (2013)	L	
	5.9×10^{-6}		Plyasunov and Shock (2000)	L	
	5.8×10^{-6}		Mackay and Shiu (1981)	L	
	5.9×10^{-6}		Duchowicz et al. (2020)	V	187
	5.8×10^{-6}		HSDB (2015)	V	
	5.9×10^{-6}		Mackay et al. (2006a)	V	
	5.9×10^{-6}		Mackay et al. (1993)	V	
	5.9×10^{-6}		Eastcott et al. (1988)	V	
	5.8×10^{-6}		Hine and Mookerjee (1975)	V	
	6.0×10^{-6}		McAuliffe (1966)	V	
	8.2×10^{-6}		Yaws (2003)	X	238
	1.7×10^{-4}		Duchowicz et al. (2020)	Q	
	6.0×10^{-5}		Wang et al. (2017)	Q	81, 239
	5.8×10^{-6}		Wang et al. (2017)	Q	81, 240
	1.9×10^{-5}		Wang et al. (2017)	Q	81, 241
	4.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	272, 244
	7.8×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	246
	5.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	6.2×10^{-6}		Hilal et al. (2008)	Q	

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.0×10^{-6}	4000	Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	
	3.1×10^{-6}		Modarresi et al. (2005)	Q	248
	5.8×10^{-6}		Yaffe et al. (2003)	Q	249, 250
	6.7×10^{-6}		Yao et al. (2002)	Q	230
	6.1×10^{-6}		English and Carroll (2001)	Q	231, 261
	1.4×10^{-5}		Katritzky et al. (1998)	Q	
	7.2×10^{-6}		Suzuki et al. (1992)	Q	233
	7.0×10^{-6}		Nirmalakhandan and Speece (1988)	Q	
			4700	Kühne et al. (2005)	?
	8.2×10^{-6}	Yaws (1999)		?	21
	3.7×10^{-6}	Abraham and Weathersby (1994)		?	21
	8.8×10^{-6}	Yaws and Yang (1992)		?	21
2,2-dimethylbutane C_6H_{14} [75-83-2] HNRMPXKDFBEGFZ-UHFFFAOYSA-N	5.7×10^{-6}	3500	Brockbank (2013)	L	
	5.6×10^{-6}		Plyasunov and Shock (2000)	L	
	5.8×10^{-6}		Mackay and Shiu (1981)	L	
	6.5×10^{-6}		Duchowicz et al. (2020)	V	187
	5.8×10^{-6}		HSDB (2015)	V	
	5.0×10^{-6}		Mackay et al. (2006a)	V	
	5.0×10^{-6}		Mackay et al. (1993)	V	
	5.8×10^{-6}		Eastcott et al. (1988)	V	
	5.1×10^{-6}		Hine and Mookerjee (1975)	V	
	5.5×10^{-6}		McAuliffe (1966)	V	226
	5.5×10^{-6}		McAuliffe (1963)	V	227
	6.5×10^{-6}		Yaws (2003)	X	238
	7.5×10^{-5}		Duchowicz et al. (2020)	Q	
	4.0×10^{-5}		Wang et al. (2017)	Q	81, 239
	2.8×10^{-6}		Wang et al. (2017)	Q	81, 240
	2.5×10^{-5}		Wang et al. (2017)	Q	81, 241
	2.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	272, 244
	3.1×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	246
	4.9×10^{-6}	Gharagheizi et al. (2010)	Q	247	
	3.4×10^{-6}	Hilal et al. (2008)	Q		
	7.2×10^{-6}	Modarresi et al. (2007)	Q	68	
	3.9×10^{-6}	Modarresi et al. (2005)	Q	248	
	5.3×10^{-6}	Yaffe et al. (2003)	Q	249, 273	
	3.4×10^{-6}	Yao et al. (2002)	Q	230	
	6.2×10^{-6}	English and Carroll (2001)	Q	231, 232	
	1.3×10^{-5}	Katritzky et al. (1998)	Q		
	6.0×10^{-6}	Suzuki et al. (1992)	Q	233	
	5.3×10^{-6}	Nirmalakhandan and Speece (1988)	Q		
	6.5×10^{-6}	Yaws (1999)	?	21	
	3.4×10^{-6}	Abraham and Weathersby (1994)	?	21	

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) [$\frac{\text{mol}}{\text{m}^3 \text{Pa}}$]	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.5×10^{-6}		Yaws and Yang (1992)	?	21
2,3-dimethylbutane C_6H_{14} [79-29-8] ZFFMLCVRJBJUDZ-UHFFFAOYSA-N	8.0×10^{-6}	4400	Brockbank (2013)	L	1
	7.6×10^{-6}		Plyasunov and Shock (2000)	L	
	7.7×10^{-6}		Mackay and Shiu (1981)	L	
	8.4×10^{-6}		Duchowicz et al. (2020)	V	187
	8.2×10^{-6}		HSDB (2015)	V	
	6.9×10^{-6}		Mackay et al. (2006a)	V	
	6.9×10^{-6}		Mackay et al. (1993)	V	
	7.1×10^{-6}		Eastcott et al. (1988)	V	
	7.6×10^{-6}		Yaws (2003)	X	238
	6.7×10^{-5}		Duchowicz et al. (2020)	Q	
	6.8×10^{-5}		Wang et al. (2017)	Q	81, 239
	4.9×10^{-6}		Wang et al. (2017)	Q	81, 240
	2.2×10^{-5}		Wang et al. (2017)	Q	81, 241
	3.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	246
	5.3×10^{-6}		Gharagheizi et al. (2010)	Q	247
	5.3×10^{-6}		Hilal et al. (2008)	Q	
	7.6×10^{-6}		Modarresi et al. (2007)	Q	68
		4000	Kühne et al. (2005)	Q	
	5.2×10^{-6}		Modarresi et al. (2005)	Q	248
	7.7×10^{-6}		Yaffe et al. (2003)	Q	249, 250
	4.2×10^{-6}		Yao et al. (2002)	Q	230
	6.1×10^{-6}		English and Carroll (2001)	Q	231, 275
	1.3×10^{-5}		Katritzky et al. (1998)	Q	
	5.8×10^{-6}		Nirmalakhandan et al. (1997)	Q	
		4200	Kühne et al. (2005)	?	
	7.6×10^{-6}		Yaws (1999)	?	21
	7.6×10^{-6}		Yaws and Yang (1992)	?	21
heptane C_7H_{16} [142-82-5] IMNFDUFMRHMDMM-UHFFFAOYSA-N	4.4×10^{-6}	4500	Brockbank (2013)	L	1
	4.9×10^{-6}	4200	Plyasunov and Shock (2000)	L	
	4.4×10^{-6}	4100	Abraham and Matteoli (1988)	L	
	4.3×10^{-6}		Mackay and Shiu (1981)	L	
	4.5×10^{-6}		Ryu and Park (1999)	M	
	5.5×10^{-6}		Park et al. (1997)	M	277
	1.2×10^{-5}	3700	Hansen et al. (1993)	M	282
	6.0×10^{-6}		Guitart et al. (1989)	M	14
	4.2×10^{-6}	4700	Jönsson et al. (1982)	M	
	4.8×10^{-6}		Rytting et al. (1978)	M	
	4.9×10^{-6}		Duchowicz et al. (2020)	V	187
	5.5×10^{-6}		HSDB (2015)	V	
	4.8×10^{-6}		Mackay et al. (2006a)	V	
	4.8×10^{-6}		Mackay et al. (1993)	V	

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	5.0×10^{-6}		Eastcott et al. (1988)	V	
	4.8×10^{-6}		Hine and Mookerjee (1975)	V	
	5.2×10^{-6}		McAuliffe (1966)	V	226
	5.2×10^{-6}		McAuliffe (1963)	V	227
	3.7×10^{-6}		Yaws (2003)	X	259
	3.7×10^{-6}		Yaws (2003)	X	238
	8.2×10^{-6}		Dupeux et al. (2022)	Q	260
	1.1×10^{-5}		Hayer et al. (2022)	Q	20
	4.4×10^{-4}		Duchowicz et al. (2020)	Q	
	4.7×10^{-5}		Wang et al. (2017)	Q	81, 239
	4.9×10^{-6}		Wang et al. (2017)	Q	81, 240
	8.0×10^{-6}		Wang et al. (2017)	Q	81, 241
	4.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-6}		Raventos-Duran et al. (2010)	Q	272, 244
	7.8×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	246
	3.4×10^{-6}		Gharagheizi et al. (2010)	Q	247
	5.4×10^{-6}		Hilal et al. (2008)	Q	
	5.3×10^{-6}		Modarresi et al. (2007)	Q	68
		4300	Kühne et al. (2005)	Q	
	2.4×10^{-6}		Modarresi et al. (2005)	Q	248
	4.1×10^{-6}		Yaffe et al. (2003)	Q	249, 273
	5.1×10^{-6}		Yao et al. (2002)	Q	230
	1.3×10^{-5}		Katritzky et al. (1998)	Q	
	6.5×10^{-6}		Russell et al. (1992)	Q	280
	6.0×10^{-6}		Suzuki et al. (1992)	Q	233
	6.2×10^{-6}		Nirmalakhandan and Speece (1988)	Q	
		4900	Kühne et al. (2005)	?	
	3.7×10^{-6}		Yaws (1999)	?	21
	2.8×10^{-6}		Abraham and Weathersby (1994)	?	21
	3.6×10^{-6}		Yaws and Yang (1992)	?	21
	4.4×10^{-6}		Abraham et al. (1990)	?	
2-methylhexane	2.9×10^{-6}		Brockbank (2013)	L	
C_7H_{16}	2.9×10^{-6}		Plyasunov and Shock (2000)	L	
(isoheptane)	2.9×10^{-6}		Mackay and Shiu (1981)	L	
[591-76-4]	1.9×10^{-5}	-3600	Hansen et al. (1993)	M	282, 283
GXDHCNNESPLIKD-UHFFFAOYSA-N	2.9×10^{-6}		Duchowicz et al. (2020)	V	187
	2.9×10^{-6}		Mackay et al. (2006a)	V	
	2.9×10^{-6}		Mackay et al. (1993)	V	
	2.9×10^{-6}		Eastcott et al. (1988)	V	
	2.9×10^{-6}		Yaws (2003)	X	238
	1.7×10^{-4}		Duchowicz et al. (2020)	Q	
	4.7×10^{-5}		Wang et al. (2017)	Q	81, 239
	3.2×10^{-6}		Wang et al. (2017)	Q	81, 240
	1.7×10^{-5}		Wang et al. (2017)	Q	81, 241

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	3.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-6}		Raventos-Duran et al. (2010)	Q	272, 244
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	246
	3.3×10^{-6}		Gharagheizi et al. (2010)	Q	247
	3.7×10^{-6}		Hilal et al. (2008)	Q	
	5.2×10^{-6}		Modarresi et al. (2007)	Q	68
	2.8×10^{-6}		Modarresi et al. (2005)	Q	248
	2.9×10^{-6}		Yaffe et al. (2003)	Q	249, 250
	3.4×10^{-6}		Yao et al. (2002)	Q	230
	1.3×10^{-5}		Katritzky et al. (1998)	Q	
	5.2×10^{-6}		Nirmalakhandan et al. (1997)	Q	
	2.9×10^{-6}		Yaws (1999)	?	21
	2.9×10^{-6}		Yaws and Yang (1992)	?	21
3-methylhexane C_7H_{16} [589-34-4] VLJXXKKOSFGPHI-UHFFFAOYSA-N	3.2×10^{-6}		Brockbank (2013)	L	
	4.5×10^{-6}		Plyasunov and Shock (2000)	L	
	4.2×10^{-6}		Mackay and Shiu (1981)	L	
	6.0×10^{-6}		Duchowicz et al. (2020)	V	187
	4.0×10^{-6}		Mackay et al. (2006a)	V	
	4.0×10^{-6}		Mackay et al. (1993)	V	
	3.2×10^{-6}		Eastcott et al. (1988)	V	
	3.2×10^{-6}		Yaws (2003)	X	238
	1.7×10^{-4}		Duchowicz et al. (2020)	Q	
	4.7×10^{-5}		Wang et al. (2017)	Q	81, 239
	3.8×10^{-6}		Wang et al. (2017)	Q	81, 240
	1.8×10^{-5}		Wang et al. (2017)	Q	81, 241
	3.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	3.3×10^{-6}		Gharagheizi et al. (2010)	Q	247
	4.5×10^{-6}		Hilal et al. (2008)	Q	
	6.1×10^{-6}		Modarresi et al. (2007)	Q	68
	2.7×10^{-6}		Modarresi et al. (2005)	Q	248
	4.1×10^{-6}		Yaffe et al. (2003)	Q	249, 250
	3.4×10^{-6}		Yao et al. (2002)	Q	230
	4.6×10^{-6}		English and Carroll (2001)	Q	231, 232
	1.3×10^{-5}		Katritzky et al. (1998)	Q	
	5.3×10^{-6}		Nirmalakhandan et al. (1997)	Q	
	3.2×10^{-6}		Yaws (1999)	?	21
	2.5×10^{-6}		Abraham and Weathersby (1994)	?	21
	3.2×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2-dimethylpentane C_7H_{16} [590-35-2] CXOWYJMDMMMMJO-UHFFFAOYSA-N	3.1×10^{-6}		Plyasunov and Shock (2000)	L	
	3.1×10^{-6}		Mackay and Shiu (1981)	L	
	3.1×10^{-6}		Duchowicz et al. (2020)	V	187
	3.1×10^{-6}		Mackay et al. (2006a)	V	
	3.1×10^{-6}		Mackay et al. (1993)	V	
	3.1×10^{-6}		Eastcott et al. (1988)	V	
	3.1×10^{-6}		Yaws (2003)	X	238
	7.5×10^{-5}		Duchowicz et al. (2020)	Q	
	2.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-6}		Raventos-Duran et al. (2010)	Q	243, 244
	2.5×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	246
	3.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.5×10^{-6}		Hilal et al. (2008)	Q	
	5.2×10^{-6}		Modarresi et al. (2007)	Q	68
	3.1×10^{-6}		Modarresi et al. (2005)	Q	248
	3.1×10^{-6}		Yaffe et al. (2003)	Q	249, 250
	3.7×10^{-6}		Yao et al. (2002)	Q	230
	3.6×10^{-6}		English and Carroll (2001)	Q	231, 232
	1.2×10^{-5}		Katritzky et al. (1998)	Q	
4.1×10^{-6}		Nirmalakhandan et al. (1997)	Q		
3.1×10^{-6}		Yaws (1999)	?	21	
3.1×10^{-6}		Yaws and Yang (1992)	?	21	
2,3-dimethylpentane C_7H_{16} [565-59-3] WGECXQBGLLYSFP-UHFFFAOYSA-N	5.7×10^{-6}		Plyasunov and Shock (2000)	L	
	5.7×10^{-6}		Mackay and Shiu (1981)	L	
	5.7×10^{-6}		Duchowicz et al. (2020)	V	187
	5.7×10^{-6}		Mackay et al. (1993)	V	
	5.7×10^{-6}		Eastcott et al. (1988)	V	
	5.7×10^{-6}		Yaws (2003)	X	238
	6.7×10^{-5}		Duchowicz et al. (2020)	Q	
	3.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-6}		Raventos-Duran et al. (2010)	Q	243, 244
	4.9×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	246
	3.3×10^{-6}		Gharagheizi et al. (2010)	Q	247
	4.8×10^{-6}		Hilal et al. (2008)	Q	
	7.1×10^{-6}		Modarresi et al. (2007)	Q	68
	5.8×10^{-6}		Yaffe et al. (2003)	Q	249, 250
	4.7×10^{-6}		English and Carroll (2001)	Q	231, 232
	1.2×10^{-5}		Katritzky et al. (1998)	Q	
	4.7×10^{-6}		Nirmalakhandan et al. (1997)	Q	
	5.7×10^{-6}		Yaws (1999)	?	21
	5.7×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
2,4-dimethylpentane C_7H_{16} [108-08-7] BZHMBWZPUJHVVE-UHFFFAOYSA-N	2.9×10^{-6}		Brockbank (2013)	L		
	3.3×10^{-6}		Plyasunov and Shock (2000)	L		
	3.3×10^{-6}		Mackay and Shiu (1981)	L		
	5.2×10^{-6}		Duchowicz et al. (2020)	V	187	
	3.1×10^{-6}		Mackay et al. (2006a)	V		
	3.1×10^{-6}		Mackay et al. (1993)	V		
	3.4×10^{-6}		Eastcott et al. (1988)	V		
	3.1×10^{-6}		Hine and Mookerjee (1975)	V		
	3.1×10^{-6}		McAuliffe (1966)	V		
	3.3×10^{-6}		Yaws (2003)	X	238	
	6.7×10^{-5}		Duchowicz et al. (2020)	Q		
	2.4×10^{-6}		Gharagheizi et al. (2012)	Q		
	4.9×10^{-6}		Raventos-Duran et al. (2010)	Q	243, 244	
	2.5×10^{-6}		Raventos-Duran et al. (2010)	Q	245	
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	246	
	3.3×10^{-6}		Gharagheizi et al. (2010)	Q	247	
	2.2×10^{-6}		Hilal et al. (2008)	Q		
	5.2×10^{-6}		Modarresi et al. (2007)	Q	68	
	3.0×10^{-6}		Modarresi et al. (2005)	Q	248	
	5.3×10^{-6}		Yaffe et al. (2003)	Q	249, 273	
4.0×10^{-6}		Yao et al. (2002)	Q	230		
4.7×10^{-6}		English and Carroll (2001)	Q	231, 275		
1.2×10^{-5}		Katritzky et al. (1998)	Q			
4.7×10^{-6}		Suzuki et al. (1992)	Q	233		
4.5×10^{-6}		Nirmalakhandan and Speece (1988)	Q			
3.4×10^{-6}		Yaws (1999)	?	21		
3.3×10^{-6}		Yaws and Yang (1992)	?	21		
3,3-dimethylpentane C_7H_{16} [562-49-2] AEXMKKGTYQZCS-UHFFFAOYSA-N	5.6×10^{-6}	3000	Brockbank (2013)	L	1, 284	
	5.3×10^{-6}		Plyasunov and Shock (2000)	L		
	5.4×10^{-6}		Mackay and Shiu (1981)	L		
	5.4×10^{-6}		Duchowicz et al. (2020)	V	187	
	5.4×10^{-6}		Mackay et al. (2006a)	V		
	5.4×10^{-6}		Mackay et al. (1993)	V		
	5.4×10^{-6}		Eastcott et al. (1988)	V		
	5.4×10^{-6}		Yaws (2003)	X	238	
	7.5×10^{-5}		Duchowicz et al. (2020)	Q		
	3.3×10^{-6}		Gharagheizi et al. (2012)	Q		
	3.1×10^{-6}		Gharagheizi et al. (2010)	Q	247	
	4.0×10^{-6}		Hilal et al. (2008)	Q		
	7.5×10^{-6}		Modarresi et al. (2007)	Q	68	
	3.5×10^{-6}		4300	Kühne et al. (2005)	Q	
	5.3×10^{-6}			Modarresi et al. (2005)	Q	248
5.3×10^{-6}	Yaffe et al. (2003)	Q		249, 250		
2.8×10^{-6}	Yao et al. (2002)	Q		230		
3.6×10^{-6}		English and Carroll (2001)	Q	231, 232		

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^{-5}		Katritzky et al. (1998)	Q	
	4.4×10^{-6}	3000	Nirmalakhandan et al. (1997)	Q	
			Kühne et al. (2005)	?	
	5.4×10^{-6}		Yaws (1999)	?	21
	5.3×10^{-6}		Yaws and Yang (1992)	?	21
3-ethylpentane C_7H_{16} [617-78-7] AORMDLNPRGXHHL-UHFFFAOYSA-N	3.8×10^{-6}		Yaws (2003)	X	238
	3.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	3.3×10^{-6}		Gharagheizi et al. (2010)	Q	247
	5.3×10^{-6}		Hilal et al. (2008)	Q	
	2.5×10^{-6}		Modarresi et al. (2005)	Q	248
	4.8×10^{-6}		Yao et al. (2002)	Q	230, 268
	3.8×10^{-6}		Yaws (1999)	?	21
	3.9×10^{-6}		Yaws and Yang (1992)	?	21
2,2,3-trimethylbutane C_7H_{16} [464-06-2] ZISSAWUMDACLOM-UHFFFAOYSA-N	3.2×10^{-6}		Mackay et al. (2006a)	V	
	3.2×10^{-6}		Mackay et al. (1993)	V	
	4.2×10^{-6}		Yaws (2003)	X	238
	2.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	3.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	3.3×10^{-6}		Hilal et al. (2008)	Q	
	7.2×10^{-6}		Modarresi et al. (2007)	Q	68
	3.1×10^{-6}		Modarresi et al. (2005)	Q	248
	3.1×10^{-6}		Yaffe et al. (2003)	Q	249, 273
	1.8×10^{-6}		Yao et al. (2002)	Q	230
	4.2×10^{-6}		Yaws (1999)	?	21
	4.1×10^{-6}		Yaws and Yang (1992)	?	21
octane C_8H_{18} [111-65-9] TVMXDCGIABBOFY-UHFFFAOYSA-N	3.4×10^{-6}	5300	Brockbank (2013)	L	1
	4.0×10^{-6}	4600	Plyasunov and Shock (2000)	L	
	3.1×10^{-6}	4300	Abraham and Matteoli (1988)	L	
	3.3×10^{-6}		Mackay and Shiu (1981)	L	
	3.4×10^{-6}		Ryu and Park (1999)	M	
	3.3×10^{-6}		Park et al. (1997)	M	277
	3.0×10^{-5}	8000	Hansen et al. (1993)	M	282
	3.1×10^{-6}	4100	Heidman et al. (1985)	M	1
	2.9×10^{-6}	5400	Jönsson et al. (1982)	M	
	3.1×10^{-6}		Rytting et al. (1978)	M	
	3.1×10^{-6}		Duchowicz et al. (2020)	V	187
	3.1×10^{-6}		HSDB (2015)	V	
	8.6×10^{-7}		Abraham and Acree (2007)	V	
	3.2×10^{-6}		Mackay et al. (2006a)	V	
	3.8×10^{-6}	4800	Sarraute et al. (2004)	V	
	3.2×10^{-6}		Mackay et al. (1993)	V	
	3.0×10^{-6}		Hwang et al. (1992)	V	
	3.1×10^{-6}		Meylan and Howard (1991)	V	
	3.2×10^{-6}		Eastcott et al. (1988)	V	

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.1×10^{-6}		Hine and Mookerjee (1975)	V	
	3.1×10^{-6}		Mackay and Leinonen (1975)	V	
	3.9×10^{-6}		McAuliffe (1966)	V	226
	3.9×10^{-6}		McAuliffe (1963)	V	227
	2.0×10^{-6}		Yaws (2003)	X	259
	2.0×10^{-6}		Yaws (2003)	X	238
	6.8×10^{-6}		Dupeux et al. (2022)	Q	260
	2.8×10^{-5}		Hayer et al. (2022)	Q	20
	4.4×10^{-4}		Duchowicz et al. (2020)	Q	
	3.6×10^{-5}		Wang et al. (2017)	Q	81, 239
	3.4×10^{-6}		Wang et al. (2017)	Q	81, 240
	4.2×10^{-6}		Wang et al. (2017)	Q	81, 241
	3.1×10^{-6}		Li et al. (2014)	Q	242
	3.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	243, 244
	4.9×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-6}		Raventos-Duran et al. (2010)	Q	246
	2.3×10^{-6}		Gharagheizi et al. (2010)	Q	247
	3.9×10^{-6}		Hilal et al. (2008)	Q	
	4.6×10^{-6}		Modarresi et al. (2007)	Q	68
		4700	Kühne et al. (2005)	Q	
	2.9×10^{-6}		Yaffe et al. (2003)	Q	249, 273
	3.7×10^{-6}		English and Carroll (2001)	Q	231, 232
	1.2×10^{-5}		Katritzky et al. (1998)	Q	
	2.6×10^{-6}		Russell et al. (1992)	Q	280
	4.6×10^{-6}		Suzuki et al. (1992)	Q	233
	3.3×10^{-6}		Meylan and Howard (1991)	Q	
	5.0×10^{-6}		Nirmalakhandan and Speece (1988)	Q	
		5400	Kühne et al. (2005)	?	
	2.0×10^{-6}		Yaws (1999)	?	21
	2.0×10^{-6}		Abraham and Weathersby (1994)	?	21
	2.0×10^{-6}		Yaws and Yang (1992)	?	21
	3.1×10^{-6}		Abraham et al. (1990)	?	
2-methylheptane	2.9×10^{-6}		Mackay et al. (2006a)	V	
C_8H_{18}	2.9×10^{-6}		Mackay et al. (1993)	V	
[592-27-8]	2.4×10^{-6}		Yaws (2003)	X	238
JVSWJIKNEAIKJW-UHFFFAOYSA-N	2.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.7×10^{-6}		Hilal et al. (2008)	Q	
	2.1×10^{-6}		Modarresi et al. (2005)	Q	248
	3.1×10^{-6}		Yao et al. (2002)	Q	230, 268
	2.4×10^{-6}		Yaws (1999)	?	21
	2.7×10^{-6}		Hoff et al. (1993)	?	21
	2.7×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methylheptane C_8H_{18} [589-81-1] LAIUFBWHERIJH-UHFFFAOYSA-N	2.6×10^{-6}		Brockbank (2013)	L	
	2.7×10^{-6}		Plyasunov and Shock (2000)	L	
	2.7×10^{-6}		Mackay and Shiu (1981)	L	
	2.7×10^{-6}		Duchowicz et al. (2020)	V	187
	2.7×10^{-6}		Eastcott et al. (1988)	V	
	2.6×10^{-6}		Yaws (2003)	X	238
	1.7×10^{-4}		Duchowicz et al. (2020)	Q	
	3.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	243, 244
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-6}		Raventos-Duran et al. (2010)	Q	246
	2.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	3.3×10^{-6}		Hilal et al. (2008)	Q	
	5.5×10^{-6}		Modarresi et al. (2007)	Q	68
	2.0×10^{-6}		Modarresi et al. (2005)	Q	248
	2.9×10^{-6}		Yaffe et al. (2003)	Q	249, 250
	3.0×10^{-6}		Yao et al. (2002)	Q	230
3.6×10^{-6}		English and Carroll (2001)	Q	231, 261	
4.2×10^{-6}		Nirmalakhandan et al. (1997)	Q		
2.7×10^{-6}		Yaws (1999)	?	21	
2.7×10^{-6}		Yaws and Yang (1992)	?	21	
4-methylheptane C_8H_{18} [589-53-7] CHBAWFGIXDBEBT-UHFFFAOYSA-N	2.7×10^{-6}		Brockbank (2013)	L	
	2.4×10^{-6}		Yaws (2003)	X	238
	2.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	3.0×10^{-6}		Hilal et al. (2008)	Q	
	2.2×10^{-6}		Modarresi et al. (2005)	Q	248
	2.7×10^{-6}		Yao et al. (2002)	Q	230
	2.4×10^{-6}		Yaws (1999)	?	21
2.7×10^{-6}		Yaws and Yang (1992)	?	21	
2,2-dimethylhexane C_8H_{18} [590-73-8] FLTJDUOFAQWHDF-UHFFFAOYSA-N	2.4×10^{-6}	4600	Brockbank (2013)	L	1
	2.4×10^{-6}	4600	Dohányosová et al. (2004)	M	285
	2.7×10^{-7}		Duchowicz et al. (2020)	V	187
	2.7×10^{-6}		Yaws (2003)	X	238
	7.5×10^{-5}		Duchowicz et al. (2020)	Q	
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.9×10^{-6}		Hilal et al. (2008)	Q	
		4700	Kühne et al. (2005)	Q	
	4.3×10^{-6}		Modarresi et al. (2005)	Q	248
	1.8×10^{-6}		Yao et al. (2002)	Q	230
	5100	Kühne et al. (2005)	?		
2.7×10^{-6}		Yaws (1999)	?	21	
2.9×10^{-6}		Yaws and Yang (1992)	?	21	

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3-dimethylhexane C_8H_{18} [584-94-1] JXPOLSKBTUYKJB-UHFFFAOYSA-N	2.4×10^{-6}		Yaws (2003)	X	238
	2.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	3.4×10^{-6}		Hilal et al. (2008)	Q	
	2.4×10^{-6}		Yaws (1999)	?	21
	2.6×10^{-6}		Yaws and Yang (1992)	?	21
2,4-dimethylhexane C_8H_{18} [589-43-5] HDGQICNBXPAKLR-UHFFFAOYSA-N	2.6×10^{-6}		Yaws (2003)	X	238
	2.3×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.9×10^{-6}		Hilal et al. (2008)	Q	
	2.6×10^{-6}		Yaws (1999)	?	21
	2.8×10^{-6}		Yaws and Yang (1992)	?	21
2,5-dimethylhexane C_8H_{18} [592-13-2] UWNADWZGEHDQAB-UHFFFAOYSA-N	3.1×10^{-6}	4000	Brockbank (2013)	L	1, 286
	2.4×10^{-6}	4000	Dohányosová et al. (2004)	M	287
	2.6×10^{-6}		Yaws (2003)	X	238
	2.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.7×10^{-6}		Hilal et al. (2008)	Q	
		4700	Kühne et al. (2005)	Q	
	2.4×10^{-6}		Modarresi et al. (2005)	Q	248
	2.3×10^{-6}		Yao et al. (2002)	Q	230
		4700	Kühne et al. (2005)	?	
	2.7×10^{-6}		Yaws (1999)	?	21
	2.9×10^{-6}		Yaws and Yang (1992)	?	21
3,3-dimethylhexane C_8H_{18} [563-16-6] KUMXLFIBWFCMOJ-UHFFFAOYSA-N	2.4×10^{-6}		Yaws (2003)	X	238
	2.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.9×10^{-6}		Hilal et al. (2008)	Q	
	1.9×10^{-6}		Modarresi et al. (2005)	Q	248
	1.5×10^{-6}		Yao et al. (2002)	Q	230
	2.4×10^{-6}		Yaws (1999)	?	21
2.6×10^{-6}		Yaws and Yang (1992)	?	21	
3,4-dimethylhexane C_8H_{18} [583-48-2] RNTWWGNZUXGTAX-UHFFFAOYSA-N	2.2×10^{-6}		Yaws (2003)	X	238
	2.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	3.8×10^{-6}		Hilal et al. (2008)	Q	
	2.3×10^{-6}		Yaws (1999)	?	21
	2.4×10^{-6}		Yaws and Yang (1992)	?	21
3-ethylhexane C_8H_{18} [619-99-8] SFRKSDZMZHISH-UHFFFAOYSA-N	2.3×10^{-6}		Yaws (2003)	X	238
	2.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	3.7×10^{-6}		Hilal et al. (2008)	Q	
	2.3×10^{-6}		Yaws (1999)	?	21
	2.6×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,3-trimethylpentane C_8H_{18} [564-02-3] XTDQDBVBDLYELW-UHFFFAOYSA-N	2.4×10^{-6}		Yaws (2003)	X	238
	2.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.7×10^{-6}		Hilal et al. (2008)	Q	
	7.3×10^{-6}		Modarresi et al. (2007)	Q	68
	2.3×10^{-6}		Modarresi et al. (2005)	Q	248
	1.7×10^{-6}		Yao et al. (2002)	Q	230
	2.4×10^{-6}		Yaws (1999)	?	21
	2.6×10^{-6}		Yaws and Yang (1992)	?	21
2,2,4-trimethylpentane C_8H_{18} (isooctane) [540-84-1] NHTMVDHEPJAVLT-UHFFFAOYSA-N	3.0×10^{-6}		Plyasunov and Shock (2000)	L	
	3.0×10^{-6}		Mackay and Shiu (1981)	L	
	4.6×10^{-6}		Guitart et al. (1989)	M	14
	3.3×10^{-6}		Mackay et al. (2006a)	V	
	3.3×10^{-6}		Mackay et al. (1993)	V	
	3.1×10^{-6}		Eastcott et al. (1988)	V	
	3.3×10^{-6}		Hine and Mookerjee (1975)	V	
	3.2×10^{-6}		Mackay and Leinonen (1975)	V	
	3.6×10^{-6}		McAuliffe (1966)	V	226
	3.6×10^{-6}		McAuliffe (1963)	V	227
	2.8×10^{-6}		Yaws (2003)	X	238
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-6}		Raventos-Duran et al. (2010)	Q	246
	3.3×10^{-6}		Zhang et al. (2010)	Q	288, 289
	1.7×10^{-6}		Zhang et al. (2010)	Q	288, 290
	2.2×10^{-5}		Zhang et al. (2010)	Q	288, 291
	1.6×10^{-5}		Zhang et al. (2010)	Q	288, 292
	2.0×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.2×10^{-6}		Hilal et al. (2008)	Q	
	4.8×10^{-6}		Modarresi et al. (2007)	Q	68
		4700	Kühne et al. (2005)	Q	
	3.4×10^{-6}		Modarresi et al. (2005)	Q	248
	6.2×10^{-6}		Yaffe et al. (2003)	Q	249, 273
	2.0×10^{-6}		Yao et al. (2002)	Q	230
	3.7×10^{-6}		English and Carroll (2001)	Q	231, 275
	3.1×10^{-6}		Suzuki et al. (1992)	Q	233
	2.9×10^{-6}		Nirmalakhandan and Speece (1988)	Q	
	4000	Kühne et al. (2005)	?		
2.9×10^{-6}		Yaws (1999)	?	21	
2.9×10^{-6}		Yaws and Yang (1992)	?	21	

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3-trimethylpentane C_8H_{18} [560-21-4] OKVWYBALHQFVFP-UHFFFAOYSA-N	2.1×10^{-6}		Yaws (2003)	X	238
	3.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-6}		Gharagheizi et al. (2010)	Q	247
	3.6×10^{-6}		Hilal et al. (2008)	Q	
	2.0×10^{-6}		Modarresi et al. (2005)	Q	248
	1.6×10^{-6}		Yao et al. (2002)	Q	230
	2.2×10^{-6}		Yaws (1999)	?	21
	2.4×10^{-6}		Yaws and Yang (1992)	?	21
2,3,4-trimethylpentane C_8H_{18} [565-75-3] RLPGDEORIPLBNF-UHFFFAOYSA-N	3.3×10^{-6}		Brockbank (2013)	L	
	4.3×10^{-6}		Plyasunov and Shock (2000)	L	
	5.3×10^{-6}		Mackay and Shiu (1981)	L	
			Mackay et al. (2006a)	V	293
	4.9×10^{-6}		Mackay et al. (1993)	V	
	5.6×10^{-6}		Eastcott et al. (1988)	V	
	5.6×10^{-6}		Yaws (2003)	X	238
	2.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-6}		Raventos-Duran et al. (2010)	Q	246
	2.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	3.1×10^{-6}		Hilal et al. (2008)	Q	
	7.0×10^{-6}		Modarresi et al. (2007)	Q	68
			4700 Kühne et al. (2005)	Q	
	2.0×10^{-6}		Modarresi et al. (2005)	Q	248
	5.3×10^{-6}		Yaffe et al. (2003)	Q	249, 250
	2.1×10^{-6}		Yao et al. (2002)	Q	230
	3.7×10^{-6}		English and Carroll (2001)	Q	231, 232
1.1×10^{-5}		Katritzky et al. (1998)	Q		
3.2×10^{-6}		Nirmalakhandan et al. (1997)	Q		
		4900 Kühne et al. (2005)	?		
	5.6×10^{-6}		Yaws (1999)	?	21
	5.6×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-2-methylpentane C_8H_{18} [609-26-7] DUPUVYJQZSLSJB-UHFFFAOYSA-N	2.3×10^{-6}		Yaws (2003)	X	238
	3.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	3.6×10^{-6}		Hilal et al. (2008)	Q	
	2.2×10^{-6}		Modarresi et al. (2005)	Q	248
	2.5×10^{-6}		Yao et al. (2002)	Q	230
	2.3×10^{-6}		Yaws (1999)	?	21
	2.6×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
3-ethyl-3-methylpentane C_8H_{18} [1067-08-9] GIEZWIDCIFICQPS-UHFFFAOYSA-N	2.1×10^{-6}		Yaws (2003)	X	238	
	3.5×10^{-6}		Gharagheizi et al. (2012)	Q		
	2.0×10^{-6}		Gharagheizi et al. (2010)	Q	247	
	4.5×10^{-6}		Hilal et al. (2008)	Q		
	2.0×10^{-6}		Modarresi et al. (2005)	Q	248	
	2.2×10^{-6}		Yao et al. (2002)	Q	230	
	2.1×10^{-6}		Yaws (1999)	?	21	
	2.3×10^{-6}		Yaws and Yang (1992)	?	21	
2,2,3,3-tetramethylbutane C_8H_{18} [594-82-1] OMMLUKLXGSRPHK-UHFFFAOYSA-N	3.3×10^{-6}		Yaws (2003)	X	238	
	2.6×10^{-6}		Gharagheizi et al. (2012)	Q		
	2.0×10^{-6}		Gharagheizi et al. (2010)	Q	247	
	3.4×10^{-6}		Hilal et al. (2008)	Q		
	2.6×10^{-6}		Yaws and Yang (1992)	?	21	
nonane C_9H_{20} [111-84-2] BKIMMITUMNQMOS-UHFFFAOYSA-N	2.3×10^{-6}	6600	Brockbank (2013)	L	1, 294	
	2.1×10^{-6}		Plyasunov and Shock (2000)	L		
	2.0×10^{-6}		Mackay and Shiu (1981)	L		
	2.2×10^{-6}		Ryu and Park (1999)	M		
	1.9×10^{-6}		Park et al. (1997)	M	277	
	2.3×10^{-5}	190	Ashworth et al. (1988)	M	42, 279	
	1.8×10^{-6}		Jönsson et al. (1982)	M		
	2.9×10^{-6}	7300	Duchowicz et al. (2020)	V	187	
	2.9×10^{-6}		HSDB (2015)	V		
	3.0×10^{-6}		Mackay et al. (2006a)	V		
	3.0×10^{-6}		Mackay et al. (1993)	V		
	1.7×10^{-6}		Eastcott et al. (1988)	V		
	2.0×10^{-6}		Abraham (1984)	V		
	1.6×10^{-6}		Yaws (2003)	X		238
	4.4×10^{-4}		Duchowicz et al. (2020)	Q		
	2.9×10^{-5}		Wang et al. (2017)	Q		81, 239
	2.5×10^{-6}		Wang et al. (2017)	Q		81, 240
	2.3×10^{-5}		Wang et al. (2017)	Q		81, 241
	3.0×10^{-6}		Gharagheizi et al. (2012)	Q		
	2.5×10^{-6}		Raventos-Duran et al. (2010)	Q		272, 244
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q		245
	2.5×10^{-6}		Raventos-Duran et al. (2010)	Q		246
	1.8×10^{-6}	Gharagheizi et al. (2010)	Q	247		
	3.0×10^{-6}	Hilal et al. (2008)	Q			
	4.3×10^{-6}	Modarresi et al. (2007)	Q	68		
		5000	Kühne et al. (2005)	Q		
	1.5×10^{-6}		Modarresi et al. (2005)	Q	248	
2.0×10^{-6}	Yaffe et al. (2003)		Q	249, 250		
4.6×10^{-6}		Yao et al. (2002)	Q	230		
1.1×10^{-5}		Katritzky et al. (1998)	Q			
3.8×10^{-6}		Nirmalakhandan et al. (1997)	Q			
	4100	Kühne et al. (2005)	?			

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	1.6×10^{-6}		Yaws (1999)	?	21
	1.7×10^{-6}		Yaws and Yang (1992)	?	21
2-methyloctane C_9H_{20} [3221-61-2] ZUBZATZOEPUUQF-UHFFFAOYSA-N	1.6×10^{-6}		Yaws (2003)	X	238
	2.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.9×10^{-6}		Hilal et al. (2008)	Q	
	2.1×10^{-6}		Modarresi et al. (2005)	Q	248
	3.3×10^{-6}		Yao et al. (2002)	Q	230
	1.6×10^{-6}		Yaws (1999)	?	21
	2.1×10^{-6}		Yaws and Yang (1992)	?	21
3-methyloctane C_9H_{20} [2216-33-3] SEEOMASXHIJC DV-UHFFFAOYSA-N	1.5×10^{-6}		Yaws (2003)	X	238
	2.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.4×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	248
	2.8×10^{-6}		Yao et al. (2002)	Q	230
	1.5×10^{-6}		Yaws (1999)	?	21
	1.9×10^{-6}		Yaws and Yang (1992)	?	21
4-methyloctane C_9H_{20} [2216-34-4] DOGIHOCMZJUNR-UHFFFAOYSA-N	9.7×10^{-7}		Plyasunov and Shock (2000)	L	
	1.0×10^{-6}		Mackay and Shiu (1981)	L	
	9.9×10^{-7}		Duchowicz et al. (2020)	V	187
	9.9×10^{-7}		Eastcott et al. (1988)	V	
	9.8×10^{-7}		Yaws (2003)	X	238
	1.7×10^{-4}		Duchowicz et al. (2020)	Q	
	2.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-6}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-6}		Raventos-Duran et al. (2010)	Q	246
	1.6×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.3×10^{-6}		Hilal et al. (2008)	Q	
	4.9×10^{-6}		Modarresi et al. (2007)	Q	68
	1.6×10^{-6}		Modarresi et al. (2005)	Q	248
	2.9×10^{-6}		Yao et al. (2002)	Q	230
	9.8×10^{-7}		Yaws (1999)	?	21
	9.9×10^{-7}		Yaws and Yang (1992)	?	21
2,3-dimethylheptane C_9H_{20} [3074-71-3] WBRFDUJXCLCKPX-UHFFFAOYSA-N	1.4×10^{-6}		Yaws (2003)	X	238
	2.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.4×10^{-6}		Hilal et al. (2008)	Q	
	2.4×10^{-6}		Modarresi et al. (2005)	Q	248
	2.0×10^{-6}		Yao et al. (2002)	Q	230, 268
	1.5×10^{-6}		Yaws (1999)	?	21
	1.9×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2-dimethylheptane C_9H_{20} [1071-26-7] PSABUFWDVWCFFDP-UHFFFAOYSA-N	1.7×10^{-6}		Yaws (2003)	X	238
	1.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	248
	2.0×10^{-6}		Yao et al. (2002)	Q	230
	1.7×10^{-6}		Yaws (1999)	?	21
	2.1×10^{-6}		Yaws and Yang (1992)	?	21
2,4-dimethylheptane C_9H_{20} [2213-23-2] AUKVIBNBLXQNZ-UHFFFAOYSA-N	1.7×10^{-6}		Yaws (2003)	X	238
	1.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	248
	1.8×10^{-6}		Yao et al. (2002)	Q	230
	1.7×10^{-6}		Yaws (1999)	?	21
	2.1×10^{-6}		Yaws and Yang (1992)	?	21
2,5-dimethylheptane C_9H_{20} [2216-30-0] HQZHQNKZOYIKQC-UHFFFAOYSA-N	1.6×10^{-6}		Yaws (2003)	X	238
	2.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.5×10^{-6}		Hilal et al. (2008)	Q	
	2.0×10^{-6}		Yao et al. (2002)	Q	230
	1.6×10^{-6}		Yaws (1999)	?	21
	2.0×10^{-6}		Yaws and Yang (1992)	?	21
2,6-dimethylheptane C_9H_{20} [1072-05-5] KBPCCVWUMVGXGF-UHFFFAOYSA-N	1.7×10^{-6}		Yaws (2003)	X	238
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.2×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	248
	2.2×10^{-6}		Yao et al. (2002)	Q	230
	1.7×10^{-6}		Yaws (1999)	?	21
	2.1×10^{-6}		Yaws and Yang (1992)	?	21
3,3-dimethylheptane C_9H_{20} [4032-86-4] BVAKDOXCVMKHE-UHFFFAOYSA-N	2.3×10^{-6}		Hilal et al. (2008)	Q	
	1.9×10^{-6}		Yaws and Yang (1992)	?	21
3,4-dimethylheptane C_9H_{20} [922-28-1] MAKRYGRRIKSDES-UHFFFAOYSA-N	1.4×10^{-6}		Yaws (2003)	X	238
	2.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.6×10^{-6}		Hilal et al. (2008)	Q	
	1.7×10^{-6}		Modarresi et al. (2005)	Q	248
	1.6×10^{-6}		Yao et al. (2002)	Q	230
	1.4×10^{-6}		Yaws (1999)	?	21
	1.8×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,5-dimethylheptane C_9H_{20} [926-82-9] DZJTZGHZAWTWGA-UHFFFAOYSA-N	1.6×10^{-6}		Yaws (2003)	X	238
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.5×10^{-6}		Hilal et al. (2008)	Q	
	1.7×10^{-6}		Modarresi et al. (2005)	Q	248
	1.6×10^{-6}		Yao et al. (2002)	Q	230
	1.6×10^{-6}		Yaws (1999)	?	21
4,4-dimethylheptane C_9H_{20} [1068-19-5] WSOKFYJGNBQDPW-UHFFFAOYSA-N	2.0×10^{-6}		Yaws and Yang (1992)	?	21
	1.5×10^{-6}		Yaws (2003)	X	238
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.1×10^{-6}		Hilal et al. (2008)	Q	
	1.5×10^{-6}		Modarresi et al. (2005)	Q	248
	1.5×10^{-6}		Yao et al. (2002)	Q	230
3-ethylheptane C_9H_{20} [15869-80-4] PSVQKOKKLWHNRP-UHFFFAOYSA-N	1.5×10^{-6}		Yaws (1999)	?	21
	1.9×10^{-6}		Yaws and Yang (1992)	?	21
	1.4×10^{-6}		Yaws (2003)	X	238
	2.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.6×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	248
4-ethylheptane C_9H_{20} [2216-32-2] XMROPFQWHHUFFS-UHFFFAOYSA-N	2.4×10^{-6}		Yao et al. (2002)	Q	230
	1.4×10^{-6}		Yaws (1999)	?	21
	1.9×10^{-6}		Yaws and Yang (1992)	?	21
	1.5×10^{-6}		Yaws (2003)	X	238
	2.3×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.5×10^{-6}		Hilal et al. (2008)	Q	
2,2,3-trimethylhexane C_9H_{20} [16747-25-4] CBVFSZDQEHBJEQ-UHFFFAOYSA-N	1.5×10^{-6}		Modarresi et al. (2005)	Q	248
	2.8×10^{-6}		Yao et al. (2002)	Q	230
	1.5×10^{-6}		Yaws (1999)	?	21
	1.9×10^{-6}		Yaws and Yang (1992)	?	21
	1.5×10^{-6}		Yaws (2003)	X	238
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	247
2,2,3-trimethylhexane C_9H_{20} [16747-25-4] CBVFSZDQEHBJEQ-UHFFFAOYSA-N	1.9×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	248
	9.0×10^{-7}		Yao et al. (2002)	Q	230
	1.5×10^{-6}		Yaws (1999)	?	21
	1.9×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,4-trimethylhexane C_9H_{20} [16747-26-5] AFTPEBDOGXRMNQ-UHFFFAOYSA-N	1.7×10^{-6}		Yaws (2003)	X	238
	1.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.1×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	248
	1.0×10^{-6}		Yao et al. (2002)	Q	230
	1.7×10^{-6}		Yaws (1999)	?	21
	2.1×10^{-6}		Yaws and Yang (1992)	?	21
2,2,5-trimethylhexane C_9H_{20} [3522-94-9] HHOSMYBYIHNXNO-UHFFFAOYSA-N	1.9×10^{-6}	6200	Brockbank (2013)	L	
	2.8×10^{-6}		Plyasunov and Shock (2000)	L	
	2.9×10^{-6}		Mackay and Shiu (1981)	L	
	4.1×10^{-6}		Mackay et al. (2006a)	V	
	4.1×10^{-6}		Mackay et al. (1993)	V	
	4.1×10^{-6}		Cabani et al. (1981)	V	
	3.9×10^{-6}		McAuliffe (1966)	V	
	1.8×10^{-6}		Yaws (2003)	X	238
	1.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	247
	9.0×10^{-7}		Hilal et al. (2008)	Q	
	1.7×10^{-6}		Modarresi et al. (2005)	Q	248
	2.9×10^{-6}		Yaffe et al. (2003)	Q	249, 250
	1.5×10^{-6}		Yao et al. (2002)	Q	230
2.2×10^{-6}		Nirmalakhandan et al. (1997)	Q		
1.8×10^{-6}		Yaws (1999)	?	21	
1.9×10^{-6}		Yaws and Yang (1992)	?	21	
2,3,3-trimethylhexane C_9H_{20} [16747-28-7] DJYSEQMMMCZAKGT-UHFFFAOYSA-N	1.4×10^{-6}		Yaws (2003)	X	238
	2.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.4×10^{-6}		Hilal et al. (2008)	Q	
	2.3×10^{-6}		Modarresi et al. (2005)	Q	248
	1.0×10^{-6}		Yao et al. (2002)	Q	230
	1.4×10^{-6}		Yaws (1999)	?	21
1.7×10^{-6}		Yaws and Yang (1992)	?	21	
2,3,4-trimethylhexane C_9H_{20} [921-47-1] RUTNOQHQISEBGT-UHFFFAOYSA-N	1.4×10^{-6}		Yaws (2003)	X	238
	2.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.6×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	248
	1.1×10^{-6}		Yao et al. (2002)	Q	230
	1.4×10^{-6}		Yaws (1999)	?	21
1.8×10^{-6}		Yaws and Yang (1992)	?	21	

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,5-trimethylhexane C_9H_{20} [1069-53-0] ODGLTLJZCVNPBU-UHFFFAOYSA-N	1.7×10^{-6}		Yaws (2003)	X	238
	1.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-6}		Hilal et al. (2008)	Q	
	2.1×10^{-6}		Modarresi et al. (2005)	Q	248
	1.1×10^{-6}		Yao et al. (2002)	Q	230, 268
	2.8×10^{-6}		English and Carroll (2001)	Q	231, 232
	1.7×10^{-6}		Yaws (1999)	?	21
2,4,4-trimethylhexane C_9H_{20} [16747-30-1] SVMKBCPZYWEPH-UHFFFAOYSA-N	2.0×10^{-6}		Yaws and Yang (1992)	?	21
	1.5×10^{-6}		Yaws (2003)	X	238
	1.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-6}		Hilal et al. (2008)	Q	
	1.5×10^{-6}		Modarresi et al. (2005)	Q	248
	1.1×10^{-6}		Yao et al. (2002)	Q	230
	1.5×10^{-6}		Yaws (1999)	?	21
3,3,4-trimethylhexane C_9H_{20} [16747-31-2] ARWOOWBJJKVYOV-UHFFFAOYSA-N	1.9×10^{-6}		Yaws and Yang (1992)	?	21
	1.3×10^{-6}		Yaws (2003)	X	238
	2.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.9×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	248
	1.1×10^{-6}		Yao et al. (2002)	Q	230
	1.3×10^{-6}		Yaws (1999)	?	21
3-ethyl-2-methylhexane C_9H_{20} [16789-46-1] MVLOWDRGPHBNNF-UHFFFAOYSA-N	1.7×10^{-6}		Yaws and Yang (1992)	?	21
	1.5×10^{-6}		Yaws (2003)	X	238
	2.3×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.3×10^{-6}		Hilal et al. (2008)	Q	
	2.2×10^{-6}		Modarresi et al. (2005)	Q	248
	1.2×10^{-6}		Yao et al. (2002)	Q	230
	1.5×10^{-6}		Yaws (1999)	?	21
4-ethyl-2-methylhexane C_9H_{20} [3074-75-7] KYCZJIBOPKRsov-UHFFFAOYSA-N	1.9×10^{-6}		Yaws and Yang (1992)	?	21
	1.6×10^{-6}		Yaws (2003)	X	238
	2.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.5×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	248
	1.5×10^{-6}		Yao et al. (2002)	Q	230, 268
	1.7×10^{-6}		Yaws (1999)	?	21
2.0×10^{-6}		Yaws and Yang (1992)	?	21	

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-ethyl-3-methylhexane C_9H_{20} [3074-76-8] CYWROHZCELEGSE-UHFFFAOYSA-N	1.3×10^{-6}		Yaws (2003)	X	238
	2.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	247
	3.2×10^{-6}		Hilal et al. (2008)	Q	
	1.5×10^{-6}		Modarresi et al. (2005)	Q	248
	1.2×10^{-6}		Yao et al. (2002)	Q	230
	1.3×10^{-6}		Yaws (1999)	?	21
	1.7×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-4-methylhexane C_9H_{20} [3074-77-9] OKCRKWVABWILDR-UHFFFAOYSA-N	1.4×10^{-6}		Yaws (2003)	X	238
	2.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	247
	3.1×10^{-6}		Hilal et al. (2008)	Q	
	1.9×10^{-6}		Modarresi et al. (2005)	Q	248
	1.2×10^{-6}		Yao et al. (2002)	Q	230
	1.4×10^{-6}		Yaws (1999)	?	21
	1.8×10^{-6}		Yaws and Yang (1992)	?	21
2,2,3,3-tetramethylpentane C_9H_{20} [7154-79-2] QUKOJKFJIHSBKV-UHFFFAOYSA-N	1.2×10^{-6}		Yaws (2003)	X	238
	2.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-6}		Gharagheizi et al. (2010)	Q	247
	3.6×10^{-6}		Hilal et al. (2008)	Q	
	2.1×10^{-6}		Modarresi et al. (2005)	Q	248
	1.0×10^{-6}		Yao et al. (2002)	Q	230, 268
	1.2×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
2,2,3,4-tetramethylpentane C_9H_{20} [1186-53-4] VZFMYOCAEQDWDY-UHFFFAOYSA-N	1.4×10^{-6}		Yaws (2003)	X	238
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.9×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	248
	2.8×10^{-6}		Yao et al. (2002)	Q	230
	1.4×10^{-6}		Yaws (1999)	?	21
	1.7×10^{-6}		Yaws and Yang (1992)	?	21
2,2,4,4-tetramethylpentane C_9H_{20} [1070-87-7] GUMULFRCHLJNDY-UHFFFAOYSA-N	1.7×10^{-6}		Yaws (2003)	X	238
	1.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-6}		Gharagheizi et al. (2010)	Q	247
	9.0×10^{-7}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	248
	1.4×10^{-6}		Yao et al. (2002)	Q	230
	1.7×10^{-6}		Yaws (1999)	?	21
	1.9×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3,4-tetramethylpentane C_9H_{20} [16747-38-9] JLCYYQOQSAMWTA-UHFFFAOYSA-N	1.2×10^{-6}		Yaws (2003)	X	238
	3.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.7×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	248
	1.2×10^{-6}		Yao et al. (2002)	Q	230
	1.2×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-2,2-dimethylpentane C_9H_{20} [16747-32-3] CLZCPQKGOAXOJT-UHFFFAOYSA-N	1.5×10^{-6}		Yaws (2003)	X	238
	2.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.9×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	248
	1.6×10^{-6}		Yao et al. (2002)	Q	230, 268
	1.5×10^{-6}		Yaws (1999)	?	21
	1.8×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-2,3-dimethylpentane C_9H_{20} [16747-33-4] MMASVVOQIKCFJZ-UHFFFAOYSA-N	1.2×10^{-6}		Yaws (2003)	X	238
	3.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	247
	3.5×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	248
	1.6×10^{-6}		Yao et al. (2002)	Q	230
	1.2×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-2,4-dimethylpentane C_9H_{20} [1068-87-7] VLHAGZNBWKUMRW-UHFFFAOYSA-N	1.4×10^{-6}		Yaws (2003)	X	238
	2.3×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.9×10^{-6}		Hilal et al. (2008)	Q	
	2.0×10^{-6}		Modarresi et al. (2005)	Q	248
	1.8×10^{-6}		Yao et al. (2002)	Q	230
	1.4×10^{-6}		Yaws (1999)	?	21
	1.8×10^{-6}		Yaws and Yang (1992)	?	21
3,3-diethylpentane C_9H_{20} [1067-20-5] BGXXYLRLPIRDHJ-UHFFFAOYSA-N		4900	Abraham and Nasehzadeh (1981)	R	
	1.1×10^{-6}		Yaws (2003)	X	238
	3.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	247
	4.1×10^{-6}		Hilal et al. (2008)	Q	
	2.0×10^{-6}		Modarresi et al. (2005)	Q	248
	1.7×10^{-6}		Yao et al. (2002)	Q	230
	1.1×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21
	9.5×10^{-6}		Abraham et al. (1990)	?	
	9.4×10^{-6}		Abraham (1979)	?	

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
decane	1.3×10^{-6}		Brockbank (2013)	L	
$\text{C}_{10}\text{H}_{22}$	1.1×10^{-6}		Plyasunov and Shock (2000)	L	
[124-18-5]	1.4×10^{-6}		Mackay and Shiu (1981)	L	
DIOQZVSQGTUSAI-UHFFFAOYSA-N	1.9×10^{-6}		Duchowicz et al. (2020)	V	187
	1.9×10^{-6}		HSDB (2015)	V	
	2.1×10^{-6}		Mackay et al. (2006a)	V	
	2.1×10^{-6}		Mackay et al. (1993)	V	
	2.0×10^{-6}		Hwang et al. (1992)	V	
	2.3×10^{-6}		Eastcott et al. (1988)	V	
	1.9×10^{-6}		Abraham (1984)	V	
	1.9×10^{-6}		Yaws (2003)	X	259
	1.9×10^{-6}		Yaws (2003)	X	238
	4.4×10^{-6}		Dupeux et al. (2022)	Q	260
	4.4×10^{-4}		Duchowicz et al. (2020)	Q	
	2.3×10^{-5}		Wang et al. (2017)	Q	81, 239
	1.7×10^{-6}		Wang et al. (2017)	Q	81, 240
	6.5×10^{-6}		Wang et al. (2017)	Q	81, 241
	3.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-6}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-6}		Raventos-Duran et al. (2010)	Q	246
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.2×10^{-6}		Hilal et al. (2008)	Q	
	3.8×10^{-6}		Modarresi et al. (2007)	Q	68
	2.0×10^{-6}		Yaffe et al. (2003)	Q	249, 250
	2.2×10^{-6}		English and Carroll (2001)	Q	231, 232
	1.0×10^{-5}		Katritzky et al. (1998)	Q	
	2.9×10^{-6}		Nirmalakhandan et al. (1997)	Q	
	1.9×10^{-6}		Yaws (1999)	?	21
	2.1×10^{-6}		Yaws and Yang (1992)	?	21
2-methylnonane	1.2×10^{-6}		Yaws (2003)	X	238
$\text{C}_{10}\text{H}_{22}$	2.0×10^{-6}		Gharagheizi et al. (2012)	Q	
[871-83-0]	1.3×10^{-6}		Gharagheizi et al. (2010)	Q	247
SGVYKUFIHHTIFL-UHFFFAOYSA-N	1.5×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	3.1×10^{-6}		Yao et al. (2002)	Q	230, 268
	1.2×10^{-6}		Yaws (1999)	?	21
	1.7×10^{-6}		Yaws and Yang (1992)	?	21
3-methylnonane	1.1×10^{-6}		Yaws (2003)	X	238
$\text{C}_{10}\text{H}_{22}$	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
[5911-04-6]	1.3×10^{-6}		Gharagheizi et al. (2010)	Q	247
PLZDDPSCZHRBOY-UHFFFAOYSA-N	1.7×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	2.8×10^{-6}		Yao et al. (2002)	Q	230
	1.1×10^{-6}		Yaws (1999)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.7×10^{-6}		Yaws and Yang (1992)	?	21
4-methylnonane $\text{C}_{10}\text{H}_{22}$ [17301-94-9] IALRSQMWHFKJJA-UHFFFAOYSA-N	1.0×10^{-6} 2.0×10^{-6} 1.3×10^{-6} 1.6×10^{-6} 1.3×10^{-6} 2.7×10^{-6} 1.0×10^{-6} 1.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999) Yaws and Yang (1992)	X Q Q Q Q Q ? ?	238 247 248 230 21 21
5-methylnonane $\text{C}_{10}\text{H}_{22}$ [15869-85-9] TYSIILFJZXHVPU-UHFFFAOYSA-N	1.1×10^{-6} 1.9×10^{-6} 1.3×10^{-6} 1.7×10^{-6} 1.3×10^{-6} 4.2×10^{-6} 1.1×10^{-6} 1.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999) Yaws and Yang (1992)	X Q Q Q Q Q ? ?	238 247 248 230 21 21
2,2-dimethyloctane $\text{C}_{10}\text{H}_{22}$ [15869-87-1] GPBUTTSWJNPYJL-UHFFFAOYSA-N	1.1×10^{-6} 1.5×10^{-6} 1.1×10^{-6} 1.3×10^{-6} 1.1×10^{-6} 1.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999) Yaws and Yang (1992)	X Q Q Q ? ?	238 247 21 21
2,3-dimethyloctane $\text{C}_{10}\text{H}_{22}$ [7146-60-3] YPMNDMUOGQJCLW-UHFFFAOYSA-N	1.0×10^{-6} 1.9×10^{-6} 1.2×10^{-6} 1.7×10^{-6} 1.4×10^{-6} 1.6×10^{-6} 1.0×10^{-6} 1.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999) Yaws and Yang (1992)	X Q Q Q Q Q ? ?	238 247 248 230 21 21
2,4-dimethyloctane $\text{C}_{10}\text{H}_{22}$ [4032-94-4] IXAVTTRPEXFVSX-UHFFFAOYSA-N	1.2×10^{-6} 1.5×10^{-6} 1.2×10^{-6} 1.2×10^{-6} 1.3×10^{-6} 1.7×10^{-6} 1.2×10^{-6} 1.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999) Yaws and Yang (1992)	X Q Q Q Q Q ? ?	238 247 248 230 21 21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,5-dimethyloctane $\text{C}_{10}\text{H}_{22}$ [15869-89-3] HOAAQUNESXYFDT-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	238
	1.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.3×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	2.0×10^{-6}		Yao et al. (2002)	Q	230, 268
	1.1×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
2,6-dimethyloctane $\text{C}_{10}\text{H}_{22}$ [2051-30-1] ZALHPSXXQIPKTQ-UHFFFAOYSA-N	1.0×10^{-6}		Yaws (2003)	X	238
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.2×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	1.8×10^{-6}		Yao et al. (2002)	Q	230
	1.1×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
2,7-dimethyloctane $\text{C}_{10}\text{H}_{22}$ [1072-16-8] KEVMYFLMMDUPJE-UHFFFAOYSA-N	1.2×10^{-6}		Yaws (2003)	X	238
	1.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.0×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	1.9×10^{-6}		Yao et al. (2002)	Q	230
	1.2×10^{-6}		Yaws (1999)	?	21
	1.7×10^{-6}		Yaws and Yang (1992)	?	21
3,3-dimethyloctane $\text{C}_{10}\text{H}_{22}$ [4110-44-5] DBULLUBYDONGLT-UHFFFAOYSA-N	1.0×10^{-6}		Yaws (2003)	X	238
	1.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.7×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	1.4×10^{-6}		Yao et al. (2002)	Q	230
	1.0×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21
3,4-dimethyloctane $\text{C}_{10}\text{H}_{22}$ [15869-92-8] QQCWGAMGBCGAQJ-UHFFFAOYSA-N	1.0×10^{-6}		Yaws (2003)	X	238
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.0×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	1.6×10^{-6}		Yao et al. (2002)	Q	230
	1.0×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,5-dimethyloctane $\text{C}_{10}\text{H}_{22}$ [15869-93-9] VRHRGVJOUHJULC-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	238
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	1.6×10^{-6}		Yao et al. (2002)	Q	230
	1.1×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
3,6-dimethyloctane $\text{C}_{10}\text{H}_{22}$ [15869-94-0] JEEQUUSFXRPRK-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	238
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.3×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	1.6×10^{-6}		Yao et al. (2002)	Q	230
	1.1×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
4,4-dimethyloctane $\text{C}_{10}\text{H}_{22}$ [15869-95-1] ZMEDGZAGMLTROM-UHFFFAOYSA-N	1.0×10^{-6}		Yaws (2003)	X	238
	1.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.5×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	1.4×10^{-6}		Yao et al. (2002)	Q	230, 268
	1.1×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21
4,5-dimethyloctane $\text{C}_{10}\text{H}_{22}$ [15869-96-2] DOYJTLUPPPUSMD-UHFFFAOYSA-N	1.0×10^{-6}		Yaws (2003)	X	238
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.1×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	1.4×10^{-6}		Yao et al. (2002)	Q	230
	1.0×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyloctane $\text{C}_{10}\text{H}_{22}$ [5881-17-4] OEYGTUAKNZFCDJ-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	238
	2.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.2×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-ethyloctane $\text{C}_{10}\text{H}_{22}$ [15869-86-0] NRJUFUBKIFIKFI-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	238
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.4×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	2.8×10^{-6}		Yao et al. (2002)	Q	230
	1.1×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
2,2,3-trimethylheptane $\text{C}_{10}\text{H}_{22}$ [52896-92-1] ACYHSTUWQNWXC-UHFFFAOYSA-N	1.0×10^{-6}		Yaws (2003)	X	238
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.6×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	9.4×10^{-7}		Yao et al. (2002)	Q	230
	1.0×10^{-6}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
2,2,4-trimethylheptane $\text{C}_{10}\text{H}_{22}$ [14720-74-2] IYGOARYARWJBO-UHFFFAOYSA-N	1.2×10^{-6}		Yaws (2003)	X	238
	1.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	1.0×10^{-6}		Yao et al. (2002)	Q	230
	1.2×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
2,2,5-trimethylheptane $\text{C}_{10}\text{H}_{22}$ [20291-95-6] GZJFAWOTMWATOS-UHFFFAOYSA-N	1.2×10^{-6}		Yaws (2003)	X	238
	1.3×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.5×10^{-6}		Modarresi et al. (2005)	Q	248
	1.1×10^{-6}		Yao et al. (2002)	Q	230, 268
	1.2×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
2,2,6-trimethylheptane $\text{C}_{10}\text{H}_{22}$ [1190-83-6] FHJCGIUZJXWNET-UHFFFAOYSA-N	1.2×10^{-6}		Yaws (2003)	X	238
	1.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	1.3×10^{-6}		Yao et al. (2002)	Q	230
	1.3×10^{-6}		Yaws (1999)	?	21
	1.7×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3-trimethylheptane $\text{C}_{10}\text{H}_{22}$ [52896-93-2] QACXEXNKLFWKLIK-UHFFFAOYSA-N	9.5×10^{-7}		Yaws (2003)	X	238
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.6×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	9.7×10^{-7}		Yao et al. (2002)	Q	230
	9.5×10^{-7}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
2,3,4-trimethylheptane $\text{C}_{10}\text{H}_{22}$ [52896-95-4] UVVYAKOLFKEZEE-UHFFFAOYSA-N	9.9×10^{-7}		Yaws (2003)	X	238
	1.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.6×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	9.0×10^{-7}		Yao et al. (2002)	Q	230
	9.9×10^{-7}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
2,3,5-trimethylheptane $\text{C}_{10}\text{H}_{22}$ [20278-85-7] YKPNYFKOKKKGNM-UHFFFAOYSA-N	9.5×10^{-7}		Yaws (2003)	X	238
	1.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.1×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	1.1×10^{-6}		Yao et al. (2002)	Q	230
	9.5×10^{-7}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
2,3,6-trimethylheptane $\text{C}_{10}\text{H}_{22}$ [4032-93-3] IHPXJGBVRWFEJB-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	238
	1.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.1×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	1.2×10^{-6}		Yao et al. (2002)	Q	230
	1.1×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
2,4,4-trimethylheptane $\text{C}_{10}\text{H}_{22}$ [4032-92-2] QALGVLROELGEEM-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	238
	1.3×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.1×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	8.6×10^{-7}		Yao et al. (2002)	Q	230
	1.1×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4,5-trimethylheptane $\text{C}_{10}\text{H}_{22}$ [20278-84-6] YMBNRMDSLJNNPF-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	238
	1.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.1×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	9.0×10^{-7}		Yao et al. (2002)	Q	230, 268
	1.1×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21
2,4,6-trimethylheptane $\text{C}_{10}\text{H}_{22}$ [2613-61-8] YNLBBDHDNIXQNL-UHFFFAOYSA-N	1.3×10^{-6}		Yaws (2003)	X	238
	1.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	7.5×10^{-7}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	1.0×10^{-6}		Yao et al. (2002)	Q	230
	1.3×10^{-6}		Yaws (1999)	?	21
	1.8×10^{-6}		Yaws and Yang (1992)	?	21
2,5,5-trimethylheptane $\text{C}_{10}\text{H}_{22}$ [1189-99-7] SOYLPZSOEXZMLE-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	238
	1.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.1×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	1.2×10^{-6}		Yao et al. (2002)	Q	230
	1.1×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21
3,3,4-trimethylheptane $\text{C}_{10}\text{H}_{22}$ [20278-87-9] WRBHKVWLEIYLDZ-UHFFFAOYSA-N	9.0×10^{-7}		Yaws (2003)	X	238
	2.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.9×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	7.6×10^{-7}		Yao et al. (2002)	Q	230
	9.0×10^{-7}		Yaws (1999)	?	21
	1.3×10^{-6}		Yaws and Yang (1992)	?	21
3,3,5-trimethylheptane $\text{C}_{10}\text{H}_{22}$ [7154-80-5] VRVRRZZWPKABUOE-UHFFFAOYSA-N	9.9×10^{-7}		Yaws (2003)	X	238
	1.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.2×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	8.3×10^{-7}		Yao et al. (2002)	Q	230
	1.0×10^{-6}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,4,4-trimethylheptane $\text{C}_{10}\text{H}_{22}$ [20278-88-0] BLNBSBLKPFJJQ-UHFFFAOYSA-N	9.0×10^{-7}		Yaws (2003)	X	238
	2.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.9×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	7.7×10^{-7}		Yao et al. (2002)	Q	230
	9.0×10^{-7}		Yaws (1999)	?	21
	1.3×10^{-6}		Yaws and Yang (1992)	?	21
3,4,5-trimethylheptane $\text{C}_{10}\text{H}_{22}$ [20278-89-1] LJIIBBYARMPST-UHFFFAOYSA-N	9.4×10^{-7}		Yaws (2003)	X	238
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.3×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	8.9×10^{-7}		Yao et al. (2002)	Q	230
	9.4×10^{-7}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-2-methylheptane $\text{C}_{10}\text{H}_{22}$ [14676-29-0] NKMJCVVUYDKHAV-UHFFFAOYSA-N	1.0×10^{-6}		Yaws (2003)	X	238
	1.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.0×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	1.4×10^{-6}		Yao et al. (2002)	Q	230
	1.0×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21
4-ethyl-2-methylheptane $\text{C}_{10}\text{H}_{22}$ [52896-88-5] OJDKRASKNKPYDH-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	238
	1.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	1.5×10^{-6}		Yao et al. (2002)	Q	230
	1.1×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
5-ethyl-2-methylheptane $\text{C}_{10}\text{H}_{22}$ [13475-78-0] DGEMPTLPTFNEHJ-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	238
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	1.5×10^{-6}		Yao et al. (2002)	Q	230
	1.1×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-ethyl-3-methylheptane $C_{10}H_{22}$ [17302-01-1] HSOMNBKXPGCNBH-UHFFFAOYSA-N	9.1×10^{-7}		Yaws (2003)	X	238
	2.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.2×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	1.3×10^{-6}		Yao et al. (2002)	Q	230, 268
	9.2×10^{-7}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
4-ethyl-3-methylheptane $C_{10}H_{22}$ [52896-89-6] BTGGSWBKRYMHQK-UHFFFAOYSA-N	9.8×10^{-7}		Yaws (2003)	X	238
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.2×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	1.2×10^{-6}		Yao et al. (2002)	Q	230
	9.8×10^{-7}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-5-methylheptane $C_{10}H_{22}$ [52896-90-9] VXARVYMIZCGZGG-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	238
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.3×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	1.6×10^{-6}		Yao et al. (2002)	Q	230
	1.1×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-4-methylheptane $C_{10}H_{22}$ [52896-91-0] JZBKRUIGSVOOIC-UHFFFAOYSA-N	9.7×10^{-7}		Yaws (2003)	X	238
	2.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.2×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	1.1×10^{-6}		Yao et al. (2002)	Q	230
	9.8×10^{-7}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
4-ethyl-4-methylheptane $C_{10}H_{22}$ [17302-04-4] MPYQJQDSICRCJJ-UHFFFAOYSA-N	9.5×10^{-7}		Yaws (2003)	X	238
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.4×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	1.0×10^{-6}		Yao et al. (2002)	Q	230
	9.5×10^{-7}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-propylheptane $\text{C}_{10}\text{H}_{22}$ [3178-29-8] ABYGSZMCVWVFCQ-UHFFFAOYSA-N	1.2×10^{-6}		Yaws (2003)	X	238
	1.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.6×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	2.6×10^{-6}		Yao et al. (2002)	Q	230
	1.2×10^{-6}		Yaws (1999)	?	21
	1.7×10^{-6}		Yaws and Yang (1992)	?	21
4-(1-methylethyl)-heptane $\text{C}_{10}\text{H}_{22}$ (4-isopropylheptane) [52896-87-4] AZLAWGCU DHUQDB-UHFFFAOYSA-N	1.0×10^{-6}		Yaws (2003)	X	238
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.1×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	2.0×10^{-6}		Yao et al. (2002)	Q	230
	1.0×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21
2,2,3,3-tetramethylhexane $\text{C}_{10}\text{H}_{22}$ [13475-81-5] RMQJHMMCLSJULX-UHFFFAOYSA-N	8.4×10^{-7}		Yaws (2003)	X	238
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-7}		Gharagheizi et al. (2010)	Q	247
	1.8×10^{-6}		Hilal et al. (2008)	Q	
	1.5×10^{-6}		Modarresi et al. (2005)	Q	248
	4.9×10^{-7}		Yao et al. (2002)	Q	230
	8.4×10^{-7}		Yaws (1999)	?	21
	1.2×10^{-6}		Yaws and Yang (1992)	?	21
2,2,3,4-tetramethylhexane $\text{C}_{10}\text{H}_{22}$ [52897-08-2] MHSPNGW FAGBNH-UHFFFAOYSA-N	8.7×10^{-7}		Yaws (2003)	X	238
	1.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.2×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	5.9×10^{-7}		Yao et al. (2002)	Q	230
	8.7×10^{-7}		Yaws (1999)	?	21
	1.2×10^{-6}		Yaws and Yang (1992)	?	21
2,2,3,5-tetramethylhexane $\text{C}_{10}\text{H}_{22}$ [52897-09-3] GCFKTDRTZYDRBI-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	238
	1.3×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	8.4×10^{-7}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	6.6×10^{-7}		Yao et al. (2002)	Q	230, 268
	1.1×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,4,4-tetramethylhexane $C_{10}H_{22}$ [51750-65-3] PXHNHTBJHHSVPT-UHFFFAOYSA-N	8.3×10^{-7}		Yaws (2003)	X	238
	1.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-7}		Gharagheizi et al. (2010)	Q	247
	8.8×10^{-7}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	6.5×10^{-7}		Yao et al. (2002)	Q	230
	8.3×10^{-7}		Yaws (1999)	?	21
	1.1×10^{-6}		Yaws and Yang (1992)	?	21
2,2,4,5-tetramethylhexane $C_{10}H_{22}$ [16747-42-5] KDRZICOOQNIJDN-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	238
	1.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	8.0×10^{-7}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	7.3×10^{-7}		Yao et al. (2002)	Q	230
	1.1×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21
2,2,5,5-tetramethylhexane $C_{10}H_{22}$ [1071-81-4] HXQDUXXBVMMIKL-UHFFFAOYSA-N	1.4×10^{-6}		Yaws (2003)	X	238
	8.9×10^{-7}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-7}		Gharagheizi et al. (2010)	Q	247
	4.6×10^{-7}		Hilal et al. (2008)	Q	
	1.5×10^{-6}		Modarresi et al. (2005)	Q	248
	1.1×10^{-6}		Yao et al. (2002)	Q	230
	1.4×10^{-6}		Yaws (1999)	?	21
	1.8×10^{-6}		Yaws and Yang (1992)	?	21
2,3,3,4-tetramethylhexane $C_{10}H_{22}$ [52897-10-6] HIHSOGFAVTVMCY-UHFFFAOYSA-N	7.9×10^{-7}		Yaws (2003)	X	238
	2.3×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	6.0×10^{-7}		Yao et al. (2002)	Q	230
	7.9×10^{-7}		Yaws (1999)	?	21
	1.2×10^{-6}		Yaws and Yang (1992)	?	21
2,3,3,5-tetramethylhexane $C_{10}H_{22}$ [52897-11-7] GCGFXFIPOBRMQT-UHFFFAOYSA-N	1.0×10^{-6}		Yaws (2003)	X	238
	1.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	9.2×10^{-7}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	5.9×10^{-7}		Yao et al. (2002)	Q	230
	1.0×10^{-6}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,4,4-tetramethylhexane $\text{C}_{10}\text{H}_{22}$ [52897-12-8] XDRDDPSGUQMOBO-UHFFFAOYSA-N	8.2×10^{-7}		Yaws (2003)	X	238
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.3×10^{-6}		Hilal et al. (2008)	Q	
	1.5×10^{-6}		Modarresi et al. (2005)	Q	248
	6.3×10^{-7}		Yao et al. (2002)	Q	230
	8.3×10^{-7}		Yaws (1999)	?	21
	1.2×10^{-6}		Yaws and Yang (1992)	?	21
2,3,4,5-tetramethylhexane $\text{C}_{10}\text{H}_{22}$ [52897-15-1] BHGNYYIOYPFWKU-UHFFFAOYSA-N	1.0×10^{-6}		Yaws (2003)	X	238
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.2×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	6.6×10^{-7}		Yao et al. (2002)	Q	230, 268
	1.0×10^{-6}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
3,3,4,4-tetramethylhexane $\text{C}_{10}\text{H}_{22}$ [5171-84-6] MCEYLFHKATVXLN-UHFFFAOYSA-N	6.6×10^{-7}		Yaws (2003)	X	238
	2.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-7}		Gharagheizi et al. (2010)	Q	247
	2.2×10^{-6}		Hilal et al. (2008)	Q	
	1.5×10^{-6}		Modarresi et al. (2005)	Q	248
	6.2×10^{-7}		Yao et al. (2002)	Q	230
	6.7×10^{-7}		Yaws (1999)	?	21
	1.0×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-2,2-dimethylhexane $\text{C}_{10}\text{H}_{22}$ [20291-91-2] XYDYODCWVCBIOQ-UHFFFAOYSA-N	9.8×10^{-7}		Yaws (2003)	X	238
	1.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.8×10^{-6}		Hilal et al. (2008)	Q	
	1.8×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	7.1×10^{-7}		Yao et al. (2002)	Q	230
9.8×10^{-7}		Yaws (1999)	?	21	
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
4-ethyl-2,2-dimethylhexane $\text{C}_{10}\text{H}_{22}$ [52896-99-8] QHLDLDFLIDFTHQI-UHFFFAOYSA-N	1.2×10^{-6}		Yaws (2003)	X	238
	1.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.1×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	9.9×10^{-7}		Yao et al. (2002)	Q	230
	1.2×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-ethyl-2,3-dimethylhexane $C_{10}H_{22}$ [52897-00-4] PJIFKODHGMUPFH-UHFFFAOYSA-N	8.5×10^{-7}		Yaws (2003)	X	238
	2.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.0×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	6.6×10^{-7}		Yao et al. (2002)	Q	230
	8.6×10^{-7}		Yaws (1999)	?	21
	1.3×10^{-6}		Yaws and Yang (1992)	?	21
4-ethyl-2,3-dimethylhexane $C_{10}H_{22}$ [52897-01-5] RHMRCBCYFAZIK-UHFFFAOYSA-N	9.4×10^{-7}		Yaws (2003)	X	238
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.6×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	7.2×10^{-7}		Yao et al. (2002)	Q	230
	9.5×10^{-7}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-2,4-dimethylhexane $C_{10}H_{22}$ [7220-26-0] OSKIMJMPFNVOU-UHFFFAOYSA-N	9.5×10^{-7}		Yaws (2003)	X	238
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.6×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	7.1×10^{-7}		Yao et al. (2002)	Q	230, 268
	9.5×10^{-7}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
4-ethyl-2,4-dimethylhexane $C_{10}H_{22}$ [52897-03-7] SIKFMUYSQCEQOO-UHFFFAOYSA-N	9.1×10^{-7}		Yaws (2003)	X	238
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.3×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	7.2×10^{-7}		Yao et al. (2002)	Q	230
	9.1×10^{-7}		Yaws (1999)	?	21
	1.3×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-2,5-dimethylhexane $C_{10}H_{22}$ [52897-04-8] UJEUVDLASLOZIV-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	238
	1.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.1×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	1.1×10^{-6}		Yao et al. (2002)	Q	230
	1.1×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-ethyl-3,3-dimethylhexane $C_{10}H_{22}$ [52897-05-9] ZRTXVJYJVBTXHE-UHFFFAOYSA-N	8.5×10^{-7}		Yaws (2003)	X	238
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.9×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	7.3×10^{-7}		Yao et al. (2002)	Q	230
	8.6×10^{-7}		Yaws (1999)	?	21
	1.3×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-3,4-dimethylhexane $C_{10}H_{22}$ [52897-06-0] ZGJCTUKRTSBTIQ-UHFFFAOYSA-N	8.6×10^{-7}		Yaws (2003)	X	238
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.2×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	7.7×10^{-7}		Yao et al. (2002)	Q	230
	8.6×10^{-7}		Yaws (1999)	?	21
	1.3×10^{-6}		Yaws and Yang (1992)	?	21
3,3-diethylhexane $C_{10}H_{22}$ [17302-02-2] WWNGLKDLYKNGGT-UHFFFAOYSA-N	8.5×10^{-7}		Yaws (2003)	X	238
	2.3×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	3.4×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	7.7×10^{-7}		Yao et al. (2002)	Q	230
	8.5×10^{-7}		Yaws (1999)	?	21
	1.3×10^{-6}		Yaws and Yang (1992)	?	21
3,4-diethylhexane $C_{10}H_{22}$ [19398-77-7] VBZCRMTUDYIWIH-UHFFFAOYSA-N	9.3×10^{-7}		Yaws (2003)	X	238
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.8×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	7.9×10^{-7}		Yao et al. (2002)	Q	230
	9.3×10^{-7}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
2-methyl-3-(1-methylethyl)-hexane $C_{10}H_{22}$ (3-isopropyl-2-methylhexane) [62016-13-1] YBOXGRMAQIYMGV-UHFFFAOYSA-N	7.5×10^{-7}		Yaws (2003)	X	238
	2.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.5×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	8.5×10^{-7}		Yao et al. (2002)	Q	230, 268
	7.5×10^{-7}		Yaws (1999)	?	21
	1.1×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,3,3,4-pentamethylpentane $\text{C}_{10}\text{H}_{22}$ [16747-44-7] WKQBIIUOSATALN-UHFFFAOYSA-N	6.8×10^{-7}		Yaws (2003)	X	238
	2.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.0×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.3×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	8.8×10^{-7}		Yao et al. (2002)	Q	230, 268
	6.8×10^{-7}		Yaws (1999)	?	21
	1.0×10^{-6}		Yaws and Yang (1992)	?	21
2,2,3,4,4-pentamethylpentane $\text{C}_{10}\text{H}_{22}$ [16747-45-8] OWFKEHICSVOVAC-UHFFFAOYSA-N	7.2×10^{-7}		Yaws (2003)	X	238
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.0×10^{-6}		Gharagheizi et al. (2010)	Q	247
	8.6×10^{-7}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	1.0×10^{-6}		Yao et al. (2002)	Q	230
	7.2×10^{-7}		Yaws (1999)	?	21
	1.0×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-2,2,3-trimethylpentane $\text{C}_{10}\text{H}_{22}$ [52897-17-3] AJDIFHIHSYVDGP-UHFFFAOYSA-N	6.6×10^{-7}		Yaws (2003)	X	238
	2.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-7}		Gharagheizi et al. (2010)	Q	247
	2.1×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	9.2×10^{-7}		Yao et al. (2002)	Q	230
	6.6×10^{-7}		Yaws (1999)	?	21
	1.0×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-2,2,4-trimethylpentane $\text{C}_{10}\text{H}_{22}$ [52897-18-4] VLIZIVHXZXRDE-UHFFFAOYSA-N	9.2×10^{-7}		Yaws (2003)	X	238
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.2×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	1.1×10^{-6}		Yao et al. (2002)	Q	230
	9.2×10^{-7}		Yaws (1999)	?	21
	1.3×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-2,3,4-trimethylpentane $\text{C}_{10}\text{H}_{22}$ [52897-19-5] OHZNMGSGEFVFTI-UHFFFAOYSA-N	7.0×10^{-7}		Yaws (2003)	X	238
	2.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.5×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	1.0×10^{-6}		Yao et al. (2002)	Q	230
	7.0×10^{-7}		Yaws (1999)	?	21
	1.1×10^{-6}		Yaws and Yang (1992)	?	21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3-diethyl-2-methylpentane $C_{10}H_{22}$ [52897-16-2] DSSAZLXYIQIXGW-UHFFFAOYSA-N	7.5×10^{-7}		Yaws (2003)	X	238
	2.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.3×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	248
	1.2×10^{-6}		Yao et al. (2002)	Q	230
	7.5×10^{-7}		Yaws (1999)	?	21
	1.1×10^{-6}		Yaws and Yang (1992)	?	21
2,4-dimethyl-3-(1-methylethyl)- pentane $C_{10}H_{22}$ (2,4-dimethyl-3-isopropylpentane) [13475-79-1] VYVHOOYMDHZALB-UHFFFAOYSA-N	9.1×10^{-7}		Yaws (2003)	X	238
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.0×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	248
	1.2×10^{-6}		Yao et al. (2002)	Q	230
	9.2×10^{-7}		Yaws (1999)	?	21
	1.3×10^{-6}		Yaws and Yang (1992)	?	21
undecane $C_{11}H_{24}$ [1120-21-4] RSJKGSCJYJTIGS-UHFFFAOYSA-N	4.5×10^{-7}		Plyasunov and Shock (2000)	L	
	5.4×10^{-7}		Mackay and Shiu (1981)	L	
	5.1×10^{-6}		Duchowicz et al. (2020)	V	187
	5.2×10^{-6}		HSDB (2015)	V	
	4.9×10^{-7}		Mackay et al. (2006a)	V	
	5.4×10^{-6}		Eastcott et al. (1988)	V	
	4.9×10^{-7}		Abraham (1984)	V	
	5.1×10^{-6}		Yaws (2003)	X	238
	4.4×10^{-4}		Duchowicz et al. (2020)	Q	
	2.1×10^{-5}		Wang et al. (2017)	Q	81, 239
	1.2×10^{-6}		Wang et al. (2017)	Q	81, 240
	1.1×10^{-5}		Wang et al. (2017)	Q	81, 241
	4.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.5×10^{-6}		Hilal et al. (2008)	Q	
	3.6×10^{-6}		Modarresi et al. (2007)	Q	68
	5.4×10^{-7}		Yaffe et al. (2003)	Q	249, 250
3.4×10^{-6}		Yao et al. (2002)	Q	230, 268	
5.1×10^{-6}		Yaws (1999)	?	21	
	5.4×10^{-6}		Yaws and Yang (1992)	?	21
2-methyldecane $C_{11}H_{24}$ [6975-98-0] CNPVJWYWYZMPDS-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	238
	3.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methyldecane $C_{11}H_{24}$ [13151-34-3] JJRUZTXRDDMYGM-UHFFFAOYSA-N	1.1×10^{-6} 2.4×10^{-6} 1.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyldecane $C_{11}H_{24}$ [2847-72-5] DVWZKNLWPILULD-UHFFFAOYSA-N	1.1×10^{-6} 2.3×10^{-6} 1.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-methyldecane $C_{11}H_{24}$ [13151-35-4] QUYFPNWYGLFQQU-UHFFFAOYSA-N	1.1×10^{-6} 2.2×10^{-6} 1.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethylnonane $C_{11}H_{24}$ [17302-14-6] WDSBVMLUILJOW-UHFFFAOYSA-N	9.7×10^{-7} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethylnonane $C_{11}H_{24}$ [2884-06-2] IGJRNTLDWLTHCQ-UHFFFAOYSA-N	1.0×10^{-6} 1.4×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethylnonane $C_{11}H_{24}$ [17302-24-8] JZUUAUSQCXSTN-UHFFFAOYSA-N	1.1×10^{-6} 1.1×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5-dimethylnonane $C_{11}H_{24}$ [17302-27-1] NQUMJENPNGXAIH-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,6-dimethylnonane $C_{11}H_{24}$ [17302-28-2] MNGOEWESNDQAN-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,7-dimethylnonane $C_{11}H_{24}$ [17302-29-3] QYQSPINNJUXEDY-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,8-dimethylnonane $C_{11}H_{24}$ [17302-30-6] FZFRYQHIEAAV-UHFFFAOYSA-N	1.0×10^{-6} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3-dimethylnonane $C_{11}H_{24}$ [17302-15-7] HTRYNYZYFGHKDV-UHFFFAOYSA-N	9.5×10^{-7} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethylnonane $C_{11}H_{24}$ [17302-22-6] PAXLEVPLFYBSQJ-UHFFFAOYSA-N	1.0×10^{-6} 1.4×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,5-dimethylnonane $C_{11}H_{24}$ [17302-25-9] BAFVBVRBYKSWCE-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,6-dimethylnonane $C_{11}H_{24}$ [17302-31-7] YHLBUWVGPXILSW-UHFFFAOYSA-N	1.0×10^{-6} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,7-dimethylnonane $C_{11}H_{24}$ [17302-32-8] YGPVLXJHRFZYJJ-UHFFFAOYSA-N	1.0×10^{-6} 1.4×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,4-dimethylnonane $C_{11}H_{24}$ [17302-18-0] HARRKRKVTQABSF-UHFFFAOYSA-N	9.9×10^{-7} 1.1×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,5-dimethylnonane $C_{11}H_{24}$ [17302-23-7] JDNGDDOTBYZAGS-UHFFFAOYSA-N	1.0×10^{-6} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,6-dimethylnonane $C_{11}H_{24}$ [17302-26-0] JZKWOUUZMBTBDO-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5,5-dimethylnonane $C_{11}H_{24}$ [6414-96-6] BEPKYSJVUZWKMP-UHFFFAOYSA-N	1.0×10^{-6} 1.1×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-ethylnonane $C_{11}H_{24}$ [17302-11-3] FKJSIWPOZCKMIL-UHFFFAOYSA-N	1.1×10^{-6} 1.5×10^{-6} 1.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-ethylnonane $C_{11}H_{24}$ [5911-05-7] UGCQDCMVAKKTQG-UHFFFAOYSA-N	1.1×10^{-6} 1.3×10^{-6} 1.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-ethylnonane $C_{11}H_{24}$ [17302-12-4] QPOVZYGNFWRMJE-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3-trimethyloctane $C_{11}H_{24}$ [62016-26-6] XZPXMMWVWDSEMY-UHFFFAOYSA-N	9.0×10^{-7} 1.2×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4-trimethyloctane $C_{11}H_{24}$ [18932-14-4] IKMGZPRUMVFYBK-UHFFFAOYSA-N	9.9×10^{-7} 9.6×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,5-trimethyloctane $C_{11}H_{24}$ [62016-27-7] CSVNISDVBYGXME-UHFFFAOYSA-N	9.9×10^{-7} 9.5×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,6-trimethyloctane $C_{11}H_{24}$ [62016-28-8] NBIHFQKVSFKHGH-UHFFFAOYSA-N	9.6×10^{-7} 1.0×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,7-trimethyloctane $C_{11}H_{24}$ [62016-29-9] QQQAHVJJOBYNMFN-UHFFFAOYSA-N	1.0×10^{-6} 9.2×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,3-trimethyloctane $C_{11}H_{24}$ [62016-30-2] KFYWDCCDWVPXXCA-UHFFFAOYSA-N	8.7×10^{-7} 1.3×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4-trimethyloctane $C_{11}H_{24}$ [62016-31-3] SJAEXCGOLTHPG-UHFFFAOYSA-N	9.7×10^{-7} 1.2×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,5-trimethyloctane $C_{11}H_{24}$ [62016-32-4] CEOHXVQAHSSEG-UHFFFAOYSA-N	1.0×10^{-6} 1.1×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,6-trimethyloctane $C_{11}H_{24}$ [62016-33-5] MNFUBUNLEXRMWOY-UHFFFAOYSA-N	9.7×10^{-7} 1.2×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,7-trimethyloctane $C_{11}H_{24}$ [62016-34-6] XJKKSYAVEVAGFX-UHFFFAOYSA-N	9.8×10^{-7} 1.2×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,4-trimethyloctane $C_{11}H_{24}$ [62016-35-7] CJXXTMWNCYKHU-UHFFFAOYSA-N	9.9×10^{-7} 9.5×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,5-trimethyloctane $C_{11}H_{24}$ [62016-36-8] UJYGOBMOHSFJQP-UHFFFAOYSA-N	1.0×10^{-6} 1.1×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,6-trimethyloctane $C_{11}H_{24}$ [62016-37-9] XHNIFDXYGJLP-UHFFFAOYSA-N	1.0×10^{-6} 1.0×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,7-trimethyloctane $C_{11}H_{24}$ [62016-38-0] DUHKHXHIPOGMOW-UHFFFAOYSA-N	1.1×10^{-6} 9.4×10^{-7} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5,5-trimethyloctane $C_{11}H_{24}$ [62016-39-1] DZKJZWAIBSEZKB-UHFFFAOYSA-N	9.8×10^{-7} 9.7×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5,6-trimethyloctane $C_{11}H_{24}$ [62016-14-2] VHBZECSWMMWTMQ-UHFFFAOYSA-N	1.0×10^{-6} 1.2×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,6,6-trimethyloctane $C_{11}H_{24}$ [54166-32-4] RUPXAIGHLDMSOL-UHFFFAOYSA-N	9.3×10^{-7} 1.1×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3,4-trimethyloctane $C_{11}H_{24}$ [62016-40-4] IJVIFYHTPQSPSW-UHFFFAOYSA-N	8.7×10^{-7} 1.3×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3,5-trimethyloctane $C_{11}H_{24}$ [62016-41-5] BEFCOJKHEMBPSK-UHFFFAOYSA-N	9.6×10^{-7} 1.0×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3,6-trimethyloctane $C_{11}H_{24}$ [62016-42-6] CFESHXNQRRYSED-UHFFFAOYSA-N	9.2×10^{-7} 1.1×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,4-trimethyloctane $C_{11}H_{24}$ [62016-43-7] WWCBWKZBTINVDE-UHFFFAOYSA-N	8.8×10^{-7} 1.3×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,5-trimethyloctane $C_{11}H_{24}$ [62016-44-8] BPFOUTQNEVQSFR-UHFFFAOYSA-N	9.6×10^{-7} 1.3×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,6-trimethyloctane $C_{11}H_{24}$ [62016-45-9] RMGAENUTYIFEJO-UHFFFAOYSA-N	9.8×10^{-7} 1.2×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,5,5-trimethyloctane $C_{11}H_{24}$ [61868-94-8] FVYNWISHVUNIOZ-UHFFFAOYSA-N	1.0×10^{-6} 9.2×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,4,5-trimethyloctane $C_{11}H_{24}$ [61868-95-9] QGCVKCDWOOQTQ-UHFFFAOYSA-N	8.9×10^{-7} 1.2×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-3-ethyloctane $C_{11}H_{24}$ [62016-16-4] ITDXDCBDQBZEB-UHFFFAOYSA-N	1.0×10^{-6} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-4-ethyloctane $C_{11}H_{24}$ [62016-17-5] ZYEQSLHBOITAM-UHFFFAOYSA-N	1.1×10^{-6} 1.1×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-5-ethyloctane $C_{11}H_{24}$ [62016-18-6] CQCKNPUKBOITAX-UHFFFAOYSA-N	1.1×10^{-6} 1.1×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-6-ethyloctane $C_{11}H_{24}$ [62016-19-7] AZXGABNJUBNOHW-UHFFFAOYSA-N	1.0×10^{-6} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-3-ethyloctane $C_{11}H_{24}$ [17302-16-8] DQNINFLTCGTQGU-UHFFFAOYSA-N	9.1×10^{-7} 1.4×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-4-ethyloctane $C_{11}H_{24}$ [62016-20-0] BTRAURWAFYPYMW-UHFFFAOYSA-N	1.0×10^{-6} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-5-ethyloctane $C_{11}H_{24}$ [62016-21-1] LZFCXJTLKGPW-UHFFFAOYSA-N	1.1×10^{-6} 1.1×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-6-ethyloctane $C_{11}H_{24}$ [62016-22-2] FTQLPWORENXYAZ-UHFFFAOYSA-N	1.0×10^{-6} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-3-ethyloctane $C_{11}H_{24}$ [62016-23-3] LXRSBMFQRZTMNK-UHFFFAOYSA-N	1.0×10^{-6} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-4-ethyloctane $C_{11}H_{24}$ [17302-19-1] IXZULXYHNRHENR-UHFFFAOYSA-N	9.7×10^{-7} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-5-ethyloctane $C_{11}H_{24}$ [62016-24-4] DTSHQAHKLUTGAR-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-6-ethyloctane $C_{11}H_{24}$ [62016-25-5] NXUUVZOGBPCPDV-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-propyloctane $C_{11}H_{24}$ [17302-13-5] VFAMBAFLNKONTN-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-isopropyloctane $C_{11}H_{24}$ [62016-15-3] VSJAVEFYQMREHJ-UHFFFAOYSA-N	1.1×10^{-6} 1.1×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,3-tetramethylheptane $C_{11}H_{24}$ [61868-40-4] YPGGGWSLWOECQF-UHFFFAOYSA-N	7.5×10^{-7} 1.2×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,4-tetramethylheptane $C_{11}H_{24}$ [61868-41-5] HPKDRGPKZGWSND-UHFFFAOYSA-N	8.6×10^{-7} 1.1×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,5-tetramethylheptane $C_{11}H_{24}$ [61868-42-6] KXNFNEAZTWCHIL-UHFFFAOYSA-N	8.8×10^{-7} 1.0×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,6-tetramethylheptane $C_{11}H_{24}$ [61868-43-7] AQHGQPHAJYTMJ-UHFFFAOYSA-N	9.3×10^{-7} 9.3×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4,4-tetramethylheptane $C_{11}H_{24}$ [61868-44-8] JMRHVFQTDSCACD-UHFFFAOYSA-N	8.6×10^{-7} 9.3×10^{-7} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4,5-tetramethylheptane $C_{11}H_{24}$ [61868-45-9] MPDBIZNQOUSUIN-UHFFFAOYSA-N	9.5×10^{-7} 9.0×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4,6-tetramethylheptane $C_{11}H_{24}$ [61868-46-0] XSMHBEAIQLABAO-UHFFFAOYSA-N	1.0×10^{-6} 7.4×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,5,5-tetramethylheptane $C_{11}H_{24}$ [61868-47-1] VQJNSRPWQMPDDO-UHFFFAOYSA-N	9.1×10^{-7} 8.3×10^{-7} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,5,6-tetramethylheptane $C_{11}H_{24}$ [61868-48-2] ZYJXKOJVCNGFSL-UHFFFAOYSA-N	9.5×10^{-7} 9.0×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,6,6-tetramethylheptane $C_{11}H_{24}$ [40117-45-1] GKNMBVVJQTDWDRU-UHFFFAOYSA-N	9.5×10^{-7} 7.6×10^{-7} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,3,4-tetramethylheptane $C_{11}H_{24}$ [61868-49-3] OHIUULFTBGSFAG-UHFFFAOYSA-N	8.0×10^{-7} 1.3×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,3,5-tetramethylheptane $C_{11}H_{24}$ [61868-50-6] XGCFPCZVDOZHLT-UHFFFAOYSA-N	8.6×10^{-7} 1.1×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,3,6-tetramethylheptane $C_{11}H_{24}$ [61868-51-7] ZVRALCAHDAJURU-UHFFFAOYSA-N	8.7×10^{-7} 1.1×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4,4-tetramethylheptane $C_{11}H_{24}$ [61868-52-8] SXHQWTUVNZIMTP-UHFFFAOYSA-N	8.4×10^{-7} 1.2×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4,5-tetramethylheptane $C_{11}H_{24}$ [61868-53-9] LGUFKOOYNDNVNP-UHFFFAOYSA-N	9.1×10^{-7} 1.2×10^{-6} 9.6×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4,6-tetramethylheptane $C_{11}H_{24}$ [61868-54-0] WOHQOFSYZPITE-UHFFFAOYSA-N	9.6×10^{-7} 1.0×10^{-6} 9.6×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,5,5-tetramethylheptane $C_{11}H_{24}$ [61868-55-1] QSBIXVGCKCYBBL-UHFFFAOYSA-N	9.1×10^{-7} 9.8×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,5,6-tetramethylheptane $C_{11}H_{24}$ [52670-32-3] RAHGVMDMAJFLTP-UHFFFAOYSA-N	9.5×10^{-7} 1.1×10^{-6} 9.6×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,4,5-tetramethylheptane $C_{11}H_{24}$ [61868-56-2] QALMSCCHYDFGLF-UHFFFAOYSA-N	8.8×10^{-7} 1.0×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,4,4,6-tetramethylheptane $C_{11}H_{24}$ [61868-57-3] DTMSZIVVBLZFEV-UHFFFAOYSA-N	1.0×10^{-6} 7.8×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,5,5-tetramethylheptane $C_{11}H_{24}$ [61868-58-4] JVYVKEOAYQAABU-UHFFFAOYSA-N	8.6×10^{-7} 1.1×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3,4,4-tetramethylheptane $C_{11}H_{24}$ [61868-59-5] CFNIIBCZVLNKPV-UHFFFAOYSA-N	7.2×10^{-7} 1.4×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3,4,5-tetramethylheptane $C_{11}H_{24}$ [61868-60-8] QVCSKDHUHWVRTA-UHFFFAOYSA-N	8.1×10^{-7} 1.3×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3,5,5-tetramethylheptane $C_{11}H_{24}$ [61868-61-9] GALDMESQGNRJGE-UHFFFAOYSA-N	7.5×10^{-7} 1.2×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,4,5-tetramethylheptane $C_{11}H_{24}$ [61868-62-0] CXIAIMLBUJNNJR-UHFFFAOYSA-N	7.8×10^{-7} 1.4×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyl-3-ethylheptane $C_{11}H_{24}$ [61869-03-2] SBWMIVQVGGUMCE-UHFFFAOYSA-N	9.3×10^{-7} 1.1×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyl-4-ethylheptane $C_{11}H_{24}$ [62016-46-0] BJOUMMMNSZESV-UHFFFAOYSA-N	1.0×10^{-6} 8.7×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyl-5-ethylheptane $C_{11}H_{24}$ [62016-47-1] HVVFIMZXFNXKA-UHFFFAOYSA-N	9.8×10^{-7} 9.7×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl-3-ethylheptane $C_{11}H_{24}$ [61868-21-1] KQUHXOYVQZYOOOF-UHFFFAOYSA-N	8.9×10^{-7} 1.2×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3-dimethyl-4-ethylheptane $C_{11}H_{24}$ [61868-22-2] CNEPAGDSOHLVRW-UHFFFAOYSA-N	9.8×10^{-7} 1.2×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl-5-ethylheptane $C_{11}H_{24}$ [61868-23-3] BFCKNSGKYWMUNP-UHFFFAOYSA-N	1.0×10^{-6} 1.2×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyl-3-ethylheptane $C_{11}H_{24}$ [61868-24-4] OBCGEYFMJYXFJV-UHFFFAOYSA-N	9.8×10^{-7} 1.2×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyl-4-ethylheptane $C_{11}H_{24}$ [61868-25-5] OETKSNKIFXLJDO-UHFFFAOYSA-N	1.0×10^{-6} 9.2×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyl-5-ethylheptane $C_{11}H_{24}$ [61868-26-6] RZHNOEUMKYRHX-UHFFFAOYSA-N	1.0×10^{-6} 1.1×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5-dimethyl-3-ethylheptane $C_{11}H_{24}$ [61868-27-7] DEZOXTLNRYCKNK-UHFFFAOYSA-N	1.0×10^{-6} 1.1×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5-dimethyl-4-ethylheptane $C_{11}H_{24}$ [61868-28-8] CUHCBWKQRDWQMN-UHFFFAOYSA-N	1.0×10^{-6} 1.1×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5-dimethyl-5-ethylheptane $C_{11}H_{24}$ [61868-29-9] GPZDEXDVXFJVLH-UHFFFAOYSA-N	9.1×10^{-7} 1.2×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,6-dimethyl-3-ethylheptane $C_{11}H_{24}$ [61868-30-2] BFXHSWDHLPKFSH-UHFFFAOYSA-N	1.0×10^{-6} 1.1×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,6-dimethyl-4-ethylheptane $C_{11}H_{24}$ [61868-31-3] GBSGJLJGXHBTQQ-UHFFFAOYSA-N	1.1×10^{-6} 9.2×10^{-7} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3-dimethyl-4-ethylheptane $C_{11}H_{24}$ [61868-32-4] QXJXAHFNWHEQEU-UHFFFAOYSA-N	8.9×10^{-7} 1.2×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3-dimethyl-5-ethylheptane $C_{11}H_{24}$ [61868-33-5] FLLHBJKGZIOYAA-UHFFFAOYSA-N	9.4×10^{-7} 1.1×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyl-3-ethylheptane $C_{11}H_{24}$ [61868-34-6] HKSCZRRMBTUZLO-UHFFFAOYSA-N	8.5×10^{-7} 1.4×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyl-4-ethylheptane $C_{11}H_{24}$ [61868-35-7] RMVWUJAZCGGWZKA-UHFFFAOYSA-N	8.8×10^{-7} 1.3×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyl-5-ethylheptane $C_{11}H_{24}$ [61868-36-8] PCRCVFLPWIQGNJ-UHFFFAOYSA-N	9.5×10^{-7} 1.3×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,5-dimethyl-3-ethylheptane $C_{11}H_{24}$ [61868-37-9] FQOCKNRDCVODKW-UHFFFAOYSA-N	8.9×10^{-7} 1.2×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,5-dimethyl-4-ethylheptane $C_{11}H_{24}$ [61868-38-0] IKVNPWSSYMJDKE-UHFFFAOYSA-N	9.6×10^{-7} 1.3×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,4-dimethyl-3-ethylheptane $C_{11}H_{24}$ [61868-39-1] YMWPSGKMMMFSS-UHFFFAOYSA-N	9.3×10^{-7} 1.1×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-4-propylheptane $C_{11}H_{24}$ [61868-96-0] AXOUMHTUGUFOKF-UHFFFAOYSA-N	1.1×10^{-6} 1.0×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-4-propylheptane $C_{11}H_{24}$ [61868-97-1] WAMROSASDOIVDE-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methyl-4-propylheptane $C_{11}H_{24}$ [17302-20-4] RDZFGBZTNOYNAH-UHFFFAOYSA-N	9.9×10^{-7} 1.1×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-3-isopropylheptane $C_{11}H_{24}$ [6876-18-2] GECZBVJYUAPYFD-UHFFFAOYSA-N	9.9×10^{-7} 1.2×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-4-isopropylheptane $C_{11}H_{24}$ [61868-98-2] ADLZFTVQXMDTCY-UHFFFAOYSA-N	1.1×10^{-6} 9.7×10^{-7} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-4-isopropylheptane $C_{11}H_{24}$ [61868-99-3] SRECVVXQFXRBNI-UHFFFAOYSA-N	1.0×10^{-6} 1.1×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-4-isopropylheptane $C_{11}H_{24}$ [61869-00-9] LSJZMBVEVGYTAG-UHFFFAOYSA-N	8.9×10^{-7} 1.2×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3-diethylheptane $C_{11}H_{24}$ [17302-17-9] XATIZWAWQAIMQJ-UHFFFAOYSA-N	9.1×10^{-7} 1.5×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-diethylheptane $C_{11}H_{24}$ [61869-01-0] UWOPVDFSBGDRJR-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,5-diethylheptane $C_{11}H_{24}$ [61869-02-1] OBHTWTQZINRNAB-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,4-diethylheptane $C_{11}H_{24}$ [17302-21-5] WDTMGYSKSAMSPF-UHFFFAOYSA-N	9.6×10^{-7} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4- <i>tert</i> -butylheptane $C_{11}H_{24}$ [60302-21-8] MDOHZJRFNISIHH-UHFFFAOYSA-N	9.6×10^{-7} 1.0×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,3,3,4-pentamethylhexane $C_{11}H_{24}$ [61868-85-7] RSEBTOONCGVAKN-UHFFFAOYSA-N	6.6×10^{-7} 1.4×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,3,5-pentamethylhexane $C_{11}H_{24}$ [61868-86-8] QGVXFIIIZUSICQO-UHFFFAOYSA-N	7.9×10^{-7} 9.5×10^{-7} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,4,4-pentamethylhexane $C_{11}H_{24}$ [61868-87-9] HBVQLCKOFAUQGY-UHFFFAOYSA-N	6.5×10^{-7} 1.5×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,4,5-pentamethylhexane $C_{11}H_{24}$ [61868-88-0] LDUJGROUWHEKU-UHFFFAOYSA-N	8.2×10^{-7} 1.1×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,5,5-pentamethylhexane $C_{11}H_{24}$ [14739-73-2] UKYAYXXQXKPIBL-UHFFFAOYSA-N	8.5×10^{-7} 8.4×10^{-7} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4,4,5-pentamethylhexane $C_{11}H_{24}$ [60302-23-0] JQFZWBZEZYOCQL-UHFFFAOYSA-N	7.3×10^{-7} 1.1×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,3,4,4-pentamethylhexane $C_{11}H_{24}$ [61868-89-1] GHRPCKCGHFDDOH-UHFFFAOYSA-N	6.4×10^{-7} 1.5×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,3,4,5-pentamethylhexane $C_{11}H_{24}$ [52670-33-4] STMIMOUYUGUOQZ-UHFFFAOYSA-N	7.5×10^{-7} 1.3×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3-trimethyl-3-ethylhexane $C_{11}H_{24}$ [61868-72-2] HUAYVMMWWLHZAB-UHFFFAOYSA-N	7.5×10^{-7} 1.2×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3-trimethyl-4-ethylhexane $C_{11}H_{24}$ [61868-73-3] ZSUMTZIXJNZKBI-UHFFFAOYSA-N	8.6×10^{-7} 1.1×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,4-trimethyl-3-ethylhexane $C_{11}H_{24}$ [61868-74-4] UDUTWNYTAVENNO-UHFFFAOYSA-N	8.7×10^{-7} 1.1×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4-trimethyl-4-ethylhexane $C_{11}H_{24}$ [61868-75-5] YFQDCXGMLYJDSG-UHFFFAOYSA-N	7.7×10^{-7} 1.2×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,5-trimethyl-3-ethylhexane $C_{11}H_{24}$ [61868-76-6] GJV FOLLEVKEKMU-UHFFFAOYSA-N	9.3×10^{-7} 9.3×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,5-trimethyl-4-ethylhexane $C_{11}H_{24}$ [61868-77-7] UKTBERWYLDSDZDQ-UHFFFAOYSA-N	9.9×10^{-7} 8.3×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,3-trimethyl-4-ethylhexane $C_{11}H_{24}$ [61868-78-8] DNDCULLMOLSZER-UHFFFAOYSA-N	7.9×10^{-7} 1.4×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4-trimethyl-3-ethylhexane $C_{11}H_{24}$ [61868-79-9] XCNOKZUAQAZTAJ-UHFFFAOYSA-N	7.6×10^{-7} 1.5×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4-trimethyl-4-ethylhexane $C_{11}H_{24}$ [61868-80-2] HNNSQDJQJRTMMW-UHFFFAOYSA-N	8.2×10^{-7} 1.2×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,5-trimethyl-3-ethylhexane $C_{11}H_{24}$ [61868-81-3] VYVPEEFLIYVOTH-UHFFFAOYSA-N	8.6×10^{-7} 1.1×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,5-trimethyl-4-ethylhexane $C_{11}H_{24}$ [61868-82-4] LDKMZLRIVWGQRW-UHFFFAOYSA-N	9.3×10^{-7} 1.1×10^{-6} 9.6×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,4-trimethyl-3-ethylhexane $C_{11}H_{24}$ [61868-83-5] MTYPKDRKJRWXKB-UHFFFAOYSA-N	8.4×10^{-7} 1.2×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3,4-trimethyl-4-ethylhexane $C_{11}H_{24}$ [61868-84-6] ADDYWUNUHVKQGT-UHFFFAOYSA-N	6.8×10^{-7} 1.7×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyl-3-isopropylhexane $C_{11}H_{24}$ [61868-63-1] VKABOTNMFKIVDN-UHFFFAOYSA-N	9.1×10^{-7} 9.8×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl-3-isopropylhexane $C_{11}H_{24}$ [61868-64-2] XVWGUCNHEXRNU-UHFFFAOYSA-N	8.2×10^{-7} 1.2×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyl-3-isopropylhexane $C_{11}H_{24}$ [61868-65-3] QRNSQXWPYPLHTL-UHFFFAOYSA-N	9.5×10^{-7} 1.1×10^{-6} 9.6×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5-dimethyl-3-isopropylhexane $C_{11}H_{24}$ [61868-66-4] QKICRGDGLQROM-UHFFFAOYSA-N	1.0×10^{-6} 9.2×10^{-7} 9.6×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-3,3-diethylhexane $C_{11}H_{24}$ [61868-67-5] QNRHKXCWHYUEKP-UHFFFAOYSA-N	8.4×10^{-7} 1.5×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-3,4-diethylhexane $C_{11}H_{24}$ [61868-68-6] MWHIPTVSAPEYPC-UHFFFAOYSA-N	9.8×10^{-7} 1.2×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-4,4-diethylhexane $C_{11}H_{24}$ [61868-69-7] UNPXTJSCIHOMKB-UHFFFAOYSA-N	9.0×10^{-7} 1.2×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-3,4-diethylhexane $C_{11}H_{24}$ [61868-70-0] ZFMWIIWWLOKHXHC-UHFFFAOYSA-N	8.4×10^{-7} 1.5×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-4,4-diethylhexane $C_{11}H_{24}$ [61868-71-1] CUHCCZRBXHOAMW-UHFFFAOYSA-N	8.1×10^{-7} 1.6×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,3,3,4,4-hexamethylpentane $C_{11}H_{24}$ [60302-27-4] JKJQSSSRSKPVEU-UHFFFAOYSA-N	5.0×10^{-7} 1.9×10^{-6} 7.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,4-tetramethyl-3-ethylpentane $C_{11}H_{24}$ [61868-93-7] HBSINJYUKWVYBC-UHFFFAOYSA-N	6.5×10^{-7} 1.5×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4,4-tetramethyl-3-ethylpentane $C_{11}H_{24}$ [3178-30-1] FNWCWFQEEKFGHB-UHFFFAOYSA-N	6.9×10^{-7} 1.3×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4-trimethyl-3-isopropylpentane $C_{11}H_{24}$ [61868-90-4] SZPCILWZDHUKLW-UHFFFAOYSA-N	8.7×10^{-7} 9.4×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4-trimethyl-3-isopropylpentane $C_{11}H_{24}$ [61868-91-5] FHBVPOXLRRZPP-UHFFFAOYSA-N	7.1×10^{-7} 1.5×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyl-3,3-diethylpentane $C_{11}H_{24}$ [60302-28-5] KCQSYGZVYTYSLG-UHFFFAOYSA-N	6.8×10^{-7} 1.6×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyl-3,3-diethylpentane $C_{11}H_{24}$ [61868-92-6] VVQOQVXGUMJNET-UHFFFAOYSA-N	7.5×10^{-7} 1.6×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
dodecane $C_{12}H_{26}$ [112-40-3] SNRUBQQJIBEYMU-UHFFFAOYSA-N	1.2×10^{-6} 1.3×10^{-6} 1.2×10^{-6} 1.2×10^{-6} 1.2×10^{-6} 1.3×10^{-6} 1.2×10^{-6} 1.2×10^{-6} 3.0×10^{-6} 4.4×10^{-4} 1.7×10^{-5} 8.5×10^{-7} 5.3×10^{-6} 5.1×10^{-6}		Plyasunov and Shock (2000) Mackay and Shiu (1981) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006a) Eastcott et al. (1988) Abraham (1984) Yaws (2003) Yaws (2003) Dupeux et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Gharagheizi et al. (2012)	L L V V V V V X X Q Q Q Q Q Q	187 259 238 260 81, 239 81, 240 81, 241

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^{-6}		Raventos-Duran et al. (2010)	Q	243, 244
	1.6×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-7}		Raventos-Duran et al. (2010)	Q	246
	1.6×10^{-6}		Gharagheizi et al. (2010)	Q	247
	1.1×10^{-6}		Hilal et al. (2008)	Q	
	3.1×10^{-6}		Modarresi et al. (2007)	Q	68
	1.2×10^{-6}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
2-methylundecane $C_{12}H_{26}$ [31807-55-3] GTJOHISYCKPIMT-UHFFFAOYSA-N	1.1×10^{-6} 4.2×10^{-6} 1.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methylundecane $C_{12}H_{26}$ [1002-43-3] HTZWVZNRDDOFEI-UHFFFAOYSA-N	1.1×10^{-6} 4.2×10^{-6} 1.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methylundecane $C_{12}H_{26}$ [2980-69-0] KNMXZGDUJUVOTOC-UHFFFAOYSA-N	1.1×10^{-6} 2.7×10^{-6} 1.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-methylundecane $C_{12}H_{26}$ [1632-70-8] QULNVKABFWNUCW-UHFFFAOYSA-N	1.1×10^{-6} 2.5×10^{-6} 1.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
6-methylundecane $C_{12}H_{26}$ [17302-33-9] VPYZCUCKYWHJGX-UHFFFAOYSA-N	1.1×10^{-6} 2.5×10^{-6} 1.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyldecane $C_{12}H_{26}$ [17302-37-3] WBWYXWILSHQILH-UHFFFAOYSA-N	9.1×10^{-7} 3.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyldecane $C_{12}H_{26}$ [17312-44-6] ZCTGYLNFWOQVHV-UHFFFAOYSA-N	1.0×10^{-6} 2.5×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyldecane $C_{12}H_{26}$ [2801-84-5] OJAFXEXESSNPMH-UHFFFAOYSA-N	1.0×10^{-6} 2.1×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,5-dimethyldecane $\text{C}_{12}\text{H}_{26}$ [17312-50-4] DQHKBYZSYRJBMD-UHFFFAOYSA-N	1.0×10^{-6} 2.0×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,6-dimethyldecane $\text{C}_{12}\text{H}_{26}$ [13150-81-7] DHJGXZWEQBKLN-UHFFFAOYSA-N	1.0×10^{-6} 2.0×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,7-dimethyldecane $\text{C}_{12}\text{H}_{26}$ [17312-51-5] RVQIXUWWPOTVNP-UHFFFAOYSA-N	1.0×10^{-6} 2.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,8-dimethyldecane $\text{C}_{12}\text{H}_{26}$ [17312-52-6] KSRGGHUVCVVVDW-UHFFFAOYSA-N	1.0×10^{-6} 2.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,9-dimethyldecane $\text{C}_{12}\text{H}_{26}$ [1002-17-1] HWISDPDDDUZJAW-UHFFFAOYSA-N	1.0×10^{-6} 5.5×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3-dimethyldecane $\text{C}_{12}\text{H}_{26}$ [17302-38-4] URERYDSQOIHQK-UHFFFAOYSA-N	9.1×10^{-7} 1.5×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyldecane $\text{C}_{12}\text{H}_{26}$ [17312-45-7] NRBMEEDORZDRIT-UHFFFAOYSA-N	1.0×10^{-6} 1.6×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,5-dimethyldecane $\text{C}_{12}\text{H}_{26}$ [17312-48-0] XXSUEVGKGOUJMD-UHFFFAOYSA-N	1.0×10^{-6} 1.4×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,6-dimethyldecane $\text{C}_{12}\text{H}_{26}$ [17312-53-7] NQWFSCYWTXQNGG-UHFFFAOYSA-N	1.0×10^{-6} 1.4×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,7-dimethyldecane $\text{C}_{12}\text{H}_{26}$ [17312-54-8] VDAVEASVPZDNQB-UHFFFAOYSA-N	1.0×10^{-6} 1.5×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,8-dimethyldecane $\text{C}_{12}\text{H}_{26}$ [17312-55-9] KMAHIPNGGSOJSM-UHFFFAOYSA-N	1.0×10^{-6} 1.6×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,4-dimethyldecane $\text{C}_{12}\text{H}_{26}$ [17312-39-9] WZCACTKWHXCWFZ-UHFFFAOYSA-N	9.2×10^{-7} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,5-dimethyldecane $\text{C}_{12}\text{H}_{26}$ [17312-46-8] QZFIIEYSHODCSV-UHFFFAOYSA-N	1.0×10^{-6} 1.5×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,6-dimethyldecane $\text{C}_{12}\text{H}_{26}$ [17312-49-1] TVGNRLXJXKVGD-UHFFFAOYSA-N	1.0×10^{-6} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,7-dimethyldecane $\text{C}_{12}\text{H}_{26}$ [17312-56-0] GCKWUFQALHAZDH-UHFFFAOYSA-N	1.0×10^{-6} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5,5-dimethyldecane $\text{C}_{12}\text{H}_{26}$ [17453-92-8] RNXSOUOIPAWOAC-UHFFFAOYSA-N	9.3×10^{-7} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5,6-dimethyldecane $\text{C}_{12}\text{H}_{26}$ [1636-43-7] NCJIZIYQFWXMFZ-UHFFFAOYSA-N	1.0×10^{-6} 1.4×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-ethyldecane $\text{C}_{12}\text{H}_{26}$ [17085-96-0] ZBDDVSBBCGZQDV-UHFFFAOYSA-N	1.1×10^{-6} 2.7×10^{-6} 1.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-ethyldecane $\text{C}_{12}\text{H}_{26}$ [1636-44-8] IGTKVLJTIZALGL-UHFFFAOYSA-N	1.1×10^{-6} 1.5×10^{-6} 1.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-ethyldecane $\text{C}_{12}\text{H}_{26}$ [17302-36-2] BCQLAHKMMOGIIS-UHFFFAOYSA-N	1.1×10^{-6} 1.4×10^{-6} 1.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,3-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [55499-04-2] XXNUJUNKYOZLAJ-UHFFFAOYSA-N	8.3×10^{-7} 9.2×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-50-3] YYAICGYFLHBIN-UHFFFAOYSA-N	8.8×10^{-7} 7.1×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,5-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-51-4] ZIXRFABUOOUIMA-UHFFFAOYSA-N	8.8×10^{-7} 7.1×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,6-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-52-5] BUTMZMIZSWINDK-UHFFFAOYSA-N	8.8×10^{-7} 6.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,7-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-53-6] PXOURNMYVAOURL-UHFFFAOYSA-N	8.5×10^{-7} 7.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,8-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-54-7] WXUAVABOZJOELJ-UHFFFAOYSA-N	8.5×10^{-7} 7.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,3-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-55-8] RSUFJUIYLXRYFG-UHFFFAOYSA-N	8.3×10^{-7} 9.7×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-56-9] RRZRZLRUYYPZYEH-UHFFFAOYSA-N	9.2×10^{-7} 9.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,5-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-57-0] IESSJKAXJWJFD-UHFFFAOYSA-N	9.4×10^{-7} 8.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,6-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-58-1] AUXUELQPRQTQBE-UHFFFAOYSA-N	9.3×10^{-7} 8.6×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,7-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-59-2] GGUGBCMHEULHJS-UHFFFAOYSA-N	9.2×10^{-7} 9.4×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,8-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-60-5] GQHCJRDJABETBJ-UHFFFAOYSA-N	9.2×10^{-7} 9.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,4-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-61-6] RRLKOZCPQXMIIJ-UHFFFAOYSA-N	8.8×10^{-7} 6.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,5-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-62-7] NZAPYIGNIYRJNJ-UHFFFAOYSA-N	9.4×10^{-7} 7.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,6-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-10-5] QCQMRLDBNMV KOZ-UHFFFAOYSA-N	9.6×10^{-7} 7.2×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,7-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-11-6] OHB DIVOYUFLOTO-UHFFFAOYSA-N	9.5×10^{-7} 7.7×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,8-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [49542-74-7] PZXMOJBYRFSNJH-UHFFFAOYSA-N	9.6×10^{-7} 7.0×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5,5-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-12-7] ZRRKWMYB HUMSTG-UHFFFAOYSA-N	8.8×10^{-7} 6.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5,6-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-13-8] KXHDWXIQHWSOHI-UHFFFAOYSA-N	9.4×10^{-7} 8.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5,7-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-14-9] KMBPYTMBXFKXON-UHFFFAOYSA-N	9.5×10^{-7} 7.7×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,5,8-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [49557-09-7] YYZRNFMGAQMLJJ-UHFFFAOYSA-N	9.6×10^{-7} 7.2×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,6,6-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-15-0] MTPVPWZHWOHMQT-UHFFFAOYSA-N	8.8×10^{-7} 6.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,6,7-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-16-1] PGLYQCHTCUBASV-UHFFFAOYSA-N	9.3×10^{-7} 8.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,7,7-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-17-2] RCTMUTWYOMEASD-UHFFFAOYSA-N	8.5×10^{-7} 8.4×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3,4-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-18-3] RNCRKMFELJSFRA-UHFFFAOYSA-N	8.3×10^{-7} 9.7×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3,5-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-19-4] KRWQPUIYFIGHZNF-UHFFFAOYSA-N	8.8×10^{-7} 6.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3,6-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-20-7] GPSMOBMYMZBKGT-UHFFFAOYSA-N	8.4×10^{-7} 8.6×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3,7-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-21-8] NZYGFHSHEQXPFT-UHFFFAOYSA-N	8.5×10^{-7} 7.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,4-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-22-9] UYNWXBDPBKCTRS-UHFFFAOYSA-N	8.3×10^{-7} 9.2×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,5-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-23-0] PFVDUOFPBLPHEQ-UHFFFAOYSA-N	9.2×10^{-7} 9.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,4,6-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-24-1] VSRUKIVBxBGRDU-UHFFFAOYSA-N	9.3×10^{-7} 8.4×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,7-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [27802-85-3] HQIBDLHPQGDJEW-UHFFFAOYSA-N	9.2×10^{-7} 9.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,5,5-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-25-2] MUVSDRJGHVLIJQX-UHFFFAOYSA-N	8.8×10^{-7} 7.1×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,5,6-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-26-3] HMCPPWBQUPZETF-UHFFFAOYSA-N	9.3×10^{-7} 8.4×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,5,7-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-27-4] LLWFEFHXBQAEJX-UHFFFAOYSA-N	9.4×10^{-7} 7.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,6,6-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-28-5] CBDYLMAJISNHBH-UHFFFAOYSA-N	8.8×10^{-7} 6.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,4,5-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-29-6] QLJZSYCAASGFGU-UHFFFAOYSA-N	8.4×10^{-7} 8.6×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,4,6-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-30-9] KBTTWWLCAOXSV-UHFFFAOYSA-N	8.8×10^{-7} 7.1×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,5,5-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62184-31-0] QVDLUCCOJXIINS-UHFFFAOYSA-N	8.4×10^{-7} 8.6×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,5,6-trimethylnonane $\text{C}_{12}\text{H}_{26}$ [62211-85-2] BBEKERHGCZOIX-UHFFFAOYSA-N	9.3×10^{-7} 8.6×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-3-ethylnonane $C_{12}H_{26}$ [62184-73-0] NVCDNLWOUSWNRQ-UHFFFAOYSA-N	1.0×10^{-6} 9.3×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-4-ethylnonane $C_{12}H_{26}$ [62184-37-6] GRYPXYDXCQOVAY-UHFFFAOYSA-N	1.0×10^{-6} 8.5×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-5-ethylnonane $C_{12}H_{26}$ [62184-38-7] WZWWJMDOQQIPJZ-UHFFFAOYSA-N	1.0×10^{-6} 8.1×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-6-ethylnonane $C_{12}H_{26}$ [62184-39-8] GBMUYYDAAUUNLY-UHFFFAOYSA-N	1.0×10^{-6} 8.5×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-7-ethylnonane $C_{12}H_{26}$ [62184-40-1] PHPGTUZXJVCCKP-UHFFFAOYSA-N	1.0×10^{-6} 9.6×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-3-ethylnonane $C_{12}H_{26}$ [17302-39-5] MJZXPBAAOXUJF-UHFFFAOYSA-N	9.1×10^{-7} 1.0×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-4-ethylnonane $C_{12}H_{26}$ [62184-41-2] ZELDGOVWPZHVJS-UHFFFAOYSA-N	1.0×10^{-6} 9.3×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-5-ethylnonane $C_{12}H_{26}$ [62184-42-3] GDUZVOIDJDZQBC-UHFFFAOYSA-N	1.0×10^{-6} 7.8×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-6-ethylnonane $C_{12}H_{26}$ [62184-43-4] WSMCXXNPFLZSMY-UHFFFAOYSA-N	1.0×10^{-6} 8.8×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-7-ethylnonane $C_{12}H_{26}$ [62184-44-5] FSGFZSLYTXQNCW-UHFFFAOYSA-N	1.0×10^{-6} 9.0×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methyl-3-ethylnonane $C_{12}H_{26}$ [62184-45-6] AUMKRFNJSTUECA-UHFFFAOYSA-N	1.0×10^{-6} 9.0×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-4-ethylnonane $C_{12}H_{26}$ [17312-40-2] LXQCGRFCISXKQC-UHFFFAOYSA-N	9.2×10^{-7} 8.8×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-5-ethylnonane $C_{12}H_{26}$ [62184-46-7] BDJIXOFXGLDYLN-UHFFFAOYSA-N	1.0×10^{-6} 8.5×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-6-ethylnonane $C_{12}H_{26}$ [62184-47-8] SULZKBWLMOBACQ-UHFFFAOYSA-N	1.0×10^{-6} 8.1×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-7-ethylnonane $C_{12}H_{26}$ [62184-48-9] HYIBWPIYSSTZLB-UHFFFAOYSA-N	1.0×10^{-6} 9.0×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-methyl-3-ethylnonane $C_{12}H_{26}$ [62184-49-0] ZBALIHUORTBQR-UHFFFAOYSA-N	1.0×10^{-6} 8.8×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-methyl-4-ethylnonane $C_{12}H_{26}$ [1632-71-9] HKUUNAHRKAJIY-UHFFFAOYSA-N	1.0×10^{-6} 8.8×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-methyl-5-ethylnonane $C_{12}H_{26}$ [14531-16-9] DZSBQMNPPKBNF-UHFFFAOYSA-N	9.2×10^{-7} 8.6×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-propylnonane $C_{12}H_{26}$ [6165-37-3] QLKPGWNXMMBQMG-UHFFFAOYSA-N	1.1×10^{-6} 8.7×10^{-7} 1.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-propylnonane $C_{12}H_{26}$ [998-35-6] ISHSSTRAYNPQFX-UHFFFAOYSA-N	1.1×10^{-6} 8.2×10^{-7} 1.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-isopropylnonane $C_{12}H_{26}$ [62184-71-8] BXYKZQOGHMLDIE-UHFFFAOYSA-N	1.0×10^{-6} 8.5×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-isopropylnonane $C_{12}H_{26}$ [62184-72-9] ALZCRHWYCQKQK-UHFFFAOYSA-N	1.0×10^{-6} 8.5×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,3-tetramethyloctane $C_{12}H_{26}$ [62183-74-8] UXQAEOWCSOPBLF-UHFFFAOYSA-N	6.9×10^{-7} 9.3×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,4-tetramethyloctane $C_{12}H_{26}$ [62183-75-9] HEJULKHHKGYPT-UHFFFAOYSA-N	7.8×10^{-7} 8.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,5-tetramethyloctane $C_{12}H_{26}$ [62183-76-0] MRBTZFDZTJYCAO-UHFFFAOYSA-N	8.0×10^{-7} 7.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,6-tetramethyloctane $C_{12}H_{26}$ [62183-77-1] YRSBZJIBIXVOME-UHFFFAOYSA-N	7.9×10^{-7} 7.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,7-tetramethyloctane $C_{12}H_{26}$ [62183-78-2] CPEHPCZXBBEYOL-UHFFFAOYSA-N	7.9×10^{-7} 7.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4,4-tetramethyloctane $C_{12}H_{26}$ [62183-79-3] TYUFTNSABIBNRY-UHFFFAOYSA-N	7.2×10^{-7} 7.3×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4,5-tetramethyloctane $C_{12}H_{26}$ [62183-80-6] SNJCVBJFQJMFU-UHFFFAOYSA-N	8.3×10^{-7} 6.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4,6-tetramethyloctane $C_{12}H_{26}$ [62183-81-7] ODZRFEPMTWHMBK-UHFFFAOYSA-N	8.4×10^{-7} 6.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,4,7-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62183-82-8] QHDKQPZLRKHEHV-UHFFFAOYSA-N	8.4×10^{-7} 6.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,5,5-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62183-83-9] RJJMZKVKQLGGDK-UHFFFAOYSA-N	7.8×10^{-7} 5.8×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,5,6-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62183-84-0] BQVVPJLOJUCQGM-UHFFFAOYSA-N	8.1×10^{-7} 6.9×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,5,7-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-19-3] ISTINYWNHRBEDQ-UHFFFAOYSA-N	8.4×10^{-7} 6.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,6,6-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-20-6] BANZIZHQGFRTMI-UHFFFAOYSA-N	7.7×10^{-7} 6.0×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,6,7-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-21-7] ZSXJNQURTCJFGP-UHFFFAOYSA-N	8.0×10^{-7} 7.1×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,7,7-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [1071-31-4] QZUFNKONEPLWBC-UHFFFAOYSA-N	7.7×10^{-7} 6.0×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,3,4-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-22-8] ITTRGXKGDMDYDX-UHFFFAOYSA-N	7.6×10^{-7} 9.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,3,5-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-23-9] RVOIBAZQSHFKMM-UHFFFAOYSA-N	7.9×10^{-7} 7.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,3,6-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-24-0] MBJHOSHYIFXEPL-UHFFFAOYSA-N	7.8×10^{-7} 8.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3,7-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-25-1] WWQBXZREQWIXFF-UHFFFAOYSA-N	7.8×10^{-7} 8.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4,4-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-26-2] MELCVUZPHQRNTK-UHFFFAOYSA-N	7.8×10^{-7} 8.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4,5-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-27-3] AMIZVDCCXDQOHL-UHFFFAOYSA-N	8.5×10^{-7} 8.4×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4,6-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-28-4] OYZWSGWTBSWCLN-UHFFFAOYSA-N	8.6×10^{-7} 8.0×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4,7-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-29-5] YUCNZDFGMLKYFT-UHFFFAOYSA-N	8.7×10^{-7} 7.7×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,5,5-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-30-8] RQOLUXQWYAKKTG-UHFFFAOYSA-N	7.8×10^{-7} 8.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,5,6-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-31-9] IPYLOMHOPWIUFA-UHFFFAOYSA-N	8.6×10^{-7} 8.0×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,5,7-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-32-0] AIUMUQUQTYGQPMV-UHFFFAOYSA-N	8.9×10^{-7} 6.9×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,6,6-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-33-1] CVRMZIOMFWYAPV-UHFFFAOYSA-N	7.9×10^{-7} 7.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,6,7-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [52670-34-5] FZCGYGCRYRXLDDY-UHFFFAOYSA-N	8.6×10^{-7} 8.2×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4,4,5-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-34-2] OBWRJGVWBWXXAO-UHFFFAOYSA-N	8.0×10^{-7} 7.1×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,4,6-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-35-3] UQGGTRPILZWACX-UHFFFAOYSA-N	8.4×10^{-7} 6.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,4,7-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [35866-96-7] QYUWMFZODNLLRJ-UHFFFAOYSA-N	8.5×10^{-7} 5.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,5,5-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-36-4] OMFWIGPPTXTQHH-UHFFFAOYSA-N	8.0×10^{-7} 7.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,5,6-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-37-5] YJMGKHXCSEVKG-UHFFFAOYSA-N	8.7×10^{-7} 7.7×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,5,7-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [2217-17-6] PWYLDJLMYGOPSR-UHFFFAOYSA-N	9.1×10^{-7} 6.2×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,6,6-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-38-6] VVEPRQWGSASPPP-UHFFFAOYSA-N	8.3×10^{-7} 6.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5,5,6-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-39-7] DLCPMTDXNVOOLU-UHFFFAOYSA-N	7.9×10^{-7} 7.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5,6,6-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-40-0] SQOVOQLOSFZJGI-UHFFFAOYSA-N	7.8×10^{-7} 8.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3,4,4-tetramethyloctane $\text{C}_{12}\text{H}_{26}$ [62199-41-1] VXEUNQVVVNDLTL-UHFFFAOYSA-N	6.8×10^{-7} 9.8×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3,4,5-tetramethyloctane $C_{12}H_{26}$ [62199-42-2] FATMBSLXTUXZBP-UHFFFAOYSA-N	7.7×10^{-7} 8.7×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3,4,6-tetramethyloctane $C_{12}H_{26}$ [62199-43-3] VCXMKRQQDPQALS-UHFFFAOYSA-N	7.8×10^{-7} 8.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3,5,5-tetramethyloctane $C_{12}H_{26}$ [62199-44-4] UJLDJWNVZROTLS-UHFFFAOYSA-N	7.0×10^{-7} 8.5×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3,5,6-tetramethyloctane $C_{12}H_{26}$ [62199-45-5] AQPSWWWUVHSZJK-UHFFFAOYSA-N	7.9×10^{-7} 7.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3,6,6-tetramethyloctane $C_{12}H_{26}$ [62199-46-6] PAEUGKMMSQUAGH-UHFFFAOYSA-N	7.4×10^{-7} 6.9×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,4,5-tetramethyloctane $C_{12}H_{26}$ [62199-47-7] HWNTXBYEGXKWKG-UHFFFAOYSA-N	7.6×10^{-7} 9.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,4,6-tetramethyloctane $C_{12}H_{26}$ [62185-19-7] LNRFGUGPGLBLV-UHFFFAOYSA-N	7.8×10^{-7} 8.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,5,5-tetramethyloctane $C_{12}H_{26}$ [62185-20-0] NCNZUEBQNGRARF-UHFFFAOYSA-N	7.7×10^{-7} 8.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,5,6-tetramethyloctane $C_{12}H_{26}$ [62185-21-1] NADJQGPTQSFIHB-UHFFFAOYSA-N	8.5×10^{-7} 8.9×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,4,5,5-tetramethyloctane $C_{12}H_{26}$ [62185-22-2] INTYEXUWOYUVGJ-UHFFFAOYSA-N	6.9×10^{-7} 9.3×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62183-95-3] LIZQPVRBTUZZCL-UHFFFAOYSA-N	8.5×10^{-7} 8.2×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62183-96-4] PEGJIFSOTZJFH-UHFFFAOYSA-N	9.0×10^{-7} 6.3×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyl-5-ethyloctane $C_{12}H_{26}$ [62183-97-5] ACWGGQUVVQOZPJ-UHFFFAOYSA-N	8.9×10^{-7} 6.7×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyl-6-ethyloctane $C_{12}H_{26}$ [62183-98-6] SHNILIMSRTWRKG-UHFFFAOYSA-N	8.6×10^{-7} 7.5×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62183-99-7] NDFHPGVSCVJNFR-UHFFFAOYSA-N	8.3×10^{-7} 9.7×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62184-00-3] DCBIYDZULXWXTQ-UHFFFAOYSA-N	9.3×10^{-7} 8.4×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl-5-ethyloctane $C_{12}H_{26}$ [62184-01-4] NPUNZBBVZZNRNS-UHFFFAOYSA-N	9.5×10^{-7} 7.7×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl-6-ethyloctane $C_{12}H_{26}$ [62184-02-5] BWSXPPUMTZVKPA-UHFFFAOYSA-N	9.3×10^{-7} 8.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62184-03-6] QYHDQDAUJCPVFJ-UHFFFAOYSA-N	9.3×10^{-7} 8.4×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62184-04-7] XAKSPVTMTAMMDT-UHFFFAOYSA-N	8.8×10^{-7} 7.1×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4-dimethyl-5-ethyloctane $C_{12}H_{26}$ [62184-05-8] JHDZOLPKXSWZKD-UHFFFAOYSA-N	9.5×10^{-7} 7.5×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyl-6-ethyloctane $C_{12}H_{26}$ [62184-06-9] VGDSKYXZZCASQ-UHFFFAOYSA-N	9.6×10^{-7} 7.2×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62184-07-0] BCQWMBQACXNHGP-UHFFFAOYSA-N	9.5×10^{-7} 7.7×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62184-08-1] IMMDGMKEESKIQT-UHFFFAOYSA-N	9.6×10^{-7} 7.2×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5-dimethyl-5-ethyloctane $C_{12}H_{26}$ [62184-09-2] BVAIFAWSJOPLJD-UHFFFAOYSA-N	8.6×10^{-7} 7.5×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5-dimethyl-6-ethyloctane $C_{12}H_{26}$ [62183-50-0] CYTDZGRTFHXLQS-UHFFFAOYSA-N	9.3×10^{-7} 8.4×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,6-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62183-51-1] WAFCPUFGSNTFSP-UHFFFAOYSA-N	9.3×10^{-7} 8.4×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,6-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62183-52-2] JIOQMLJPQDNFA-UHFFFAOYSA-N	9.7×10^{-7} 6.8×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,6-dimethyl-5-ethyloctane $C_{12}H_{26}$ [62183-53-3] ZBMWKURVBLDBAH-UHFFFAOYSA-N	9.4×10^{-7} 7.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,6-dimethyl-6-ethyloctane $C_{12}H_{26}$ [62183-54-4] DGFWFJRTTJTVEQ-UHFFFAOYSA-N	8.4×10^{-7} 8.6×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,7-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62183-55-5] XEMFRSYZKNPRTA-UHFFFAOYSA-N	9.4×10^{-7} 8.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,7-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62183-56-6] KSVMIUVYLYZDMT-UHFFFAOYSA-N	9.7×10^{-7} 6.8×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62183-57-7] BKNJDUXGYCILJT-UHFFFAOYSA-N	8.4×10^{-7} 8.6×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3-dimethyl-5-ethyloctane $C_{12}H_{26}$ [62183-58-8] GQTCKTISADWVNV-UHFFFAOYSA-N	8.8×10^{-7} 7.1×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3-dimethyl-6-ethyloctane $C_{12}H_{26}$ [62183-59-9] DDRNRTRVXHMVLA-UHFFFAOYSA-N	8.5×10^{-7} 8.2×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62212-28-6] AOQVLRSMPNHJPF-UHFFFAOYSA-N	8.3×10^{-7} 9.2×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62183-60-2] WBKPODGAYHVUMM-UHFFFAOYSA-N	8.3×10^{-7} 9.4×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyl-5-ethyloctane $C_{12}H_{26}$ [62183-61-3] LEPWFUNEXVKPDO-UHFFFAOYSA-N	9.3×10^{-7} 8.6×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyl-6-ethyloctane $C_{12}H_{26}$ [62183-62-4] DPDGQUDZYGOBAM-UHFFFAOYSA-N	9.3×10^{-7} 8.6×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,5-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62183-63-5] QYJKERUDQYOWRC-UHFFFAOYSA-N	8.5×10^{-7} 8.2×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,5-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62183-64-6] OMAJEXDENFMCIN-UHFFFAOYSA-N	9.3×10^{-7} 8.4×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,5-dimethyl-5-ethyloctane $C_{12}H_{26}$ [62183-65-7] OLBJDMSGRVKJMF-UHFFFAOYSA-N	8.8×10^{-7} 6.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,5-dimethyl-6-ethyloctane $C_{12}H_{26}$ [62183-66-8] LLHGAWREVJAITE-UHFFFAOYSA-N	9.3×10^{-7} 8.4×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,6-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62183-67-9] MNXPIOFJFYQCKE-UHFFFAOYSA-N	8.4×10^{-7} 8.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,6-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62183-68-0] RTVRGBUFZDPIH-UHFFFAOYSA-N	9.4×10^{-7} 8.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,4-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62183-69-1] RHSANRLUOZFDW-UHFFFAOYSA-N	8.4×10^{-7} 8.6×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,4-dimethyl-5-ethyloctane $C_{12}H_{26}$ [62183-70-4] BETVNWPSZXTJLK-UHFFFAOYSA-N	8.5×10^{-7} 8.2×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,4-dimethyl-6-ethyloctane $C_{12}H_{26}$ [62183-71-5] UGEWSKWSWHZABT-UHFFFAOYSA-N	8.8×10^{-7} 7.1×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,5-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62183-72-6] MNDPOEACQSQCJ-UHFFFAOYSA-N	9.3×10^{-7} 8.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,5-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62183-73-7] MOEUNMMPAYEJOZ-UHFFFAOYSA-N	8.3×10^{-7} 9.2×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3-diethyloctane $C_{12}H_{26}$ [17302-40-8] DGJISSKLLWWTG-UHFFFAOYSA-N	9.1×10^{-7} 1.0×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-diethyloctane $C_{12}H_{26}$ [62183-92-0] HILZBOWVGZXYGQ-UHFFFAOYSA-N	1.0×10^{-6} 8.8×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,5-diethyloctane $C_{12}H_{26}$ [62183-93-1] DSYIMNMBWBEOHY-UHFFFAOYSA-N	1.0×10^{-6} 8.3×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,6-diethyloctane $C_{12}H_{26}$ [62183-94-2] UTCTYSTYZOAAOS-UHFFFAOYSA-N	1.0×10^{-6} 9.6×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,4-diethyloctane $C_{12}H_{26}$ [17312-42-4] FTEQKVNFNZNDQJG-UHFFFAOYSA-N	9.2×10^{-7} 9.1×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,5-diethyloctane $C_{12}H_{26}$ [1636-41-5] XRVCHXCONYJHLU-UHFFFAOYSA-N	1.0×10^{-6} 8.3×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-4-propyloctane $C_{12}H_{26}$ [62184-33-2] FJVPBTBEYVNWCA-UHFFFAOYSA-N	1.1×10^{-6} 7.0×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-5-propyloctane $C_{12}H_{26}$ [62184-34-3] NYBDGQCICAIJL-UHFFFAOYSA-N	1.1×10^{-6} 7.0×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-4-propyloctane $C_{12}H_{26}$ [62184-35-4] CTXPEFTVFFFIBQ-UHFFFAOYSA-N	1.0×10^{-6} 8.3×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-5-propyloctane $C_{12}H_{26}$ [62184-36-5] VOSHMCRSZWNTLJ-UHFFFAOYSA-N	1.0×10^{-6} 7.6×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methyl-4-propyloctane $C_{12}H_{26}$ [17312-41-3] RNKCZSBPRRHTOZ-UHFFFAOYSA-N	9.3×10^{-7} 7.9×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-5-propyloctane $C_{12}H_{26}$ [62183-85-1] MVUWSCFPURGAJF-UHFFFAOYSA-N	1.0×10^{-6} 8.1×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-3-isopropyloctane $C_{12}H_{26}$ [13287-19-9] KBIUKRVYBYJVSS-UHFFFAOYSA-N	9.4×10^{-7} 8.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-4-isopropyloctane $C_{12}H_{26}$ [62183-86-2] NRRICFUUPCDSKW-UHFFFAOYSA-N	9.7×10^{-7} 6.8×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-5-isopropyloctane $C_{12}H_{26}$ [62183-87-3] OPKVPKXVSDEXOZ-UHFFFAOYSA-N	9.6×10^{-7} 7.0×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-4-isopropyloctane $C_{12}H_{26}$ [62183-88-4] UXTHXSNAZBLVOD-UHFFFAOYSA-N	9.4×10^{-7} 7.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-5-isopropyloctane $C_{12}H_{26}$ [62183-89-5] VEJPAYNPRZYJNN-UHFFFAOYSA-N	9.6×10^{-7} 7.2×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-4-isopropyloctane $C_{12}H_{26}$ [62183-90-8] KCNISWXEVSJYRS-UHFFFAOYSA-N	8.4×10^{-7} 8.6×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-5-isopropyloctane $C_{12}H_{26}$ [62183-91-9] HEFVKUUZAXCMQX-UHFFFAOYSA-N	9.5×10^{-7} 7.7×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4- <i>tert</i> -butyloctane $C_{12}H_{26}$ [62184-32-1] RWILNGDOCMDMJW-UHFFFAOYSA-N	8.8×10^{-7} 7.1×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,4,6,6-pentamethylheptane $C_{12}H_{26}$ [13475-82-6] VKPSKYDESGTTFR-UHFFFAOYSA-N	7.7×10^{-7} 4.9×10^{-7} 1.1×10^{-6} 2.3×10^{-7} 2.4×10^{-5} 5.1×10^{-6} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Gharagheizi et al. (2010)	X Q Q Q Q Q Q	238 288, 289 288, 290 288, 291 288, 292 247
2,2,3,3,4-pentamethylheptane $C_{12}H_{26}$ [62198-80-5] NTDYBHYVUCYILC-UHFFFAOYSA-N	6.3×10^{-7} 9.3×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,3,5-pentamethylheptane $C_{12}H_{26}$ [62198-81-6] ZLCPJIFAFIYPV-UHFFFAOYSA-N	6.5×10^{-7} 7.9×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,3,6-pentamethylheptane $C_{12}H_{26}$ [62198-82-7] LYTFNNQFUUFUDH-UHFFFAOYSA-N	6.6×10^{-7} 7.6×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,4,4-pentamethylheptane $C_{12}H_{26}$ [62198-83-8] SUFPUVGFEWPIFA-UHFFFAOYSA-N	6.2×10^{-7} 9.9×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,4,5-pentamethylheptane $C_{12}H_{26}$ [62198-84-9] XYDYIKVIGCXDLV-UHFFFAOYSA-N	7.2×10^{-7} 7.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,4,6-pentamethylheptane $C_{12}H_{26}$ [62198-85-0] XRJGBYMRUIWAJP-UHFFFAOYSA-N	7.5×10^{-7} 6.6×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,5,5-pentamethylheptane $C_{12}H_{26}$ [62198-86-1] OSZLORKBJVWZNT-UHFFFAOYSA-N	6.9×10^{-7} 6.4×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,5,6-pentamethylheptane $C_{12}H_{26}$ [62198-87-2] MHJUEZDXDYXCPA-UHFFFAOYSA-N	7.5×10^{-7} 6.7×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,3,6,6-pentamethylheptane $C_{12}H_{26}$ [62198-88-3] SLGYOGBODYIQGW-UHFFFAOYSA-N	7.1×10^{-7} 6.1×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4,4,5-pentamethylheptane $C_{12}H_{26}$ [62199-61-5] XRGPEBQZXVFCRE-UHFFFAOYSA-N	6.4×10^{-7} 8.3×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4,4,6-pentamethylheptane $C_{12}H_{26}$ [62199-62-6] NOFQKTWPZFUCOO-UHFFFAOYSA-N	7.0×10^{-7} 6.2×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4,5,5-pentamethylheptane $C_{12}H_{26}$ [62199-63-7] JGOKXUSMFJOVQT-UHFFFAOYSA-N	7.0×10^{-7} 6.2×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4,5,6-pentamethylheptane $C_{12}H_{26}$ [62199-64-8] JVESFBBBMJIZLO-UHFFFAOYSA-N	7.8×10^{-7} 6.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,5,5,6-pentamethylheptane $C_{12}H_{26}$ [62199-65-9] FMJMMNPKKCFHTH-UHFFFAOYSA-N	7.0×10^{-7} 6.2×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,3,4,4-pentamethylheptane $C_{12}H_{26}$ [62199-66-0] VBOBCKMZHQJDQA-UHFFFAOYSA-N	6.2×10^{-7} 1.0×10^{-6} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,3,4,5-pentamethylheptane $C_{12}H_{26}$ [62199-67-1] OLZJEASDLLWCY-UHFFFAOYSA-N	7.0×10^{-7} 9.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,3,4,6-pentamethylheptane $C_{12}H_{26}$ [62199-68-2] YENAHMOHMFYKPC-UHFFFAOYSA-N	7.2×10^{-7} 8.1×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,3,5,5-pentamethylheptane $C_{12}H_{26}$ [62199-69-3] DTLBRJVRUQMSQN-UHFFFAOYSA-N	6.3×10^{-7} 9.3×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3,5,6-pentamethylheptane $C_{12}H_{26}$ [52670-35-6] SZQDOCSTKXRAR-UHFFFAOYSA-N	7.3×10^{-7} 7.4×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4,4,5-pentamethylheptane $C_{12}H_{26}$ [62199-70-6] CHHJLGDSEYTKKE-UHFFFAOYSA-N	7.0×10^{-7} 9.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4,4,6-pentamethylheptane $C_{12}H_{26}$ [62199-71-7] DHXWMADSONSWTL-UHFFFAOYSA-N	7.4×10^{-7} 7.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4,5,5-pentamethylheptane $C_{12}H_{26}$ [62199-72-8] BDFJISGXUJUJYCX-UHFFFAOYSA-N	7.1×10^{-7} 8.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4,5,6-pentamethylheptane $C_{12}H_{26}$ [27574-98-7] YIKFFSNUOIJPSI-UHFFFAOYSA-N	7.9×10^{-7} 8.0×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,4,5,5-pentamethylheptane $C_{12}H_{26}$ [62199-73-9] TXGUYEKSMHZHSB-UHFFFAOYSA-N	6.4×10^{-7} 8.3×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3,4,4,5-pentamethylheptane $C_{12}H_{26}$ [62199-74-0] YFXNIDIHYOGTEN-UHFFFAOYSA-N	6.1×10^{-7} 1.1×10^{-6} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3,4,5,5-pentamethylheptane $C_{12}H_{26}$ [62199-75-1] NZIFKVSORPBQSX-UHFFFAOYSA-N	6.1×10^{-7} 1.2×10^{-6} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62199-04-6] CVXGCQXACVZXR-UHFFFAOYSA-N	6.9×10^{-7} 9.3×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62199-05-7] COHRBFNOOUABCT-UHFFFAOYSA-N	7.9×10^{-7} 7.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,3-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62199-06-8] OOIGDPTZPWRGHN-UHFFFAOYSA-N	8.0×10^{-7} 7.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62199-07-9] TYGUUZVWCBYDKW-UHFFFAOYSA-N	8.0×10^{-7} 7.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62199-08-0] XMUXASPVQBQLPC-UHFFFAOYSA-N	7.1×10^{-7} 7.8×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62199-09-1] QADOHJKDWMLCQT-UHFFFAOYSA-N	8.3×10^{-7} 6.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,5-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62199-10-4] SUDWTPMZYLBGKW-UHFFFAOYSA-N	8.1×10^{-7} 6.9×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,5-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62199-11-5] GDPLKYYKURLRKJ-UHFFFAOYSA-N	8.4×10^{-7} 6.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,5-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62199-12-6] KJWMMFYTYSUWMH-UHFFFAOYSA-N	7.4×10^{-7} 6.7×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,6-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62199-13-7] RIIDJQQRWGTQEN-UHFFFAOYSA-N	8.1×10^{-7} 6.9×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,6-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62199-14-8] QGYSVVWKEDKPTP-UHFFFAOYSA-N	8.9×10^{-7} 5.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,6-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62199-15-9] LYZRWXZZVRWJHX-UHFFFAOYSA-N	8.3×10^{-7} 6.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62199-16-0] VIIXORRHJWHIBP-UHFFFAOYSA-N	7.6×10^{-7} 9.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,3-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62199-17-1] JHGOLBUJAJLXCX-UHFFFAOYSA-N	7.9×10^{-7} 7.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62199-18-2] YZXMDZSZKHUODO-UHFFFAOYSA-N	7.5×10^{-7} 1.0×10^{-6} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62198-55-4] QDWZIZQKVLESDK-UHFFFAOYSA-N	7.7×10^{-7} 8.7×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62198-56-5] URFFXJPMCMXFR-UHFFFAOYSA-N	8.5×10^{-7} 8.4×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,5-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62198-57-6] QHACFORXSGHTJG-UHFFFAOYSA-N	7.7×10^{-7} 8.6×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,5-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62198-58-7] UEZAASCWBVAVHRO-UHFFFAOYSA-N	8.6×10^{-7} 8.2×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,5-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62198-59-8] LTSLSBVPXXAMB-M-UHFFFAOYSA-N	7.9×10^{-7} 7.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,6-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62198-60-1] KOVQAKVRXODFNL-UHFFFAOYSA-N	7.8×10^{-7} 8.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,6-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62198-61-2] RBVKVRIWSQSXP-UHFFFAOYSA-N	8.9×10^{-7} 6.9×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,6-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62198-62-3] JXCQTSFHNKTLJ-UHFFFAOYSA-N	8.7×10^{-7} 7.5×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,4-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62198-63-4] BNFUBMCCIACHFX-UHFFFAOYSA-N	7.9×10^{-7} 7.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,4-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62198-64-5] YSCJXRHNKUXHLH-UHFFFAOYSA-N	8.0×10^{-7} 7.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,5-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62198-65-6] JFKSTTDMBQAPCT-UHFFFAOYSA-N	8.6×10^{-7} 8.2×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,5-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62198-66-7] HSVLOEWHJNAWLC-UHFFFAOYSA-N	7.8×10^{-7} 8.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,5-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62198-67-8] JAUBFUZENNVAG-UHFFFAOYSA-N	7.7×10^{-7} 8.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,6-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62198-68-9] KQBJYFJWQOUHCI-UHFFFAOYSA-N	8.8×10^{-7} 7.1×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,6-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62198-69-0] LPNPQCHEMXFBSW-UHFFFAOYSA-N	8.4×10^{-7} 6.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5,5-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62198-70-3] MARFNXCIPCRAJU-UHFFFAOYSA-N	8.1×10^{-7} 6.9×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5,5-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62198-71-4] HGYOEMXZYDBOKQ-UHFFFAOYSA-N	8.0×10^{-7} 7.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3,4-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62198-72-5] QLOXTBGCIUOWIG-UHFFFAOYSA-N	6.8×10^{-7} 1.1×10^{-6} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3,4-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62198-73-6] CUWOOQVXUDOHOH-UHFFFAOYSA-N	7.6×10^{-7} 9.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3,5-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62198-74-7] QXCHZKHIIUTBOU-UHFFFAOYSA-N	7.7×10^{-7} 8.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3,5-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62198-75-8] GCWLDOMARVHVOZ-UHFFFAOYSA-N	6.8×10^{-7} 9.8×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,4-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62198-76-9] SIIFYRMARKBLER-UHFFFAOYSA-N	6.8×10^{-7} 1.1×10^{-6} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,4-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62198-77-0] XSLWCLUAFIVTLD-UHFFFAOYSA-N	7.6×10^{-7} 9.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,5-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62198-78-1] ZHILUIHUWKDTM-UHFFFAOYSA-N	7.6×10^{-7} 9.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,5-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62198-79-2] SZOKDASFURUJDF-UHFFFAOYSA-N	7.5×10^{-7} 1.1×10^{-6} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyl-4-propylheptane $C_{12}H_{26}$ DWEXNJRCPKKJBQ-UHFFFAOYSA-N	9.2×10^{-7} 5.8×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl-4-propylheptane $C_{12}H_{26}$ [62185-30-2] AZUDVOIXPNEOLR-UHFFFAOYSA-N	9.5×10^{-7} 7.7×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4-dimethyl-4-propylheptane $C_{12}H_{26}$ [62185-31-3] FDVJFPZZPSPQAO-UHFFFAOYSA-N	8.9×10^{-7} 6.7×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5-dimethyl-4-propylheptane $C_{12}H_{26}$ [62185-32-4] PJXVVWKRCASATD-UHFFFAOYSA-N	9.7×10^{-7} 6.8×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,6-dimethyl-4-propylheptane $C_{12}H_{26}$ [62185-33-5] UFJZYHSURMZROL-UHFFFAOYSA-N	1.0×10^{-6} 5.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3-dimethyl-4-propylheptane $C_{12}H_{26}$ [62185-34-6] XVWBLUKOUJTCDO-UHFFFAOYSA-N	8.5×10^{-7} 8.2×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyl-4-propylheptane $C_{12}H_{26}$ [62185-35-7] UGSAJWKYCFZRD-UHFFFAOYSA-N	8.4×10^{-7} 8.6×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,5-dimethyl-4-propylheptane $C_{12}H_{26}$ [62185-36-8] GKVRDSIZILZQJE-UHFFFAOYSA-N	9.4×10^{-7} 8.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyl-3-isopropylheptane $C_{12}H_{26}$ [62185-37-9] XPOSVKCTMHOWTN-UHFFFAOYSA-N	8.1×10^{-7} 6.9×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyl-4-isopropylheptane $C_{12}H_{26}$ [62185-38-0] HFRVMJCEWUXCMP-UHFFFAOYSA-N	8.7×10^{-7} 5.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl-3-isopropylheptane $C_{12}H_{26}$ [62185-39-1] IAWDNHPMOJTEEN-UHFFFAOYSA-N	7.6×10^{-7} 9.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl-4-isopropylheptane $C_{12}H_{26}$ [62185-40-4] GEQDAUMUCVOARW-UHFFFAOYSA-N	8.8×10^{-7} 7.3×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4-dimethyl-3-isopropylheptane $C_{12}H_{26}$ [62185-41-5] MWVRZCOXSIAHLW-UHFFFAOYSA-N	8.8×10^{-7} 7.3×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyl-4-isopropylheptane $C_{12}H_{26}$ [62185-42-6] MTPOSQRPOBWFQC-UHFFFAOYSA-N	8.0×10^{-7} 7.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5-dimethyl-3-isopropylheptane $C_{12}H_{26}$ [62185-43-7] XSKMFUBSJXETFW-UHFFFAOYSA-N	8.9×10^{-7} 6.9×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5-dimethyl-4-isopropylheptane $C_{12}H_{26}$ [62185-44-8] OOYWQZAQFKOCKA-UHFFFAOYSA-N	9.0×10^{-7} 6.7×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,6-dimethyl-3-isopropylheptane $C_{12}H_{26}$ [62185-45-9] NOAGKIODSFDOTA-UHFFFAOYSA-N	8.8×10^{-7} 7.1×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,6-dimethyl-4-isopropylheptane $C_{12}H_{26}$ [35866-89-8] BIBHNAJLMRUJLS-UHFFFAOYSA-N	9.4×10^{-7} 5.6×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3-dimethyl-4-isopropylheptane $C_{12}H_{26}$ [62185-46-0] MACIOLXBYDNTTI-UHFFFAOYSA-N	7.9×10^{-7} 7.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyl-4-isopropylheptane $C_{12}H_{26}$ [62185-47-1] QFKXRROMVRXZIF-UHFFFAOYSA-N	7.6×10^{-7} 9.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,5-dimethyl-4-isopropylheptane $C_{12}H_{26}$ [62198-89-4] XJRRTENBDSNHQB-UHFFFAOYSA-N	8.7×10^{-7} 7.7×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-3,3-diethylheptane $C_{12}H_{26}$ [62198-90-7] VBKOVDPJLQIMSZ-UHFFFAOYSA-N	8.3×10^{-7} 1.0×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-3,4-diethylheptane $C_{12}H_{26}$ [62198-91-8] PRSHREOBBOOUSO-UHFFFAOYSA-N	9.4×10^{-7} 7.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-3,5-diethylheptane $C_{12}H_{26}$ [62198-92-9] KZTGLPPJUZINLQ-UHFFFAOYSA-N	9.4×10^{-7} 7.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-4,4-diethylheptane $C_{12}H_{26}$ [62198-93-0] VJTVFYMTOXDIID-UHFFFAOYSA-N	8.6×10^{-7} 7.7×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-4,5-diethylheptane $C_{12}H_{26}$ [62198-94-1] SRLQJPCYKGMUSM-UHFFFAOYSA-N	9.5×10^{-7} 7.5×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-5,5-diethylheptane $C_{12}H_{26}$ [62198-95-2] XPAWKGLXSPHNAN-UHFFFAOYSA-N	8.4×10^{-7} 8.6×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-3,4-diethylheptane $C_{12}H_{26}$ [62198-96-3] VRVWVWJIPKQWVJB-UHFFFAOYSA-N	8.3×10^{-7} 9.4×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-3,5-diethylheptane $C_{12}H_{26}$ [62198-97-4] RGRSPNWZJFXFAN-UHFFFAOYSA-N	8.5×10^{-7} 8.4×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-4,4-diethylheptane $C_{12}H_{26}$ [62198-98-5] WSBKWCXGZHVUHW-UHFFFAOYSA-N	8.3×10^{-7} 1.0×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-4,5-diethylheptane $C_{12}H_{26}$ [62198-99-6] NVBVLQDXCRDBBU-UHFFFAOYSA-N	9.3×10^{-7} 8.6×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-5,5-diethylheptane $C_{12}H_{26}$ [62199-00-2] JOJSCBROPYJHJX-UHFFFAOYSA-N	8.4×10^{-7} 8.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methyl-3,3-diethylheptane $C_{12}H_{26}$ [62199-01-3] KGSWPEXUAXYDMO-UHFFFAOYSA-N	8.2×10^{-7} 1.1×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-3,4-diethylheptane $C_{12}H_{26}$ [62199-02-4] RAFABRWSQNCWEY-UHFFFAOYSA-N	8.3×10^{-7} 9.4×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-3,5-diethylheptane $C_{12}H_{26}$ [62199-03-5] XUUVBJZPYCGZQDK-UHFFFAOYSA-N	9.2×10^{-7} 9.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-4- <i>tert</i> -butylheptane $C_{12}H_{26}$ [62185-23-3] HIHQJZLWJQHTEJ-UHFFFAOYSA-N	8.4×10^{-7} 6.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-4- <i>tert</i> -butylheptane $C_{12}H_{26}$ [62185-24-4] IKKVFRPBQQTTP-UHFFFAOYSA-N	8.1×10^{-7} 6.9×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-4- <i>tert</i> -butylheptane $C_{12}H_{26}$ [62185-25-5] JABLMQZBFVNBNS-UHFFFAOYSA-N	7.0×10^{-7} 8.7×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-ethyl-4-propylheptane $C_{12}H_{26}$ [62185-26-6] FPODIYZXVCXXQE-UHFFFAOYSA-N	1.0×10^{-6} 8.1×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-ethyl-4-propylheptane $C_{12}H_{26}$ [17312-43-5] JTZJHTZCYBYCSZ-UHFFFAOYSA-N	9.3×10^{-7} 8.3×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-ethyl-4-isopropylheptane $C_{12}H_{26}$ [62185-27-7] VENQCMSFBOBTMS-UHFFFAOYSA-N	9.4×10^{-7} 7.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-ethyl-4-isopropylheptane $C_{12}H_{26}$ [62185-28-8] IKRHMKIYGHBTGZ-UHFFFAOYSA-N	8.3×10^{-7} 9.2×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,3,3,4,4-hexamethylhexane $C_{12}H_{26}$ [62185-11-9] AOZDZCRQHVWGEF-UHFFFAOYSA-N	4.9×10^{-7} 1.5×10^{-6} 6.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,3,4,5-hexamethylhexane $C_{12}H_{26}$ [62185-12-0] IFHVEHXJQMYGHH-UHFFFAOYSA-N	5.8×10^{-7} 9.1×10^{-7} 7.4×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,3,5,5-hexamethylhexane $C_{12}H_{26}$ [60302-24-1] YFGLJPQISFJQSO-UHFFFAOYSA-N	5.4×10^{-7} 8.2×10^{-7} 6.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,4,4,5-hexamethylhexane $C_{12}H_{26}$ [62185-13-1] QJVUKMHIEDVCDT-UHFFFAOYSA-N	5.6×10^{-7} 1.1×10^{-6} 7.4×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,4,5,5-hexamethylhexane $C_{12}H_{26}$ [62185-14-2] NXZMBOYMLHOPD-UHFFFAOYSA-N	6.2×10^{-7} 7.0×10^{-7} 7.4×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,3,4,4,5-hexamethylhexane $C_{12}H_{26}$ [52670-36-7] GRVNDHRZJGSRDC-UHFFFAOYSA-N	5.6×10^{-7} 1.1×10^{-6} 7.4×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,3-tetramethyl-4-ethylhexane $C_{12}H_{26}$ [62184-98-9] CRTTYRRLFPCOTC-UHFFFAOYSA-N	6.3×10^{-7} 9.6×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,4-tetramethyl-3-ethylhexane $C_{12}H_{26}$ [62184-99-0] SYWRGACXWPDMM-UHFFFAOYSA-N	6.2×10^{-7} 1.0×10^{-6} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,4-tetramethyl-4-ethylhexane $C_{12}H_{26}$ [62185-00-6] WVLMCSYUMSZJQJ-UHFFFAOYSA-N	6.1×10^{-7} 1.2×10^{-6} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,5-tetramethyl-3-ethylhexane $C_{12}H_{26}$ [62185-01-7] CHURHVBNTYCJDL-UHFFFAOYSA-N	6.5×10^{-7} 7.9×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,3,5-tetramethyl-4-ethylhexane $C_{12}H_{26}$ [62185-02-8] GYAMSLKQDQYJGT-UHFFFAOYSA-N	7.4×10^{-7} 7.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4,4-tetramethyl-3-ethylhexane $C_{12}H_{26}$ [62185-03-9] HWHADLCAKCOTRI-UHFFFAOYSA-N	6.3×10^{-7} 9.3×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4,5-tetramethyl-3-ethylhexane $C_{12}H_{26}$ [62185-04-0] KZHIDSBQFJFWDV-UHFFFAOYSA-N	7.4×10^{-7} 7.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4,5-tetramethyl-4-ethylhexane $C_{12}H_{26}$ [62185-05-1] HAVVIZEMKFOFL-UHFFFAOYSA-N	6.4×10^{-7} 8.6×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,5,5-tetramethyl-3-ethylhexane $C_{12}H_{26}$ [62185-06-2] GJJUHGLRQQDIFN-UHFFFAOYSA-N	7.5×10^{-7} 5.2×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,3,4-tetramethyl-4-ethylhexane $C_{12}H_{26}$ [62185-07-3] YVKQGHGRZXUTNK-UHFFFAOYSA-N	6.1×10^{-7} 1.2×10^{-6} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,3,5-tetramethyl-4-ethylhexane $C_{12}H_{26}$ [62185-08-4] AMMSTTMNZHWREI-UHFFFAOYSA-N	7.1×10^{-7} 8.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4,4-tetramethyl-3-ethylhexane $C_{12}H_{26}$ [62185-09-5] VYCKEOSFJUAFGK-UHFFFAOYSA-N	6.1×10^{-7} 1.2×10^{-6} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4,5-tetramethyl-3-ethylhexane $C_{12}H_{26}$ [62185-10-8] IBPLCPRMAQRHHK-UHFFFAOYSA-N	6.9×10^{-7} 9.6×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3-trimethyl-3-isopropylhexane $C_{12}H_{26}$ [62199-79-5] UTCSLKLGOKPGW-UHFFFAOYSA-N	6.3×10^{-7} 9.6×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,4-trimethyl-3-isopropylhexane $\text{C}_{12}\text{H}_{26}$ [62199-80-8] VEMACPZMOMAUAN-UHFFFAOYSA-N	7.5×10^{-7} 6.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,5-trimethyl-3-isopropylhexane $\text{C}_{12}\text{H}_{26}$ [62199-81-9] GZFOXOCUKPGWEA-UHFFFAOYSA-N	8.2×10^{-7} 5.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,5-trimethyl-4-isopropylhexane $\text{C}_{12}\text{H}_{26}$ [62199-82-0] QFLYTOVYLBZBJC-UHFFFAOYSA-N	8.2×10^{-7} 5.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4-trimethyl-3-isopropylhexane $\text{C}_{12}\text{H}_{26}$ [62199-83-1] SXELEUFFBZGXIC-UHFFFAOYSA-N	6.8×10^{-7} 1.0×10^{-6} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,5-trimethyl-3-isopropylhexane $\text{C}_{12}\text{H}_{26}$ [62199-84-2] GUMUKRVQSSIBJO-UHFFFAOYSA-N	7.2×10^{-7} 7.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,5-trimethyl-4-isopropylhexane $\text{C}_{12}\text{H}_{26}$ [62199-85-3] VBRDSJSWPGXVIR-UHFFFAOYSA-N	8.2×10^{-7} 6.9×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,4-trimethyl-3-isopropylhexane $\text{C}_{12}\text{H}_{26}$ [62199-86-4] UGPHXQWIHGYYHOH-UHFFFAOYSA-N	7.3×10^{-7} 7.4×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyl-3,4-diethylhexane $\text{C}_{12}\text{H}_{26}$ [62199-89-7] ZAKPEOVUOZWBNO-UHFFFAOYSA-N	8.1×10^{-7} 6.9×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyl-4,4-diethylhexane $\text{C}_{12}\text{H}_{26}$ [62184-89-8] CYPRMBGQWCLJBN-UHFFFAOYSA-N	6.9×10^{-7} 9.3×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl-3,4-diethylhexane $\text{C}_{12}\text{H}_{26}$ [62184-90-1] BUUBMKJLVCTKU-UHFFFAOYSA-N	7.5×10^{-7} 1.0×10^{-6} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3-dimethyl-4,4-diethylhexane $C_{12}H_{26}$ [62184-91-2] YNHBDJNMYMZVLM-UHFFFAOYSA-N	7.5×10^{-7} 1.0×10^{-6} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyl-3,3-diethylhexane $C_{12}H_{26}$ [62184-92-3] OXAROVXPKXMTIV-UHFFFAOYSA-N	7.6×10^{-7} 9.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyl-3,4-diethylhexane $C_{12}H_{26}$ [62184-93-4] AUVJTUXGNKLTIN-UHFFFAOYSA-N	7.6×10^{-7} 9.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5-dimethyl-3,3-diethylhexane $C_{12}H_{26}$ [62184-94-5] XHDPVTDZGZCNFV-UHFFFAOYSA-N	8.1×10^{-7} 6.9×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5-dimethyl-3,4-diethylhexane $C_{12}H_{26}$ [62184-95-6] WCPAKUFSQFCWTQ-UHFFFAOYSA-N	8.9×10^{-7} 6.9×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3-dimethyl-4,4-diethylhexane $C_{12}H_{26}$ [62184-96-7] XFUAJHJXJMVZCQ-UHFFFAOYSA-N	6.7×10^{-7} 1.2×10^{-6} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyl-3,4-diethylhexane $C_{12}H_{26}$ [62184-97-8] NTQKWVJMJSYRDX-UHFFFAOYSA-N	6.7×10^{-7} 1.2×10^{-6} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyl-3- <i>tert</i> -butylhexane $C_{12}H_{26}$ [62199-76-2] VZAYJUSYQVNGBC-UHFFFAOYSA-N	6.4×10^{-7} 8.3×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-3-ethyl-3- isopropylhexane $C_{12}H_{26}$ [62199-77-3] TXYYDQJNRQTOW-UHFFFAOYSA-N	8.3×10^{-7} 9.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-4-ethyl-3- isopropylhexane $C_{12}H_{26}$ [62199-78-4] JXHSGKIMXDNKIS-UHFFFAOYSA-N	9.7×10^{-7} 6.8×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3,4-triethylhexane $\text{C}_{12}\text{H}_{26}$ [62199-87-5] YGNQREHYYPYLX-UHFFFAOYSA-N	8.2×10^{-7} 1.1×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,4,4-pentamethyl-3-ethylpentane $\text{C}_{12}\text{H}_{26}$ [66576-21-4] IZNAUALMSCRBS-UHFFFAOYSA-N	4.9×10^{-7} 1.4×10^{-6} 6.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3,4-tetramethyl-3-isopropylpentane $\text{C}_{12}\text{H}_{26}$ [62185-17-5] OKGFCJOAXUYCBG-UHFFFAOYSA-N	5.6×10^{-7} 1.1×10^{-6} 7.4×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4,4-tetramethyl-3-isopropylpentane $\text{C}_{12}\text{H}_{26}$ [62185-18-6] BYIFHEDQKBAFSW-UHFFFAOYSA-N	6.0×10^{-7} 7.9×10^{-7} 7.4×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,4-trimethyl-3,3-diethylpentane $\text{C}_{12}\text{H}_{26}$ [62185-15-3] GIKXQMPMOJVRDN-UHFFFAOYSA-N	6.1×10^{-7} 1.1×10^{-6} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyl-3-ethyl-3-isopropylpentane $\text{C}_{12}\text{H}_{26}$ [62185-16-4] ASDDXPPGGPFNIL-UHFFFAOYSA-N	6.8×10^{-7} 1.1×10^{-6} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
tridecane $\text{C}_{13}\text{H}_{28}$ [629-50-5] IIFYFAKIEWZDVMP-UHFFFAOYSA-N	3.4×10^{-6} 1.4×10^{-6} 4.4×10^{-4} 5.9×10^{-6} 2.2×10^{-6} 7.9×10^{-7} 1.5×10^{-6} 4.3×10^{-6}		Duchowicz et al. (2020) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999) Yaws and Yang (1992)	V X Q Q Q Q ? ?	187 238 247 21 21
2-methyldodecane $\text{C}_{13}\text{H}_{28}$ [1560-97-0] HGEMCUOAMCILCP-UHFFFAOYSA-N	1.5×10^{-6} 4.8×10^{-6} 1.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methyldodecane $C_{13}H_{28}$ [17312-57-1] GRJUENNHNVNYCHD-UHFFFAOYSA-N	1.5×10^{-6} 4.9×10^{-6} 1.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethylundecane $C_{13}H_{28}$ [17312-64-0] QDKSGHXRHXMPPF-UHFFFAOYSA-N	1.1×10^{-6} 3.8×10^{-6} 1.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethylundecane $C_{13}H_{28}$ [17312-77-5] QSSUTSOGIQHRIU-UHFFFAOYSA-N	1.3×10^{-6} 4.6×10^{-6} 1.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethylundecane $C_{13}H_{28}$ [17312-80-0] WMZNFELFMFOGCC-UHFFFAOYSA-N	1.2×10^{-6} 2.1×10^{-6} 1.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
tetradecane $C_{14}H_{30}$ [629-59-4] BGHCVCJVXZWKCC-UHFFFAOYSA-N	9.3×10^{-7} 1.1×10^{-6} 1.1×10^{-6} 2.6×10^{-6} 7.4×10^{-6} 7.2×10^{-6} 4.4×10^{-4} 6.5×10^{-6} 3.7×10^{-6} 5.6×10^{-7} 2.9×10^{-5} 2.2×10^{-6} 7.2×10^{-6} 8.7×10^{-6}		Plyasunov and Shock (2000) Duchowicz et al. (2020) HSDB (2015) Eastcott et al. (1988) Abraham (1984) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaffe et al. (2003) Yao et al. (2002) Yaws (1999) Yaws and Yang (1992)	L V V V V X Q Q Q Q Q Q ? ?	187 238 247 249, 250 230 21 21
2-methyltridecane $C_{14}H_{30}$ [1560-96-9] CJBFZKZYIPBBTO-UHFFFAOYSA-N	2.4×10^{-6} 5.2×10^{-6} 2.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyltridecane $C_{14}H_{30}$ [6418-41-3] NLHRRMKILFRDGV-UHFFFAOYSA-N	2.5×10^{-6} 5.4×10^{-6} 2.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyldodecane $C_{14}H_{30}$ [49598-54-1] ATWISEHEXAEGKB-UHFFFAOYSA-N	1.6×10^{-6} 4.3×10^{-6} 1.8×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3-dimethyldodecane $C_{14}H_{30}$ [6117-98-2] QBIXLGCJCVGNDBJ-UHFFFAOYSA-N	2.1×10^{-6} 5.2×10^{-6} 1.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyldodecane $C_{14}H_{30}$ [6117-99-3] AFELDWXNIFIYOC-UHFFFAOYSA-N	1.6×10^{-6} 3.6×10^{-6} 1.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
pentadecane $C_{15}H_{32}$ [629-62-9] YCOZIPAWZNQLMR-UHFFFAOYSA-N	7.8×10^{-7} 7.6×10^{-7} 1.1×10^{-5} 4.4×10^{-4} 7.1×10^{-6} 7.9×10^{-6} 4.0×10^{-7} 1.1×10^{-5} 2.1×10^{-5}		Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999) Yaws and Yang (1992)	V V X Q Q Q Q ? ?	187 238 247 21 21
2-methyltetradecane $C_{15}H_{32}$ [1560-95-8] KUVMKLCGXIYSNH-UHFFFAOYSA-N	4.9×10^{-6} 5.7×10^{-6} 4.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyltetradecane $C_{15}H_{32}$ [18435-22-8] HXUYUZCPGPKNGS-UHFFFAOYSA-N	5.1×10^{-6} 5.9×10^{-6} 4.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyltridecane $C_{15}H_{32}$ [61869-04-3] NVEUWWMNWPXOC-UHFFFAOYSA-N	2.9×10^{-6} 4.5×10^{-6} 3.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyltridecane $C_{15}H_{32}$ [18435-20-6] SWUJSLXRUPXTQB-UHFFFAOYSA-N	4.3×10^{-6} 5.7×10^{-6} 3.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyltridecane $C_{15}H_{32}$ [61868-05-1] JDFJCABQSZLDMZ-UHFFFAOYSA-N	2.6×10^{-6} 3.8×10^{-6} 3.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hexadecane $\text{C}_{16}\text{H}_{34}$ [544-76-3] DCAYPVUWAIABOU-UHFFFAOYSA-N	2.1×10^{-5} 2.6×10^{-6} 2.7×10^{-5} 2.1×10^{-5}		Duchowicz et al. (2020) Eastcott et al. (1988) Abraham (1984) Yaws (2003)	V V V X	187 238
	4.4×10^{-4} 7.2×10^{-6} 2.2×10^{-5} 2.9×10^{-7} 2.1×10^{-5} 4.3×10^{-5}		Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999) Yaws and Yang (1992)	Q Q Q Q ? ?	 247 21 21
2-methylpentadecane $\text{C}_{16}\text{H}_{34}$ [1560-93-6] BANXPJUEBPWEOT-UHFFFAOYSA-N	1.2×10^{-5} 5.9×10^{-6} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methylpentadecane $\text{C}_{16}\text{H}_{34}$ [2882-96-4] FWXKXCJPHSAYMK-UHFFFAOYSA-N	1.2×10^{-5} 6.0×10^{-6} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyltetradecane $\text{C}_{16}\text{H}_{34}$ [59222-86-5] VCAMXEbnaszvez-UHFFFAOYSA-N	6.5×10^{-6} 4.8×10^{-6} 7.9×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyltetradecane $\text{C}_{16}\text{H}_{34}$ [18435-23-9] ZQRVEWIJXCRTFW-UHFFFAOYSA-N	1.1×10^{-5} 6.0×10^{-6} 7.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyltetradecane $\text{C}_{16}\text{H}_{34}$ [61868-06-2] NWTlFDYNCLTSAR-UHFFFAOYSA-N	5.1×10^{-6} 3.8×10^{-6} 7.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
heptadecane $\text{C}_{17}\text{H}_{36}$ [629-78-7] NDJKXXJCMXVBJW-UHFFFAOYSA-N	2.2×10^{-7} 2.1×10^{-4} 1.8×10^{-4}		Hilal et al. (2008) Yaws (1999) Yaws and Yang (1992)	Q ? ?	 21 21
octadecane $\text{C}_{18}\text{H}_{38}$ [593-45-3] RZJRJXONCZWCBN-UHFFFAOYSA-N	1.6×10^{-6} 7.8×10^{-4} 1.5×10^{-7} 6.1×10^{-4} 3.6×10^{-4} 1.1×10^{-3}		Eastcott et al. (1988) Abraham (1984) Hilal et al. (2008) Yaffe et al. (2003) Yaws (1999) Yaws and Yang (1992)	V V Q Q ? ?	 249, 250 21 21

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
nonadecane $C_{19}H_{40}$ [629-92-5] LQERIDTXQFOHKA-UHFFFAOYSA-N	1.3×10^{-7} 9.3×10^{-4} 3.4×10^{-3}		Hilal et al. (2008) Yaws (1999) Yaws and Yang (1992)	Q ? ?	 21 21
eicosane $C_{20}H_{42}$ [112-95-8] CBFCDTFDPHXCNV-UHFFFAOYSA-N	5.0×10^{-6} 1.4×10^{-2} 9.7×10^{-8} 2.3×10^{-3} 3.0×10^{-2}		Eastcott et al. (1988) Abraham (1984) Hilal et al. (2008) Yaws (1999) Yaws and Yang (1992)	V V Q ? ?	 21 21
heneicosane $C_{21}H_{44}$ [629-94-7] FNAZRRHPUDJQCJ-UHFFFAOYSA-N	7.3×10^{-8}		Hilal et al. (2008)	Q	
docosane $C_{22}H_{46}$ [629-97-0] HOWGUJZVBDQJKV-UHFFFAOYSA-N	5.4×10^{-8}		Hilal et al. (2008)	Q	
tricosane $C_{23}H_{48}$ [638-67-5] FIGVVZUWCLSUEI-UHFFFAOYSA-N	4.1×10^{-8}		Hilal et al. (2008)	Q	
tetracosane $C_{24}H_{50}$ [646-31-1] POOSGDOYLQNASK-UHFFFAOYSA-N	3.1×10^{-8}		Hilal et al. (2008)	Q	
pentacosane $C_{25}H_{52}$ [629-99-2] YKNWILGEOFOPE-UHFFFAOYSA-N	1.5×10^{-8}		Hilal et al. (2008)	Q	
hexacosane $C_{26}H_{54}$ [630-01-3] HMSWAIKSFDFLKN-UHFFFAOYSA-N	5.0×10^{-5} 1.3×10^2 1.1×10^{-8}		Eastcott et al. (1988) Abraham (1984) Hilal et al. (2008)	V V Q	
heptacosane $C_{27}H_{56}$ [593-49-7] BJQWYEJQWHSSCJ-UHFFFAOYSA-N	7.7×10^{-9}		Hilal et al. (2008)	Q	
octacosane $C_{28}H_{58}$ [630-02-4] ZYURHZPYMFLWSH-UHFFFAOYSA-N	5.6×10^{-9}		Hilal et al. (2008)	Q	

Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
nonacosane $\text{C}_{29}\text{H}_{60}$ [630-03-5] IGGUPRCHHJZPBS-UHFFFAOYSA-N	4.0×10^{-9}		Hilal et al. (2008)	Q	
triacontane $\text{C}_{30}\text{H}_{62}$ [638-68-6] JXTPJDDICSTXJX-UHFFFAOYSA-N	2.9×10^{-9}		Hilal et al. (2008)	Q	
dotriacontane $\text{C}_{32}\text{H}_{66}$ [544-85-4] QHMGJGNTMQDRQA-UHFFFAOYSA-N	1.5×10^{-9}		Hilal et al. (2008)	Q	
pentatriacontane $\text{C}_{35}\text{H}_{72}$ [630-07-9] VHQPFLOGSTQPC-UHFFFAOYSA-N	5.8×10^{-10}		Hilal et al. (2008)	Q	
hexatriacontane $\text{C}_{36}\text{H}_{74}$ [630-06-8] YDLYQMBWCWFRAI-UHFFFAOYSA-N	8.6×10^8		Abraham (1984)	V	
octatriacontane $\text{C}_{38}\text{H}_{78}$ [7194-85-6] BVKCQBBZBGYNOP-UHFFFAOYSA-N	2.2×10^{-10}		Hilal et al. (2008)	Q	

A2.2 Cycloalkanes

Table A2.2: Cycloalkanes

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cyclopropane C_3H_6 [75-19-4] LVZWSLJZHVFQJ-UHFFFAOYSA-N	1.2×10^{-4}	2800	Plyasunov and Shock (2000)	L	
	1.1×10^{-4}	1600	Wilhelm et al. (1977)	L	
	8.1×10^{-5}		Steward et al. (1973)	L	14
	1.1×10^{-4}	2300	Allott et al. (1973)	L	
	7.8×10^{-5}		Guitart et al. (1989)	M	14
	1.1×10^{-4}	2000	Saidman et al. (1966)	M	
	1.2×10^{-5}		Duchowicz et al. (2020)	V	187
	1.2×10^{-5}		HSDB (2015)	V	
	1.3×10^{-4}		Irmann (1965)	V	
	1.3×10^{-4}		Yaws (2003)	X	238, 295
	1.1×10^{-4}		Hayer et al. (2022)	Q	20
	3.6×10^{-3}		Duchowicz et al. (2020)	Q	
	2.6×10^{-5}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-5}		Raventos-Duran et al. (2010)	Q	272, 244
	1.6×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	1.2×10^{-4}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-4}		Hilal et al. (2008)	Q	
	2.3×10^{-5}		Modarresi et al. (2007)	Q	68
		2500	Kühne et al. (2005)	Q	
	1.2×10^{-4}	Yaffe et al. (2003)	Q	249, 250	
	7.3×10^{-5}	English and Carroll (2001)	Q	231, 232	
	3.9×10^{-5}	Katritzky et al. (1998)	Q		
	9.0×10^{-5}	Nirmalakhandan et al. (1997)	Q		
		2200	Kühne et al. (2005)	?	
	1.3×10^{-4}		Yaws (1999)	?	21, 295
	1.1×10^{-4}	1600	Yaws et al. (1999)	?	21
	1.3×10^{-4}		Yaws and Yang (1992)	?	21, 295
	1.1×10^{-4}		Abraham et al. (1990)	?	
cyclobutane C_4H_8 [287-23-0] PMPVIKIVABFJJI-UHFFFAOYSA-N	1.3×10^{-6}		Hayer et al. (2022)	Q	20
	7.0×10^{-5}		HSDB (2015)	Q	100
cyclopentane C_5H_{10} [287-92-3] RGSFGYAAUTVSQA-UHFFFAOYSA-N	5.8×10^{-5}	3500	Brockbank (2013)	L	1
	5.5×10^{-5}	3200	Plyasunov and Shock (2000)	L	
	5.4×10^{-5}		Mackay and Shiu (1981)	L	
	6.5×10^{-5}	3400	Hansen et al. (1993)	M	282
	5.6×10^{-5}		Mackay et al. (2006a)	V	
	5.2×10^{-5}		Mackay et al. (1993)	V	
	5.5×10^{-5}		Hwang et al. (1992)	V	
	5.4×10^{-5}		Eastcott et al. (1988)	V	
5.3×10^{-5}		Hine and Mookerjee (1975)	V		
5.6×10^{-5}		McAuliffe (1963)	V		

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.3×10^{-5}		Yaws (2003)	X	259
	5.2×10^{-5}		Yaws (2003)	X	238
	6.2×10^{-5}		Dupeux et al. (2022)	Q	260
	4.9×10^{-5}		Keshavarz et al. (2022)	Q	
	3.6×10^{-3}		Duchowicz et al. (2020)	Q	185
	5.2×10^{-5}		HSDB (2015)	Q	100
	3.0×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-5}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	5.8×10^{-5}		Gharagheizi et al. (2010)	Q	247
	1.1×10^{-4}		Hilal et al. (2008)	Q	
	1.2×10^{-5}		Modarresi et al. (2007)	Q	68
		3200	Kühne et al. (2005)	Q	
	3.1×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	4.8×10^{-5}		Yao et al. (2002)	Q	230
	3.8×10^{-5}		English and Carroll (2001)	Q	231, 232
	3.5×10^{-5}		Katritzky et al. (1998)	Q	
	4.3×10^{-5}		Suzuki et al. (1992)	Q	233
	5.7×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	6.5×10^{-5}		Duchowicz et al. (2020)	?	186, 21
		4300	Kühne et al. (2005)	?	
	5.3×10^{-5}		Yaws (1999)	?	21
	5.2×10^{-5}		Yaws and Yang (1992)	?	21
	5.3×10^{-5}		Abraham et al. (1990)	?	
	5.3×10^{-5}		Abraham (1979)	?	
cyclohexane C_6H_{12} [110-82-7] XDTMQSROBMDMFD-UHFFFAOYSA-N	5.1×10^{-5}	3900	Brockbank (2013)	L	1, 296
	5.3×10^{-5}	4000	Plyasunov and Shock (2000)	L	
	5.6×10^{-5}		Mackay and Shiu (1981)	L	
	3.2×10^{-4}	5400	Hiatt (2013)	M	
	8.0×10^{-5}		Helburn et al. (2008)	M	
	5.2×10^{-5}	4500	Dewulf et al. (1999)	M	297
	6.0×10^{-5}		Hansen et al. (1993)	M	298
	5.4×10^{-5}	3800	Kolb et al. (1992)	M	278
	3.4×10^{-5}		Guitart et al. (1989)	M	14
	5.5×10^{-5}	3200	Ashworth et al. (1988)	M	279
	5.4×10^{-5}	3400	Tsonopoulos and Wilson (1983)	M	1
	5.4×10^{-5}	3800	Tucker et al. (1981)	M	
	5.3×10^{-5}		Mackay et al. (2006a)	V	
	5.1×10^{-5}		Mackay et al. (1993)	V	
	6.0×10^{-5}		Hwang et al. (1992)	V	
	5.4×10^{-5}		Eastcott et al. (1988)	V	
	5.1×10^{-5}		Hine and Mookerjee (1975)	V	
	5.6×10^{-5}		McAuliffe (1963)	V	
	5.4×10^{-5}	4000	Plyasunov et al. (2001)	T	

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
		4000	Gill et al. (1976)	T	
	5.0×10^{-5}		Yaws (2003)	X	259
	5.1×10^{-5}		Yaws (2003)	X	238
	6.2×10^{-5}	710	Goldstein (1982)	X	299
	6.7×10^{-5}		Dupeux et al. (2022)	Q	260
	6.6×10^{-5}		Keshavarz et al. (2022)	Q	
	3.6×10^{-3}		Duchowicz et al. (2020)	Q	300
	1.6×10^{-4}		Wang et al. (2017)	Q	81, 239
	9.6×10^{-5}		Wang et al. (2017)	Q	81, 240
	1.5×10^{-4}		Wang et al. (2017)	Q	81, 241
	2.7×10^{-5}		Gharagheizi et al. (2012)	Q	
	5.0×10^{-5}		Gharagheizi et al. (2010)	Q	247
	9.5×10^{-5}		Hilal et al. (2008)	Q	
	2.3×10^{-5}		Modarresi et al. (2007)	Q	68
		3600	Kühne et al. (2005)	Q	
	5.8×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	3.4×10^{-5}		Yao et al. (2002)	Q	230
	2.7×10^{-5}		English and Carroll (2001)	Q	231, 275
	3.4×10^{-5}		Katritzky et al. (1998)	Q	
	3.4×10^{-5}		Suzuki et al. (1992)	Q	233
	4.5×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	6.6×10^{-5}		Duchowicz et al. (2020)	?	186, 21
		3900	Kühne et al. (2005)	?	
	5.1×10^{-5}		Yaws (1999)	?	21
	3.1×10^{-5}		Abraham and Weathersby (1994)	?	21
	5.1×10^{-5}		Yaws and Yang (1992)	?	21
	5.1×10^{-5}		Abraham et al. (1990)	?	
	5.1×10^{-5}		Abraham (1979)	?	
methylcyclopentane $\text{C}_5\text{H}_9\text{CH}_3$ [96-37-7] GDOPTJXRTPNYNR-UHFFFAOYSA-N	2.8×10^{-5}		Brockbank (2013)	L	
	2.8×10^{-5}	5500	Plyasunov and Shock (2000)	L	
	2.7×10^{-5}		Mackay and Shiu (1981)	L	
	2.7×10^{-5}		Duchowicz et al. (2020)	V	187
	2.7×10^{-5}		HSDB (2015)	V	
	2.8×10^{-5}		Mackay et al. (2006a)	V	
	2.7×10^{-5}		Mackay et al. (1993)	V	
	2.7×10^{-5}		Eastcott et al. (1988)	V	
	2.7×10^{-5}		Hine and Mookerjee (1975)	V	
	2.9×10^{-5}		McAuliffe (1963)	V	
	2.8×10^{-5}		Yaws (2003)	X	238
	1.4×10^{-3}		Duchowicz et al. (2020)	Q	
	1.7×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-5}		Raventos-Duran et al. (2010)	Q	272, 244
	4.9×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	3.2×10^{-5}		Gharagheizi et al. (2010)	Q	247

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.4×10^{-5}		Hilal et al. (2008)	Q	
	1.1×10^{-5}		Modarresi et al. (2007)	Q	68
	2.9×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	2.6×10^{-5}		Yao et al. (2002)	Q	230
	2.7×10^{-5}		English and Carroll (2001)	Q	231, 232
	3.6×10^{-5}		Katritzky et al. (1998)	Q	
	3.1×10^{-5}		Suzuki et al. (1992)	Q	233
	3.9×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	2.8×10^{-5}		Yaws (1999)	?	21
	1.7×10^{-5}		Abraham and Weathersby (1994)	?	21
	2.8×10^{-5}		Yaws and Yang (1992)	?	21
cycloheptane C_7H_{14} [291-64-5] DMEGYFMYUHOHGS-UHFFFAOYSA-N	6.7×10^{-5}		Brockbank (2013)	L	
	1.0×10^{-4}	3100	Plyasunov and Shock (2000)	L	
	1.1×10^{-4}		Duchowicz et al. (2020)	V	187
	8.2×10^{-5}		Mackay et al. (2006a)	V	
	1.0×10^{-4}		Mackay et al. (1993)	V	
	1.1×10^{-4}		Cabani et al. (1981)	V	
	1.1×10^{-4}		Yaws (2003)	X	259
	1.1×10^{-4}		Yaws (2003)	X	238
	1.2×10^{-4}		Dupeux et al. (2022)	Q	260
	3.6×10^{-3}		Duchowicz et al. (2020)	Q	
	2.5×10^{-5}		HSDB (2015)	Q	100
	3.2×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	5.7×10^{-5}		Gharagheizi et al. (2010)	Q	247
	5.1×10^{-5}		Hilal et al. (2008)	Q	
	8.3×10^{-6}		Modarresi et al. (2007)	Q	68
	1.1×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	3.2×10^{-5}		Katritzky et al. (1998)	Q	
	1.1×10^{-4}		Yaws (1999)	?	21
	1.6×10^{-3}		Hoff et al. (1993)	?	21
	1.1×10^{-4}		Yaws and Yang (1992)	?	21
methylcyclohexane $\text{C}_6\text{H}_{11}\text{CH}_3$ [108-87-2] UAEPNZWRGJTJPN-UHFFFAOYSA-N	2.6×10^{-5}	4500	Brockbank (2013)	L	1
	2.4×10^{-5}		Plyasunov and Shock (2000)	L	
	2.5×10^{-5}		Mackay and Shiu (1981)	L	
	3.2×10^{-4}	5300	Hiatt (2013)	M	
	1.5×10^{-4}		Ramachandran et al. (1996)	M	
	9.6×10^{-5}	9400	Hansen et al. (1993)	M	282
	5.0×10^{-6}		Abraham and Acree (2007)	V	
	2.5×10^{-5}		Mackay et al. (2006a)	V	
	2.3×10^{-5}		Mackay et al. (1993)	V	
	2.3×10^{-5}		Meylan and Howard (1991)	V	
	2.6×10^{-5}		Eastcott et al. (1988)	V	

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.3×10^{-5}		Hine and Mookerjee (1975)	V	
	2.7×10^{-5}		McAuliffe (1963)	V	
	2.3×10^{-5}		Yaws (2003)	X	238
	8.9×10^{-5}		Keshavarz et al. (2022)	Q	
	1.4×10^{-3}		Duchowicz et al. (2020)	Q	300
	1.5×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	272, 244
	3.9×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	2.4×10^{-5}		Gharagheizi et al. (2010)	Q	247
	3.5×10^{-5}		Hilal et al. (2008)	Q	
	2.1×10^{-5}		Modarresi et al. (2007)	Q	68
		3900	Kühne et al. (2005)	Q	
	2.5×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	2.7×10^{-5}		Yao et al. (2002)	Q	230
	1.9×10^{-5}		English and Carroll (2001)	Q	231, 261
	3.5×10^{-5}		Katritzky et al. (1998)	Q	
	8.6×10^{-5}		Russell et al. (1992)	Q	280
	2.3×10^{-5}		Suzuki et al. (1992)	Q	233
	2.9×10^{-5}		Meylan and Howard (1991)	Q	
	3.1×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	2.3×10^{-5}		Duchowicz et al. (2020)	?	186, 21
		3100	Kühne et al. (2005)	?	
	2.3×10^{-5}		Yaws (1999)	?	21
	2.3×10^{-5}		Yaws and Yang (1992)	?	21
methylcyclohexane-d14 $C_6D_{11}CD_3$ [10120-28-2] UAEPNZWRGJTJPN-OBYKGMMLSA-N	3.1×10^{-4}	5600	Hiatt (2013)	M	
ethylcyclopentane C_7H_{14} [1640-89-7] IFTRQJLVEBNKJK-UHFFFAOYSA-N	1.8×10^{-5}		Yaws (2003)	X	238
	1.6×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.9×10^{-5}		Gharagheizi et al. (2010)	Q	247
	2.4×10^{-5}		Yao et al. (2002)	Q	230
	1.8×10^{-5}		Yaws (1999)	?	21
1,1-dimethylcyclopentane C_7H_{14} [1638-26-2] QWHNJUXXYKPLQM-UHFFFAOYSA-N	2.3×10^{-5}		Yaws (2003)	X	238
	1.0×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.9×10^{-5}		Gharagheizi et al. (2010)	Q	247
	1.7×10^{-5}		Yao et al. (2002)	Q	230
	2.3×10^{-5}		Yaws (1999)	?	21
<i>cis</i> -1,2-dimethylcyclopentane C_7H_{14} [1192-18-3] RIRARCHMRDHZAR-KNVOCYPGSA-N	1.9×10^{-5}		Yaws (2003)	X	238
	1.4×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.9×10^{-5}		Gharagheizi et al. (2010)	Q	247
	1.9×10^{-5}		Yaws (1999)	?	21

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>cis</i> -1,3-dimethylcyclopentane C_7H_{14} [2532-58-3] XAZKFISIRYLAEE-KNVOCYPGSA-N	2.2×10^{-5}		Yaws (2003)	X	238
	1.1×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.9×10^{-5}		Gharagheizi et al. (2010)	Q	247
	2.2×10^{-5}		Yaws (1999)	?	21
<i>trans</i> -1,2-dimethylcyclopentane C_7H_{14} [822-50-4] RIRARCHMRDHZAR-RNFRBKRXSA-N	2.2×10^{-5}		Yaws (2003)	X	238
	1.1×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.9×10^{-5}		Gharagheizi et al. (2010)	Q	247
	2.2×10^{-5}		Yaws (1999)	?	21
<i>trans</i> -1,3-dimethylcyclopentane C_7H_{14} [1759-58-6] XAZKFISIRYLAEE-RNFRBKRXSA-N	2.2×10^{-5}		Yaws (2003)	X	238
	1.1×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.9×10^{-5}		Gharagheizi et al. (2010)	Q	247
	2.2×10^{-5}		Yaws (1999)	?	21
cyclooctane C_8H_{16} [292-64-8] WJTCGQSWYFHTAC-UHFFFAOYSA-N	7.3×10^{-5}	4800	Brockbank (2013)	L	1
	9.3×10^{-5}	3800	Plyasunov and Shock (2000)	L	
	6.9×10^{-5}	4700	Dohányosová et al. (2004)	M	301
	6.9×10^{-5}		Mackay et al. (2006a)	V	
	9.3×10^{-5}		Mackay et al. (1993)	V	
	9.5×10^{-5}		Cabani et al. (1981)	V	
	9.7×10^{-5}		Yaws (2003)	X	238
	3.1×10^{-5}		Gharagheizi et al. (2012)	Q	
	9.5×10^{-5}		Gharagheizi et al. (2010)	Q	247
	7.5×10^{-5}		Hilal et al. (2008)	Q	
	7.4×10^{-6}		Modarresi et al. (2007)	Q	68
	4300	Kühne et al. (2005)	Q		
	5000	Kühne et al. (2005)	?		
	9.8×10^{-5}		Hoff et al. (1993)	?	21
	9.5×10^{-5}		Yaws and Yang (1992)	?	21
methylcycloheptane C_8H_{16} [4126-78-7] GYNNXHKOJHMOHS-UHFFFAOYSA-N	2.1×10^{-5}		Hilal et al. (2008)	Q	
1,1-dimethylcyclohexane C_8H_{16} [590-66-9] QEGNUYASOUJEHD-UHFFFAOYSA-N	1.8×10^{-5}		Yaws (2003)	X	238
	8.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-5}		Gharagheizi et al. (2010)	Q	247
	2.0×10^{-5}		Yao et al. (2002)	Q	230
	1.8×10^{-5}		Yaws (1999)	?	21
1,2-dimethylcyclohexane $C_6H_{10}(CH_3)_2$ [583-57-3] KVZJLSYJROEPSQ-UHFFFAOYSA-N	2.8×10^{-5}		Duchowicz et al. (2020)	V	187
	2.1×10^{-5}		Mackay et al. (1993)	V	
	5.5×10^{-4}		Duchowicz et al. (2020)	Q	
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	272, 244
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	1.4×10^{-5}		Hilal et al. (2008)	Q	

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.1×10^{-5}		Katritzky et al. (1998)	Q	
	1.7×10^{-5}		Suzuki et al. (1992)	Q	233
	2.3×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
<i>cis</i> -1,2-dimethylcyclohexane $\text{C}_6\text{H}_{10}(\text{CH}_3)_2$ [2207-01-4] KVZJLSYJROEPSQ-OCAPTIKFS-A-N	2.6×10^{-5}	4600	Brockbank (2013)	L	1
	2.8×10^{-5}		Plyasunov and Shock (2000)	L	
	2.8×10^{-5}		Mackay and Shiu (1981)	L	
	2.7×10^{-5}	4600	Dohányosová et al. (2004)	M	302
	2.8×10^{-5}		Duchowicz et al. (2020)	V	187
	4.6×10^{-6}		Abraham and Acree (2007)	V	
	2.8×10^{-5}		Mackay et al. (2006a)	V	
	2.8×10^{-5}		Meylan and Howard (1991)	V	
	2.8×10^{-5}		Eastcott et al. (1988)	V	
	2.8×10^{-5}		Hine and Mookerjee (1975)	V	
	2.8×10^{-5}		Yaws (2003)	X	238
	5.5×10^{-4}		Duchowicz et al. (2020)	Q	
	1.1×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-5}		Gharagheizi et al. (2010)	Q	247
	2.3×10^{-5}		Modarresi et al. (2007)	Q	68
		4300	Kühne et al. (2005)	Q	
	2.9×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	1.4×10^{-5}		English and Carroll (2001)	Q	231, 232
	4.3×10^{-5}		Nirmalakhandan et al. (1997)	Q	
	2.2×10^{-5}		Meylan and Howard (1991)	Q	
		4900	Kühne et al. (2005)	?	
	2.8×10^{-5}		Yaws (1999)	?	21
	2.8×10^{-5}		Yaws and Yang (1992)	?	21
<i>trans</i> -1,2-dimethylcyclohexane $\text{C}_6\text{H}_{10}(\text{CH}_3)_2$ [6876-23-9] KVZJLSYJROEPSQ-HTQZYQBOSA-N	1.6×10^{-5}	4000	Brockbank (2013)	L	1
	1.6×10^{-5}	4300	Dohányosová et al. (2004)	M	303
	1.8×10^{-5}		Duchowicz et al. (2020)	V	187
	5.7×10^{-6}		Abraham and Acree (2007)	V	
	1.3×10^{-5}		Mackay et al. (1993)	V	
	1.6×10^{-5}		Yaws (2003)	X	238
	5.5×10^{-4}		Duchowicz et al. (2020)	Q	
	9.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-5}		Gharagheizi et al. (2010)	Q	247
		4300	Kühne et al. (2005)	Q	
		4600	Kühne et al. (2005)	?	
	1.6×10^{-5}		Yaws (1999)	?	21
	2.1×10^{-5}		Yaws and Yang (1992)	?	21
			Haynes (2014)	W	304
<i>cis</i> -1,3-dimethylcyclohexane C_8H_{16} [638-04-0] SGVUHPSBDNVHKL-OCAPTIKFS-A-N	1.8×10^{-5}		Yaws (2003)	X	238
	8.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-5}		Gharagheizi et al. (2010)	Q	247
	1.8×10^{-5}		Yaws (1999)	?	21

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>trans</i> -1,3-dimethylcyclohexane C_8H_{16} [2207-03-6] SGVUHPSBDNVHKL-HTQZYQBOSA-N	1.7×10^{-5}		Yaws (2003)	X	238
	9.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-5}		Gharagheizi et al. (2010)	Q	247
	1.7×10^{-5}		Yaws (1999)	?	21
1,4-dimethylcyclohexane $\text{C}_6\text{H}_{10}(\text{CH}_3)_2$ [589-90-2] QRMPKOFEUHIBNM-UHFFFAOYSA-N	1.5×10^{-5}		Hilal et al. (2008)	Q	
<i>cis</i> -1,4-dimethylcyclohexane C_8H_{16} [624-29-3] QRMPKOFEUHIBNM-OCAPTIFSA-N	1.7×10^{-5}		Yaws (2003)	X	238
	9.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-5}		Gharagheizi et al. (2010)	Q	247
	1.7×10^{-5}		Yaws (1999)	?	21
<i>trans</i> -1,4-dimethylcyclohexane $\text{C}_6\text{H}_{10}(\text{CH}_3)_2$ [2207-04-7] QRMPKOFEUHIBNM-ZKCHVHJHSA-N	1.1×10^{-5}		Plyasunov and Shock (2000)	L	
	1.1×10^{-5}		Mackay and Shiu (1981)	L	
	1.1×10^{-5}		Duchowicz et al. (2020)	V	187
	1.1×10^{-5}		Mackay et al. (2006a)	V	
	1.1×10^{-5}		Mackay et al. (1993)	V	
	1.1×10^{-5}		Eastcott et al. (1988)	V	
	1.1×10^{-5}		Yaws (2003)	X	238
	5.5×10^{-4}		Duchowicz et al. (2020)	Q	
	8.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	243, 244
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	1.4×10^{-5}		Gharagheizi et al. (2010)	Q	247
	2.9×10^{-5}		Yaffe et al. (2003)	Q	249, 273
	1.4×10^{-5}		English and Carroll (2001)	Q	231, 232
2.2×10^{-5}		Nirmalakhandan et al. (1997)	Q		
1.1×10^{-5}		Yaws (1999)	?	21	
1.1×10^{-5}		Yaws and Yang (1992)	?	21	
ethylcyclohexane C_8H_{16} [1678-91-7] IIEWJVIFRVWJOD-UHFFFAOYSA-N	2.1×10^{-5}	4100	Brockbank (2013)	L	1, 305
	2.0×10^{-5}	4400	Dohányosová et al. (2004)	M	306
	3.1×10^{-5}	4600	Heidman et al. (1985)	M	1
	3.3×10^{-5}		Duchowicz et al. (2020)	V	187
	7.3×10^{-6}		Abraham and Acree (2007)	V	
	1.5×10^{-5}		Yaws (2003)	X	238
	1.4×10^{-3}		Duchowicz et al. (2020)	Q	
	1.3×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	1.5×10^{-5}		Gharagheizi et al. (2010)	Q	247
	2.3×10^{-5}		Hilal et al. (2008)	Q	
	4300	Kühne et al. (2005)	Q		

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	3.3×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	3.5×10^{-5}		Yao et al. (2002)	Q	230, 268
	3.4×10^{-5}	4700	Katritzky et al. (1998)	Q	
			Kühne et al. (2005)	?	
	1.5×10^{-5}		Yaws (1999)	?	21
1,1,2-trimethylcyclopentane $C_5H_7(CH_3)_3$ [4259-00-1] WINGSBAYCULVDU-UHFFFAOYSA-N	1.3×10^{-5}		Yaws (2003)	X	238
	8.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-5}		Gharagheizi et al. (2010)	Q	247
	6.9×10^{-6}		Hilal et al. (2008)	Q	
1,1,3-trimethylcyclopentane $C_5H_7(CH_3)_3$ [4516-69-2] OBKHUIZSOIEPG-UHFFFAOYSA-N	6.2×10^{-6}		Plyasunov and Shock (2000)	L	
	6.3×10^{-6}		Mackay and Shiu (1981)	L	
	6.3×10^{-6}		Mackay et al. (2006a)	V	
	6.3×10^{-6}		Mackay et al. (1993)	V	
	6.3×10^{-6}		Eastcott et al. (1988)	V	
	1.5×10^{-5}		Yaws (2003)	X	238
	6.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	272, 244
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	1.2×10^{-5}		Gharagheizi et al. (2010)	Q	247
	6.2×10^{-6}		Yaffe et al. (2003)	Q	249, 250
1,cis-2,cis-3-trimethylcyclopentane C_8H_{16} [2613-69-6] VCWNHOPGKQCXIQ-RNLVFAQGSA-N	1.1×10^{-5}		Yaws (2003)	X	238
	8.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-5}		Gharagheizi et al. (2010)	Q	247
1,cis-2,trans-3-trimethylcyclopentane C_8H_{16} [15890-40-1] VCWNHOPGKQCXIQ-JIGDXULJSA-N	1.2×10^{-5}		Yaws (2003)	X	238
	7.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-5}		Gharagheizi et al. (2010)	Q	247
1,trans-2,cis-3-trimethylcyclopentane C_8H_{16} [19374-46-0] VCWNHOPGKQCXIQ-RNFRBKRXSA-N	1.4×10^{-5}		Yaws (2003)	X	238
	6.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-5}		Gharagheizi et al. (2010)	Q	247
1,cis-2,cis-4-trimethylcyclopentane C_8H_{16} [2613-72-1] PNUFYSGVPMNRN-RNLVFAQGSA-N	1.3×10^{-5}		Yaws (2003)	X	238
	7.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-5}		Gharagheizi et al. (2010)	Q	247

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
1, <i>cis</i> -2, <i>trans</i> -4-trimethylcyclopentane C_8H_{16} [4850-28-6] PNUFYSGVPMNRN-WHUPJOBBSA-N	1.2×10^{-5} 7.5×10^{-6} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>trans</i> -2, <i>cis</i> -4-trimethylcyclopentane C_8H_{16} [16883-48-0] PNUFYSGVPMNRN-HTQZYQBOSA-N	1.4×10^{-5} 6.0×10^{-6} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl-1-ethylcyclopentane C_8H_{16} [16747-50-5] LETYIFNDQBJGPJ-UHFFFAOYSA-N	1.1×10^{-5} 9.5×10^{-6} 1.2×10^{-5} 1.5×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	X Q Q Q ?	238 247 230 21
1-methyl- <i>cis</i> -2-ethylcyclopentane C_8H_{16} [930-89-2] BSKOLJVTLRLTHE-SFYZADRCSA-N	1.1×10^{-5} 1.1×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl- <i>trans</i> -2-ethylcyclopentane C_8H_{16} [930-90-5] BSKOLJVTLRLTHE-HTQZYQBOSA-N	1.2×10^{-5} 9.1×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl- <i>cis</i> -3-ethylcyclopentane C_8H_{16} [2613-66-3] PQXAPVOKLYINEI-SFYZADRCSA-N	1.2×10^{-5} 9.0×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl- <i>trans</i> -3-ethylcyclopentane C_8H_{16} [2613-65-2] PQXAPVOKLYINEI-HTQZYQBOSA-N	1.2×10^{-5} 9.0×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
propylcyclopentane $C_5H_9C_3H_7$ [2040-96-2] KDIAMAVWIJYWHN-UHFFFAOYSA-N	1.1×10^{-5} 1.1×10^{-5} 1.1×10^{-5} 1.1×10^{-5} 1.1×10^{-5} 1.1×10^{-5} 1.4×10^{-3} 1.2×10^{-5} 1.6×10^{-5}		Plyasunov and Shock (2000) Mackay and Shiu (1981) Duchowicz et al. (2020) Mackay et al. (2006a) Mackay et al. (1993) Eastcott et al. (1988) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010)	L L V V V V X Q Q Q	187 238 243, 244

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.5×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	1.2×10^{-5}		Gharagheizi et al. (2010)	Q	247
	2.0×10^{-5}		Hilal et al. (2008)	Q	
	1.1×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	2.5×10^{-5}		Yao et al. (2002)	Q	230
	3.2×10^{-5}		Katritzky et al. (1998)	Q	
	2.5×10^{-5}		Nirmalakhandan et al. (1997)	Q	
	1.1×10^{-5}		Yaws (1999)	?	21
	1.1×10^{-5}		Yaws and Yang (1992)	?	21
isopropylcyclopentane C_8H_{16} [3875-51-2] TVSBRLGQVHJIKT-UHFFFAOYSA-N	1.1×10^{-5}		Yaws (2003)	X	238
	1.1×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-5}		Gharagheizi et al. (2010)	Q	247
5,5-dimethylbicyclo[2.1.1]hexane C_8H_{14} (MCM:C8BC) WZXMFVFMYGAEAT-UHFFFAOYSA-N	3.1×10^{-4}		Wang et al. (2017)	Q	81, 239
	1.7×10^{-5}		Wang et al. (2017)	Q	81, 240
	2.1×10^{-4}		Wang et al. (2017)	Q	81, 241
1,1,2-trimethylcyclohexane C_9H_{18} [7094-26-0] MEBONNVPKOBPEA-UHFFFAOYSA-N	9.0×10^{-6}		Yaws (2003)	X	238
	8.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	9.0×10^{-6}		Gharagheizi et al. (2010)	Q	247
1,1,3-trimethylcyclohexane C_9H_{18} [3073-66-3] PYOLJOJPIPCRDP-UHFFFAOYSA-N	9.3×10^{-6}		Plyasunov and Shock (2000)	L	
	9.5×10^{-6}		Mackay et al. (2006a)	V	
	9.5×10^{-6}		Mackay et al. (1993)	V	
	1.2×10^{-5}		Yaws (2003)	X	238
	6.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	9.0×10^{-6}		Gharagheizi et al. (2010)	Q	247
1,1,4-trimethylcyclohexane C_9H_{18} [7094-27-1] UIWORXHEVNIOJG-UHFFFAOYSA-N	1.1×10^{-5}		Yaws (2003)	X	238
	5.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	9.0×10^{-6}		Gharagheizi et al. (2010)	Q	247
1,cis-2,cis-3-trimethylcyclohexane C_9H_{18} [1839-88-9] DQTVJLHNWPRPPH-AYMMMOKOSA-N	5.6×10^{-6}		Yaws (2003)	X	238
	8.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	8.8×10^{-6}		Gharagheizi et al. (2010)	Q	247
1,cis-2,trans-3-trimethylcyclohexane C_9H_{18} [7667-55-2] DQTVJLHNWPRPPH-BRPSZJMVA-N	6.2×10^{-6}		Yaws (2003)	X	238
	8.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	8.8×10^{-6}		Gharagheizi et al. (2010)	Q	247

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1, <i>cis</i> -2, <i>cis</i> -4-trimethylcyclohexane C_9H_{18} [1678-80-4] VCJPCEVERINRSG-YIZRAAEISA-N	6.2×10^{-6} 7.5×10^{-6} 8.8×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>cis</i> -2, <i>trans</i> -4-trimethylcyclohexane C_9H_{18} [7667-58-5] VCJPCEVERINRSG-HLTSFMKQSA-N	6.7×10^{-6} 7.5×10^{-6} 8.8×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
<i>cis,cis</i> -1,3,5-trimethylcyclohexane C_9H_{18} [1795-27-3] ODNRTOSCFYDTKF-AYMMOKOSA-N	1.7×10^{-5} 5.7×10^{-6} 8.8×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
<i>cis,trans</i> -1,3,5-trimethylcyclohexane C_9H_{18} [1795-26-2] ODNRTOSCFYDTKF-FBJGQNJSA-N	1.6×10^{-5} 6.0×10^{-6} 6.1×10^{-6} 8.8×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q Q	238 247
1, <i>trans</i> -2, <i>cis</i> -3-trimethylcyclohexane C_9H_{18} [1678-81-5] DQTVJLHNWPRPPH-HTQZYQBOSA-N	7.8×10^{-6} 6.7×10^{-6} 8.8×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>trans</i> -2, <i>cis</i> -4-trimethylcyclohexane C_9H_{18} [7667-59-6] VCJPCEVERINRSG-DJLDLDEBSA-N	7.1×10^{-6} 6.9×10^{-6} 8.8×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>trans</i> -2, <i>trans</i> -4-trimethylcyclohexane C_9H_{18} [7667-60-9] VCJPCEVERINRSG-IWSPIDZSA-N	7.8×10^{-6} 6.1×10^{-6} 8.8×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl-1-ethylcyclohexane C_9H_{18} [4926-90-3] YPJRYQGOKHKNKZ-UHFFFAOYSA-N	8.1×10^{-6} 1.0×10^{-5} 1.0×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl- <i>cis</i> -2-ethylcyclohexane C_9H_{18} [4923-77-7] XARGIVYWQPXRTC-BDAKNGLRSA-N	9.7×10^{-6} 1.0×10^{-5} 8.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methyl- <i>cis</i> -3-ethylcyclohexane C_9H_{18} [19489-10-2] UDDVMPHNQKRNNNS-BDAKNGLRSA-N	1.1×10^{-5} 7.9×10^{-6} 8.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl- <i>cis</i> -4-ethylcyclohexane C_9H_{18} [4926-78-7] CYISMTMRBPPERU-DTORHVGOSA-N	1.2×10^{-5} 8.6×10^{-6} 8.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl- <i>trans</i> -2-ethylcyclohexane C_9H_{18} [4923-78-8] XARGIVYWQPXRTC-RKDXNWHRSA-N	1.0×10^{-5} 8.8×10^{-6} 8.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl- <i>trans</i> -3-ethylcyclohexane C_9H_{18} [4926-76-5] UDDVMPHNQKRNNNS-RKDXNWHRSA-N	1.1×10^{-5} 8.6×10^{-6} 8.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl- <i>trans</i> -4-ethylcyclohexane C_9H_{18} [6236-88-0] CYISMTMRBPPERU-KYZUINATSA-N	8.4×10^{-6} 7.9×10^{-6} 8.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
propylcyclohexane C_9H_{18} [1678-92-8] DEDZSLCZHWTGOR-UHFFFAOYSA-N	9.6×10^{-6} 1.1×10^{-5} 1.1×10^{-5} 4.9×10^{-5} 9.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	X Q Q Q ?	238 247 230 21
isopropylcyclohexane C_9H_{18} [696-29-7] GWESVXSMPKAFAS-UHFFFAOYSA-N	9.4×10^{-6} 1.0×10^{-5} 1.1×10^{-5} 2.7×10^{-5} 9.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	X Q Q Q ?	238 247 230, 268 21
1,1,2,2-tetramethylcyclopentane C_9H_{18} [52688-89-8] YXDMSFJDVHXFCV-UHFFFAOYSA-N	8.0×10^{-6} 5.8×10^{-6} 8.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
<i>cis</i> -1,1,2,3-tetramethylcyclopentane C_9H_{18} CXCBKSYSKZEEJB-YUMQZZPRSA-N	7.2×10^{-6} 5.8×10^{-6} 8.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>trans</i> -1,1,2,3-tetramethylcyclopentane C ₉ H ₁₈ [62016-70-0] CXCBKSYSKZEEJB-SFYZADRCSA-N	8.4×10^{-6} 4.6×10^{-6} 8.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
<i>cis</i> -1,1,2,4-tetramethylcyclopentane C ₉ H ₁₈ [62016-71-1] AVBGIJNNMIBMQG-SFYZADRCSA-N	8.4×10^{-6} 4.6×10^{-6} 8.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
<i>trans</i> -1,1,2,4-tetramethylcyclopentane C ₉ H ₁₈ AVBGIJNNMIBMQG-YUMQZZPRSA-N	8.4×10^{-6} 4.6×10^{-6} 8.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1,1,3,3-tetramethylcyclopentane C ₉ H ₁₈ [50876-33-0] YWYCGTZNHWYQBD-UHFFFAOYSA-N	1.1×10^{-5} 3.8×10^{-6} 8.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
<i>cis</i> -1,1,3,4-tetramethylcyclopentane C ₉ H ₁₈ [53907-60-1] OWHFMVURUNNXMJ-OCAPTIKFSA-N	8.0×10^{-6} 5.0×10^{-6} 8.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
<i>trans</i> -1,1,3,4-tetramethylcyclopentane C ₉ H ₁₈ [20309-77-7] OWHFMVURUNNXMJ-HTQZYQBOSA-N	9.9×10^{-6} 3.6×10^{-6} 8.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
<i>cis</i> -1,2,2,3-tetramethylcyclopentane C ₉ H ₁₈ [18938-68-6] DHLYDHNCPUAVHP-OCAPTIKFSA-N	7.2×10^{-6} 5.8×10^{-6} 8.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
<i>trans</i> -1,2,2,3-tetramethylcyclopentane C ₉ H ₁₈ DHLYDHNCPUAVHP-YUMQZZPRSA-N	7.2×10^{-6} 5.8×10^{-6} 8.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>cis</i> -2, <i>cis</i> -3, <i>cis</i> -4-tetramethylcyclopentane C ₉ H ₁₈ [2532-65-2] INXDKODFMWKER-FNCVBFSA-N	6.3×10^{-6} 6.2×10^{-6} 7.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1, <i>cis</i> -2, <i>cis</i> -3, <i>trans</i> -4-tetramethylcyclopentane C ₉ H ₁₈ [2532-69-6] INXXDKODFMWKER-BGZDPUMWSA-N	7.2×10^{-6} 7.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
1, <i>cis</i> -2, <i>trans</i> -3, <i>cis</i> -4-tetramethylcyclopentane C ₉ H ₁₈ [2532-68-5] INXXDKODFMWKER-BZNPZCIMSAN	8.2×10^{-6} 4.2×10^{-6} 7.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>trans</i> -2, <i>cis</i> -3, <i>trans</i> -4-tetramethylcyclopentane C ₉ H ₁₈ [2532-67-4] INXXDKODFMWKER-HXFLIBJXSA-N	8.8×10^{-6} 3.7×10^{-6} 7.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>trans</i> -2, <i>trans</i> -3, <i>cis</i> -4-tetramethylcyclopentane C ₉ H ₁₈ [19907-40-5] INXXDKODFMWKER-OJOKCITNSA-N	8.2×10^{-6} 4.2×10^{-6} 7.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1,1-dimethyl-2-ethylcyclopentane C ₉ H ₁₈ [54549-80-3] RXPIHZJWAFCHEJ-UHFFFAOYSA-N	7.7×10^{-6} 6.2×10^{-6} 6.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1,1-dimethyl-3-ethylcyclopentane C ₉ H ₁₈ [62016-61-9] WXHYOGXBESCUU-UHFFFAOYSA-N	8.3×10^{-6} 5.5×10^{-6} 6.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>cis</i> -2-dimethyl-1-ethylcyclopentane C ₉ H ₁₈ [62016-63-1] DRWDWIMYUGHJBR-DTWKUNHWSA-N	6.9×10^{-6} 7.3×10^{-6} 6.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>trans</i> -2-dimethyl-1-ethylcyclopentane C ₉ H ₁₈ [62016-62-0] DRWDWIMYUGHJBR-RKDXNWHRSA-N	6.9×10^{-6} 7.3×10^{-6} 6.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1, <i>cis</i> -2-dimethyl- <i>cis</i> -3-ethylcyclopentane C ₉ H ₁₈ UMUGNPFWQJAOJI-HLTSFMKQSA-N	6.0 × 10 ⁻⁶ 8.0 × 10 ⁻⁶ 6.7 × 10 ⁻⁶		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>trans</i> -2-dimethyl- <i>trans</i> -3-ethylcyclopentane C ₉ H ₁₈ UMUGNPFWQJAOJI-HRDYMLBCSA-N	6.7 × 10 ⁻⁶ 6.6 × 10 ⁻⁶ 6.7 × 10 ⁻⁶		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>cis</i> -2-dimethyl- <i>trans</i> -3-ethylcyclopentane C ₉ H ₁₈ UMUGNPFWQJAOJI-IWSPJIDZSA-N	6.7 × 10 ⁻⁶ 6.6 × 10 ⁻⁶ 6.7 × 10 ⁻⁶		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>trans</i> -2-dimethyl- <i>cis</i> -3-ethylcyclopentane C ₉ H ₁₈ UMUGNPFWQJAOJI-VGMNWLOBSA-N	7.7 × 10 ⁻⁶ 5.4 × 10 ⁻⁶ 6.7 × 10 ⁻⁶		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>cis</i> -2-dimethyl- <i>cis</i> -4-ethylcyclopentane C ₉ H ₁₈ [62016-64-2] QKXQNQVXTYSGKS-BRPSZJMVSA-N	6.5 × 10 ⁻⁶ 7.0 × 10 ⁻⁶ 6.7 × 10 ⁻⁶		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>cis</i> -2-dimethyl- <i>trans</i> -4-ethylcyclopentane C ₉ H ₁₈ [62016-65-3] QKXQNQVXTYSGKS-AYMMMOKOSA-N	6.5 × 10 ⁻⁶ 7.0 × 10 ⁻⁶ 6.7 × 10 ⁻⁶		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>trans</i> -2-dimethyl- <i>cis</i> -4-ethylcyclopentane C ₉ H ₁₈ [62016-66-4] QKXQNQVXTYSGKS-HTQZYQBOSA-N	7.4 × 10 ⁻⁶ 5.7 × 10 ⁻⁶ 6.7 × 10 ⁻⁶		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>cis</i> -3-dimethyl-1-ethylcyclopentane C ₉ H ₁₈ [62016-68-6] OAWOMHRJVJMDLZ-DTWKUNHWSA-N	8.0 × 10 ⁻⁶ 5.8 × 10 ⁻⁶ 6.7 × 10 ⁻⁶		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>trans</i> -3-dimethyl-1-ethylcyclopentane C ₉ H ₁₈ [62016-67-5] OAWOMHRJVJMDLZ-RKDXNWHRSA-N	8.0 × 10 ⁻⁶ 5.8 × 10 ⁻⁶ 6.7 × 10 ⁻⁶		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1, <i>cis</i> -3-dimethyl- <i>cis</i> -2-ethylcyclopentane C ₉ H ₁₈ [19903-00-5] JREISGVVJTVFBL-AYMMMOKOSA-N	6.0 × 10 ⁻⁶ 8.0 × 10 ⁻⁶ 6.7 × 10 ⁻⁶		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>cis</i> -3-dimethyl- <i>trans</i> -2-ethylcyclopentane C ₉ H ₁₈ [19902-98-8] JREISGVVJTVFBL-BRPSZJMUSA-N	7.8 × 10 ⁻⁶ 5.2 × 10 ⁻⁶ 6.7 × 10 ⁻⁶		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>trans</i> -3-dimethyl- <i>cis</i> -2-ethylcyclopentane C ₉ H ₁₈ [19902-99-9] JREISGVVJTVFBL-HTQZYQBOSA-N	6.9 × 10 ⁻⁶ 6.4 × 10 ⁻⁶ 6.7 × 10 ⁻⁶		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>cis</i> -3-dimethyl- <i>cis</i> -4-ethylcyclopentane C ₉ H ₁₈ VMCXXGFUCWAIIN-YIZRAAEISA-N	6.7 × 10 ⁻⁶ 6.6 × 10 ⁻⁶ 6.7 × 10 ⁻⁶		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>cis</i> -3-dimethyl- <i>trans</i> -4-ethylcyclopentane C ₉ H ₁₈ VMCXXGFUCWAIIN-DJLDLDEBSA-N	7.8 × 10 ⁻⁶ 5.2 × 10 ⁻⁶ 6.7 × 10 ⁻⁶		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>trans</i> -3-dimethyl- <i>cis</i> -4-ethylcyclopentane C ₉ H ₁₈ VMCXXGFUCWAIIN-CIUDSAMLISA-N	3.5 × 10 ⁻⁶ 2.5 × 10 ⁻⁵ 6.7 × 10 ⁻⁶		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>trans</i> -3-dimethyl- <i>trans</i> -4-ethylcyclopentane C ₉ H ₁₈ VMCXXGFUCWAIIN-XHNCKOQMSA-N	6.7 × 10 ⁻⁶ 6.6 × 10 ⁻⁶ 6.7 × 10 ⁻⁶		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl-1-propylcyclopentane C ₉ H ₁₈ [16631-63-3] HICYLMKNNFKEMK-UHFFFAOYSA-N	7.2 × 10 ⁻⁶ 8.3 × 10 ⁻⁶ 7.5 × 10 ⁻⁶		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl- <i>cis</i> -2-propylcyclopentane C ₉ H ₁₈ [932-43-4] ADQJFBQXLAAVQA-BDAKNGLRSA-N	6.4 × 10 ⁻⁶ 8.6 × 10 ⁻⁶ 6.4 × 10 ⁻⁶		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methyl- <i>trans</i> -2-propylcyclopentane C_9H_{18} [932-44-5] ADQJFBQXLA AVQA-RKDXNWHRSA-N	7.1×10^{-6} 7.2×10^{-6} 6.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl- <i>cis</i> -3-propylcyclopentane C_9H_{18} [2443-04-1] HRSBYASWAILIF-BDAKNGLRSA-N	6.9×10^{-6} 7.6×10^{-6} 6.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl- <i>trans</i> -3-propylcyclopentane C_9H_{18} [2443-03-0] HRSBYASWAILIF-RKDXNWHRSA-N	6.9×10^{-6} 7.6×10^{-6} 6.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl-1-isopropylcyclopentane C_9H_{18} [61828-00-0] XFMQGDWBNOQLEG-UHFFFAOYSA-N	6.5×10^{-6} 8.9×10^{-6} 7.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl- <i>cis</i> -2-isopropylcyclopentane C_9H_{18} [61868-01-7] CGWXYEIQDFIU-RKDXNWHRSA-N	6.5×10^{-6} 7.7×10^{-6} 7.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl- <i>trans</i> -2-isopropylcyclopentane C_9H_{18} [61828-01-1] CGWXYEIQDFIU-BDAKNGLRSA-N	7.3×10^{-6} 6.3×10^{-6} 7.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl- <i>cis</i> -3-isopropylcyclopentane C_9H_{18} [61828-02-2] CDTDMKCVKCGRPD-BDAKNGLRSA-N	7.2×10^{-6} 6.5×10^{-6} 7.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl- <i>trans</i> -3-isopropylcyclopentane C_9H_{18} [61828-03-3] CDTDMKCVKCGRPD-RKDXNWHRSA-N	7.2×10^{-6} 6.5×10^{-6} 7.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1,1-diethylcyclopentane C_9H_{18} [2721-38-2] DPGQSDLGKGLNHC-UHFFFAOYSA-N	6.7×10^{-6} 9.4×10^{-6} 7.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1, <i>cis</i> -2-diethylcyclopentane C_9H_{18} [932-39-8] JKMYLSLBFNMSFP-DTORHVGOSA-N	6.3×10^{-6} 8.9×10^{-6} 6.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>trans</i> -2-diethylcyclopentane C_9H_{18} [932-40-1] JKMYLSLBFNMSFP-RKDXNWHRSA-N	6.9×10^{-6} 7.5×10^{-6} 6.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>cis</i> -3-diethylcyclopentane C_9H_{18} [62016-59-5] RUUVWUNHERVOAY-DTORHVGOSA-N	6.7×10^{-6} 8.0×10^{-6} 6.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1, <i>trans</i> -3-diethylcyclopentane C_9H_{18} [62016-60-8] RUUVWUNHERVOAY-RKDXNWHRSA-N	6.7×10^{-6} 8.0×10^{-6} 6.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
butylcyclopentane C_9H_{18} [2040-95-1] ZAGHKONXGGSVDV-UHFFFAOYSA-N	6.5×10^{-6} 1.0×10^{-5} 8.7×10^{-6} 6.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	238 247 21
isobutylcyclopentane C_9H_{18} [3788-32-7] DPUYDFJBHDYVQM-UHFFFAOYSA-N	7.2×10^{-6} 8.2×10^{-6} 8.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
<i>sec</i> -butylcyclopentane C_9H_{18} [4850-32-2] DCEHVBLXWODXCW-UHFFFAOYSA-N	6.5×10^{-6} 9.8×10^{-6} 8.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
<i>tert</i> -butylcyclopentane C_9H_{18} [3875-52-3] BFWVYBVSRYIDHI-UHFFFAOYSA-N	6.7×10^{-6} 7.6×10^{-6} 7.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
octahydro-1H-indene C_9H_{16} [496-10-6] BNRNAKTVFSZAFU-UHFFFAOYSA-N	8.8×10^{-5}		Hilal et al. (2008)	Q	
butylcyclohexane $\text{C}_{10}\text{H}_{20}$ [1678-93-9] GGBJHURWWWLEQH-UHFFFAOYSA-N	7.2×10^{-6} 8.5×10^{-6} 9.3×10^{-6} 7.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	238 247 21

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
pentylcyclopentane $C_{10}H_{20}$ [3741-00-2] HPQURZRDYMUHJI-UHFFFAOYSA-N	5.3×10^{-6}		Plyasunov and Shock (2000)	L	
	5.4×10^{-6}		Mackay and Shiu (1981)	L	
	5.4×10^{-6}		Mackay et al. (2006a)	V	
	5.4×10^{-6}		Mackay et al. (1993)	V	
	5.4×10^{-6}		Eastcott et al. (1988)	V	
	5.2×10^{-6}		Yaws (2003)	X	238
	8.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-6}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	7.0×10^{-6}		Gharagheizi et al. (2010)	Q	247
	9.2×10^{-6}		Hilal et al. (2008)	Q	
5.8×10^{-6}		Yaffe et al. (2003)	Q	249, 250	
1.6×10^{-5}		Nirmalakhandan et al. (1997)	Q		
5.4×10^{-6}		Yaws and Yang (1992)	?	21	
decahydronaphthalene $C_{10}H_{18}$ (decalin) [91-17-8] NNBZCPXTIHJBJL-UHFFFAOYSA-N	7.2×10^{-5}	4100	Ashworth et al. (1988)	M	279
	2.1×10^{-5}		Duchowicz et al. (2020)	V	187
	2.1×10^{-5}		HSDB (2015)	V	
	4.4×10^{-3}		Duchowicz et al. (2020)	Q	
	6.5×10^{-5}		Hilal et al. (2008)	Q	
		4500	Kühne et al. (2005)	Q	
	2.1×10^{-5}		Yaffe et al. (2003)	Q	249, 250
6.5×10^{-5}		Katritzky et al. (1998)	Q		
		4100	Kühne et al. (2005)	?	
(Z)-bicyclo[4.4.0]decane $C_{10}H_{18}$ (cis-decahydronaphthalene; cis-decalin) [493-01-6] NNBZCPXTIHJBJL-AOOOYVTPSA-N	4.3×10^{-4}		Mackay et al. (1993)	V	
	6.1×10^{-5}		Yaws (2003)	X	238
	4.3×10^{-5}		Gharagheizi et al. (2012)	Q	
	8.1×10^{-5}		Gharagheizi et al. (2010)	Q	247
6.1×10^{-5}		Yaws (1999)	?	21	
(E)-bicyclo[4.4.0]decane $C_{10}H_{18}$ (trans-decahydronaphthalene; trans-decalin) [493-02-7] NNBZCPXTIHJBJL-MGCOHNPYSA-N	2.7×10^{-4}		Mackay et al. (1993)	V	
	3.9×10^{-5}		Yaws (2003)	X	238
	2.6×10^{-5}		Gharagheizi et al. (2012)	Q	
	8.1×10^{-5}		Gharagheizi et al. (2010)	Q	247
4.0×10^{-5}		Yaws (1999)	?	21	
2,6,6-trimethylbicyclo[3.1.1]heptane $C_{10}H_{18}$ (dihydropinene) [473-55-2] XOKSLPVRUOBDEW-UHFFFAOYSA-N	2.8×10^{-5}		HSDB (2015)	Q	100

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
tricyclene $C_{10}H_{16}$ [508-32-7] RRBYUSWBLVXTQN-UHFFFAOYSA-N	4.9×10^{-5}		Plyasunov and Shock (2000)	L	
hexylcyclopentane $C_{11}H_{22}$ [4457-00-5] LKHGKBBAJAFMSQ-UHFFFAOYSA-N	5.1×10^{-6} 6.2×10^{-6} 6.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
pentylcyclohexane $C_{11}H_{22}$ [4292-92-6] HLTMUYBTNSVOFY-UHFFFAOYSA-N	7.1×10^{-6} 6.6×10^{-6} 9.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
cyclododecane $C_{12}H_{24}$ [294-62-2] DDTBPAQBQHZRDW-UHFFFAOYSA-N	6.4×10^{-6}		HSDB (2015)	Q	100
heptylcyclopentane $C_{12}H_{24}$ [5617-42-5] BOFNAOHMSHEKQL-UHFFFAOYSA-N	6.6×10^{-6} 9.8×10^{-6} 7.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
hexylcyclohexane $C_{12}H_{24}$ [4292-75-5] QHWAXQXSHHKCFK-UHFFFAOYSA-N	8.8×10^{-6} 7.4×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1,1'-bicyclohexyl $C_{12}H_{22}$ [92-51-3] WVIIMZNLDWSIRH-UHFFFAOYSA-N	3.1×10^{-5}		Hilal et al. (2008)	Q	
heptylcyclohexane $C_{13}H_{26}$ [5617-41-4] MSTLSCNJAHAQNU-UHFFFAOYSA-N	1.4×10^{-5} 1.3×10^{-5} 1.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
octylcyclopentane $C_{13}H_{26}$ [1795-20-6] HARXDULSBROLME-UHFFFAOYSA-N	1.1×10^{-5} 1.8×10^{-5} 1.0×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
octylcyclohexane $C_{14}H_{28}$ [1795-15-9] FBXWCEKQCVOOLT-UHFFFAOYSA-N	3.1×10^{-5} 2.1×10^{-5} 3.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
nonylcyclopentane $C_{14}H_{28}$ [2882-98-6] GDCYEUOAZVKNHT-UHFFFAOYSA-N	2.3×10^{-5} 2.0×10^{-5} 1.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
octahydro-1,1,2,3,3-pentamethyl-1H-indene $C_{14}H_{26}$ [33704-60-8] TUALLFJCLUYJEN-UHFFFAOYSA-N	9.0×10^{-6} 1.1×10^{-6} 6.5×10^{-4} 3.5×10^{-5}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
nonylcyclohexane $C_{15}H_{30}$ [2883-02-5] CLMFECMAVQYQA-UHFFFAOYSA-N	8.7×10^{-5} 2.2×10^{-5} 8.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
decylcyclopentane $C_{15}H_{30}$ [1795-21-7] WOUVLFFZQCUYOL-UHFFFAOYSA-N	6.4×10^{-5} 2.0×10^{-5} 4.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
decylcyclohexane $C_{16}H_{32}$ [1795-16-0] STWFZICHPLEOIC-UHFFFAOYSA-N	3.7×10^{-4}		Yaws (1999)	?	21
1,1'-(2-methylpentane-2,4-diyl)dicyclohexane $C_{18}H_{34}$ [38970-72-8] XUVKLBIXLIPDZ-UHFFFAOYSA-N	2.9×10^{-6} 2.1×10^{-6} 1.1×10^{-3} 1.9×10^{-5}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1,1':3',1''-tercyclohexane $C_{18}H_{32}$ [1706-50-9] JBQRJHVXZMSLNH-UHFFFAOYSA-N	6.7×10^{-6} 1.5×10^{-5} 1.7×10^{-3} 9.0×10^{-5}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

A2.3 Aliphatic alkenes and cycloalkenes

Table A2.3: Aliphatic alkenes and cycloalkenes

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethene	5.9×10^{-5}	2200	Burkholder et al. (2019)	L	1
C_2H_4	5.9×10^{-5}	2200	Burkholder et al. (2015)	L	1
(ethylene)	5.9×10^{-5}	2200	Sander et al. (2011)	L	1
[74-85-1]	5.9×10^{-5}	2200	Sander et al. (2006)	L	1
VGGSQFUCUMXWEO-UHFFFAOYSA-N	4.8×10^{-5}	2000	Plyasunov and Shock (2000)	L	
	4.7×10^{-5}	2000	Hayduk (1994)	L	1
	4.6×10^{-5}		Mackay and Shiu (1981)	L	
	4.7×10^{-5}	1800	Wilhelm et al. (1977)	L	
	3.5×10^{-5}		Steward et al. (1973)	L	14
	4.6×10^{-5}	2200	Allott et al. (1973)	L	
	4.9×10^{-5}	2000	Maaßen (1995)	M	307
	4.8×10^{-5}	1900	Reichl (1995)	M	308
	4.7×10^{-5}		McAuliffe (1966)	M	
	4.7×10^{-5}	2000	Morrison and Billett (1952)	M	309
	4.8×10^{-5}		Orcutt and SeEVERS (1937a)	M	
	3.4×10^{-5}		Grollman (1929)	M	59
	4.8×10^{-5}	2300	Winkler (1906)	M	
	4.6×10^{-5}		Hine and Mookerjee (1975)	V	
	4.7×10^{-5}	1900	Wauchope and Haque (1972)	V	
	3.1×10^{-5}		Pierotti (1965)	T	
	4.7×10^{-5}		Yaws (2003)	X	238
	4.7×10^{-5}		Deno and Berkheimer (1960)	C	
	3.4×10^{-5}		Hayer et al. (2022)	Q	20
	2.0×10^{-5}		Keshavarz et al. (2022)	Q	
	4.0×10^{-3}		Duchowicz et al. (2020)	Q	300
	2.1×10^{-4}		Wang et al. (2017)	Q	81, 239
	2.6×10^{-5}		Wang et al. (2017)	Q	81, 240
	8.3×10^{-5}		Wang et al. (2017)	Q	81, 241
	4.6×10^{-5}		Li et al. (2014)	Q	242
	2.4×10^{-5}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-5}		Raventos-Duran et al. (2010)	Q	243, 244
	2.5×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	6.8×10^{-5}		Gharagheizi et al. (2010)	Q	247
	2.9×10^{-5}		Hilal et al. (2008)	Q	
	1.0×10^{-4}		Modarresi et al. (2007)	Q	68
		2700	Kühne et al. (2005)	Q	
	4.7×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	8.2×10^{-5}		English and Carroll (2001)	Q	231, 232
	1.5×10^{-5}		Katritzky et al. (1998)	Q	
	9.5×10^{-5}		Suzuki et al. (1992)	Q	233
	5.2×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	4.3×10^{-5}		Duchowicz et al. (2020)	?	186, 21

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
		1900	Kühne et al. (2005)	?	
	4.8×10^{-5}		Yaws (1999)	?	21
	5.1×10^{-5}	2400	Yaws et al. (1999)	?	21
	3.9×10^{-5}		Abraham and Weathersby (1994)	?	21
	4.8×10^{-5}	2000	Dean and Lange (1999)	?	310, 23
	4.7×10^{-5}		Yaws and Yang (1992)	?	21
	4.6×10^{-5}		Abraham et al. (1990)	?	
	4.8×10^{-5}		Seinfeld (1986)	?	21
propene C_3H_6 (propylene) [115-07-1] QQONPFPTGQHPMA-UHFFFAOYSA-N	5.6×10^{-5}	2600	Plyasunov and Shock (2000)	L	
	4.7×10^{-5}		Mackay and Shiu (1981)	L	
	7.3×10^{-5}	3400	Wilhelm et al. (1977)	L	
	5.4×10^{-5}	2700	Maaßen (1995)	M	311
	5.4×10^{-5}	2800	Reichl (1995)	M	312
	4.8×10^{-5}		McAuliffe (1966)	M	
	4.7×10^{-5}		Hine and Mookerjee (1975)	V	
	4.4×10^{-5}		Irmann (1965)	V	
	4.8×10^{-5}		Yaws (2003)	X	238
	9.2×10^{-5}		Deno and Berkheimer (1960)	C	
	6.5×10^{-5}		Hayer et al. (2022)	Q	20
	2.7×10^{-5}		Keshavarz et al. (2022)	Q	
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	300
	2.5×10^{-4}		Wang et al. (2017)	Q	81, 239
	2.7×10^{-5}		Wang et al. (2017)	Q	81, 240
	8.5×10^{-5}		Wang et al. (2017)	Q	81, 241
	2.9×10^{-5}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-5}		Raventos-Duran et al. (2010)	Q	243, 244
	9.9×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	6.6×10^{-5}		Gharagheizi et al. (2010)	Q	247
	3.4×10^{-5}		Hilal et al. (2008)	Q	
	5.9×10^{-5}		Modarresi et al. (2007)	Q	68
		3100	Kühne et al. (2005)	Q	
	5.1×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	1.0×10^{-4}		Yao et al. (2002)	Q	230
	6.2×10^{-5}		English and Carroll (2001)	Q	231, 232
	4.4×10^{-5}		Katritzky et al. (1998)	Q	
	6.9×10^{-5}		Suzuki et al. (1992)	Q	233
	4.1×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	4.6×10^{-5}		Irmann (1965)	Q	
	5.0×10^{-5}		Duchowicz et al. (2020)	?	186, 21
		3800	Kühne et al. (2005)	?	
	4.8×10^{-5}		Yaws (1999)	?	21
	6.8×10^{-5}	2800	Yaws et al. (1999)	?	21
	4.8×10^{-5}		Yaws and Yang (1992)	?	21
	4.3×10^{-5}		Abraham et al. (1990)	?	

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-butene	4.2×10^{-5}	3000	Plyasunov and Shock (2000)	L	
C_4H_8	1.3×10^{-4}	6400	Wilhelm et al. (1977)	L	
[106-98-9]	4.5×10^{-5}	3000	Serra and Palavra (2003)	M	313
VXNZUJAINFGPBY-UHFFFAOYSA-N	4.0×10^{-5}		McAuliffe (1966)	M	
	3.9×10^{-5}		Mackay et al. (2006a)	V	
	3.9×10^{-5}		Mackay et al. (1993)	V	
	3.9×10^{-5}		Hine and Mookerjee (1975)	V	
	4.1×10^{-5}		Irmann (1965)	V	
	4.0×10^{-5}		Yaws (2003)	X	238
	5.5×10^{-5}		Hayer et al. (2022)	Q	20
	3.6×10^{-5}		Keshavarz et al. (2022)	Q	
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	185
	2.2×10^{-4}		Wang et al. (2017)	Q	81, 239
	3.2×10^{-5}		Wang et al. (2017)	Q	81, 240
	8.5×10^{-5}		Wang et al. (2017)	Q	81, 241
	3.9×10^{-5}		Li et al. (2014)	Q	242
	3.1×10^{-5}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-5}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	4.6×10^{-5}		Gharagheizi et al. (2010)	Q	247
	3.4×10^{-5}		Hilal et al. (2008)	Q	
	5.7×10^{-5}		Modarresi et al. (2007)	Q	68
	6.0×10^{-6}		Modarresi et al. (2005)	Q	248
	3.9×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	7.1×10^{-5}		Yao et al. (2002)	Q	230
	4.7×10^{-5}		English and Carroll (2001)	Q	231, 232
	5.6×10^{-5}		Katritzky et al. (1998)	Q	
	5.2×10^{-5}		Suzuki et al. (1992)	Q	233
	3.4×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	4.1×10^{-5}		Irmann (1965)	Q	
	4.2×10^{-5}		Duchowicz et al. (2020)	?	186, 21
	4.0×10^{-5}		Yaws (1999)	?	21
	4.0×10^{-5}		Yaws and Yang (1992)	?	21
	3.9×10^{-5}		Abraham et al. (1990)	?	
			Mackay and Shiu (1981)	W	314
2-butene	5.1×10^{-5}		Hilal et al. (2008)	Q	
C_4H_8					
[107-01-7]					
IAQRGUVFOMOMEM-UHFFFAOYSA-N					

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>cis</i> -2-butene C ₄ H ₈ [590-18-1] IAQRGUVFOMOMEM-ARJAWSKDSA-N	5.5×10^{-5}		Irmann (1965)	V	
	4.1×10^{-5}		Yaws (2003)	X	238
	3.6×10^{-5}		Keshavarz et al. (2022)	Q	
	5.2×10^{-4}		Duchowicz et al. (2020)	Q	300
	3.2×10^{-4}		Wang et al. (2017)	Q	315, 81, 239
	5.4×10^{-5}		Wang et al. (2017)	Q	315, 81, 240
	6.0×10^{-5}		Wang et al. (2017)	Q	315, 81, 241
	3.2×10^{-5}		Gharagheizi et al. (2012)	Q	
	5.7×10^{-5}		Gharagheizi et al. (2010)	Q	247
	4.5×10^{-5}		Modarresi et al. (2007)	Q	68
	6.9×10^{-6}		Modarresi et al. (2005)	Q	248
	9.1×10^{-5}		Yao et al. (2002)	Q	230
	5.9×10^{-5}		Irmann (1965)	Q	
4.3×10^{-5}		Duchowicz et al. (2020)	?	186, 21	
4.1×10^{-5}		Yaws (1999)	?	21	
<i>trans</i> -2-butene C ₄ H ₈ [624-64-6] IAQRGUVFOMOMEM-ONEGZZNKSA-N	3.9×10^{-5}		Irmann (1965)	V	
	4.3×10^{-5}		Yaws (2003)	X	238
	1.0×10^{-4}		Hayer et al. (2022)	Q	20
	3.6×10^{-5}		Keshavarz et al. (2022)	Q	
	5.2×10^{-4}		Duchowicz et al. (2020)	Q	
	3.2×10^{-4}		Wang et al. (2017)	Q	315, 81, 239
	5.4×10^{-5}		Wang et al. (2017)	Q	315, 81, 240
	6.0×10^{-5}		Wang et al. (2017)	Q	315, 81, 241
	2.7×10^{-5}		Gharagheizi et al. (2012)	Q	
	5.7×10^{-5}		Gharagheizi et al. (2010)	Q	247
	4.5×10^{-5}		Modarresi et al. (2007)	Q	68
	8.5×10^{-6}		Modarresi et al. (2005)	Q	248
	7.9×10^{-5}		Yao et al. (2002)	Q	230
5.4×10^{-5}		Irmann (1965)	Q		
4.4×10^{-5}		Duchowicz et al. (2020)	?	186, 21	
4.3×10^{-5}		Yaws (1999)	?	21	
2-methylpropene C ₄ H ₈ (isobutene) [115-11-7] VQTUBCCKSQIDNK-UHFFFAOYSA-N	5.7×10^{-5}	3000	Plyasunov and Shock (2000)	L	
	5.6×10^{-5}	3000	Wilhelm et al. (1977)	L	
	4.8×10^{-5}		McAuliffe (1966)	M	
	4.6×10^{-5}		Mackay et al. (2006a)	V	
	4.6×10^{-5}		Mackay et al. (1993)	V	
	4.6×10^{-5}		Hine and Mookerjee (1975)	V	
	4.8×10^{-5}		Yaws (2003)	X	238
6.1×10^{-5}		Hayer et al. (2022)	Q	20	

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	3.6×10^{-5}		Keshavarz et al. (2022)	Q	
	5.1×10^{-4}		Duchowicz et al. (2020)	Q	300
	1.6×10^{-4}		Wang et al. (2017)	Q	81, 239
	3.9×10^{-5}		Wang et al. (2017)	Q	81, 240
	9.3×10^{-5}		Wang et al. (2017)	Q	81, 241
	2.0×10^{-5}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-5}		Raventos-Duran et al. (2010)	Q	243, 244
	9.9×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	6.1×10^{-5}		Gharagheizi et al. (2010)	Q	247
	8.6×10^{-5}		Hilal et al. (2008)	Q	
	4.6×10^{-5}		Modarresi et al. (2007)	Q	68
		3400	Kühne et al. (2005)	Q	
	8.2×10^{-6}		Modarresi et al. (2005)	Q	248
	4.7×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	6.5×10^{-5}		Yao et al. (2002)	Q	230
	4.8×10^{-5}		English and Carroll (2001)	Q	231, 232
	5.3×10^{-5}		Katritzky et al. (1998)	Q	
	4.5×10^{-5}		Suzuki et al. (1992)	Q	233
	2.8×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	4.5×10^{-5}		Duchowicz et al. (2020)	?	186, 21
		3000	Kühne et al. (2005)	?	
	4.8×10^{-5}		Yaws (1999)	?	21
	5.6×10^{-5}	3000	Yaws et al. (1999)	?	21
	4.8×10^{-5}		Yaws and Yang (1992)	?	21
			Mackay and Shiu (1981)	W	314
1-pentene C_5H_{10} [109-67-1] YWAKXRMUMFPDSH-UHFFFAOYSA-N	3.0×10^{-5}		Brockbank (2013)	L	
	2.4×10^{-5}		Plyasunov and Shock (2000)	L	
	2.5×10^{-5}		Mackay and Shiu (1981)	L	
	2.5×10^{-5}		Duchowicz et al. (2020)	V	187
	2.5×10^{-5}		HSDB (2015)	V	
	2.5×10^{-5}		Mackay et al. (2006a)	V	
	2.5×10^{-5}		Mackay et al. (1993)	V	
	2.5×10^{-5}		Eastcott et al. (1988)	V	
	1.8×10^{-5}		Amoore and Buttery (1978)	V	
	2.4×10^{-5}		Hine and Mookerjee (1975)	V	
	2.7×10^{-5}		McAuliffe (1966)	V	24
	2.5×10^{-5}		Yaws (2003)	X	238
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	
	1.7×10^{-4}		Wang et al. (2017)	Q	81, 239
	2.3×10^{-5}		Wang et al. (2017)	Q	81, 240
	7.6×10^{-5}		Wang et al. (2017)	Q	81, 241
	3.0×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-5}		Raventos-Duran et al. (2010)	Q	272, 244
	3.1×10^{-5}		Raventos-Duran et al. (2010)	Q	245

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.9×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	3.2×10^{-5}		Gharagheizi et al. (2010)	Q	247
	2.5×10^{-5}		Hilal et al. (2008)	Q	
	4.7×10^{-5}		Modarresi et al. (2007)	Q	68
	5.4×10^{-6}		Modarresi et al. (2005)	Q	248
	2.5×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	5.1×10^{-5}		Yao et al. (2002)	Q	230
	3.6×10^{-5}		English and Carroll (2001)	Q	231, 261
	6.0×10^{-5}		Katritzky et al. (1998)	Q	
	4.0×10^{-5}		Suzuki et al. (1992)	Q	233
	2.7×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	2.5×10^{-5}		Yaws (1999)	?	21
	2.5×10^{-5}		Yaws and Yang (1992)	?	21
	2.4×10^{-5}		Abraham et al. (1990)	?	
2-pentene C_5H_{10} [109-68-2] QMMOXUPEWRXHJS-UHFFFAOYSA-N	4.1×10^{-5}		Plyasunov and Shock (2000)	L	
	4.1×10^{-5}		Duchowicz et al. (2020)	V	187
	4.4×10^{-5}		Eastcott et al. (1988)	V	
	5.2×10^{-4}		Duchowicz et al. (2020)	Q	
	3.6×10^{-5}		Hilal et al. (2008)	Q	
	4.7×10^{-5}		Yaffe et al. (2003)	Q	249, 273
	6.1×10^{-5}		Katritzky et al. (1998)	Q	
<i>cis</i> -2-pentene C_5H_{10} [627-20-3] QMMOXUPEWRXHJS-HYXAFHYSA-N	4.4×10^{-5}		Brockbank (2013)	L	
	4.4×10^{-5}		Mackay and Shiu (1981)	L	
	4.4×10^{-5}		Duchowicz et al. (2020)	V	187
	4.4×10^{-5}		Yaws (2003)	X	238
	5.2×10^{-4}		Duchowicz et al. (2020)	Q	
	2.6×10^{-4}		Wang et al. (2017)	Q	315, 81, 239
	3.7×10^{-5}		Wang et al. (2017)	Q	315, 81, 240
	5.8×10^{-5}		Wang et al. (2017)	Q	315, 81, 241
	4.5×10^{-5}		HSDB (2015)	Q	100
	2.7×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.6×10^{-5}		Gharagheizi et al. (2010)	Q	247
	5.4×10^{-6}		Modarresi et al. (2005)	Q	248
	4.7×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	7.3×10^{-5}		Yao et al. (2002)	Q	230
	4.4×10^{-5}		Yaws (1999)	?	21
	4.4×10^{-5}		Yaws and Yang (1992)	?	21

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>trans</i> -2-pentene C_5H_{10} [646-04-8] QMMOXUPEWRXHJS-HWKANZROSA-N	4.3×10^{-5}		Brockbank (2013)	L	
	4.3×10^{-5}		Duchowicz et al. (2020)	V	187
	4.2×10^{-5}		Hine and Mookerjee (1975)	V	
	4.3×10^{-5}		Yaws (2003)	X	238
	5.2×10^{-4}		Duchowicz et al. (2020)	Q	
	2.6×10^{-4}		Wang et al. (2017)	Q	315, 81, 239
	3.7×10^{-5}		Wang et al. (2017)	Q	315, 81, 240
	5.9×10^{-5}		Wang et al. (2017)	Q	315, 81, 241
	3.1×10^{-5}		HSDB (2015)	Q	100
	2.6×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.6×10^{-5}		Gharagheizi et al. (2010)	Q	247
	1.0×10^{-5}		Modarresi et al. (2005)	Q	248
	6.7×10^{-5}		Yao et al. (2002)	Q	230
	3.6×10^{-5}		English and Carroll (2001)	Q	231, 232
	4.0×10^{-5}		Suzuki et al. (1992)	Q	233
2.7×10^{-5}		Nirmalakhandan and Speece (1988)	Q		
4.3×10^{-5}		Yaws (1999)	?	21	
4.3×10^{-5}		Yaws and Yang (1992)	?	21	
2-methyl-1-butene C_5H_{10} [563-46-2] MHNNAWXXUZQSNM-UHFFFAOYSA-N	2.3×10^{-5}		Duchowicz et al. (2020)	V	187
	2.3×10^{-5}		HSDB (2015)	V	
	3.3×10^{-5}		Yaws (2003)	X	238
	5.1×10^{-4}		Duchowicz et al. (2020)	Q	
	1.5×10^{-4}		Wang et al. (2017)	Q	81, 239
	4.6×10^{-5}		Wang et al. (2017)	Q	81, 240
	8.7×10^{-5}		Wang et al. (2017)	Q	81, 241
	1.9×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.8×10^{-5}		Gharagheizi et al. (2010)	Q	247
	4.2×10^{-6}		Modarresi et al. (2005)	Q	248
5.1×10^{-5}		Yao et al. (2002)	Q	230, 268	
3.4×10^{-5}		Yaws (1999)	?	21	
2-methyl-2-butene C_5H_{10} [513-35-9] BKOOMYPCSUNDGP-UHFFFAOYSA-N	5.7×10^{-5}	3500	Brockbank (2013)	L	1
	6.7×10^{-5}	3600	Plyasunov and Shock (2000)	L	
	4.4×10^{-5}		Duchowicz et al. (2020)	V	187
	7.4×10^{-5}		Mackay et al. (2006a)	V	
	4.4×10^{-5}		Hine and Mookerjee (1975)	V	
	3.4×10^{-5}		Yaws (2003)	X	238
	1.7×10^{-4}		Duchowicz et al. (2020)	Q	
	2.1×10^{-4}		Wang et al. (2017)	Q	81, 239
	6.0×10^{-5}		Wang et al. (2017)	Q	81, 240
	6.3×10^{-5}		Wang et al. (2017)	Q	81, 241
	1.6×10^{-5}		Gharagheizi et al. (2012)	Q	
4.3×10^{-5}		Gharagheizi et al. (2010)	Q	247	

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	7.5×10^{-5}		Hilal et al. (2008)	Q	
	9.7×10^{-6}		Modarresi et al. (2005)	Q	248
	4.7×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	5.4×10^{-5}		Yao et al. (2002)	Q	230
	4.8×10^{-5}		English and Carroll (2001)	Q	231, 275
	5.8×10^{-5}		Katritzky et al. (1998)	Q	
	3.6×10^{-5}		Suzuki et al. (1992)	Q	233
	2.3×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	3.5×10^{-5}		Yaws (1999)	?	21
3-methyl-1-butene C_5H_{10} [563-45-1] YHQXBTXEYZIYOV-UHFFFAOYSA-N	1.9×10^{-5}		Plyasunov and Shock (2000)	L	
	1.8×10^{-5}		Mackay and Shiu (1981)	L	
	1.9×10^{-5}		McAuliffe (1966)	M	
	1.8×10^{-5}		HSDB (2015)	V	
	1.8×10^{-5}		Mackay et al. (2006a)	V	
	1.8×10^{-5}		Mackay et al. (1993)	V	
	1.8×10^{-5}		Hine and Mookerjee (1975)	V	
	1.9×10^{-5}		Yaws (2003)	X	238
	2.1×10^{-4}		Wang et al. (2017)	Q	81, 239
	1.4×10^{-5}		Wang et al. (2017)	Q	81, 240
	6.9×10^{-5}		Wang et al. (2017)	Q	81, 241
	2.2×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-5}		Raventos-Duran et al. (2010)	Q	243, 244
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	3.7×10^{-5}		Gharagheizi et al. (2010)	Q	247
	1.5×10^{-5}		Hilal et al. (2008)	Q	
	3.7×10^{-5}		Modarresi et al. (2007)	Q	68
	7.2×10^{-6}		Modarresi et al. (2005)	Q	248
	1.8×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	2.6×10^{-5}		Yao et al. (2002)	Q	230
	3.6×10^{-5}		English and Carroll (2001)	Q	231, 232
	5.7×10^{-5}		Katritzky et al. (1998)	Q	
	3.6×10^{-5}		Suzuki et al. (1992)	Q	233
	2.3×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	1.9×10^{-5}		Yaws (1999)	?	21
	1.9×10^{-5}		Yaws and Yang (1992)	?	21
1-hexene C_6H_{12} [592-41-6] LIKMAJRDDDTEIG-UHFFFAOYSA-N	2.5×10^{-5}		Brockbank (2013)	L	
	2.3×10^{-5}	3900	Plyasunov and Shock (2000)	L	
	2.4×10^{-5}		Mackay and Shiu (1981)	L	
	2.4×10^{-5}		Duchowicz et al. (2020)	V	187
	2.4×10^{-5}		HSDB (2015)	V	
	2.4×10^{-5}		Mackay et al. (2006a)	V	
	2.4×10^{-5}		Mackay et al. (1993)	V	
	2.4×10^{-5}		Hwang et al. (1992)	V	
	2.4×10^{-5}		Eastcott et al. (1988)	V	

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.4×10^{-5}		Hine and Mookerjee (1975)	V	
	2.7×10^{-5}		McAuliffe (1966)	V	24
	2.4×10^{-5}		Yaws (2003)	X	238
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	
	1.4×10^{-4}		Wang et al. (2017)	Q	81, 239
	1.7×10^{-5}		Wang et al. (2017)	Q	81, 240
	7.1×10^{-5}		Wang et al. (2017)	Q	81, 241
	2.8×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-5}		Raventos-Duran et al. (2010)	Q	243, 244
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	2.2×10^{-5}		Gharagheizi et al. (2010)	Q	247
	1.8×10^{-5}		Hilal et al. (2008)	Q	
	3.6×10^{-5}		Modarresi et al. (2007)	Q	68
		4100	Kühne et al. (2005)	Q	
	4.0×10^{-6}		Modarresi et al. (2005)	Q	248
	2.5×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	2.5×10^{-5}		Yao et al. (2002)	Q	230, 268
	2.7×10^{-5}		English and Carroll (2001)	Q	231, 232
	6.1×10^{-5}		Katritzky et al. (1998)	Q	
	3.1×10^{-5}		Suzuki et al. (1992)	Q	233
	2.1×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
		4000	Kühne et al. (2005)	?	
	3.3×10^{-5}		Yaws (1999)	?	21
	3.3×10^{-5}		Yaws and Yang (1992)	?	21
	2.8×10^{-5}		Abraham et al. (1990)	?	
<i>cis</i> -2-hexene C_6H_{12}	2.6×10^{-5}		Yaws (2003)	X	238
	2.3×10^{-4}		Wang et al. (2017)	Q	315, 81, 239
[7688-21-3]	2.4×10^{-5}		Wang et al. (2017)	Q	315, 81, 240
RYPKRALMXUUNKS-HYXAFXHYSA-N	5.0×10^{-5}		Wang et al. (2017)	Q	315, 81, 241
	2.3×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.3×10^{-5}		Gharagheizi et al. (2010)	Q	247
	5.8×10^{-6}		Modarresi et al. (2005)	Q	248
	3.0×10^{-5}		Yao et al. (2002)	Q	230
	2.6×10^{-5}		Yaws (1999)	?	21

Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>trans</i> -2-hexene C_6H_{12} [4050-45-7] RYPKRALMXUUNKS-HWKANZROSA-N	2.6×10^{-5}		Yaws (2003)	X	238
	2.3×10^{-4}		Wang et al. (2017)	Q	315, 81, 239
	2.4×10^{-5}		Wang et al. (2017)	Q	315, 81, 240
	5.0×10^{-5}		Wang et al. (2017)	Q	315, 81, 241
	2.2×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.3×10^{-5}		Gharagheizi et al. (2010)	Q	247
	5.6×10^{-6}		Modarresi et al. (2005)	Q	248
<i>cis</i> -3-hexene C_6H_{12} [7642-09-3] ZQDPJFUHLCOCRG-WAYWQWQTSAN	3.2×10^{-5}		Yao et al. (2002)	Q	230
	2.7×10^{-5}		Yaws (1999)	?	21
	2.6×10^{-5}		Yaws (2003)	X	238
	2.1×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.3×10^{-5}		Gharagheizi et al. (2010)	Q	247
<i>trans</i> -3-hexene C_6H_{12} [13269-52-8] ZQDPJFUHLCOCRG-AATRIKPKSANA	4.5×10^{-6}		Modarresi et al. (2005)	Q	248
	3.3×10^{-5}		Yao et al. (2002)	Q	230
	2.7×10^{-5}		Yaws (1999)	?	21
	2.6×10^{-5}		Yaws (2003)	X	238
	2.2×10^{-5}		Gharagheizi et al. (2012)	Q	
2-methyl-1-pentene C_6H_{12} [763-29-1] WWUVJRULCWHUSA-UHFFFAOYSA-N	2.3×10^{-5}		Gharagheizi et al. (2010)	Q	247
	5.4×10^{-6}		Modarresi et al. (2005)	Q	248
	3.1×10^{-5}		Yao et al. (2002)	Q	230
	2.7×10^{-5}		Yaws (1999)	?	21
	3.3×10^{-5}		Plyasunov and Shock (2000)	L	
	3.6×10^{-5}		Mackay and Shiu (1981)	L	
	3.6×10^{-5}		Duchowicz et al. (2020)	V	187
	3.6×10^{-5}		Mackay et al. (2006a)	V	
	3.6×10^{-5}		Mackay et al. (1993)	V	
	3.6×10^{-5}		Eastcott et al. (1988)	V	
	3.4×10^{-5}		Cabani et al. (1981)	V	
	3.5×10^{-5}		Yaws (2003)	X	238
	5.1×10^{-4}		Duchowicz et al. (2020)	Q	
	1.9×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-5}		Raventos-Duran et al. (2010)	Q	272, 244
3.1×10^{-5}		Raventos-Duran et al. (2010)	Q	245	
2.5×10^{-5}		Raventos-Duran et al. (2010)	Q	246	
2.3×10^{-5}		Gharagheizi et al. (2010)	Q	247	
2.2×10^{-5}		Hilal et al. (2008)	Q		
5.8×10^{-6}		Modarresi et al. (2005)	Q	248	
3.6×10^{-5}		Yaffe et al. (2003)	Q	249, 250	
4.5×10^{-5}		Yao et al. (2002)	Q	230	
2.1×10^{-5}		English and Carroll (2001)	Q	231, 232	
1.9×10^{-5}		Nirmalakhandan et al. (1997)	Q		

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.6×10^{-5}		Yaws (1999)	?	21
	3.5×10^{-5}		Yaws and Yang (1992)	?	21
3-methyl-1-pentene C_6H_{12} [760-20-3] LDTAOIUHUHHCMMU-UHFFFAOYSA-N	2.8×10^{-5}		Yaws (2003)	X	238
	2.4×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-5}		Gharagheizi et al. (2010)	Q	247
	6.2×10^{-6}		Modarresi et al. (2005)	Q	248
	2.1×10^{-5}		Yao et al. (2002)	Q	230
	2.8×10^{-5}		Yaws (1999)	?	21
4-methyl-1-pentene C_6H_{12} [691-37-2] WSSSPWUEQFSQQG-UHFFFAOYSA-N	1.5×10^{-5}		Plyasunov and Shock (2000)	L	
	1.6×10^{-5}		Mackay and Shiu (1981)	L	
	1.6×10^{-5}		Duchowicz et al. (2020)	V	187
	1.6×10^{-5}		Mackay et al. (2006a)	V	
	1.6×10^{-5}		Mackay et al. (1993)	V	
	1.6×10^{-5}		Eastcott et al. (1988)	V	
	1.6×10^{-5}		Hine and Mookerjee (1975)	V	
	1.6×10^{-5}		Yaws (2003)	X	238
	6.1×10^{-4}		Duchowicz et al. (2020)	Q	
	2.3×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-5}		Raventos-Duran et al. (2010)	Q	243, 244
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	2.5×10^{-5}		Gharagheizi et al. (2010)	Q	247
	1.2×10^{-5}		Hilal et al. (2008)	Q	
	3.4×10^{-5}		Modarresi et al. (2007)	Q	68
	7.3×10^{-6}		Modarresi et al. (2005)	Q	248
	1.6×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	2.7×10^{-5}		Yao et al. (2002)	Q	230
	2.7×10^{-5}		English and Carroll (2001)	Q	231, 232
	5.8×10^{-5}		Katritzky et al. (1998)	Q	
	2.8×10^{-5}		Suzuki et al. (1992)	Q	233
	1.8×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	1.6×10^{-5}		Yaws (1999)	?	21
	1.6×10^{-5}		Yaws and Yang (1992)	?	21
2-methyl-2-pentene C_6H_{12} [625-27-4] JMMZCWZIJXAGKW-UHFFFAOYSA-N	2.6×10^{-5}		Yaws (2003)	X	238
	1.5×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-5}		Gharagheizi et al. (2010)	Q	247
	7.9×10^{-6}		Modarresi et al. (2005)	Q	248
	4.8×10^{-5}		Yao et al. (2002)	Q	230, 268
	2.7×10^{-5}		Yaws (1999)	?	21
<i>cis</i> -3-methyl-2-pentene C_6H_{12} [922-62-3] BEQGRRJLJLVQAA-QXRVVYSFSA-N	2.6×10^{-5}		Yaws (2003)	X	238
	1.6×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-5}		Gharagheizi et al. (2010)	Q	247
	2.7×10^{-5}		Yaws (1999)	?	21

Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
<i>trans</i> -3-methyl-2-pentene C_6H_{12} [616-12-6] BEQGRRJLJLVQQAQ-GQCTYLIASA-N	2.6×10^{-5}		Yaws (2003)	X	238
	1.8×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-5}		Gharagheizi et al. (2010)	Q	247
	5.5×10^{-6}		Modarresi et al. (2005)	Q	248
	3.9×10^{-5}		Yao et al. (2002)	Q	230
	2.6×10^{-5}		Yaws (1999)	?	21
<i>cis</i> -4-methyl-2-pentene C_6H_{12} [691-38-3] LGAQJENWWYGFSN-PLNGDYQASA-N	2.8×10^{-5}		Yaws (2003)	X	238
	1.7×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.8×10^{-5}		Gharagheizi et al. (2010)	Q	247
	3.7×10^{-6}		Modarresi et al. (2005)	Q	248
	3.3×10^{-5}		Yao et al. (2002)	Q	230
	2.8×10^{-5}		Yaws (1999)	?	21
<i>trans</i> -4-methyl-2-pentene C_6H_{12} [674-76-0] LGAQJENWWYGFSN-SNAWJCMRSA-N	2.8×10^{-5}		Yaws (2003)	X	238
	1.8×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.8×10^{-5}		Gharagheizi et al. (2010)	Q	247
	5.0×10^{-6}		Modarresi et al. (2005)	Q	248
	3.1×10^{-5}		Yao et al. (2002)	Q	230
	2.8×10^{-5}		Yaws (1999)	?	21
3-methylenepentane C_6H_{12} (2-ethyl-1-butene) [760-21-4] RYKZRKKEYSRDNF-UHFFFAOYSA-N	2.7×10^{-5}		Yaws (2003)	X	238
	2.0×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.3×10^{-5}		Gharagheizi et al. (2010)	Q	247
	3.9×10^{-6}		Modarresi et al. (2005)	Q	248
	4.3×10^{-5}		Yao et al. (2002)	Q	230
	2.7×10^{-5}		Yaws (1999)	?	21
2,3-dimethyl-1-butene C_6H_{12} [563-78-0] OWWIWYDDISJUMY-UHFFFAOYSA-N	2.8×10^{-5}		Yaws (2003)	X	238
	1.6×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.9×10^{-5}		Gharagheizi et al. (2010)	Q	247
	1.7×10^{-5}		Hilal et al. (2008)	Q	
	6.0×10^{-6}		Modarresi et al. (2005)	Q	248
	1.9×10^{-5}		Yao et al. (2002)	Q	230
	2.8×10^{-5}		Yaws (1999)	?	21
3,3-dimethyl-1-butene C_6H_{12} [558-37-2] PKXHXOTZMFCXSH-UHFFFAOYSA-N	2.8×10^{-5}		Yaws (2003)	X	238
	1.6×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.6×10^{-5}		Gharagheizi et al. (2010)	Q	247
	5.2×10^{-6}		Modarresi et al. (2005)	Q	248
	1.0×10^{-5}		Yao et al. (2002)	Q	230
	2.9×10^{-5}		Yaws (1999)	?	21

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3-dimethyl-2-butene C_6H_{12} [563-79-1] WGLLSSPDPJPLOR-UHFFFAOYSA-N	2.5×10^{-5}		Yaws (2003)	X	238
	1.4×10^{-4}		Wang et al. (2017)	Q	81, 239
	1.1×10^{-4}		Wang et al. (2017)	Q	81, 240
	5.5×10^{-5}		Wang et al. (2017)	Q	81, 241
	1.2×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.7×10^{-5}		Gharagheizi et al. (2010)	Q	247
	4.9×10^{-6}		Modarresi et al. (2005)	Q	248
	2.7×10^{-5}		Yao et al. (2002)	Q	230
	2.6×10^{-5}		Yaws (1999)	?	21
1-heptene C_7H_{14} [592-76-7] ZGEGCLOFRBLKSE-UHFFFAOYSA-N	2.0×10^{-5}		Brockbank (2013)	L	
	2.5×10^{-5}		Plyasunov and Shock (2000)	L	
	2.3×10^{-5}		Duchowicz et al. (2020)	V	187
	2.3×10^{-5}		HSDB (2015)	V	
	2.5×10^{-5}		Mackay et al. (2006a)	V	
	2.5×10^{-5}		Mackay et al. (1993)	V	
	2.5×10^{-5}		Yaws (2003)	X	238
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	
	2.6×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-5}		Gharagheizi et al. (2010)	Q	247
	1.3×10^{-5}		Hilal et al. (2008)	Q	
	3.3×10^{-5}		Modarresi et al. (2007)	Q	68
	3.2×10^{-6}		Modarresi et al. (2005)	Q	248
	2.2×10^{-5}		Yao et al. (2002)	Q	230
	2.1×10^{-5}		English and Carroll (2001)	Q	231, 232
	5.8×10^{-5}		Katritzky et al. (1998)	Q	
	1.7×10^{-5}		Nirmalakhandan et al. (1997)	Q	
2.5×10^{-5}		Yaws (1999)	?	21	
2.5×10^{-5}		Yaws and Yang (1992)	?	21	
	2.4×10^{-5}		Abraham et al. (1990)	?	
2-heptene C_7H_{14} [592-77-8] OTTZHAVKAVGASB-UHFFFAOYSA-N	2.3×10^{-5}		Plyasunov and Shock (2000)	L	
	2.4×10^{-5}		Duchowicz et al. (2020)	V	187
	5.2×10^{-4}		Duchowicz et al. (2020)	Q	
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	272, 244
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	1.7×10^{-5}		Hilal et al. (2008)	Q	
	2.6×10^{-5}		Modarresi et al. (2007)	Q	68
2.1×10^{-5}		English and Carroll (2001)	Q	231, 275	

Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>cis</i> -2-heptene C_7H_{14} [6443-92-1] OTTZHAVKAVGASB-HYXAFXHYSA-N	2.4×10^{-5}		Brockbank (2013)	L	
	1.5×10^{-5}		Yaws (2003)	X	238
	2.0×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-5}		Gharagheizi et al. (2010)	Q	247
	9.1×10^{-6}		Modarresi et al. (2005)	Q	248
	3.0×10^{-5}		Yao et al. (2002)	Q	230, 268
	1.5×10^{-5}		Yaws (1999)	?	21
<i>trans</i> -2-heptene C_7H_{14} [14686-13-6] OTTZHAVKAVGASB-HWKANZROSA-N	2.4×10^{-5}		Brockbank (2013)	L	
	2.4×10^{-5}		Mackay and Shiu (1981)	L	
	2.3×10^{-5}		Duchowicz et al. (2020)	V	187
	2.4×10^{-5}		Mackay et al. (1993)	V	
	2.4×10^{-5}		Eastcott et al. (1988)	V	
	2.4×10^{-5}		Hine and Mookerjee (1975)	V	
	1.5×10^{-5}		Yaws (2003)	X	238
	5.2×10^{-4}		Duchowicz et al. (2020)	Q	
	2.0×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-5}		Gharagheizi et al. (2010)	Q	247
	2.5×10^{-5}		Modarresi et al. (2007)	Q	68
	4.4×10^{-6}		Modarresi et al. (2005)	Q	248
	2.8×10^{-5}		Yao et al. (2002)	Q	230
1.7×10^{-5}		Nirmalakhandan et al. (1997)	Q		
2.4×10^{-5}		Suzuki et al. (1992)	Q	233	
1.5×10^{-5}		Yaws (1999)	?	21	
<i>cis</i> -3-heptene C_7H_{14} [7642-10-6] WZHKDGSXCTSCCK-ALCCZGGFSA-N	1.6×10^{-5}		Yaws (2003)	X	238
	1.9×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-5}		Gharagheizi et al. (2010)	Q	247
	3.8×10^{-6}		Modarresi et al. (2005)	Q	248
	3.1×10^{-5}		Yao et al. (2002)	Q	230
	1.6×10^{-5}		Yaws (1999)	?	21
<i>trans</i> -3-heptene C_7H_{14} [14686-14-7] WZHKDGSXCTSCCK-FNORWQNLISA-N	1.6×10^{-5}		Yaws (2003)	X	238
	1.9×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-5}		Gharagheizi et al. (2010)	Q	247
	4.0×10^{-6}		Modarresi et al. (2005)	Q	248
	2.8×10^{-5}		Yao et al. (2002)	Q	230
	1.6×10^{-5}		Yaws (1999)	?	21
2-methyl-1-hexene C_7H_{14} [6094-02-6] IRUDSQHLKGNCGF-UHFFFAOYSA-N	1.7×10^{-5}		Yaws (2003)	X	238
	1.7×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-5}		Gharagheizi et al. (2010)	Q	247
	3.2×10^{-6}		Modarresi et al. (2005)	Q	248
	2.4×10^{-5}		Yao et al. (2002)	Q	230
	1.7×10^{-5}		Yaws (1999)	?	21

Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-2-hexene C_7H_{14} [2738-19-4] BWEKDYGHDCWEN-UHFFFAOYSA-N	1.6×10^{-5} 1.4×10^{-5} 1.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl- <i>cis</i> -3-hexene C_7H_{14} [15840-60-5] IQANHVBWTVLDTP-WAYWQWQTSAN	1.9×10^{-5} 1.6×10^{-5} 1.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl- <i>trans</i> -3-hexene C_7H_{14} [692-24-0] IQANHVBWTVLDTP-AATRIKPKSANA	1.9×10^{-5} 1.6×10^{-5} 1.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-1-hexene C_7H_{14} [3404-61-3] RITONZMLZWYPHW-UHFFFAOYSA-N	1.9×10^{-5} 2.1×10^{-5} 1.7×10^{-5} 9.9×10^{-6} 1.0×10^{-5} 1.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999)	X Q Q Q Q ?	238 247 248 230 21
3-methyl- <i>cis</i> -2-hexene C_7H_{14} [10574-36-4] JZMUUSXQSKCZNO-ALCCZGGFSA-N	1.6×10^{-5} 1.5×10^{-5} 1.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl- <i>trans</i> -2-hexene C_7H_{14} [20710-38-7] JZMUUSXQSKCZNO-FNORWQNLSAN	1.6×10^{-5} 1.4×10^{-5} 1.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl- <i>cis</i> -3-hexene C_7H_{14} [4914-89-0] FHHSSXNRVNXTBG-SREVYHEPSANA	1.7×10^{-5} 1.4×10^{-5} 1.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl- <i>trans</i> -3-hexene C_7H_{14} [3899-36-3] FHHSSXNRVNXTBG-VOTSOKGWSANA	1.7×10^{-5} 1.3×10^{-5} 1.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-1-hexene C_7H_{14} [3769-23-1] SUWJESCICIOQHO-UHFFFAOYSA-N	1.8×10^{-5} 2.4×10^{-5} 1.7×10^{-5} 4.8×10^{-6} 1.3×10^{-5} 1.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999)	X Q Q Q Q ?	238 247 248 230, 268 21

Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methyl- <i>cis</i> -2-hexene C_7H_{14} [3683-19-0] MBNDKEPQUVZHCM-XQRVVYSFSA-N	1.9×10^{-5} 1.6×10^{-5} 1.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl- <i>trans</i> -2-hexene C_7H_{14} [3683-22-5] MBNDKEPQUVZHCM-GQCTYLIASA-N	1.9×10^{-5} 1.6×10^{-5} 1.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-methyl-1-hexene C_7H_{14} [3524-73-0] JIUFYGIEXPUPL-UHFFFAOYSA-N	1.9×10^{-5} 2.2×10^{-5} 1.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-methyl- <i>cis</i> -2-hexene C_7H_{14} [13151-17-2] GHBKCPRDHLITSE-PLNGDYQASA-N	1.8×10^{-5} 1.7×10^{-5} 1.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-methyl- <i>trans</i> -2-hexene C_7H_{14} [7385-82-2] GHBKCPRDHLITSE-SNAWJCMRSA-N	1.8×10^{-5} 1.7×10^{-5} 1.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl-1-pentene C_7H_{14} [3404-72-6] LIMAEKMEXJTSNI-UHFFFAOYSA-N	1.9×10^{-5} 1.5×10^{-5} 1.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl-2-pentene C_7H_{14} [10574-37-5] WFHALSLYRWWUGH-UHFFFAOYSA-N	1.5×10^{-5} 1.0×10^{-5} 1.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyl-1-pentene C_7H_{14} [2213-32-3] LXQPBCHJNMQU-UHFFFAOYSA-N	1.9×10^{-5} 1.4×10^{-5} 1.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyl-2-pentene C_7H_{14} [625-65-0] VVCFYASOGFVJFN-UHFFFAOYSA-N	2.0×10^{-5} 9.9×10^{-6} 1.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3-dimethyl-1-pentene C_7H_{14} [3404-73-7] TXBZITDWMURSEF-UHFFFAOYSA-N	2.1×10^{-5} 1.8×10^{-5} 1.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,4-dimethyl-1-pentene C_7H_{14} [7385-78-6] WFHXQNMTMDKVJG-UHFFFAOYSA-N	2.0×10^{-5} 2.0×10^{-5} 1.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyl- <i>cis</i> -2-pentene C_7H_{14} [4914-91-4] PPBWEVDSRKEIK-ALCCZGGFSA-N	1.8×10^{-5} 1.2×10^{-5} 1.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyl- <i>trans</i> -2-pentene C_7H_{14} [4914-92-5] PPBWEVDSRKEIK-FNORWQNLSA-N	1.7×10^{-5} 1.3×10^{-5} 1.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,4-dimethyl-1-pentene C_7H_{14} [762-62-9] KLCNJIQZXOQYTE-UHFFFAOYSA-N	2.1×10^{-5} 1.6×10^{-5} 1.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,4-dimethyl- <i>cis</i> -2-pentene C_7H_{14} [762-63-0] BIDIHFPLDRSAMB-WAYWQWQTSA-N	1.9×10^{-5} 1.4×10^{-5} 1.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,4-dimethyl- <i>trans</i> -2-pentene C_7H_{14} [690-08-4] BIDIHFPLDRSAMB-AATRIKPKSA-N	2.1×10^{-5} 1.2×10^{-5} 1.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-ethyl-1-pentene C_7H_{14} [3404-71-5] TWCRRBJSQAZZQB-UHFFFAOYSA-N	1.6×10^{-5} 1.9×10^{-5} 1.5×10^{-5} 2.9×10^{-6} 2.4×10^{-5} 1.6×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999)	X Q Q Q Q ?	238 247 248 230 21
3-ethyl-1-pentene C_7H_{14} [4038-04-4] YVPVQMCSLFDIKA-UHFFFAOYSA-N	1.9×10^{-5} 2.2×10^{-5} 1.7×10^{-5} 4.9×10^{-6} 1.3×10^{-5} 1.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999)	X Q Q Q Q ?	238 247 248 230 21
3-ethyl-2-pentene C_7H_{14} [816-79-5] XMYFZAWUNVHVGI-UHFFFAOYSA-N	1.6×10^{-5} 1.4×10^{-5} 1.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methyl-2-ethyl-1-butene C_7H_{14} [7357-93-9] ADHCYQWFCLQBFG-UHFFFAOYSA-N	1.9×10^{-5}		Yaws (2003)	X	238
	1.6×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.8×10^{-5}		Gharagheizi et al. (2010)	Q	247
2,3,3-trimethyl-1-butene C_7H_{14} [594-56-9] AUYRUAVCWOAHQN-UHFFFAOYSA-N	1.9×10^{-5}		Yaws (2003)	X	238
	1.4×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.9×10^{-5}		Gharagheizi et al. (2010)	Q	247
	3.0×10^{-6}		Modarresi et al. (2005)	Q	248
	7.8×10^{-6}		Yao et al. (2002)	Q	230
	2.0×10^{-5}		Yaws (1999)	?	21
1-octene C_8H_{16} [111-66-0] KWKAKUADMBZCLK-UHFFFAOYSA-N	1.6×10^{-5}		Brockbank (2013)	L	
	1.1×10^{-5}	4400	Plyasunov and Shock (2000)	L	
	1.0×10^{-5}		Mackay and Shiu (1981)	L	
	1.6×10^{-5}		Duchowicz et al. (2020)	V	187
	1.6×10^{-5}		HSDB (2015)	V	
	1.0×10^{-5}		Mackay et al. (2006a)	V	
	1.0×10^{-5}		Mackay et al. (1993)	V	
	1.0×10^{-5}		Hwang et al. (1992)	V	
	1.0×10^{-5}		Meylan and Howard (1991)	V	
	1.0×10^{-5}		Eastcott et al. (1988)	V	
	1.0×10^{-5}		Hine and Mookerjee (1975)	V	
	1.5×10^{-5}		McAuliffe (1966)	V	24
	1.6×10^{-5}		Yaws (2003)	X	238
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	
	2.2×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	243, 244
	9.9×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	1.2×10^{-5}		Gharagheizi et al. (2010)	Q	247
	9.2×10^{-6}		Hilal et al. (2008)	Q	
2.6×10^{-5}	Modarresi et al. (2007)		Q	68	
2.1×10^{-6}	Modarresi et al. (2005)	Q	248		
1.1×10^{-5}	Yaffe et al. (2003)	Q	249, 250		
1.9×10^{-5}	Yao et al. (2002)	Q	230		
1.6×10^{-5}	English and Carroll (2001)	Q	231, 232		
5.7×10^{-5}	Katritzky et al. (1998)	Q			
8.4×10^{-6}	Russell et al. (1992)	Q	280		
1.8×10^{-5}	Suzuki et al. (1992)	Q	233		
1.6×10^{-5}	Meylan and Howard (1991)	Q			
1.3×10^{-5}	Nirmalakhandan and Speece (1988)	Q			
1.6×10^{-5}	Yaws (1999)	?	21		
1.6×10^{-5}	Yaws and Yang (1992)	?	21		
1.6×10^{-5}	Abraham et al. (1990)	?			

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>cis</i> -2-octene C_8H_{16} [7642-04-8] ILPBINAXDRFYPL-HYXAFXHYSA-N	8.3×10^{-6} 1.9×10^{-5} 9.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
<i>trans</i> -2-octene C_8H_{16} [13389-42-9] ILPBINAXDRFYPL-HWKANZROSA-N	8.3×10^{-6} 1.7×10^{-5} 9.6×10^{-6} 8.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	238 247 21
<i>cis</i> -3-octene C_8H_{16} [14850-22-7] YCTDZYMMFQCTEO-ALCCZGGFSA-N	8.9×10^{-6} 1.7×10^{-5} 9.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
<i>trans</i> -3-octene C_8H_{16} [14919-01-8] YCTDZYMMFQCTEO-FNORWQNLSA-N	8.6×10^{-6} 1.6×10^{-5} 9.6×10^{-6} 8.8×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	238 247 21
<i>cis</i> -4-octene C_8H_{16} [7642-15-1] IRUCBBFNLDIMIK-FPLPWBNSA-N	8.9×10^{-6} 1.7×10^{-5} 9.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
<i>trans</i> -4-octene C_8H_{16} [14850-23-8] IRUCBBFNLDIMIK-BQYQJAHWSA-N	8.9×10^{-6} 1.6×10^{-5} 9.6×10^{-6} 9.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	238 247 21
2-methyl-1-heptene C_8H_{16} [15870-10-7] RCBGGJURENJHKV-UHFFFAOYSA-N	9.6×10^{-6} 1.5×10^{-5} 9.8×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-2-heptene C_8H_{16} [627-97-4] WEPNJTDVIIKRIK-UHFFFAOYSA-N	8.9×10^{-6} 1.2×10^{-5} 9.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl- <i>cis</i> -3-heptene C_8H_{16} [20488-34-0] CYEZJYAMLNTSKN-SREVYHEPSA-N	1.1×10^{-5} 1.3×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl- <i>trans</i> -3-heptene C_8H_{16} [692-96-6] CYEZJYAMLNTSKN-VOTSOKGWSA-N	1.1×10^{-5} 1.3×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methyl-1-heptene C_8H_{16} [4810-09-7] QDMFTFWKTYXBIW-UHFFFAOYSA-N	1.1×10^{-5} 1.8×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl- <i>cis</i> -2-heptene C_8H_{16} [22768-19-0] OFKLSPUVNMOIJB-YVMONPNESA-N	9.0×10^{-6} 1.1×10^{-5} 9.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl- <i>trans</i> -2-heptene C_8H_{16} [22768-20-3] OFKLSPUVNMOIJB-VMPITWQZSA-N	9.0×10^{-6} 1.1×10^{-5} 9.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl- <i>cis</i> -3-heptene C_8H_{16} [22768-17-8] AAUHUDBDDBJONC-FPLPWBNSA-N	9.2×10^{-6} 1.1×10^{-5} 9.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl- <i>trans</i> -3-heptene C_8H_{16} [22768-18-9] AAUHUDBDDBJONC-BQYQJAHWSA-N	9.2×10^{-6} 1.1×10^{-5} 9.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-1-heptene C_8H_{16} [13151-05-8] BFGOGLKYJXQPJZ-UHFFFAOYSA-N	1.1×10^{-5} 1.9×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl- <i>cis</i> -2-heptene C_8H_{16} [66225-16-9] SVGLFIBXVQUQY-XQRVVYSFSA-N	1.1×10^{-5} 1.3×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl- <i>trans</i> -2-heptene C_8H_{16} [66225-17-0] SVGLFIBXVQUQY-GQCTYLIASA-N	1.1×10^{-5} 1.3×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl- <i>cis</i> -3-heptene C_8H_{16} [14255-24-4] KKVVJQGDNYIIMN-VURMDHGXSA-N	9.0×10^{-6} 1.1×10^{-5} 9.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl- <i>trans</i> -3-heptene C_8H_{16} [13714-85-7] KKVVJQGDNYIIMN-SOFGYWHQSA-N	9.0×10^{-6} 1.1×10^{-5} 9.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
5-methyl-1-heptene C_8H_{16} [13151-04-7] WNEYWVBECXCQRT-UHFFFAOYSA-N	1.1×10^{-5} 1.9×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-methyl- <i>cis</i> -2-heptene C_8H_{16} [24608-84-2] VIHUHUGDEZCPDK-XQRVVYSFSA-N	9.9×10^{-6} 1.5×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-methyl- <i>trans</i> -2-heptene C_8H_{16} [24608-85-3] VIHUHUGDEZCPDK-GQCTYLIASA-N	9.9×10^{-6} 1.5×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-methyl- <i>cis</i> -3-heptene C_8H_{16} [50422-80-5] YMNTZRCUPAYGLG-SREVVYHEPSA-N	1.1×10^{-5} 1.3×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-methyl- <i>trans</i> -3-heptene C_8H_{16} [53510-18-2] YMNTZRCUPAYGLG-VOTSOKGWSA-N	1.1×10^{-5} 1.3×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
6-methyl-1-heptene C_8H_{16} [5026-76-6] DFVOXRAAHOJJBNUHFFFAOYSA-N	1.1×10^{-5} 1.9×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
6-methyl- <i>cis</i> -2-heptene C_8H_{16} [66225-18-1] LXBJRNXXTAWCKU-PLNGDYQASA-N	1.0×10^{-5} 1.5×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
6-methyl- <i>trans</i> -2-heptene C_8H_{16} [51065-65-7] LXBJRNXXTAWCKU-SNAWJCMRSA-N	1.0×10^{-5} 1.5×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
6-methyl- <i>cis</i> -3-heptene C_8H_{16} [66225-19-2] PMPISKBGRHSPEE-WAYWQWQTSA-N	1.1×10^{-5} 1.4×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
6-methyl- <i>trans</i> -3-heptene C_8H_{16} [66225-20-5] PMPISKBGRHSPEE-AATRIKPKSA-N	1.0×10^{-5} 1.4×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2-dimethyl- <i>cis</i> -3-hexene C_8H_{16} [690-92-6] JPLZSSHKQZJYTJ-SREVYHEPSA-N	1.2×10^{-5} 1.1×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyl- <i>trans</i> -3-hexene C_8H_{16} [690-93-7] JPLZSSHKQZJYTJ-VOTSOKGWSA-N	1.4×10^{-5} 9.4×10^{-6} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl-1-hexene C_8H_{16} [16746-86-4] LVLXQRZPKUFJJQ-UHFFFAOYSA-N	1.2×10^{-5} 1.2×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl-2-hexene C_8H_{16} [7145-20-2] RGYAVZGBAJFMIZ-UHFFFAOYSA-N	9.1×10^{-6} 7.8×10^{-6} 9.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl- <i>cis</i> -3-hexene C_8H_{16} [59643-75-3] PRTXQHCLTIKAAJ-VURMDHGXA-N	1.1×10^{-5} 9.2×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl- <i>trans</i> -3-hexene C_8H_{16} [66225-30-7] PRTXQHCLTIKAAJ-SOFGYWHQSA-N	1.1×10^{-5} 9.2×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyl-1-hexene C_8H_{16} [16746-87-5] PKVDGQHNRICJLA-UHFFFAOYSA-N	1.1×10^{-5} 1.2×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyl-2-hexene C_8H_{16} [14255-23-3] IZSBIPQYBGDXJZ-UHFFFAOYSA-N	1.2×10^{-5} 8.4×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyl- <i>cis</i> -3-hexene C_8H_{16} [37549-89-6] VFCHEMABGOYOQI-VURMDHGXA-N	1.2×10^{-5} 8.0×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyl- <i>trans</i> -3-hexene C_8H_{16} [61847-78-7] VFCHEMABGOYOQI-SOFGYWHQSA-N	1.2×10^{-5} 7.7×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,5-dimethyl-1-hexene C_8H_{16} [6975-92-4] ISZWTVCVSJVEOL-UHFFFAOYSA-N	1.1×10^{-5} 1.2×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5-dimethyl-2-hexene C_8H_{16} [3404-78-2] VFZIUUUQFYZBR-UHFFFAOYSA-N	1.2×10^{-5} 8.8×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5-dimethyl- <i>cis</i> -3-hexene C_8H_{16} [10557-44-5] KNCKMKWVOMRUHKZ-WAYWQWQTSAN	1.3×10^{-5} 9.6×10^{-6} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5-dimethyl- <i>trans</i> -3-hexene C_8H_{16} [692-70-6] KNCKMKWVOMRUHKZ-AATRIKPKSAN	1.4×10^{-5} 9.6×10^{-6} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3-dimethyl-1-hexene C_8H_{16} [3404-77-1] RXYYKIMRVXDSFR-UHFFFAOYSA-N	1.3×10^{-5} 1.5×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyl-1-hexene C_8H_{16} [16745-94-1] OWWRMMIWAOBFBK-UHFFFAOYSA-N	1.1×10^{-5} 1.9×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyl- <i>cis</i> -2-hexene C_8H_{16} [19550-81-3] FMNLVKMLDPGPY-ALCCZGGFSA-N	1.0×10^{-5} 9.8×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyl- <i>trans</i> -2-hexene C_8H_{16} [19550-82-4] FMNLVKMLDPGPY-FNORWQNLSA-N	1.0×10^{-5} 9.8×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyl- <i>cis</i> -3-hexene C_8H_{16} [19550-87-9] XTUXVDJHGIEBAA-FPLPWBNLSA-N	9.0×10^{-6} 7.9×10^{-6} 9.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyl- <i>trans</i> -3-hexene C_8H_{16} [19550-88-0] XTUXVDJHGIEBAA-BQYQJAHWSA-N	9.0×10^{-6} 7.9×10^{-6} 9.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,5-dimethyl-1-hexene C_8H_{16} [7423-69-0] FEZKAPRRVNNJTK-UHFFFAOYSA-N	1.3×10^{-5} 1.5×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,5-dimethyl- <i>cis</i> -2-hexene C_8H_{16} [66225-31-8] BQAZYKYBFAMHPG-YVMONPNESA-N	1.1×10^{-5} 8.7×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,5-dimethyl- <i>trans</i> -2-hexene C_8H_{16} [66225-12-5] BQAZYKYBFAMHPG-VMPITWQZSA-N	1.1×10^{-5} 8.7×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,4-dimethyl-1-hexene C_8H_{16} [1647-08-1] SUJVMIXNUAJEY-UHFFFAOYSA-N	1.2×10^{-5} 1.6×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,4-dimethyl- <i>cis</i> -2-hexene C_8H_{16} OQEVASXHCRRQGF-ALCCZGGFSA-N	1.3×10^{-5} 1.1×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,4-dimethyl- <i>trans</i> -2-hexene C_8H_{16} [19550-83-5] OQEVASXHCRRQGF-FNORWQNLSA-N	1.3×10^{-5} 1.1×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,5-dimethyl-1-hexene C_8H_{16} [16106-59-5] UFWIBUBEFUNVNI-UHFFFAOYSA-N	1.2×10^{-5} 1.7×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,5-dimethyl- <i>cis</i> -2-hexene C_8H_{16} [65036-71-7] OAVNNZUEVHDCKP-WAYWQWQZSA-N	1.2×10^{-5} 1.2×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,5-dimethyl- <i>trans</i> -2-hexene C_8H_{16} [66225-14-7] OAVNNZUEVHDCKP-AATRIKPKSA-N	1.2×10^{-5} 1.2×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5,5-dimethyl-1-hexene C_8H_{16} [7116-86-1] KZJIOVQKSAOPOP-UHFFFAOYSA-N	1.4×10^{-5} 1.4×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
5,5-dimethyl- <i>cis</i> -2-hexene C_8H_{16} [39761-61-0] NWZJLSKAFZXSQH-WAYWQWQTS-A-N	1.2×10^{-5} 1.1×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5,5-dimethyl- <i>trans</i> -2-hexene C_8H_{16} [39782-43-9] NWZJLSKAFZXSQH-AATRIKPKSA-N	1.3×10^{-5} 1.0×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-ethyl-1-hexene C_8H_{16} [1632-16-2] XTVRLCUJHGUXCP-UHFFFAOYSA-N	9.2×10^{-6} 2.0×10^{-5} 9.8×10^{-6} 9.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	238 247 21
3-ethyl-1-hexene C_8H_{16} [3404-58-8] OLGHJTHQWQKJQQ-UHFFFAOYSA-N	1.2×10^{-5} 1.7×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-ethyl-3-hexene C_8H_{16} [16789-51-8] AUJLDZJNMXNESO-UHFFFAOYSA-N	1.0×10^{-5} 9.6×10^{-6} 9.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-ethyl- <i>cis</i> -2-hexene C_8H_{16} [36880-72-5] QEMJIDSLEPYRLM-YVMONPNESA-N	9.2×10^{-6} 1.1×10^{-5} 9.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-ethyl- <i>trans</i> -2-hexene C_8H_{16} [66225-15-8] QEMJIDSLEPYRLM-VMPITWQZSA-N	9.2×10^{-6} 1.1×10^{-5} 9.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-ethyl-1-hexene C_8H_{16} [16746-85-3] OPMUAJRVOWSBTP-UHFFFAOYSA-N	1.3×10^{-5} 1.7×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-ethyl- <i>cis</i> -2-hexene C_8H_{16} [54616-49-8] STHONQMAWQLWLX-DAXSKMNVSA-N	1.1×10^{-5} 1.3×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-ethyl- <i>trans</i> -2-hexene C_8H_{16} [19781-63-6] STHONQMAWQLWLX-QPJXVBHSA-N	1.1×10^{-5} 1.3×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3-trimethyl-1-pentene C_8H_{16} [560-23-6] TUSBCMPNIOJUBX-UHFFFAOYSA-N	1.2×10^{-5} 1.2×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4-trimethyl-1-pentene C_8H_{16} [565-76-4] FAWUHEYSSPPNSH-UHFFFAOYSA-N	1.2×10^{-5} 1.1×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4-trimethyl-2-pentene C_8H_{16} [565-77-5] SZFRZEBLZFTODC-UHFFFAOYSA-N	1.0×10^{-5} 6.8×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,4-trimethyl-1-pentene C_8H_{16} [107-39-1] FXNDIJDIPNCZQJ-UHFFFAOYSA-N	1.2×10^{-5} 1.3×10^{-5} 9.0×10^{-6} 1.2×10^{-5} 2.6×10^{-6} 1.1×10^{-5} 1.2×10^{-5}		Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999)	X Q Q Q Q Q ?	238 100 247 248 230 21
2,4,4-trimethyl-2-pentene C_8H_{16} [107-40-4] LAAVYEUEJEMRIGF-UHFFFAOYSA-N	1.2×10^{-5} 1.1×10^{-5} 6.8×10^{-6} 1.2×10^{-5} 5.9×10^{-6} 1.0×10^{-5} 1.2×10^{-5}		Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999)	X Q Q Q Q Q ?	238 100 247 248 230 21
3,3,4-trimethyl-1-pentene C_8H_{16} [560-22-5] LLFHCOGPD CJMKY-UHFFFAOYSA-N	1.3×10^{-5} 1.5×10^{-5} 1.4×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,4-trimethyl-1-pentene C_8H_{16} [564-03-4] BOPVNMJIDZBQB-UHFFFAOYSA-N	1.3×10^{-5} 1.5×10^{-5} 1.4×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,4-trimethyl-2-pentene C_8H_{16} [598-96-9] FZQMZR XKWHQJAG-UHFFFAOYSA-N	1.1×10^{-5}		HSDB (2015)	Q	100
3,4,4-trimethyl- <i>cis</i> -2-pentene C_8H_{16} [39761-64-3] FZQMZR XKWHQJAG-SREVVYHEPSA-N	1.1×10^{-5} 8.9×10^{-6} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,4,4-trimethyl- <i>trans</i> -2-pentene C_8H_{16} [39761-57-4] FZQMZR XKWHQJAG-VOTSOKGWSA-N	1.1×10^{-5} 8.9×10^{-6} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-3-ethyl-1-pentene C_8H_{16} [19780-66-6] HPHHYSWOBXEIRG-UHFFFAOYSA-N	1.1×10^{-5} 1.2×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-3-ethyl-2-pentene C_8H_{16} [19780-67-7] FQYUGAXHZSQH MU-UHFFFAOYSA-N	1.1×10^{-5} 6.8×10^{-6} 9.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-2-ethyl-1-pentene C_8H_{16} [3404-67-9] YXLCVBVDFKWWRW-UHFFFAOYSA-N	1.2×10^{-5} 1.2×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-3-ethyl-1-pentene C_8H_{16} [6196-60-7] PHHHEKOJKDYRIN-UHFFFAOYSA-N	1.1×10^{-5} 1.9×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-2-ethyl-1-pentene C_8H_{16} [3404-80-6] TVBQWTDYXVGWJL-UHFFFAOYSA-N	1.2×10^{-5} 1.2×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-3-ethyl-1-pentene C_8H_{16} [61847-80-1] DTNALCAUPPLROB-UHFFFAOYSA-N	1.2×10^{-5} 1.6×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-3-ethyl- <i>cis</i> -2-pentene C_8H_{16} [42067-48-1] DSTFDBMUTNIZGD-YVMONPNESA-N	1.0×10^{-5} 9.8×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-3-ethyl- <i>trans</i> -2-pentene C_8H_{16} [42067-49-2] DSTFDBMUTNIZGD-VMPITWQZSA-N	1.1×10^{-5} 9.3×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-propyl-1-pentene C_8H_{16} [15918-08-8] FYUUBXZYRPRIHC-UHFFFAOYSA-N	1.0×10^{-5} 1.5×10^{-5} 9.8×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-isopropyl-1-pentene C_8H_{16} [16746-02-4] QOUCFWFZPKWYRE-UHFFFAOYSA-N	1.1×10^{-5} 1.3×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3-dimethyl-2-ethyl-1-butene C_8H_{16} [18231-53-3] KQRPZENSXZIOQO-UHFFFAOYSA-N	1.2×10^{-5} 1.2×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-2-isopropyl-1-butene C_8H_{16} [111823-35-9] GIBPFTYFAOOKOV-UHFFFAOYSA-N	1.3×10^{-5} 1.0×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-nonene C_9H_{18} [124-11-8] JRZJOMJEPLMPRA-UHFFFAOYSA-N	1.1×10^{-5} 1.2×10^{-5} 1.2×10^{-5} 1.2×10^{-5} 1.2×10^{-5} 1.2×10^{-5} 1.6×10^{-3} 1.9×10^{-5} 8.9×10^{-6} 6.5×10^{-6} 1.1×10^{-5} 1.7×10^{-5} 1.2×10^{-5} 1.0×10^{-5} 1.2×10^{-5} 1.2×10^{-5} 1.2×10^{-5}		Brockbank (2013) Plyasunov and Shock (2000) Duchowicz et al. (2020) Mackay et al. (2006a) Mackay et al. (1993) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaffe et al. (2003) Yao et al. (2002) English and Carroll (2001) Nirmalakhandan et al. (1997) Yaws (1999) Yaws and Yang (1992) Abraham et al. (1990)	L L V V V X Q Q Q Q Q Q Q Q Q Q Q ?	187 238 247 249, 273 230 231, 232 21 21
2-methyl-1-octene C_9H_{18} [4588-18-5] FBEDQPGLIKZGIN-UHFFFAOYSA-N	6.2×10^{-6} 1.3×10^{-5} 6.9×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-decene $C_{10}H_{20}$ [872-05-9] AFFLGGQVNFPEV-UHFFFAOYSA-N	8.6×10^{-6} 1.8×10^{-5} 3.7×10^{-6} 3.3×10^{-6} 3.7×10^{-6} 1.6×10^{-3} 2.4×10^{-5} 7.3×10^{-6} 4.2×10^{-6} 4.7×10^{-6}		Brockbank (2013) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (1993) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999)	L V V V X Q Q Q Q Q ?	187 238 247 21

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-1-nonene $C_{10}H_{20}$ [2980-71-4] YLZQHQUVNZVGOK-UHFFFAOYSA-N	4.3×10^{-6} 1.0×10^{-5} 5.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-undecene $C_{11}H_{22}$ [821-95-4] DCTOHCCUXLBQMS-UHFFFAOYSA-N	4.5×10^{-6} 6.7×10^{-6} 2.9×10^{-5} 6.7×10^{-6} 2.2×10^{-6} 1.2×10^{-5} 4.6×10^{-6}		Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yao et al. (2002) Yaws (1999)	X Q Q Q Q Q ?	238 100 247 230 21
2-methyl-1-decene $C_{11}H_{22}$ [13151-27-4] HLMACKQLXSEXY-UHFFFAOYSA-N	3.4×10^{-6} 1.8×10^{-5} 4.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-dodecene $C_{12}H_{24}$ [112-41-4] CRSBERNSMYQZNG-UHFFFAOYSA-N	5.1×10^{-6} 2.3×10^{-6} 3.4×10^{-5} 7.1×10^{-6} 1.5×10^{-6} 9.9×10^{-6} 5.2×10^{-6}		Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yao et al. (2002) Yaws (1999)	X Q Q Q Q Q ?	238 100 247 230 21
2-methyl-1-undecene $C_{12}H_{24}$ [18516-37-5] SJVKHZYVCVKEGM-UHFFFAOYSA-N	3.4×10^{-6} 4.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
2,2,4,6,6-pentamethyl-3-heptene $C_{12}H_{24}$ [123-48-8] NBUMCEJRJRLCA-UHFFFAOYSA-N	3.6×10^{-6} 5.2×10^{-7} 1.8×10^{-5} 1.5×10^{-5}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1-tridecene $C_{13}H_{26}$ [2437-56-1] VQOXUMQBYILCKR-UHFFFAOYSA-N	5.8×10^{-6} 5.8×10^{-6} 9.4×10^{-6} 3.8×10^{-6} 3.9×10^{-5} 8.8×10^{-6} 9.2×10^{-6} 5.9×10^{-6}		Yaws (2003) Yaws (2003) Dupeux et al. (2022) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	X X Q Q Q Q Q Q ?	259 238 260 100 247 247 230 21
2-methyl-1-dodecene $C_{13}H_{26}$ [16435-49-7] PWRBDKMPAZFCV-UHFFFAOYSA-N	4.1×10^{-6} 2.4×10^{-5} 4.9×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
1-tetradecene $C_{14}H_{28}$ [1120-36-1] HFDVRLIODXPAHB-UHFFFAOYSA-N	3.0×10^{-6} 1.4×10^{-5} 1.2×10^{-6} 4.3×10^{-5}		Brockbank (2013) Yaws (2003) HSDB (2015) Gharagheizi et al. (2012)	L X Q Q	
	1.3×10^{-5} 1.5×10^{-5}		Gharagheizi et al. (2010) Yaws (1999)	Q ?	247 21
2-tetradecene $C_{14}H_{28}$ [638-60-8] OBDUMNZXAIUUTH-UHFFFAOYSA-N	7.5×10^{-6} 4.0×10^{-5} 4.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-1-tridecene $C_{14}H_{28}$ [18094-01-4] VNBHQHLCULRDN-UHFFFAOYSA-N	8.9×10^{-6} 3.0×10^{-5} 6.9×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-pentadecene $C_{15}H_{30}$ [13360-61-7] PJLHTVIBELQURV-UHFFFAOYSA-N	2.2×10^{-6} 3.5×10^{-5} 4.7×10^{-5} 2.6×10^{-5} 8.7×10^{-5} 3.6×10^{-5}		Brockbank (2013) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	L X Q Q Q ?	
					230, 268 21
2-methyl-1-tetradecene $C_{15}H_{30}$ [52254-38-3] WSNMNSLVXDWAFZ-UHFFFAOYSA-N	1.1×10^{-5} 2.9×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-hexadecene $C_{16}H_{32}$ [629-73-2] GQEZCXVZFLOKMC-UHFFFAOYSA-N	5.7×10^{-5} 4.9×10^{-5} 6.7×10^{-5} 5.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	238 247 21
2-methyl-1-pentadecene $C_{16}H_{32}$ [29833-69-0] FWQJRKLXMTXDY-UHFFFAOYSA-N	2.5×10^{-5} 3.1×10^{-5} 2.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethylpentadecane $C_{17}H_{36}$ [61868-07-3] TXGHMPJBDYZJLF-UHFFFAOYSA-N	1.1×10^{-5} 4.0×10^{-6} 2.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
1,2-butadiene C_4H_6 [590-19-2] QNRMTGGDHLBXQZ-UHFFFAOYSA-N	1.2×10^{-4}		Yaws (2003)	X	238	
	1.0×10^{-4}		HSDB (2015)	Q	100	
	1.5×10^{-4}		Gharagheizi et al. (2012)	Q		
	1.2×10^{-4}		Gharagheizi et al. (2010)	Q	247	
	1.1×10^{-4}		Hilal et al. (2008)	Q		
	1.2×10^{-4}		Yaws (1999)	?	21	
1,3-butadiene C_4H_6 [106-99-0] KAKZBPTYRLMSJV-UHFFFAOYSA-N	1.4×10^{-4}	3200	Plyasunov and Shock (2000)	L		
	1.3×10^{-4}		Mackay and Shiu (1981)	L		
	1.4×10^{-4}	4500	Wilhelm et al. (1977)	L		
	1.4×10^{-4}		Ross and Hudson (1957)	M		
	1.3×10^{-4}		Duchowicz et al. (2020)	V	187	
	1.3×10^{-4}		HSDB (2015)	V		
	1.3×10^{-4}		Mackay et al. (2006a)	V		
	3.9×10^{-6}		Lide and Frederikse (1995)	V		
	4.8×10^{-5}		Mackay et al. (1993)	V		
	5.0×10^{-5}		Hwang et al. (1992)	V		
	1.6×10^{-4}		Hine and Mookerjee (1975)	V		
	1.2×10^{-4}		Irmann (1965)	V		
	1.4×10^{-4}		Yaws (2003)	X	238	
	1.5×10^{-4}		Irmann (1965)	C		
	1.5×10^{-4}		Hayer et al. (2022)	Q	20	
	5.6×10^{-3}		Duchowicz et al. (2020)	Q		
	6.3×10^{-4}		Wang et al. (2017)	Q	81, 239	
	1.4×10^{-4}		Wang et al. (2017)	Q	81, 240	
	2.0×10^{-4}		Wang et al. (2017)	Q	81, 241	
	2.7×10^{-4}		Gharagheizi et al. (2012)	Q		
	2.0×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244	
	9.9×10^{-5}		Raventos-Duran et al. (2010)	Q	245	
	1.2×10^{-4}		Raventos-Duran et al. (2010)	Q	246	
	1.4×10^{-4}		Gharagheizi et al. (2010)	Q	247	
	1.8×10^{-4}		Hilal et al. (2008)	Q		
	1.8×10^{-4}		Modarresi et al. (2007)	Q	68	
			3600	Kühne et al. (2005)	Q	
	1.3×10^{-5}			Modarresi et al. (2005)	Q	248
	1.3×10^{-4}			Yaffe et al. (2003)	Q	249, 250
2.5×10^{-4}			Yao et al. (2002)	Q	230	
1.3×10^{-4}			English and Carroll (2001)	Q	231, 275	
1.8×10^{-4}			Suzuki et al. (1992)	Q	233	
9.2×10^{-5}			Nirmalakhandan and Speece (1988)	Q		
		4100	Kühne et al. (2005)	?		
1.4×10^{-4}			Yaws (1999)	?	21	
1.4×10^{-4}			Yaws and Yang (1992)	?	21	

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3-pentadiene C_5H_8 [504-60-9] PMJHHCWVYXUKFD-UHFFFAOYSA-N	1.4×10^{-4}		HSDB (2015)	Q	100
<i>trans</i> -1,3-pentadiene C_5H_8 [2004-70-8] PMJHHCWVYXUKFD-SNAWJCMRSA-N	1.0×10^{-4}		Yaws (2003)	X	238
	8.2×10^{-5}		HSDB (2015)	Q	100
	2.2×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.0×10^{-4}		Gharagheizi et al. (2010)	Q	247
	1.1×10^{-4}		Yaws (1999)	?	21
<i>cis</i> -1,3-pentadiene C_5H_8 [1574-41-0] PMJHHCWVYXUKFD-PLNGDYQASA-N	1.1×10^{-4}		Yaws (2003)	X	238
	2.4×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.0×10^{-4}		Gharagheizi et al. (2010)	Q	247
	1.1×10^{-4}		Yaws (1999)	?	21
1,4-pentadiene C_5H_8 [591-93-5] QYZLKGVSQXAMU-UHFFFAOYSA-N	8.0×10^{-5}		Plyasunov and Shock (2000)	L	
	8.3×10^{-5}		Mackay and Shiu (1981)	L	
	8.2×10^{-5}		Duchowicz et al. (2020)	V	187
	8.4×10^{-5}		Mackay et al. (2006a)	V	
	8.4×10^{-5}		Mackay et al. (1993)	V	
	8.2×10^{-5}		Hine and Mookerjee (1975)	V	
	8.3×10^{-5}		Yaws (2003)	X	238
	5.6×10^{-3}		Duchowicz et al. (2020)	Q	
	2.1×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	7.8×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	8.5×10^{-5}		Gharagheizi et al. (2010)	Q	247
	9.9×10^{-5}		Hilal et al. (2008)	Q	
	8.2×10^{-5}		Modarresi et al. (2007)	Q	68
	1.2×10^{-5}		Modarresi et al. (2005)	Q	248
	8.4×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	1.1×10^{-4}		Yao et al. (2002)	Q	230, 268
9.9×10^{-5}		English and Carroll (2001)	Q	231, 261	
1.5×10^{-4}		Russell et al. (1992)	Q	280	
1.6×10^{-4}		Suzuki et al. (1992)	Q	233	
7.3×10^{-5}		Nirmalakhandan and Speece (1988)	Q		
8.4×10^{-5}		Yaws (1999)	?	21	
8.3×10^{-5}		Yaws and Yang (1992)	?	21	
2,3-pentadiene C_5H_8 [591-96-8] PODAMDJNMAKAZ-UHFFFAOYSA-N	1.1×10^{-4}		Yaws (2003)	X	238
	8.8×10^{-5}		Gharagheizi et al. (2012)	Q	
	9.6×10^{-5}		Gharagheizi et al. (2010)	Q	247
	1.1×10^{-4}		Hilal et al. (2008)	Q	
	1.1×10^{-4}		Yaws (1999)	?	21

Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) [$\frac{\text{mol}}{\text{m}^3 \text{Pa}}$]	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2-hexadiene C_6H_{10} [592-44-9] XIAJQOBRHVKGSP-UHFFFAOYSA-N	7.5×10^{-5} 1.2×10^{-4} 9.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
<i>cis</i> -1,3-hexadiene C_6H_{10} [14596-92-0] AHAREKHAZNPPMI-WAYWQWQTSAN	7.7×10^{-5} 2.1×10^{-4} 8.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
<i>trans</i> -1,3-hexadiene C_6H_{10} [20237-34-7] AHAREKHAZNPPMI-AATRIKPKSAN	7.7×10^{-5} 2.1×10^{-4} 8.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1,4-hexadiene C_6H_{10} [592-45-0] PRBHEGAFLDMLAL-UHFFFAOYSA-N	8.4×10^{-5}		HSDB (2015)	Q	100
<i>cis</i> -1,4-hexadiene C_6H_{10} [7318-67-4] PRBHEGAFLDMLAL-XQRVVVSFSAN	8.3×10^{-5} 1.7×10^{-4} 8.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
<i>trans</i> -1,4-hexadiene C_6H_{10} [7319-00-8] PRBHEGAFLDMLAL-GQCTYLIASAN	8.3×10^{-5} 1.7×10^{-4} 8.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1,5-hexadiene C_6H_{10} [592-42-7] PYGSKMBEVAICCR-UHFFFAOYSA-N	6.8×10^{-5} 7.0×10^{-5} 6.9×10^{-5} 6.7×10^{-5} 7.3×10^{-5} 8.1×10^{-5} 5.6×10^{-3} 2.0×10^{-4} 7.7×10^{-5} 5.8×10^{-5} 1.0×10^{-4} 9.4×10^{-6} 5.8×10^{-5} 3.5×10^{-5} 7.5×10^{-5} 1.2×10^{-4} 5.8×10^{-5} 8.4×10^{-5}		Plyasunov and Shock (2000) Duchowicz et al. (2020) Mackay et al. (2006a) Hwang et al. (1992) Hine and Mookerjee (1975) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Modarresi et al. (2005) Yaffe et al. (2003) Yao et al. (2002) English and Carroll (2001) Suzuki et al. (1992) Nirmalakhandan and Speece (1988) Yaws (1999)	L V V V V X Q Q Q Q Q Q Q Q Q Q Q Q Q ?	187 238 247 68 248 249, 250 230 231, 232 233 21

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3-hexadiene C_6H_{10} [592-49-4] DPUXQWOMYBMHRN-UHFFFAOYSA-N	8.1×10^{-5} 6.7×10^{-5} 8.0×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
<i>cis</i> -2, <i>cis</i> -4-hexadiene C_6H_{10} [6108-61-8] APPOKADJQUIAHP-GLIMQPGKSA-N	7.1×10^{-5} 1.8×10^{-4} 7.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
<i>cis</i> -2, <i>trans</i> -4-hexadiene C_6H_{10} [5194-50-3] APPOKADJQUIAHP-CIODKQPSA-N	6.8×10^{-5} 1.8×10^{-4} 7.5×10^{-5} 7.0×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	238 247 21
<i>trans</i> -2, <i>trans</i> -4-hexadiene C_6H_{10} [5194-51-4] APPOKADJQUIAHP-GGWOSOGESA-N	7.0×10^{-5} 1.7×10^{-4} 7.5×10^{-5} 7.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	238 247 21
2-methyl-1,4-pentadiene C_6H_{10} [763-30-4] DRWYRROCDFQZQF-UHFFFAOYSA-N	8.8×10^{-5} 1.1×10^{-4} 9.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-1, <i>cis</i> -3-pentadiene C_6H_{10} [1501-60-6] RCJMVGJKROQDCB-PLNGDYQASA-N	7.3×10^{-5} 1.6×10^{-4} 7.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-1, <i>trans</i> -3-pentadiene C_6H_{10} [926-54-5] RCJMVGJKROQDCB-SNAWJCMRSA-N	7.3×10^{-5} 1.6×10^{-4} 7.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-2,3-pentadiene C_6H_{10} [3043-33-2] JWMDOGMKTRMFDS-UHFFFAOYSA-N	7.6×10^{-5} 5.2×10^{-5} 8.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-1,2-pentadiene C_6H_{10} [7417-48-3] INFVCVIZNSUFGK-UHFFFAOYSA-N	7.8×10^{-5} 7.0×10^{-5} 7.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-1, <i>cis</i> -3-pentadiene C_6H_{10} [2787-45-3] BOGRNZQRTNVZCZ-WAYWQWQTSA-N	7.2×10^{-5} 1.6×10^{-4} 7.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methyl-1, <i>trans</i> -3-pentadiene C_6H_{10} [2787-43-1] BOGRNZQRTNVZCZ-AATRIKPKSA-N	7.2×10^{-5} 1.6×10^{-4} 7.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-1,4-pentadiene C_6H_{10} [1115-08-8] IKQUUYDRTYXAP-UHFFFAOYSA-N	8.6×10^{-5} 1.9×10^{-4} 9.6×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-1,2-pentadiene C_6H_{10} [13643-05-5] CAAAXQFHdyHTTC-UHFFFAOYSA-N	7.8×10^{-5} 9.7×10^{-5} 9.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-1,3-pentadiene C_6H_{10} [926-56-7] CJSBUWDGPGXGFGA-UHFFFAOYSA-N	7.3×10^{-5} 1.6×10^{-4} 7.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-ethyl-1,3-butadiene C_6H_{10} [3404-63-5] IGLWQCMNTGCUBB-UHFFFAOYSA-N	7.4×10^{-5} 2.2×10^{-4} 8.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl-1,3-butadiene C_6H_{10} [513-81-5] SDJHPPZKZZWAKF-UHFFFAOYSA-N	2.0×10^{-4} 2.0×10^{-4} 2.0×10^{-4} 2.0×10^{-4} 2.1×10^{-4} 7.7×10^{-5} 6.0×10^{-4} 1.3×10^{-4} 7.8×10^{-5} 1.9×10^{-4} 8.1×10^{-6} 4.7×10^{-5} 3.8×10^{-5} 9.9×10^{-5} 5.2×10^{-5} 4.7×10^{-5} 8.0×10^{-5}		Duchowicz et al. (2020) Mackay et al. (2006a) Mackay et al. (1993) Meylan and Howard (1991) Hine and Mookerjee (1975) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2005) Yaffe et al. (2003) Yao et al. (2002) Suzuki et al. (1992) Meylan and Howard (1991) Nirmalakhandan and Speece (1988) Yaws (1999)	V V V V V X Q Q Q Q Q Q Q Q Q Q Q ?	187 238 247 248 249, 250 230 233 21
1,6-heptadiene C_7H_{12} [3070-53-9] GEAWFZNTIFJMHR-UHFFFAOYSA-N	5.6×10^{-5} 4.6×10^{-5} 1.5×10^{-4}		Plyasunov and Shock (2000) Hilal et al. (2008) Yaffe et al. (2003)	L Q Q	249, 250

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,5-dimethyl-2,4-hexadiene C_8H_{14} [764-13-6] DZPCYXCBXGQBRN-UHFFFAOYSA-N	2.1×10^{-4}		Ebert et al. (2023)	?	317
1-methylcyclopropene C_4H_6 [3100-04-7] SHDPRTQPPWIEJG-UHFFFAOYSA-N	2.5×10^{-4}		HSDB (2015)	Q	100
cyclopentene C_5H_8 [142-29-0] LPIQUOYDBNQMRZ-UHFFFAOYSA-N	2.0×10^{-4}	3300	Brockbank (2013)	L	
	1.6×10^{-4}		Plyasunov and Shock (2000)	L	
	2.3×10^{-4}	2200	Bakierowska and Trzeczczynski (2003)	M	
	1.5×10^{-4}		Duchowicz et al. (2020)	V	187
	1.5×10^{-4}		Mackay et al. (2006a)	V	
	1.5×10^{-4}		Mackay et al. (1993)	V	
	1.6×10^{-4}		Hwang et al. (1992)	V	
	1.6×10^{-4}		Hine and Mookerjee (1975)	V	
	1.5×10^{-4}		Yaws (2003)	X	238
	4.3×10^{-3}		Duchowicz et al. (2020)	Q	
	1.5×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	1.8×10^{-4}		Gharagheizi et al. (2010)	Q	247
	3.1×10^{-4}		Hilal et al. (2008)	Q	
	3.1×10^{-4}	3400	Kühne et al. (2005)	Q	
	1.5×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	2.8×10^{-4}		Yao et al. (2002)	Q	230
	4.5×10^{-4}		English and Carroll (2001)	Q	231, 232
1.4×10^{-4}		Katritzky et al. (1998)	Q		
1.7×10^{-4}		Suzuki et al. (1992)	Q	233	
1.6×10^{-4}		Nirmalakhandan and Speece (1988)	Q		
1.6×10^{-4}	2200	Kühne et al. (2005)	?		
1.6×10^{-4}		Yaws (1999)	?	21	
1.5×10^{-4}		Yaws and Yang (1992)	?	21	
cyclohexene C_6H_{10} [110-83-8] HGCIXCUEYOPUTN-UHFFFAOYSA-N	2.9×10^{-4}	3600	Brockbank (2013)	L	
	2.2×10^{-4}		Plyasunov and Shock (2000)	L	
	3.3×10^{-4}	2000	Bakierowska and Trzeczczynski (2003)	M	
	2.5×10^{-4}		Nielsen et al. (1994)	M	
	2.2×10^{-4}		Mackay et al. (2006a)	V	
	2.2×10^{-4}		Mackay et al. (1993)	V	
2.2×10^{-4}		Hwang et al. (1992)	V		
2.2×10^{-4}		Hine and Mookerjee (1975)	V		
2.2×10^{-4}		Yaws (2003)	X	259	

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	2.2×10^{-4}		Yaws (2003)	X	238
	3.3×10^{-4}		Dupeux et al. (2022)	Q	260
	6.6×10^{-5}		Keshavarz et al. (2022)	Q	
	4.3×10^{-3}		Duchowicz et al. (2020)	Q	185
	1.6×10^{-4}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-5}		Raventos-Duran et al. (2010)	Q	243, 244
	2.5×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	1.5×10^{-4}		Gharagheizi et al. (2010)	Q	247
	2.5×10^{-4}		Hilal et al. (2008)	Q	
	1.4×10^{-4}		Modarresi et al. (2007)	Q	68
		3700	Kühne et al. (2005)	Q	
	2.2×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	2.5×10^{-4}		Yao et al. (2002)	Q	230
	3.3×10^{-4}		English and Carroll (2001)	Q	231, 232
	1.5×10^{-4}		Katritzky et al. (1998)	Q	
	2.0×10^{-4}		Russell et al. (1992)	Q	280
	1.3×10^{-4}		Suzuki et al. (1992)	Q	233
	1.3×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	2.2×10^{-4}		Duchowicz et al. (2020)	?	186, 21
		3600	Kühne et al. (2005)	?	
	2.2×10^{-4}		Yaws (1999)	?	21
	2.2×10^{-4}		Yaws and Yang (1992)	?	21
1-methylcyclopentene C_6H_{10} [693-89-0] ATQUFXWBVZUTKO-UHFFFAOYSA-N	2.4×10^{-4}		Hilal et al. (2008)	Q	
cycloheptene C_7H_{12} [628-92-2] ZXIJMRYMVAMXQP-UHFFFAOYSA-N	2.0×10^{-4}		Brockbank (2013)	L	
	2.0×10^{-4}		Plyasunov and Shock (2000)	L	
	2.6×10^{-4}		Mackay et al. (2006a)	V	
	2.0×10^{-4}		Mackay et al. (1993)	V	
	1.3×10^{-4}		Hilal et al. (2008)	Q	
1-methylcyclohexene $C_6H_9CH_3$ [591-49-1] CTMHWPIWNRWQEG-UHFFFAOYSA-N	1.4×10^{-4}		Plyasunov and Shock (2000)	L	
	1.3×10^{-4}		Duchowicz et al. (2020)	V	187
	1.2×10^{-4}		Mackay et al. (2006a)	V	
	1.3×10^{-4}		Hine and Mookerjee (1975)	V	
	1.4×10^{-4}		Duchowicz et al. (2020)	Q	
	1.9×10^{-4}		Hilal et al. (2008)	Q	
	1.2×10^{-4}		Modarresi et al. (2007)	Q	68
	1.3×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	2.4×10^{-4}		English and Carroll (2001)	Q	231, 232
	1.6×10^{-4}		Katritzky et al. (1998)	Q	
	9.2×10^{-5}		Suzuki et al. (1992)	Q	233

Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cyclooctene C_8H_{14} [931-88-4] URYYVOIYTNXXBN-UPHR SURJSA-N	2.1×10^{-4} 2.1×10^{-4} 2.1×10^{-4}	4300 4300	Brockbank (2013) Dohányosová et al. (2004) Mackay et al. (2006a)	L M V	1 318
		4400 4400	Kühne et al. (2005) Kühne et al. (2005)	Q ?	
1,1,2,3,3-pentamethyl-2,3,4,5,6,7-hexahydro-1H-indene $C_{14}H_{24}$ [33704-59-5] CDEGOUYLXTUDAU-UHFFFAOYSA-N	2.5×10^{-5} 2.5×10^{-6} 1.1×10^{-3} 7.3×10^{-5}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1,3-cyclopentadiene C_5H_6 [542-92-7] ZSWFCLXCOIISFI-UHFFFAOYSA-N	1.8×10^{-4} 4.7×10^{-4} 4.7×10^{-4} 5.1×10^{-3} 1.2×10^{-3}		Plyasunov and Shock (2000) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008)	L V V Q Q	187
1,3-cyclohexadiene C_6H_8 [592-57-4] MGNZXYYWBUKAI-UHFFFAOYSA-N	6.7×10^{-4} 8.6×10^{-4} 4.4×10^{-4} 1.1×10^{-3} 6.7×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999)	X Q Q Q ?	238 247 21
1,4-cyclohexadiene C_6H_8 (1,4-dihydrobenzene) [628-41-1] UVJHQYIOXKWHFD-UHFFFAOYSA-N	1.3×10^{-3} 1.0×10^{-3} 1.1×10^{-3} 9.7×10^{-4} 1.0×10^{-3} 4.9×10^{-4} 6.2×10^{-4} 9.9×10^{-5} 8.0×10^{-4} 5.4×10^{-4}	4000 3800	Brockbank (2013) Plyasunov and Shock (2000) Mackay et al. (2006a) Mackay et al. (1993) Hilal et al. (2008) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	L L V V C Q Q Q Q Q	272, 244 245 246 68
1,3-cycloheptadiene C_7H_{10} [4054-38-0] GWYPDXLJACEENP-UHFFFAOYSA-N	6.2×10^{-4}		Hilal et al. (2008)	Q	
1,3,5-cycloheptatriene C_7H_8 [544-25-2] CHVJITGCYZJHLR-UHFFFAOYSA-N	2.2×10^{-3} 2.1×10^{-3} 2.1×10^{-3} 2.1×10^{-3} 2.2×10^{-3} 6.0×10^{-3} 4.0×10^{-3} 2.3×10^{-3}	3900	Plyasunov and Shock (2000) Duchowicz et al. (2020) Mackay et al. (2006a) Mackay et al. (1993) Cabani et al. (1981) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	L V V V V X Q Q Q	187 293 238 247

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.8×10^{-3}		Hilal et al. (2008)	Q	
	3.4×10^{-4}		Modarresi et al. (2007)	Q	68
	3.0×10^{-3}		English and Carroll (2001)	Q	231, 232
	8.4×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	2.1×10^{-3}		Yaws (1999)	?	21
	2.1×10^{-3}		Yaws and Yang (1992)	?	21
1,5-cyclooctadiene C_8H_{12} [111-78-4] VYXHVRRARDIDEHS-QGTKBVGQSA-N	3.8×10^{-4}		Hilal et al. (2008)	Q	
1-ethenylcyclohexene C_8H_{12} [2622-21-1] SDRZFSPCVYEJTP-UHFFFAOYSA-N	7.7×10^{-4}		Hilal et al. (2008)	Q	
4-ethenylcyclohexene C_8H_{12} (4-vinylcyclohexene) [100-40-3] BBDKZWKPEPTENS-UHFFFAOYSA-N	2.2×10^{-4}		Plyasunov and Shock (2000)	L	
	2.2×10^{-4}		Duchowicz et al. (2020)	V	187
	2.2×10^{-4}		HSDB (2015)	V	
	5.9×10^{-3}		Duchowicz et al. (2020)	Q	
	2.5×10^{-4}		Raventos-Duran et al. (2010)	Q	272, 244
	1.6×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	1.8×10^{-4}		Hilal et al. (2008)	Q	
	2.7×10^{-4}		Modarresi et al. (2007)	Q	68
	2.2×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	2.7×10^{-4}		Katritzky et al. (1998)	Q	
	2.2×10^{-4}		Yaws (1999)	?	21
1,3,5,7-cyclooctatetraene C_8H_8 [629-20-9] KDUIUFJBNGTBMD-DLMDZQPMISA-N	3.6×10^{-2}		Hilal et al. (2008)	Q	
3a,4,7,7a-tetrahydro-4,7-methano-1H-indene $C_{10}H_{12}$ (dicyclopentadiene) [77-73-6] HECLRDQVFMWTQS-UHFFFAOYSA-N	1.6×10^{-4}		HSDB (2015)	Q	100
	2.8×10^{-5}		Hilal et al. (2008)	Q	
1,5,9-cyclododecatriene $C_{12}H_{18}$ [4904-61-4] ZOLLIQAKMYWTBR-UHFFFAOYSA-N	3.3×10^{-4}		HSDB (2015)	Q	100

Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(<i>E,E,Z</i>)-1,5,9-cyclododecatriene $\text{C}_{12}\text{H}_{18}$ [706-31-0] ZOLLIQAKMYWTBR-RYMQXAEESA-N	1.8×10^{-4}		Ebert et al. (2023)	?	319

A2.4 Aliphatic alkynes

Table A2.4: Aliphatic alkynes

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethyne	4.1×10^{-4}	1800	Burkholder et al. (2019)	L	1
C_2H_2	4.1×10^{-4}	1800	Burkholder et al. (2015)	L	1
(acetylene)	4.1×10^{-4}	1700	Sander et al. (2011)	L	1
[74-86-2]	4.1×10^{-4}	1800	Sander et al. (2006)	L	1
HSFWRNGVRCDJHI-UHFFFAOYSA-N	4.1×10^{-4}	1700	Fogg et al. (2002)	L	
	4.1×10^{-4}	1800	Plyasunov and Shock (2000)	L	
	4.1×10^{-4}	1800	Wilhelm et al. (1977)	L	
	4.0×10^{-4}	2500	Jadkar and Chaudhari (1980)	M	
	2.5×10^{-4}		Maillard and Rosenthal (1952)	M	320
	3.3×10^{-4}		Grollman (1929)	M	59
	4.2×10^{-4}	1900	Gatterer (1926)	M	
	3.7×10^{-4}		Kremann and Hönel (1913)	M	
	4.1×10^{-4}	2000	Winkler (1906)	M	
	5.1×10^{-4}		Billitzer (1902)	M	81, 321
	4.5×10^{-4}		Duchowicz et al. (2020)	V	187
	4.5×10^{-4}		HSDB (2015)	V	
	3.9×10^{-4}		Hwang et al. (1992)	V	
	4.1×10^{-4}		Hine and Mookerjee (1975)	V	
	1.8×10^{-5}		Pierotti (1965)	T	
	3.9×10^{-4}		Yaws (2003)	X	238
	4.1×10^{-4}	1800	Schoen (1923)	X	322
	4.4×10^{-4}		Vítovec (1968)	X	322, 12
	4.1×10^{-4}		Deno and Berkheimer (1960)	C	
	4.2×10^{-4}		Hayer et al. (2022)	Q	20
	8.9×10^{-3}		Duchowicz et al. (2020)	Q	
	3.5×10^{-3}		Wang et al. (2017)	Q	81, 239
	1.8×10^{-3}		Wang et al. (2017)	Q	81, 240
	2.9×10^{-3}		Wang et al. (2017)	Q	81, 241
	8.4×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-4}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-3}		Hilal et al. (2008)	Q	
		1800	Kühne et al. (2005)	Q	
	3.8×10^{-4}		Suzuki et al. (1992)	Q	233
	5.8×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	5.0×10^{-4}		Irmann (1965)	Q	
		1800	Kühne et al. (2005)	?	
	3.9×10^{-4}		Yaws (1999)	?	21
	4.1×10^{-4}	1800	Yaws et al. (1999)	?	21
	4.1×10^{-4}	1800	Dean and Lange (1999)	?	323, 23
	3.9×10^{-4}		Yaws and Yang (1992)	?	21
	4.1×10^{-4}		Abraham et al. (1990)	?	

Table A2.4: Aliphatic alkynes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
propyne CH ₃ CCH [74-99-7] MWWATHDPGQKSAR-UHFFFAOYSA-N	7.5×10^{-4}	2400	Plyasunov and Shock (2000)	L	
	9.0×10^{-4}		Mackay and Shiu (1981)	L	
	9.2×10^{-4}		McAuliffe (1966)	M	
	7.7×10^{-4}	2500	Simpson and Lovell (1962)	M	
	6.2×10^{-4}	2000	Inga and McKetta (1961)	M	
	9.0×10^{-4}		Duchowicz et al. (2020)	V	187
	9.0×10^{-4}		HSDB (2015)	V	
	9.0×10^{-4}		Hine and Mookerjee (1975)	V	
	6.6×10^{-4}		Irmann (1965)	V	
	9.2×10^{-4}		Yaws (2003)	X	238
	7.6×10^{-4}		Hayer et al. (2022)	Q	20
	3.2×10^{-3}		Duchowicz et al. (2020)	Q	
	1.1×10^{-4}		Gharagheizi et al. (2012)	Q	
	9.8×10^{-4}		Gharagheizi et al. (2010)	Q	247
	6.0×10^{-4}		Hilal et al. (2008)	Q	
	4.0×10^{-4}		Modarresi et al. (2007)	Q	68
		2100	Kühne et al. (2005)	Q	
			Yaffe et al. (2003)	Q	249, 250
			Suzuki et al. (1992)	Q	233
			Nirmalakhandan and Speece (1988)	Q	
		Irmann (1965)	Q		
	2400	Kühne et al. (2005)	?		
		Yaws (1999)	?	21	
		Yaws and Yang (1992)	?	21	
		Abraham et al. (1990)	?		
		Wilhelm et al. (1977)	W	87	
1-butyne C ₂ H ₅ CCH (ethylacetylene) [107-00-6] KDKYADYSIPSCCQ-UHFFFAOYSA-N	5.6×10^{-4}		Brockbank (2013)	L	
	6.2×10^{-4}	1900	Plyasunov and Shock (2000)	L	
	5.2×10^{-4}		Mackay and Shiu (1981)	L	
	7.5×10^{-4}	1900	Wilhelm et al. (1977)	L	
	5.4×10^{-4}		McAuliffe (1966)	M	
	7.2×10^{-4}	1900	Simpson and Lovell (1962)	M	
	5.2×10^{-4}		Mackay et al. (2006a)	V	
	2.9×10^{-4}		Hwang et al. (1992)	V	
	5.3×10^{-4}		Hine and Mookerjee (1975)	V	
	5.4×10^{-4}		Yaws (2003)	X	238
	8.3×10^{-5}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-4}		Gharagheizi et al. (2010)	Q	247
	3.6×10^{-4}		Hilal et al. (2008)	Q	
	2.1×10^{-4}		Modarresi et al. (2007)	Q	68
	2500	Kühne et al. (2005)	Q		
		English and Carroll (2001)	Q	231, 232	
		Suzuki et al. (1992)	Q	233	
		Nirmalakhandan and Speece (1988)	Q		
		Irmann (1965)	Q		

Table A2.4: Aliphatic alkynes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
		1900	Kühne et al. (2005)	?	
	5.4×10^{-4}		Yaws (1999)	?	21
	5.4×10^{-4}		Yaws and Yang (1992)	?	21
	5.3×10^{-4}		Abraham et al. (1990)	?	
			Burkholder et al. (2019)	W	324
2-butyne C_4H_6 (dimethylacetylene) [503-17-3] XNMQEEKYCVKGBD-UHFFFAOYSA-N	4.6×10^{-4}		Yaws (2003)	X	238
	1.1×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.9×10^{-3}		Hilal et al. (2008)	Q	
	4.7×10^{-4}		Yaws (1999)	?	21
1-pentyne $\text{C}_3\text{H}_7\text{CCH}$ [627-19-0] IBXNCJKFFQIKKY-UHFFFAOYSA-N	3.9×10^{-4}		Brockbank (2013)	L	
	3.2×10^{-4}		Plyasunov and Shock (2000)	L	
	4.0×10^{-4}		Mackay and Shiu (1981)	L	
	4.0×10^{-4}		Duchowicz et al. (2020)	V	187
	4.0×10^{-4}		Mackay et al. (2006a)	V	
	4.0×10^{-4}		Mackay et al. (1993)	V	
	2.5×10^{-4}		Amoore and Buttery (1978)	V	
	3.9×10^{-4}		Hine and Mookerjee (1975)	V	
	4.0×10^{-4}		Yaws (2003)	X	238
	3.2×10^{-3}		Duchowicz et al. (2020)	Q	
	6.0×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-4}		Gharagheizi et al. (2010)	Q	247
	2.4×10^{-4}		Hilal et al. (2008)	Q	
	1.5×10^{-4}		Modarresi et al. (2007)	Q	68
	1.3×10^{-5}		Modarresi et al. (2005)	Q	248
	4.6×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	7.5×10^{-5}		Yao et al. (2002)	Q	230
	2.3×10^{-4}		English and Carroll (2001)	Q	231, 261
	6.1×10^{-5}		Russell et al. (1992)	Q	280
	1.6×10^{-4}		Suzuki et al. (1992)	Q	233
	2.9×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	4.0×10^{-4}		Yaws (1999)	?	21
	2.0×10^{-4}		Yaws and Yang (1992)	?	21
	3.9×10^{-4}		Abraham et al. (1990)	?	
2-pentyne C_5H_8 [627-21-4] NKTDTONXHDOTI-UHFFFAOYSA-N	5.6×10^{-4}		Yaws (2003)	X	238
	6.7×10^{-5}		Gharagheizi et al. (2012)	Q	
	7.0×10^{-4}		Gharagheizi et al. (2010)	Q	247
	1.1×10^{-3}		Hilal et al. (2008)	Q	
	1.1×10^{-5}		Modarresi et al. (2005)	Q	248
	7.9×10^{-5}		Yao et al. (2002)	Q	230
	4.0×10^{-4}		Yaws (1999)	?	21

Table A2.4: Aliphatic alkynes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
3-methyl-1-butyne C_5H_8 [598-23-2] USCSRAJGJYMJFZ-UHFFFAOYSA-N	5.3×10^{-4}		Yaws (2003)	X	238
	4.4×10^{-5}		Gharagheizi et al. (2012)	Q	
	6.3×10^{-4}		Gharagheizi et al. (2010)	Q	247
	3.7×10^{-4}		Yaws (1999)	?	21
1-hexyne $\text{C}_4\text{H}_9\text{CCH}$ [693-02-7] CGHIBGNXEGJPQZ-UHFFFAOYSA-N	2.6×10^{-4}		Brockbank (2013)	L	
	3.0×10^{-4}		Plyasunov and Shock (2000)	L	
	2.5×10^{-4}		Duchowicz et al. (2020)	V	187
	2.5×10^{-4}		Duchowicz et al. (2020)	V	187
	2.4×10^{-4}		Mackay et al. (2006a)	V	
	2.4×10^{-4}		Mackay et al. (1993)	V	
	2.5×10^{-4}		Hine and Mookerjee (1975)	V	
	2.5×10^{-4}		Yaws (2003)	X	238
	3.2×10^{-3}		Duchowicz et al. (2020)	Q	
	3.2×10^{-3}		Duchowicz et al. (2020)	Q	
	4.8×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-4}		Gharagheizi et al. (2010)	Q	247
	1.7×10^{-4}		Hilal et al. (2008)	Q	
	1.5×10^{-4}		Modarresi et al. (2007)	Q	68
	1.1×10^{-5}		Modarresi et al. (2005)	Q	248
	2.4×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	2.7×10^{-5}		Yao et al. (2002)	Q	230
	1.8×10^{-4}		English and Carroll (2001)	Q	231, 275
	1.2×10^{-4}		Suzuki et al. (1992)	Q	233
	2.3×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
2.5×10^{-4}		Yaws (1999)	?	21	
4.6×10^{-4}		Yaws and Yang (1992)	?	21	
2.5×10^{-4}		Abraham et al. (1990)	?		
2-hexyne C_6H_{10} [764-35-2] MELUCTCJOARQQG-UHFFFAOYSA-N	3.5×10^{-4}		Yaws (2003)	X	238
	4.5×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.8×10^{-4}		Gharagheizi et al. (2010)	Q	247
	5.8×10^{-4}		Hilal et al. (2008)	Q	
	1.0×10^{-5}		Modarresi et al. (2005)	Q	248
	3.1×10^{-5}		Yao et al. (2002)	Q	230
2.5×10^{-4}		Yaws (1999)	?	21	
3-hexyne C_6H_{10} [928-49-4] DQQNMIPXXNPGCV-UHFFFAOYSA-N	5.5×10^{-4}		Plyasunov and Shock (2000)	L	
	5.6×10^{-4}		Yaws (2003)	X	238
	4.1×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.8×10^{-4}		Gharagheizi et al. (2010)	Q	247
	6.0×10^{-4}		Hilal et al. (2008)	Q	
	1.0×10^{-5}		Modarresi et al. (2005)	Q	248
	3.2×10^{-5}		Yao et al. (2002)	Q	230, 268
2.6×10^{-4}		Yaws (1999)	?	21	

Table A2.4: Aliphatic alkynes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methyl-1-pentyne C_6H_{10} [922-59-8] PLHJCCHSCFNKCC-UHFFFAOYSA-N	4.6×10^{-4}		Yaws (2003)	X	238
	3.5×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-4}		Gharagheizi et al. (2010)	Q	247
4-methyl-1-pentyne C_6H_{10} [7154-75-8] OXRWICUICBZVAE-UHFFFAOYSA-N	4.5×10^{-4}		Yaws (2003)	X	238
	3.8×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-4}		Gharagheizi et al. (2010)	Q	247
4-methyl-2-pentyne C_6H_{10} [21020-27-9] SLMFWJQZLPEDDU-UHFFFAOYSA-N	4.1×10^{-4}		Yaws (2003)	X	238
	3.8×10^{-5}		Gharagheizi et al. (2012)	Q	
	4.6×10^{-4}		Gharagheizi et al. (2010)	Q	247
3,3-dimethyl-1-butyne C_6H_{10} [917-92-0] PPWNCLVNXGCGAF-UHFFFAOYSA-N	4.6×10^{-4}		Yaws (2003)	X	238
	2.0×10^{-5}		Gharagheizi et al. (2012)	Q	
	4.8×10^{-4}		Gharagheizi et al. (2010)	Q	247
1-heptyne $\text{C}_5\text{H}_{11}\text{CCH}$ [628-71-7] YVXHZKKCZYLQOP-UHFFFAOYSA-N	1.8×10^{-4}		Brockbank (2013)	L	
	1.8×10^{-4}		Plyasunov and Shock (2000)	L	
	1.4×10^{-4}		Duchowicz et al. (2020)	V	187
	1.3×10^{-4}		Mackay et al. (2006a)	V	
	2.2×10^{-4}		Mackay et al. (1993)	V	
	1.5×10^{-4}		Hine and Mookerjee (1975)	V	
	1.4×10^{-4}		Yaws (2003)	X	238
	3.1×10^{-3}		Duchowicz et al. (2020)	Q	
	4.1×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-4}		Gharagheizi et al. (2010)	Q	247
	1.1×10^{-4}		Hilal et al. (2008)	Q	
	1.1×10^{-4}		Modarresi et al. (2007)	Q	68
	9.6×10^{-6}		Modarresi et al. (2005)	Q	248
	1.5×10^{-4}		Yaffe et al. (2003)	Q	249, 250
2-heptyne C_7H_{12} [1119-65-9] AMSFEMSYKQQCHL-UHFFFAOYSA-N	2.4×10^{-5}		Yao et al. (2002)	Q	230
	1.3×10^{-4}		English and Carroll (2001)	Q	231, 232
	9.5×10^{-5}		Suzuki et al. (1992)	Q	233
	1.8×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	1.4×10^{-4}		Yaws (1999)	?	21
	1.4×10^{-4}		Yaws and Yang (1992)	?	21
	1.5×10^{-4}		Abraham et al. (1990)	?	

Table A2.4: Aliphatic alkynes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-heptyne C_7H_{12} [2586-89-2] KLYHSJRCIZOUHE-UHFFFAOYSA-N	2.2×10^{-4} 3.6×10^{-5} 2.1×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-3-hexyne C_7H_{12} [36566-80-0] POBOUPFSQKXZFZ-UHFFFAOYSA-N	2.2×10^{-4} 2.6×10^{-4} 2.6×10^{-5} 2.5×10^{-4}		Plyasunov and Shock (2000) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	L X Q Q	238 247
3-methyl-1-hexyne C_7H_{12} [40276-93-5] OPZULQHRFNTFFZ-UHFFFAOYSA-N	3.1×10^{-4} 2.7×10^{-5} 2.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-1-hexyne C_7H_{12} [52713-81-2] YFZSGTDENCTWGW-UHFFFAOYSA-N	2.9×10^{-4} 3.3×10^{-5} 2.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-2-hexyne C_7H_{12} [20198-49-6] ABEXZFRJQJSEBW-UHFFFAOYSA-N	2.5×10^{-4} 2.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
5-methyl-1-hexyne C_7H_{12} [2203-80-7] HKANANEMUCJGPMS-UHFFFAOYSA-N	2.8×10^{-4} 3.4×10^{-5} 2.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-methyl-2-hexyne C_7H_{12} [53566-37-3] SVGHRUSRQTQES-UHFFFAOYSA-N	2.4×10^{-4} 3.2×10^{-5} 2.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3-dimethyl-1-pentyne C_7H_{12} [918-82-1] KQIKSQUHG GYCU-UHFFFAOYSA-N	3.6×10^{-4} 1.8×10^{-5} 3.0×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyl-1-pentyne C_7H_{12} [61064-08-2] JDQKSTIAVKXRSK-UHFFFAOYSA-N	3.3×10^{-4} 2.4×10^{-5} 3.8×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,4-dimethyl-1-pentyne C_7H_{12} [13361-63-2] KHBYKPSFBHBJQ-UHFFFAOYSA-N	3.3×10^{-4} 2.2×10^{-5} 3.0×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.4: Aliphatic alkynes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
4,4-dimethyl-2-pentyne C_7H_{12} [999-78-0] FOALCTWKQSWRST-UHFFFAOYSA-N	3.0×10^{-4} 1.9×10^{-5} 2.7×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-ethyl-1-pentyne C_7H_{12} [21020-26-8] WGWGXWSBPXLXTA-UHFFFAOYSA-N	3.2×10^{-4} 2.7×10^{-5} 2.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-octyne $C_6H_{13}CCH$ [629-05-0] UMIPWJGWASORKV-UHFFFAOYSA-N	1.2×10^{-4} 1.2×10^{-4} 1.2×10^{-4} 1.3×10^{-4} 1.3×10^{-4} 1.2×10^{-4} 1.3×10^{-4} 3.1×10^{-3} 3.1×10^{-5} 1.1×10^{-4} 6.4×10^{-5} 1.0×10^{-4} 1.2×10^{-4} 1.0×10^{-4} 7.2×10^{-5} 1.5×10^{-4} 1.2×10^{-4} 1.2×10^{-4}		Brockbank (2013) Plyasunov and Shock (2000) Duchowicz et al. (2020) Mackay et al. (2006a) Mackay et al. (1993) Hine and Mookerjee (1975) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Suzuki et al. (1992) Nirmalakhandan and Speece (1988) Yaws and Yang (1992) Abraham et al. (1990)	L L V V V V X Q Q Q Q Q Q Q Q Q Q Q ?	187 238 247 68 249, 250 231, 232 233 21
2-octyne C_8H_{14} [2809-67-8] QQQALVMFTWRFCFI-UHFFFAOYSA-N	1.3×10^{-4} 3.2×10^{-5} 1.3×10^{-4} 2.2×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008)	X Q Q Q	238 247
3-octyne C_8H_{14} [15232-76-5] UDEISTCPVNLKRJ-UHFFFAOYSA-N	1.5×10^{-4} 2.8×10^{-5} 1.3×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyl-3-hexyne C_8H_{14} [4911-60-8] XYBFBXTUWDPXLK-UHFFFAOYSA-N	1.4×10^{-4}		Plyasunov and Shock (2000)	L	

Table A2.4: Aliphatic alkynes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-nonyne $\text{C}_7\text{H}_{15}\text{CCH}$ [3452-09-3] OSSQXSOTMIGBCF-UHFFFAOYSA-N	8.5×10^{-5} 9.7×10^{-5} 6.9×10^{-5} 6.9×10^{-5} 6.9×10^{-5} 7.2×10^{-5} 3.1×10^{-3} 2.6×10^{-5} 7.8×10^{-5} 4.4×10^{-5} 8.2×10^{-5} 6.9×10^{-5} 7.9×10^{-5} 5.6×10^{-5} 1.1×10^{-4} 1.2×10^{-4} 6.9×10^{-5} 6.9×10^{-5}		Brockbank (2013) Plyasunov and Shock (2000) Duchowicz et al. (2020) Meylan and Howard (1991) Hine and Mookerjee (1975) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Suzuki et al. (1992) Meylan and Howard (1991) Nirmalakhandan and Speece (1988) Yaws and Yang (1992) Abraham et al. (1990)	L L V V V X Q Q Q Q Q Q Q Q Q Q Q ?	187 238 247 68 249, 250 231, 232 233 21
2-nonyne C_9H_{16} [19447-29-1] LXKRETAGISZJAD-UHFFFAOYSA-N	7.3×10^{-5} 2.5×10^{-5} 8.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-nonyne C_9H_{16} [20184-89-8] SRRDRCWRHKEKU-UHFFFAOYSA-N	7.8×10^{-5} 2.2×10^{-5} 8.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,5-trimethyl-3-hexyne C_9H_{16} [17530-23-3] DKFPMSNUJIRAMR-UHFFFAOYSA-N	5.5×10^{-5}		Plyasunov and Shock (2000)	L	
2,2,5,5-tetramethyl-3-hexyne $\text{C}_{10}\text{H}_{18}$ [17530-24-4] FXVDWKZNFZMSOU-UHFFFAOYSA-N	3.4×10^{-5}		Plyasunov and Shock (2000)	L	
1-decyne $\text{C}_{10}\text{H}_{18}$ [764-93-2] ILLHQJIJCRNRCJ-UHFFFAOYSA-N	6.6×10^{-5} 3.0×10^{-5} 6.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-decyne $\text{C}_{10}\text{H}_{18}$ [2384-70-5] RWDDSTHSVISBEA-UHFFFAOYSA-N	5.2×10^{-5} 2.9×10^{-5} 5.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.4: Aliphatic alkynes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-decyne $\text{C}_{10}\text{H}_{18}$ [2384-85-2] JUWXVJKQNKRLD-UHFFFAOYSA-N	5.5×10^{-5} 2.5×10^{-5} 5.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-undecyne $\text{C}_{11}\text{H}_{20}$ [2243-98-3] YVSFLVNWJIEJRV-UHFFFAOYSA-N	5.9×10^{-5} 5.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
2-undecyne $\text{C}_{11}\text{H}_{20}$ [60212-29-5] XZSXEDPHMIFYOS-UHFFFAOYSA-N	4.5×10^{-5} 3.3×10^{-5} 4.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-undecyne $\text{C}_{11}\text{H}_{20}$ [60212-30-8] DPWGGJNPCPLQVKQ-UHFFFAOYSA-N	4.6×10^{-5} 2.7×10^{-5} 4.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-dodecyne $\text{C}_{12}\text{H}_{22}$ [765-03-7] ZVDBUOGYYNMQI-UHFFFAOYSA-N	5.8×10^{-5} 3.8×10^{-5} 5.4×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-dodecyne $\text{C}_{12}\text{H}_{22}$ [629-49-2] NDIJGAGRSOPRNJ-UHFFFAOYSA-N	4.9×10^{-5} 3.6×10^{-5} 4.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-dodecyne $\text{C}_{12}\text{H}_{22}$ [6790-27-8] ZFAGQZXKTQFQLE-UHFFFAOYSA-N	4.5×10^{-5} 3.0×10^{-5} 4.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-tridecyne $\text{C}_{13}\text{H}_{24}$ [26186-02-7] GZEDKDBFUBPZNG-UHFFFAOYSA-N	7.4×10^{-5} 4.2×10^{-5} 6.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-tridecyne $\text{C}_{13}\text{H}_{24}$ [28467-75-6] ZGKKGWBQPYIOBH-UHFFFAOYSA-N	6.7×10^{-5} 3.9×10^{-5} 5.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-tridecyne $\text{C}_{13}\text{H}_{24}$ [60186-78-9] HDLJOUCNTFYRPD-UHFFFAOYSA-N	5.8×10^{-5} 3.2×10^{-5} 5.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.4: Aliphatic alkynes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-tetradecyne $C_{14}H_{26}$ [765-10-6] DZEFNRWGWQDGR-UHFFFAOYSA-N	7.4×10^{-5} 4.4×10^{-5} 9.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-tetradecyne $C_{14}H_{26}$ [60212-32-0] DWWWJIDVLGUCDE-UHFFFAOYSA-N	8.6×10^{-5} 3.3×10^{-5} 8.0×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-pentadecyne $C_{15}H_{28}$ [765-13-9] DONJGKADZJEXRJ-UHFFFAOYSA-N	2.2×10^{-4} 4.5×10^{-5} 1.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-pentadecyne $C_{15}H_{28}$ [52112-25-1] VWWAVTXUUYHIEE-UHFFFAOYSA-N	2.3×10^{-4} 4.4×10^{-5} 1.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-pentadecyne $C_{15}H_{28}$ [61886-61-1] RUHQJUVXUGQUNY-UHFFFAOYSA-N	1.5×10^{-4} 3.4×10^{-5} 1.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-hexadecyne $C_{16}H_{30}$ [629-74-3] UCIDYSLOTJMRAM-UHFFFAOYSA-N	8.3×10^{-4} 5.0×10^{-4}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
3-hexadecyne $C_{16}H_{30}$ [61886-62-2] HRFPRVYNMNOAQO-UHFFFAOYSA-N	3.3×10^{-4} 3.3×10^{-5} 3.8×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-buten-1-yne CH_2CHCCH (vinylacetylene) [689-97-4] WFYPICNXXBKQZGB-UHFFFAOYSA-N	4.1×10^{-4} 3.7×10^{-4} 3.8×10^{-4} 3.4×10^{-4} 3.4×10^{-4} 1.1×10^{-2} 1.1×10^{-3} 3.5×10^{-4}	1700 1700 1800	Plyasunov and Shock (2000) Wilhelm et al. (1977) Simpson and Lovell (1962) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Kühne et al. (2005) Kühne et al. (2005) Yaws (1999)	L L M V V Q Q Q ? ?	325 187

Table A2.4: Aliphatic alkynes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
butadiyne C_4H_2 (biacetylene) [460-12-8] LLCSWKVOHICRDD-UHFFFAOYSA-N	2.0×10^{-3} 2.7×10^{-1} 8.6×10^{-3} 1.9×10^{-3} 1.9×10^{-3}		Irmann (1965) Hayer et al. (2022) Hilal et al. (2008) Yaws (1999) Yaws and Yang (1992)	C Q Q ? ?	 20 21 21
1,6-heptadiyne C_7H_8 [2396-63-6] RSPZSDWVQWRAEF-UHFFFAOYSA-N	4.6×10^{-3}		Plyasunov and Shock (2000)	L	
1,8-nonadiyne C_9H_{12} [2396-65-8] DMOVPHYFYSASTC-UHFFFAOYSA-N	3.0×10^{-3}		Plyasunov and Shock (2000)	L	

A2.5 Mononuclear aromatics

Table A2.5: Mononuclear aromatics

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
benzene	1.8×10^{-3}	3800	Schwardt et al. (2021)	L	1
C_6H_6	1.8×10^{-3}	3700	Brockbank (2013)	L	1
[71-43-2]	1.7×10^{-3}	4200	Staudinger and Roberts (2001)	L	
UHOVQNZJYSORNB-UHFFFAOYSA-N	1.8×10^{-3}	3800	Plyasunov and Shock (2000)	L	
	1.6×10^{-3}	4100	Staudinger and Roberts (1996)	L	
	1.8×10^{-3}		Mackay and Shiu (1981)	L	
	1.7×10^{-3}		Kim and Kim (2014)	M	
	1.8×10^{-3}	3800	Hiatt (2013)	M	
	2.7×10^{-3}	1400	Zhang et al. (2013)	M	326
	3.5×10^{-3}		Zhang et al. (2013)	M	327
	1.4×10^{-3}	2400	Lau et al. (2010)	M	11
	1.7×10^{-3}	4200	Sieg et al. (2009)	M	328
	1.8×10^{-3}		Li et al. (2008)	M	
	2.5×10^{-3}		Lodge and Danso (2007)	M	
	1.4×10^{-3}	2200	Lei et al. (2004)	M	329
			Cheng et al. (2003)	M	330
	1.8×10^{-3}		Karl et al. (2003)	M	88
	1.8×10^{-3}	4200	Bakierowska and Trzeszczyński (2003)	M	
	1.7×10^{-3}	3800	Görgényi et al. (2002)	M	331
	1.9×10^{-3}	3200	Bierwagen and Keller (2001)	M	
	2.1×10^{-3}		Kochetkov et al. (2001)	M	298, 332
	1.7×10^{-3}		Kochetkov et al. (2001)	M	298, 333
	1.8×10^{-3}		Miller and Stuart (2000)	M	73
	3.7×10^{-3}		Altschuh et al. (1999)	M	
	1.7×10^{-3}		Ryu and Park (1999)	M	
	1.8×10^{-3}		Dohnal and Hovorka (1999)	M	
	1.8×10^{-3}		Allen et al. (1998)	M	
	2.2×10^{-3}		Peng and Wan (1998)	M	
	1.4×10^{-3}	3300	Peng and Wan (1998)	M	71
	2.2×10^{-3}		de Wolf and Lieder (1998)	M	88
	1.6×10^{-3}		Welke et al. (1998)	M	
	1.9×10^{-3}	3200	Peng and Wan (1997)	M	
	1.8×10^{-3}	2700	Kondoh and Nakajima (1997)	M	
	1.4×10^{-3}	3300	Park et al. (1997)	M	
	1.8×10^{-3}	4200	Alaee et al. (1996)	M	
	1.6×10^{-3}	4300	Turner et al. (1996)	M	
	2.1×10^{-3}	3900	Dewulf et al. (1995)	M	
	2.0×10^{-3}		Nielsen et al. (1994)	M	
	1.7×10^{-3}	4100	Khalfaoui and Newsham (1994b)	M	334
	1.8×10^{-3}	3400	Robbins et al. (1993)	M	335
	1.7×10^{-3}		Hoff et al. (1993)	M	
	1.8×10^{-3}	2300	Ettre et al. (1993)	M	11
	1.5×10^{-3}		Hansen et al. (1993)	M	336

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.7×10^{-3}	4000	Perlinger et al. (1993)	M	
	1.7×10^{-3}		Li and Carr (1993)	M	
	1.8×10^{-3}		Li et al. (1993)	M	
	1.5×10^{-3}		Zhang and Pawliszyn (1993)	M	
	1.7×10^{-3}	4300	Cooling et al. (1992)	M	337
	1.8×10^{-3}		Anderson (1992)	M	73
	1.9×10^{-3}		Yu (1992)	M	12
	1.6×10^{-3}	4300	Bissonette et al. (1990)	M	
	2.0×10^{-3}		Guitart et al. (1989)	M	14
	1.8×10^{-3}	3200	Ashworth et al. (1988)	M	279
	1.7×10^{-3}		Keeley et al. (1988)	M	
	2.0×10^{-3}		Hellmann (1987)	M	88
	1.3×10^{-3}		Yurteri et al. (1987)	M	12
	1.8×10^{-3}	3600	Tsonopoulos and Wilson (1983)	M	1
	1.7×10^{-3}	3900	Sanemasa et al. (1982)	M	
	1.8×10^{-3}	4000	Leighton and Calo (1981)	M	
	1.7×10^{-3}	3500	Sanemasa et al. (1981)	M	
	1.2×10^{-3}	5300	Ervin et al. (1980)	M	
	1.8×10^{-3}		Warner et al. (1980)	M	
	1.8×10^{-3}		Mackay et al. (1979)	M	
	1.1×10^{-3}		Sato and Nakajima (1979a)	M	14
	1.6×10^{-3}	3800	Tsibul'skii et al. (1979)	M	
	1.8×10^{-3}	4200	Green and Frank (1979)	M	
	1.8×10^{-3}		Vitenberg et al. (1975)	M	
	1.2×10^{-3}		Vitenberg et al. (1974)	M	12
	1.7×10^{-3}	4400	Brown and Wasik (1974)	M	
	2.1×10^{-3}	4500	Hartkopf and Karger (1973)	M	
	1.6×10^{-3}	4500	Wasik and Tsang (1970)	M	
	1.5×10^{-3}		Saylor et al. (1938)	M	38
	3.5×10^{-4}		Abraham and Acree (2007)	V	
	1.8×10^{-3}		Mackay et al. (2006a)	V	
	1.8×10^{-3}		Kochetkov et al. (2001)	V	
	1.8×10^{-3}		Shiu and Ma (2000)	V	
	1.8×10^{-3}		Shiu and Mackay (1997)	V	
	1.8×10^{-3}		Park et al. (1997)	V	
	1.8×10^{-3}		Mackay et al. (1992a)	V	
	1.8×10^{-3}		Hwang et al. (1992)	V	
	1.8×10^{-3}		Eastcott et al. (1988)	V	
	1.8×10^{-3}	3800	Abraham (1984)	V	
	1.8×10^{-3}	3600	Ben-Naim and Wilf (1980)	V	1
	1.8×10^{-3}		Warner et al. (1980)	V	
	1.8×10^{-3}		Hine and Mookerjee (1975)	V	
	1.8×10^{-3}	4100	Mackay and Leinonen (1975)	V	
	1.7×10^{-3}	3800	Wauchope and Haque (1972)	V	
	1.7×10^{-3}	3800	Wauchope and Haque (1972)	V	
	2.0×10^{-3}		McAuliffe (1966)	V	24

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.8×10^{-3}	3800	Andon et al. (1954)	V	338
	1.8×10^{-3}		Bohon and Claussen (1951)	V	
	1.8×10^{-3}	3800	Plyasunov et al. (2001)	T	
	1.8×10^{-3}		Mackay et al. (1979)	T	
		3800	Gill et al. (1976)	T	
	2.7×10^{-3}		Pierotti (1965)	T	
	1.8×10^{-3}		Yaws (2003)	X	259
	1.8×10^{-3}		Yaws (2003)	X	238
	1.8×10^{-3}	2200	Goldstein (1982)	X	299
	1.8×10^{-3}		Sieg et al. (2008)	C	
	1.8×10^{-3}		Schüürmann (2000)	C	21
	1.8×10^{-3}		Smith et al. (1993)	C	12
	1.8×10^{-3}		Ryan et al. (1988)	C	
	1.8×10^{-3}		Shen (1982)	C	
	1.8×10^{-3}		Dupeux et al. (2022)	Q	260
	1.4×10^{-3}		Hayer et al. (2022)	Q	20
	7.2×10^{-4}		Keshavarz et al. (2022)	Q	
	6.0×10^{-3}		Duchowicz et al. (2020)	Q	300
	6.5×10^{-3}		Wang et al. (2017)	Q	81, 239
	1.3×10^{-3}		Wang et al. (2017)	Q	81, 240
	3.2×10^{-3}		Wang et al. (2017)	Q	81, 241
	1.8×10^{-3}		Li et al. (2014)	Q	242
	4.4×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	1.2×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.7×10^{-3}		Hilal et al. (2008)	Q	
	2.2×10^{-3}		Modarresi et al. (2007)	Q	68
		4000	Kühne et al. (2005)	Q	
	1.8×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	7.4×10^{-4}		Yao et al. (2002)	Q	230
	2.2×10^{-3}		English and Carroll (2001)	Q	231, 232
	7.7×10^{-5}		Katritzky et al. (1998)	Q	
	2.1×10^{-3}		Suzuki et al. (1992)	Q	233
	2.2×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.8×10^{-3}		Arbuckle (1983)	Q	
	1.8×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		3700	Kühne et al. (2005)	?	
	1.8×10^{-3}		Yaws (1999)	?	21
	1.1×10^{-3}		Abraham and Weathersby (1994)	?	21
	1.8×10^{-3}		Yaws and Yang (1992)	?	21
	1.8×10^{-3}		Abraham et al. (1990)	?	
	2.2×10^{-3}		Mackay and Yeun (1983)	?	

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
benzene-d6 C_6D_6 [1076-43-3] UHOVQNZJYSORNB-MZWXYZOWSA-N	1.8×10^{-3}	4000	Hiatt (2013)	M	
	1.6×10^{-3}	4500	Wasik and Tsang (1970)	M	
		3800	Gill et al. (1976)	T	
methylbenzene $C_6H_5CH_3$ (toluene) [108-88-3] YXFVVABEGXRONW-UHFFFAOYSA-N	1.6×10^{-3}	4100	Schwardt et al. (2021)	L	1
	1.9×10^{-3}	4000	Brockbank (2013)	L	1, 339
	1.5×10^{-3}	4300	Staudinger and Roberts (2001)	L	
	1.6×10^{-3}	4400	Plyasunov and Shock (2000)	L	
	1.5×10^{-3}	4000	Staudinger and Roberts (1996)	L	
	1.5×10^{-3}		Mackay and Shiu (1981)	L	
	1.5×10^{-3}	4600	Kutsuna and Kaneyasu (2021)	M	
	1.5×10^{-3}		Kim and Kim (2014)	M	
	2.1×10^{-3}	4400	Hiatt (2013)	M	
	2.8×10^{-3}		Zhang et al. (2013)	M	327
	1.7×10^{-3}	4200	Lee et al. (2013)	M	
	1.5×10^{-3}		Kish et al. (2013)	M	
	1.3×10^{-3}	2700	Lau et al. (2010)	M	11
	1.5×10^{-3}	4300	Sieg et al. (2009)	M	328
	1.4×10^{-3}		Helburn et al. (2008)	M	
	1.5×10^{-3}		Li et al. (2008)	M	
	1.3×10^{-3}	2100	Falabella and Teja (2008)	M	11, 340
	1.4×10^{-3}		Lodge and Danso (2007)	M	
	1.5×10^{-3}	3900	Lin and Chou (2006)	M	
			Cheng et al. (2004)	M	330
	1.4×10^{-3}	2200	Lei et al. (2004)	M	329
			Cheng et al. (2003)	M	330
	1.4×10^{-3}		Karl et al. (2003)	M	88
	2.1×10^{-3}		Bobadilla et al. (2003)	M	
	1.7×10^{-3}	4300	Bakierowska and Trzeszczyński (2003)	M	
	2.0×10^{-3}		Destailats and Charles (2002)	M	
	1.5×10^{-3}	4200	Görgényi et al. (2002)	M	341
	1.7×10^{-3}	3600	Bierwagen and Keller (2001)	M	
	1.0×10^{-3}		Ayuttaya et al. (2001)	M	342
	1.7×10^{-4}		Ayuttaya et al. (2001)	M	343
	7.8×10^{-4}		Ayuttaya et al. (2001)	M	344
	2.3×10^{-3}		Ayuttaya et al. (2001)	M	345
	1.5×10^{-3}		David et al. (2000)	M	73
	1.6×10^{-3}		Miller and Stuart (2000)	M	73
	1.9×10^{-3}	4000	Vane and Giroux (2000)	M	
	8.5×10^{-4}		McIntosh and Heffron (2000)	M	14
	1.5×10^{-3}	4700	Dewulf et al. (1999)	M	
	1.7×10^{-3}		Altschuh et al. (1999)	M	
	1.5×10^{-3}		Ryu and Park (1999)	M	
	1.6×10^{-3}		Dohnal and Hovorka (1999)	M	

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.5×10^{-3}		Allen et al. (1998)	M	
	2.1×10^{-3}		Peng and Wan (1998)	M	
	1.2×10^{-3}	3600	Peng and Wan (1998)	M	71
	2.0×10^{-3}		de Wolf and Lieder (1998)	M	88
	1.4×10^{-3}		Welke et al. (1998)	M	
	1.7×10^{-3}	3700	Peng and Wan (1997)	M	
	1.7×10^{-3}	2800	Kondoh and Nakajima (1997)	M	
	1.3×10^{-3}	3900	Park et al. (1997)	M	
	1.4×10^{-3}	4100	Turner et al. (1996)	M	
	1.5×10^{-3}		Ramachandran et al. (1996)	M	
	1.8×10^{-3}	4400	Dewulf et al. (1995)	M	
	1.6×10^{-3}		Nielsen et al. (1994)	M	
	1.5×10^{-3}	4400	Robbins et al. (1993)	M	346
	1.3×10^{-3}		Hoff et al. (1993)	M	
	1.5×10^{-3}	2500	Ettre et al. (1993)	M	11
	1.4×10^{-3}		Hansen et al. (1993)	M	336
	1.5×10^{-3}	4500	Perlinger et al. (1993)	M	
	1.6×10^{-3}		Li and Carr (1993)	M	
	1.6×10^{-3}		Li et al. (1993)	M	
	1.5×10^{-3}		Zhang and Pawliszyn (1993)	M	
	1.6×10^{-3}	2500	Kolb et al. (1992)	M	278
	1.5×10^{-3}		Anderson (1992)	M	73
	3.7×10^{-3}		Yu (1992)	M	12
	1.4×10^{-3}	5000	Bissonette et al. (1990)	M	
	1.5×10^{-3}	6500	Lamarche and Droste (1989)	M	347
	1.5×10^{-3}	3000	Ashworth et al. (1988)	M	279
	1.6×10^{-3}		Keeley et al. (1988)	M	
	1.7×10^{-3}		Yurteri et al. (1987)	M	12
	1.2×10^{-3}	5400	Schoene and Steinhanses (1985)	M	
	1.5×10^{-3}		Garbarini and Lion (1985)	M	
	1.5×10^{-3}	4200	Sanemasa et al. (1982)	M	
	1.5×10^{-3}	3800	Leighton and Calo (1981)	M	
	1.6×10^{-3}	4100	Sanemasa et al. (1981)	M	
	1.5×10^{-3}	4900	Ervin et al. (1980)	M	
	1.7×10^{-3}		Warner et al. (1980)	M	
	1.5×10^{-3}		Mackay et al. (1979)	M	
	8.6×10^{-4}		Sato and Nakajima (1979a)	M	14
	1.5×10^{-3}	4700	Tsibul'skii et al. (1979)	M	
	1.9×10^{-3}		Vitenberg et al. (1975)	M	
	1.6×10^{-3}	5000	Brown and Wasik (1974)	M	
	2.0×10^{-3}	4900	Hartkopf and Karger (1973)	M	
	1.7×10^{-3}	5900	Wasik and Tsang (1970)	M	
	1.6×10^{-3}		Martins et al. (2017)	V	316
	1.5×10^{-3}		Mackay et al. (2006a)	V	
	1.9×10^{-3}	4300	Fogg and Sangster (2003)	V	348
	1.5×10^{-3}		Shiu and Ma (2000)	V	

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.5×10^{-3}		Park et al. (1997)	V	
	1.5×10^{-3}		Mackay et al. (1992a)	V	
	1.3×10^{-3}		Hwang et al. (1992)	V	
	1.7×10^{-3}		Eastcott et al. (1988)	V	
	1.5×10^{-3}	4400	Abraham (1984)	V	
	1.9×10^{-3}	4200	Ben-Naim and Wilf (1980)	V	1
	1.5×10^{-3}		Warner et al. (1980)	V	
	1.5×10^{-3}		Hine and Mookerjee (1975)	V	
	1.5×10^{-3}		Mackay and Leinonen (1975)	V	
	1.8×10^{-3}	4400	Wauchope and Haque (1972)	V	
	1.7×10^{-3}		McAuliffe (1966)	V	24
	1.8×10^{-3}	4300	Andon et al. (1954)	V	338
	1.8×10^{-3}		Bohon and Claussen (1951)	V	
	1.6×10^{-3}	4400	Plyasunov et al. (2001)	T	
	1.5×10^{-3}		Mackay et al. (1979)	T	
		4400	Gill et al. (1976)	T	
	1.6×10^{-3}		Yaws (2003)	X	259
	1.5×10^{-3}		Yaws (2003)	X	238
	1.5×10^{-3}	1900	Goldstein (1982)	X	299
	1.5×10^{-3}		McAuliffe (1971)	X	349
	1.5×10^{-3}		Sieg et al. (2008)	C	
	1.5×10^{-3}		Schüürmann (2000)	C	21
	1.7×10^{-3}		Smith et al. (1993)	C	12
	1.4×10^{-3}		Ryan et al. (1988)	C	
	1.7×10^{-3}		Shen (1982)	C	
	1.5×10^{-3}		Dupeux et al. (2022)	Q	260
	1.2×10^{-3}		Hayer et al. (2022)	Q	20
	9.7×10^{-4}		Keshavarz et al. (2022)	Q	
	3.1×10^{-3}		Duchowicz et al. (2020)	Q	300
	3.8×10^{-3}		Wang et al. (2017)	Q	81, 239
	1.1×10^{-3}		Wang et al. (2017)	Q	81, 240
	3.0×10^{-3}		Wang et al. (2017)	Q	81, 241
	1.5×10^{-3}		Li et al. (2014)	Q	242
	2.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	1.3×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.5×10^{-3}		Hilal et al. (2008)	Q	
	1.2×10^{-3}		Modarresi et al. (2007)	Q	68
		4300	Kühne et al. (2005)	Q	
	1.6×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	7.2×10^{-4}		Yao et al. (2002)	Q	230
	1.6×10^{-3}		English and Carroll (2001)	Q	231, 232
	2.7×10^{-4}		Katritzky et al. (1998)	Q	
	1.5×10^{-3}		Suzuki et al. (1992)	Q	233

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.6×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.2×10^{-3}		Arbuckle (1983)	Q	
	1.5×10^{-3}	4200	Duchowicz et al. (2020)	?	186, 21
			Kühne et al. (2005)	?	
	1.6×10^{-3}		Yaws (1999)	?	21
	9.0×10^{-4}		Abraham and Weathersby (1994)	?	21
	1.5×10^{-3}		Yaws and Yang (1992)	?	21
	1.5×10^{-3}		Abraham et al. (1990)	?	
	1.9×10^{-3}		Mackay and Yeun (1983)	?	
methylbenzene-d8 $\text{C}_6\text{D}_5\text{CD}_3$ (toluene-d8) [2037-26-5] YXFVVBEGXRONW-JGUCLWPXSA-N	2.0×10^{-3}	4300	Hiatt (2013)	M	
1,2-dimethylbenzene $\text{C}_6\text{H}_4(\text{CH}_3)_2$ (<i>o</i> -xylene) [95-47-6] CTQNGGLPUBDAKN-UHFFFAOYSA-N	2.0×10^{-3}	4600	Schwardt et al. (2021)	L	1
	2.0×10^{-3}	4700	Brockbank (2013)	L	1
	2.4×10^{-3}	4200	Fogg and Sangster (2003)	L	
	2.0×10^{-3}	4300	Staudinger and Roberts (2001)	L	
	2.0×10^{-3}	4400	Plyasunov and Shock (2000)	L	
	1.9×10^{-3}	4000	Staudinger and Roberts (1996)	L	
	2.0×10^{-3}		Mackay and Shiu (1981)	L	
	1.9×10^{-3}		Kim and Kim (2014)	M	
	3.2×10^{-3}	4500	Hiatt (2013)	M	
	2.7×10^{-3}	8500	Zhang et al. (2013)	M	326
	2.2×10^{-3}		Zhang et al. (2013)	M	327
	2.0×10^{-3}	4300	Sieg et al. (2009)	M	328
	2.3×10^{-3}		Li et al. (2008)	M	
	1.7×10^{-3}	2500	Falabella and Teja (2008)	M	11, 340
	9.6×10^{-4}		McIntosh and Heffron (2000)	M	14
	2.1×10^{-3}		Dohnal and Hovorka (1999)	M	
	2.2×10^{-3}		Welke et al. (1998)	M	
	1.9×10^{-3}	3400	Kondoh and Nakajima (1997)	M	
	1.4×10^{-3}		Turner et al. (1996)	M	
	2.4×10^{-3}	4500	Dewulf et al. (1995)	M	
	2.0×10^{-3}	5800	Robbins et al. (1993)	M	350
	1.9×10^{-3}		Li and Carr (1993)	M	
	2.1×10^{-3}		Li et al. (1993)	M	
	2.7×10^{-3}		Zhang and Pawliszyn (1993)	M	
	1.4×10^{-3}	3000	Kolb et al. (1992)	M	278
	1.7×10^{-3}		Anderson (1992)	M	73
	2.1×10^{-3}	5600	Bissonette et al. (1990)	M	
	1.9×10^{-3}	3200	Ashworth et al. (1988)	M	279
	2.3×10^{-3}		Yurteri et al. (1987)	M	12
	1.9×10^{-3}	4500	Sanemasa et al. (1982)	M	
	1.0×10^{-3}		Sato and Nakajima (1979a)	M	14

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	2.9×10^{-3}	5400	Wasik and Tsang (1970)	M	
	1.8×10^{-3}		Mackay et al. (2006a)	V	
	1.8×10^{-3}		Shiu and Ma (2000)	V	
	1.8×10^{-3}		Mackay et al. (1992a)	V	
	2.3×10^{-3}		Eastcott et al. (1988)	V	
	1.8×10^{-3}		Hine and Mookerjee (1975)	V	
	1.9×10^{-3}		Mackay and Leinonen (1975)	V	
	1.9×10^{-3}		McAuliffe (1966)	V	24
	2.3×10^{-3}		Yaws (2003)	X	238
	1.9×10^{-3}		Sieg et al. (2008)	C	
	1.3×10^{-3}		Keshavarz et al. (2022)	Q	
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	
	2.3×10^{-3}		Wang et al. (2017)	Q	81, 239
	1.6×10^{-3}		Wang et al. (2017)	Q	81, 240
	3.2×10^{-3}		Wang et al. (2017)	Q	81, 241
	1.3×10^{-3}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	1.9×10^{-3}		Gharagheizi et al. (2010)	Q	247
	2.0×10^{-3}		Hilal et al. (2008)	Q	
	1.1×10^{-3}		Modarresi et al. (2007)	Q	68
		4100	Kühne et al. (2005)	Q	
	1.9×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	1.7×10^{-3}		English and Carroll (2001)	Q	231, 275
	3.8×10^{-4}		Katritzky et al. (1998)	Q	
	1.0×10^{-3}		Suzuki et al. (1992)	Q	233
	1.1×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.9×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		4100	Kühne et al. (2005)	?	
	2.4×10^{-3}		Yaws (1999)	?	21
	1.1×10^{-3}		Abraham and Weathersby (1994)	?	21
	2.3×10^{-3}		Yaws and Yang (1992)	?	21
	1.9×10^{-3}		Abraham et al. (1990)	?	
1,2-dimethylbenzene-d10 $\text{C}_6\text{D}_4(\text{CD}_3)_2$ (<i>o</i> -xylene-d10) [56004-61-6] CTQNGGLPUBDAKN-ZGYYUIRESA-N	3.0×10^{-3}	4700	Hiatt (2013)	M	

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3-dimethylbenzene	1.4×10^{-3}	4100	Schwardt et al. (2021)	L	1
$\text{C}_6\text{H}_4(\text{CH}_3)_2$	1.5×10^{-3}	4300	Brockbank (2013)	L	1
(<i>m</i> -xylene)	1.4×10^{-3}	4200	Staudinger and Roberts (2001)	L	
[108-38-3]	1.4×10^{-3}	4600	Plyasunov and Shock (2000)	L	
IVSZLXZYQVIEFR-UHFFFAOYSA-N	1.3×10^{-3}	4200	Staudinger and Roberts (1996)	L	
	1.4×10^{-3}		Mackay and Shiu (1981)	L	
	1.3×10^{-3}		Kim and Kim (2014)	M	
	1.4×10^{-3}		Li et al. (2008)	M	
	1.3×10^{-3}		Karl et al. (2003)	M	88
	6.6×10^{-4}		McIntosh and Heffron (2000)	M	14
	1.5×10^{-3}		Dohnal and Hovorka (1999)	M	
	1.5×10^{-3}	2900	Kondoh and Nakajima (1997)	M	
	1.6×10^{-3}	4300	Dewulf et al. (1995)	M	
	1.3×10^{-3}		Li and Carr (1993)	M	
	1.5×10^{-3}		Li et al. (1993)	M	
	1.4×10^{-3}	6000	Bissonette et al. (1990)	M	
	1.3×10^{-3}	3300	Ashworth et al. (1988)	M	279
	1.4×10^{-3}	4700	Sanemasa et al. (1982)	M	
	6.4×10^{-4}		Sato and Nakajima (1979a)	M	14
	1.8×10^{-3}	4500	Tsibul'skii et al. (1979)	M	
	1.4×10^{-3}		Mackay et al. (2006a)	V	
	1.7×10^{-3}	4300	Fogg and Sangster (2003)	V	
	1.4×10^{-3}		Shiu and Ma (2000)	V	
	1.4×10^{-3}		Mackay et al. (1992a)	V	
	1.4×10^{-3}		Eastcott et al. (1988)	V	
	1.6×10^{-3}		Hine and Mookerjee (1975)	V	
	1.6×10^{-3}	4800	Wauchope and Haque (1972)	V	
	1.7×10^{-3}	5000	Andon et al. (1954)	V	338
	1.7×10^{-3}		Bohon and Claussen (1951)	V	
	1.5×10^{-3}		Yaws (2003)	X	238
	1.4×10^{-3}		Sieg et al. (2008)	C	
	1.3×10^{-3}		Keshavarz et al. (2022)	Q	
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	
	2.3×10^{-3}		Wang et al. (2017)	Q	81, 239
	1.2×10^{-3}		Wang et al. (2017)	Q	81, 240
	2.8×10^{-3}		Wang et al. (2017)	Q	81, 241
	1.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	1.9×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.5×10^{-3}		Hilal et al. (2008)	Q	
	7.5×10^{-4}		Modarresi et al. (2007)	Q	68
		4700	Kühne et al. (2005)	Q	
	1.4×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	4.4×10^{-4}		Yao et al. (2002)	Q	230

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.7×10^{-3}		English and Carroll (2001)	Q	231, 232
	3.8×10^{-4}		Katritzky et al. (1998)	Q	
	1.4×10^{-3}		Russell et al. (1992)	Q	280
	1.0×10^{-3}		Suzuki et al. (1992)	Q	233
	1.1×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.4×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		4900	Kühne et al. (2005)	?	
	1.5×10^{-3}		Yaws (1999)	?	21
	6.7×10^{-4}		Abraham and Weathersby (1994)	?	21
	1.5×10^{-3}		Yaws and Yang (1992)	?	21
	1.3×10^{-3}		Abraham et al. (1990)	?	
1,4-dimethylbenzene $\text{C}_6\text{H}_4(\text{CH}_3)_2$ (<i>p</i> -xylene) [106-42-3] URLKBWYHVLBVBO-UHFFFAOYSA-N	1.5×10^{-3}	5000	Schwardt et al. (2021)	L	1
	1.4×10^{-3}	5000	Brockbank (2013)	L	1
	1.9×10^{-3}	4200	Fogg and Sangster (2003)	L	
	1.3×10^{-3}	4000	Staudinger and Roberts (2001)	L	
	1.4×10^{-3}	4600	Plyasunov and Shock (2000)	L	
	1.3×10^{-3}	3800	Staudinger and Roberts (1996)	L	
	1.4×10^{-3}		Mackay and Shiu (1981)	L	
	1.0×10^{-3}	2600	Schwardt et al. (2021)	M	351, 11
	1.3×10^{-3}		Kim and Kim (2014)	M	
	1.4×10^{-3}		Li et al. (2008)	M	
	1.6×10^{-3}	4800	Lin and Chou (2006)	M	
	2.0×10^{-3}		Bobadilla et al. (2003)	M	
	6.7×10^{-4}		McIntosh and Heffron (2000)	M	14
	1.4×10^{-3}		Ryu and Park (1999)	M	
	1.5×10^{-3}		Dohnal and Hovorka (1999)	M	
	1.5×10^{-3}	2900	Kondoh and Nakajima (1997)	M	
	9.8×10^{-4}	3200	Park et al. (1997)	M	
	1.7×10^{-3}	4800	Dewulf et al. (1995)	M	
	1.2×10^{-3}	3100	Hansen et al. (1993)	M	282
	1.3×10^{-3}		Li and Carr (1993)	M	
	1.4×10^{-3}		Li et al. (1993)	M	
	1.7×10^{-3}		Zhang and Pawliszyn (1993)	M	
	1.2×10^{-3}	5300	Bissonette et al. (1990)	M	
	1.3×10^{-3}	3500	Ashworth et al. (1988)	M	279
	1.3×10^{-3}	4800	Sanemasa et al. (1982)	M	
	6.1×10^{-4}		Sato and Nakajima (1979a)	M	14
	2.3×10^{-3}	5400	Wasik and Tsang (1970)	M	
	1.2×10^{-3}		Martins et al. (2017)	V	316
	1.8×10^{-4}		Abraham and Acree (2007)	V	
	1.7×10^{-3}		Mackay et al. (2006a)	V	
	1.4×10^{-3}		Shiu and Ma (2000)	V	
	1.5×10^{-3}		Park et al. (1997)	V	
	1.7×10^{-3}		Mackay et al. (1992a)	V	
	1.5×10^{-3}		Hwang et al. (1992)	V	

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.8×10^{-3}		Eastcott et al. (1988)	V	
	1.6×10^{-3}		Hine and Mookerjee (1975)	V	
	1.6×10^{-3}	4800	Wauchope and Haque (1972)	V	
	1.6×10^{-3}	4900	Andon et al. (1954)	V	338
	1.6×10^{-3}		Bohon and Claussen (1951)	V	
	1.4×10^{-3}		Foster et al. (1994)	X	352
	1.6×10^{-3}		Yaws (2003)	X	238
	1.4×10^{-3}		Sieg et al. (2008)	C	
	1.3×10^{-3}		Schüürmann (2000)	C	21
	1.3×10^{-3}		Keshavarz et al. (2022)	Q	
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	185
	2.3×10^{-3}		Wang et al. (2017)	Q	81, 239
	1.4×10^{-3}		Wang et al. (2017)	Q	81, 240
	2.6×10^{-3}		Wang et al. (2017)	Q	81, 241
	9.8×10^{-4}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	272, 244
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	1.9×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.5×10^{-3}		Hilal et al. (2008)	Q	
	1.1×10^{-3}		Modarresi et al. (2007)	Q	68
		4700	Kühne et al. (2005)	Q	
	1.5×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	8.1×10^{-4}		Yao et al. (2002)	Q	230
	1.7×10^{-3}		English and Carroll (2001)	Q	231, 232
	3.9×10^{-4}		Katritzky et al. (1998)	Q	
	1.0×10^{-3}		Suzuki et al. (1992)	Q	233
	1.1×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.4×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		4500	Kühne et al. (2005)	?	
	1.6×10^{-3}		Yaws (1999)	?	21
	6.4×10^{-4}		Abraham and Weathersby (1994)	?	21
	1.6×10^{-3}		Yaws and Yang (1992)	?	21
	1.4×10^{-3}		Abraham et al. (1990)	?	
1,2,3-trimethylbenzene	2.4×10^{-3}	4600	Brockbank (2013)	L	
$\text{C}_6\text{H}_3(\text{CH}_3)_3$	2.7×10^{-3}	4800	Fogg and Sangster (2003)	L	
[526-73-8]	2.6×10^{-3}	4500	Plyasunov and Shock (2000)	L	
FYGHUNMUKGBRK-UHFFFAOYSA-N	3.1×10^{-3}		Mackay and Shiu (1981)	L	
	1.1×10^{-3}		Järnberg and Johanson (1995)	M	14
	2.4×10^{-3}	4500	Sanemasa et al. (1982)	M	
	2.9×10^{-3}		Mackay et al. (2006a)	V	
	2.9×10^{-3}		Shiu and Ma (2000)	V	
	3.1×10^{-3}		Abraham et al. (1994a)	V	
	2.9×10^{-3}		Mackay et al. (1992a)	V	
	2.7×10^{-3}		Eastcott et al. (1988)	V	

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.3×10^{-3}		Yaws (2003)	X	238
	1.8×10^{-3}		Keshavarz et al. (2022)	Q	
	7.9×10^{-4}		Duchowicz et al. (2020)	Q	300
	1.4×10^{-3}		Wang et al. (2017)	Q	81, 239
	2.2×10^{-3}		Wang et al. (2017)	Q	81, 240
	3.5×10^{-3}		Wang et al. (2017)	Q	81, 241
	8.8×10^{-4}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	2.5×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	1.6×10^{-3}		Gharagheizi et al. (2010)	Q	247
	3.1×10^{-3}		Hilal et al. (2008)	Q	
	8.2×10^{-4}		Modarresi et al. (2007)	Q	68
		3900	Kühne et al. (2005)	Q	
	3.1×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	2.0×10^{-3}		English and Carroll (2001)	Q	231, 275
	4.6×10^{-4}		Katritzky et al. (1998)	Q	
	8.2×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	2.3×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		4400	Kühne et al. (2005)	?	
	1.3×10^{-3}		Yaws (1999)	?	21
	2.7×10^{-3}		Yaws and Yang (1992)	?	21
	2.1×10^{-3}		Abraham et al. (1990)	?	
1,2,4-trimethylbenzene $\text{C}_6\text{H}_3(\text{CH}_3)_3$ [95-63-6] GWHJZXXIDMPWG-X-UHFFFAOYSA-N	1.6×10^{-3}	4700	Brockbank (2013)	L	
	1.7×10^{-3}	3100	Fogg and Sangster (2003)	L	
	1.6×10^{-3}	4800	Plyasunov and Shock (2000)	L	
	1.7×10^{-3}		Mackay and Shiu (1981)	L	
	3.2×10^{-3}	5200	Hiatt (2013)	M	
	1.7×10^{-3}		Li et al. (2008)	M	
	2.3×10^{-3}	3600	Kondoh and Nakajima (1997)	M	
	6.2×10^{-4}		Järnberg and Johanson (1995)	M	14
	1.5×10^{-3}	4300	Hansen et al. (1993)	M	282
	2.1×10^{-3}		Yurteri et al. (1987)	M	12
	1.6×10^{-3}	4800	Sanemasa et al. (1982)	M	
	1.8×10^{-3}		Mackay et al. (2006a)	V	
	1.8×10^{-3}		Shiu and Ma (2000)	V	
	1.7×10^{-3}		Abraham et al. (1994a)	V	
	1.8×10^{-3}		Mackay et al. (1992a)	V	
	1.6×10^{-3}		Eastcott et al. (1988)	V	
	1.7×10^{-3}		Hine and Mookerjee (1975)	V	
	1.4×10^{-3}		Yaws (2003)	X	238
	1.8×10^{-3}		Keshavarz et al. (2022)	Q	
	7.9×10^{-4}		Duchowicz et al. (2020)	Q	300
	1.4×10^{-3}		Wang et al. (2017)	Q	81, 239
	1.9×10^{-3}		Wang et al. (2017)	Q	81, 240

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.8×10^{-3}		Wang et al. (2017)	Q	81, 241
	6.3×10^{-4}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	2.0×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	1.6×10^{-3}		Gharagheizi et al. (2010)	Q	247
	2.1×10^{-3}		Hilal et al. (2008)	Q	
	7.5×10^{-4}		Modarresi et al. (2007)	Q	68
		4500	Kühne et al. (2005)	Q	
	1.8×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	2.0×10^{-3}		English and Carroll (2001)	Q	231, 232
	4.7×10^{-4}		Katritzky et al. (1998)	Q	
	7.3×10^{-4}		Suzuki et al. (1992)	Q	233
	8.0×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	8.2×10^{-4}		Arbuckle (1983)	Q	
	1.6×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		4700	Kühne et al. (2005)	?	
	1.5×10^{-3}		Yaws (1999)	?	21
	1.7×10^{-3}		Yaws and Yang (1992)	?	21
	1.6×10^{-3}		Abraham et al. (1990)	?	
1,3,5-trimethylbenzene $\text{C}_6\text{H}_3(\text{CH}_3)_3$ (mesitylene) [108-67-8] AUHZEENZYGFFBQ-UHFFFAOYSA-N	1.2×10^{-3}	4400	Brockbank (2013)	L	1
	1.3×10^{-3}	4900	Plyasunov and Shock (2000)	L	
	1.7×10^{-3}		Mackay and Shiu (1981)	L	
	2.3×10^{-3}	5100	Hiatt (2013)	M	
	2.0×10^{-3}		Karl et al. (2003)	M	88
	1.5×10^{-3}	3000	Kondoh and Nakajima (1997)	M	
	4.8×10^{-4}		Järnberg and Johanson (1995)	M	14
	1.3×10^{-3}		Li and Carr (1993)	M	
	1.4×10^{-3}		Li et al. (1993)	M	
	1.4×10^{-3}	3600	Ashworth et al. (1988)	M	279
	1.1×10^{-3}	4700	Sanemasa et al. (1982)	M	
	1.1×10^{-3}	4600	Sanemasa et al. (1981)	M	
	1.4×10^{-4}		Abraham and Acree (2007)	V	
	1.3×10^{-3}		Mackay et al. (2006a)	V	
	1.3×10^{-3}		Shiu and Ma (2000)	V	
	1.8×10^{-3}		Abraham et al. (1994a)	V	
	1.3×10^{-3}		Mackay et al. (1992a)	V	
	1.2×10^{-3}		Eastcott et al. (1988)	V	
	1.2×10^{-3}		Yaws (2003)	X	238
	9.1×10^{-4}		Hayer et al. (2022)	Q	20
	1.8×10^{-3}		Keshavarz et al. (2022)	Q	
	7.9×10^{-4}		Duchowicz et al. (2020)	Q	300
	1.4×10^{-3}		Wang et al. (2017)	Q	81, 239
	1.1×10^{-3}		Wang et al. (2017)	Q	81, 240
	2.5×10^{-3}		Wang et al. (2017)	Q	81, 241

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.2×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-3}		Hilal et al. (2008)	Q	
	9.0×10^{-4}		Modarresi et al. (2007)	Q	68
		5000	Kühne et al. (2005)	Q	
	1.8×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	4.6×10^{-4}		Katritzky et al. (1998)	Q	
	8.0×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	1.1×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		4400	Kühne et al. (2005)	?	
	1.2×10^{-3}		Yaws (1999)	?	21
	1.2×10^{-3}		Yaws and Yang (1992)	?	21
	1.3×10^{-3}		Abraham et al. (1990)	?	
1,2,3,4-tetramethylbenzene $\text{C}_{10}\text{H}_{14}$ [488-23-3] UOHMMEJUHBCKEE-UHFFFAOYSA-N	2.9×10^{-3}	5900	Brockbank (2013)	L	
1,2,3,5-tetramethylbenzene $\text{C}_{10}\text{H}_{14}$ [527-53-7] BFIMMTCNYPIMRN-UHFFFAOYSA-N	1.2×10^{-3}		Zhang et al. (2010)	Q	288, 289
	2.2×10^{-3}		Zhang et al. (2010)	Q	288, 290
	2.2×10^{-3}		Zhang et al. (2010)	Q	288, 291
	4.1×10^{-4}		Zhang et al. (2010)	Q	288, 292
	1.2×10^{-3}		Yaws (1999)	?	21
1,2,4,5-tetramethylbenzene $\text{C}_{10}\text{H}_{14}$ [95-93-2] SQNZJJAZBFDUTD-UHFFFAOYSA-N	1.4×10^{-3}		Brockbank (2013)	L	
	1.3×10^{-3}		Plyasunov and Shock (2000)	L	
	3.9×10^{-4}		Mackay and Shiu (1981)	L	
	3.9×10^{-4}		Mackay et al. (2006a)	V	
	3.9×10^{-4}		Mackay et al. (1992a)	V	
	3.9×10^{-4}		Eastcott et al. (1988)	V	
	3.5×10^{-4}		Yaws (2003)	X	238
	1.4×10^{-3}		Abraham et al. (2019)	Q	
	3.7×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-3}		Zhang et al. (2010)	Q	288, 289
	2.5×10^{-3}		Zhang et al. (2010)	Q	288, 290
	1.9×10^{-3}		Zhang et al. (2010)	Q	288, 291
	4.1×10^{-4}		Zhang et al. (2010)	Q	288, 292
	3.7×10^{-4}		Gharagheizi et al. (2010)	Q	247
	2.9×10^{-3}		Hilal et al. (2008)	Q	
	8.2×10^{-4}		Modarresi et al. (2007)	Q	68
	3.9×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	3.9×10^{-4}		Yaws and Yang (1992)	?	21

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethylbenzene	1.4×10^{-3}	4500	Schwardt et al. (2021)	L	1, 353
$\text{C}_6\text{H}_5\text{C}_2\text{H}_5$	1.3×10^{-3}	5000	Brockbank (2013)	L	1
[100-41-4]	1.4×10^{-3}	4800	Fogg and Sangster (2003)	L	
YNQLUTRBYVCPMQ-UHFFFAOYSA-N	1.3×10^{-3}	5100	Staudinger and Roberts (2001)	L	
	1.3×10^{-3}	4800	Plyasunov and Shock (2000)	L	
	1.2×10^{-3}	5100	Staudinger and Roberts (1996)	L	
	1.3×10^{-3}		Mackay and Shiu (1981)	L	
	1.3×10^{-3}	4400	Schwardt et al. (2021)	M	354
	2.0×10^{-3}	4100	Hiatt (2013)	M	
	1.9×10^{-3}	4200	Zhang et al. (2013)	M	326
	1.4×10^{-3}		Zhang et al. (2013)	M	327
	1.3×10^{-3}	5100	Sieg et al. (2009)	M	328
	1.4×10^{-3}		Li et al. (2008)	M	
	1.2×10^{-3}	2700	Falabella and Teja (2008)	M	11, 340
	1.1×10^{-3}		Lodge and Danso (2007)	M	
			Cheng et al. (2003)	M	330
	1.6×10^{-3}		Miller and Stuart (2000)	M	73
	1.1×10^{-3}		Ryu and Park (1999)	M	355
	1.3×10^{-3}		Allen et al. (1998)	M	
	1.4×10^{-3}	2800	Kondoh and Nakajima (1997)	M	
	1.1×10^{-3}		Turner et al. (1996)	M	
	1.5×10^{-3}	4900	Dewulf et al. (1995)	M	
	1.3×10^{-3}	5000	Robbins et al. (1993)	M	356
	1.3×10^{-3}	5300	Perlinger et al. (1993)	M	
	1.3×10^{-3}		Li and Carr (1993)	M	
	1.3×10^{-3}		Li et al. (1993)	M	
	2.5×10^{-3}		Zhang and Pawliszyn (1993)	M	
	1.1×10^{-3}	5500	Bissonette et al. (1990)	M	
	1.2×10^{-3}	5000	Ashworth et al. (1988)	M	279
	1.3×10^{-3}	4400	Heidman et al. (1985)	M	1
	1.3×10^{-3}	4600	Sanemasa et al. (1982)	M	
	1.4×10^{-3}	4500	Sanemasa et al. (1981)	M	
	1.4×10^{-3}	5500	Ervin et al. (1980)	M	
	1.5×10^{-3}		Warner et al. (1980)	M	
	1.2×10^{-3}		Mackay et al. (1979)	M	
	6.6×10^{-4}		Sato and Nakajima (1979a)	M	14
	1.3×10^{-3}	5600	Brown and Wasik (1974)	M	
	1.6×10^{-3}	6400	Hartkopf and Karger (1973)	M	
	1.6×10^{-4}		Abraham and Acree (2007)	V	
	1.1×10^{-3}		Mackay et al. (2006a)	V	
	1.2×10^{-3}		Shiu and Ma (2000)	V	
	1.2×10^{-3}		Lide and Frederikse (1995)	V	
	1.1×10^{-3}		Mackay et al. (1992a)	V	
	1.2×10^{-3}		Hwang et al. (1992)	V	
	1.0×10^{-3}		Eastcott et al. (1988)	V	
	1.2×10^{-3}	4800	Abraham (1984)	V	

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.6×10^{-3}	4900	Ben-Naim and Wilf (1980)	V	1
	1.5×10^{-3}		Warner et al. (1980)	V	
	1.1×10^{-3}		Hine and Mookerjee (1975)	V	
	1.5×10^{-3}	4800	Wauchope and Haque (1972)	V	
	1.3×10^{-3}		McAuliffe (1966)	V	24
	1.5×10^{-3}	4900	Andon et al. (1954)	V	338
	1.5×10^{-3}		Bohon and Claussen (1951)	V	
	1.4×10^{-3}	4900	Owens et al. (1986)	T	
	1.1×10^{-3}		Mackay et al. (1979)	T	
		4800	Gill et al. (1976)	T	
	1.2×10^{-3}		Yaws (2003)	X	238
	1.6×10^{-3}	1700	Goldstein (1982)	X	299
	1.3×10^{-3}		Sieg et al. (2008)	C	
	1.6×10^{-3}		Ryan et al. (1988)	C	
	1.5×10^{-3}		Shen (1982)	C	
	9.7×10^{-4}		Hayer et al. (2022)	Q	20
	1.3×10^{-3}		Keshavarz et al. (2022)	Q	
	3.1×10^{-3}		Duchowicz et al. (2020)	Q	
	3.1×10^{-3}		Wang et al. (2017)	Q	81, 239
	9.3×10^{-4}		Wang et al. (2017)	Q	81, 240
	2.8×10^{-3}		Wang et al. (2017)	Q	81, 241
	1.4×10^{-3}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	1.1×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-3}		Hilal et al. (2008)	Q	
	9.6×10^{-4}		Modarresi et al. (2007)	Q	68
		4700	Kühne et al. (2005)	Q	
	1.2×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	5.8×10^{-4}		Yao et al. (2002)	Q	230
	1.4×10^{-3}		English and Carroll (2001)	Q	231, 261
	4.1×10^{-4}		Katritzky et al. (1998)	Q	
	1.6×10^{-3}		Russell et al. (1992)	Q	280
	1.1×10^{-3}		Suzuki et al. (1992)	Q	233
	1.3×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.3×10^{-3}		Arbuckle (1983)	Q	
	1.3×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		5000	Kühne et al. (2005)	?	
	1.2×10^{-3}		Yaws (1999)	?	21
	6.9×10^{-4}		Abraham and Weathersby (1994)	?	21
	1.1×10^{-3}		Hoff et al. (1993)	?	21
	1.2×10^{-3}		Yaws and Yang (1992)	?	21
	1.2×10^{-3}		Abraham et al. (1990)	?	

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethylbenzene-d10 $\text{C}_6\text{D}_5\text{C}_2\text{D}_5$ [25837-05-2] YNQLUTRBYVCPMQ-CFTAVCBPSA-N	2.0×10^{-3}	4200	Hiatt (2013)	M	
1,2-diethylbenzene $\text{C}_{10}\text{H}_{14}$ (<i>o</i> -diethylbenzene) [135-01-3] KVNYFPKFSJIPBJ-UHFFFAOYSA-N	3.8×10^{-3} 3.8×10^{-3} 1.3×10^{-3} 1.2×10^{-3} 1.6×10^{-3} 5.2×10^{-4} 6.2×10^{-4} 9.9×10^{-4} 7.8×10^{-4} 1.1×10^{-3} 1.3×10^{-3} 1.2×10^{-3}	4800 5100	Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Hilal et al. (2008) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Yaffe et al. (2003) Katritzky et al. (1998) Kühne et al. (2005) Yaws (1999)	V V X C Q Q Q Q Q Q Q Q Q Q Q Q ?	187 238 272, 244 245 246 247 68 249, 250 21
1,3-diethylbenzene $\text{C}_{10}\text{H}_{14}$ (<i>m</i> -diethylbenzene) [141-93-5] AFZZYIJWUTJFO-UHFFFAOYSA-N	1.2×10^{-3} 1.1×10^{-3} 1.3×10^{-3} 3.8×10^{-3} 1.6×10^{-3} 4.8×10^{-4} 1.1×10^{-3} 9.7×10^{-4} 4.7×10^{-4} 5.6×10^{-4} 1.3×10^{-3}	5300 5300	Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Hilal et al. (2008) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Katritzky et al. (1998) Kühne et al. (2005) Yaws (1999)	V V X C Q Q Q Q Q Q Q Q ?	187 238 247 68 21
1,4-diethylbenzene $\text{C}_{10}\text{H}_{14}$ (<i>p</i> -diethylbenzene) [105-05-5] DSNHSQKRULAAEI-UHFFFAOYSA-N	1.3×10^{-3} 1.4×10^{-3} 1.2×10^{-3} 1.6×10^{-3} 5.0×10^{-4} 1.1×10^{-3} 1.1×10^{-3} 7.6×10^{-4} 1.4×10^{-3}	5300	Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Yaffe et al. (2003)	V V X Q Q Q Q Q Q Q	187 238 247 68 249, 250

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.7×10^{-4}		Katritzky et al. (1998)	Q	
	7.9×10^{-4}		Nirmalakhandan et al. (1997)	Q	
		5900	Kühne et al. (2005)	?	
	1.2×10^{-3}		Yaws (1999)	?	21
			Brockbank (2013)	W	357
propylbenzene	9.0×10^{-4}	3800	Schwardt et al. (2021)	L	1
$\text{C}_6\text{H}_5\text{C}_3\text{H}_7$	9.1×10^{-4}	4700	Brockbank (2013)	L	1
[103-65-1]	9.1×10^{-4}	5300	Plyasunov and Shock (2000)	L	
ODLMAHJVESYWTB-UHFFFAOYSA-N	1.4×10^{-3}		Mackay and Shiu (1981)	L	
	1.9×10^{-3}	4500	Hiatt (2013)	M	
	1.5×10^{-3}		Karl et al. (2003)	M	88
	1.1×10^{-3}	2600	Kondoh and Nakajima (1997)	M	
	8.6×10^{-4}	5400	Perlinger et al. (1993)	M	
	9.3×10^{-4}		Li and Carr (1993)	M	
	9.1×10^{-4}		Li et al. (1993)	M	
	9.0×10^{-4}	3700	Ashworth et al. (1988)	M	279
	9.5×10^{-4}	4700	Sanemasa et al. (1982)	M	
	5.0×10^{-4}		Sato and Nakajima (1979a)	M	14
	9.6×10^{-4}		Mackay et al. (2006a)	V	
	9.6×10^{-4}		Shiu and Ma (2000)	V	
	9.6×10^{-4}		Mackay et al. (1992a)	V	
	9.7×10^{-4}		Eastcott et al. (1988)	V	
	9.7×10^{-4}	5300	Abraham (1984)	V	
	1.5×10^{-3}	5500	Ben-Naim and Wilf (1980)	V	1
	9.9×10^{-4}		Hine and Mookerjee (1975)	V	
	9.6×10^{-4}	5100	Owens et al. (1986)	T	
		5300	Gill et al. (1976)	T	
	7.4×10^{-4}		Yaws (2003)	X	238
	1.8×10^{-3}		Keshavarz et al. (2022)	Q	
	3.1×10^{-3}		Duchowicz et al. (2020)	Q	
	2.5×10^{-3}		Wang et al. (2017)	Q	81, 239
	6.6×10^{-4}		Wang et al. (2017)	Q	81, 240
	2.6×10^{-3}		Wang et al. (2017)	Q	81, 241
	9.9×10^{-4}		Li et al. (2014)	Q	242
	1.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	8.6×10^{-4}		Gharagheizi et al. (2010)	Q	247
	9.9×10^{-4}		Hilal et al. (2008)	Q	
	8.6×10^{-4}		Modarresi et al. (2007)	Q	68
		5000	Kühne et al. (2005)	Q	
	1.0×10^{-3}		Yaffe et al. (2003)	Q	249, 273
	1.1×10^{-3}		English and Carroll (2001)	Q	231, 232
	5.1×10^{-4}		Katritzky et al. (1998)	Q	

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.3×10^{-3}		Russell et al. (1992)	Q	280
	8.8×10^{-4}		Suzuki et al. (1992)	Q	233
	1.1×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	9.4×10^{-4}	4700	Duchowicz et al. (2020)	?	186, 21
			Kühne et al. (2005)	?	
	1.7×10^{-3}		Yaws (1999)	?	21
	5.2×10^{-4}		Abraham and Weathersby (1994)	?	21
	9.6×10^{-4}		Yaws and Yang (1992)	?	21
	9.7×10^{-4}		Abraham et al. (1990)	?	
(2-propyl)-benzene $\text{C}_6\text{H}_5\text{C}_3\text{H}_7$ (isopropylbenzene; cumene) [98-82-8] RWGFKTVRMDUZSP-UHFFFAOYSA-N	9.0×10^{-4}	4800	Brockbank (2013)	L	
	1.2×10^{-3}	3200	Staudinger and Roberts (2001)	L	
	8.4×10^{-4}	4800	Plyasunov and Shock (2000)	L	
	7.7×10^{-3}		Mackay and Shiu (1981)	L	
	1.4×10^{-3}	4900	Hiatt (2013)	M	
	1.0×10^{-3}	2500	Kondoh and Nakajima (1997)	M	
	8.7×10^{-4}	3300	Hansen et al. (1993)	M	282
	9.1×10^{-4}		Li and Carr (1993)	M	
	8.9×10^{-4}		Li et al. (1993)	M	
	1.6×10^{-3}	3200	Ashworth et al. (1988)	M	279
	8.9×10^{-4}	4700	Sanemasa et al. (1982)	M	
	5.6×10^{-4}		Sato and Nakajima (1979a)	M	14
	6.8×10^{-4}		Mackay et al. (2006a)	V	
	6.8×10^{-4}		Shiu and Ma (2000)	V	
	6.8×10^{-4}		Mackay et al. (1992a)	V	
	6.8×10^{-4}		Hwang et al. (1992)	V	
	6.6×10^{-4}		Eastcott et al. (1988)	V	
	6.7×10^{-4}		Hine and Mookerjee (1975)	V	
	6.8×10^{-4}		Mackay and Leinonen (1975)	V	
	1.1×10^{-3}	5000	Wauchope and Haque (1972)	V	
	1.1×10^{-3}		McAuliffe (1966)	V	24
	6.8×10^{-4}		Yaws (2003)	X	238
	1.8×10^{-3}		Keshavarz et al. (2022)	Q	
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	300
	2.9×10^{-3}		Wang et al. (2017)	Q	81, 239
	5.3×10^{-4}		Wang et al. (2017)	Q	81, 240
	2.8×10^{-3}		Wang et al. (2017)	Q	81, 241
	9.4×10^{-4}		Savary et al. (2014)	Q	
	8.2×10^{-4}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	8.8×10^{-4}		Gharagheizi et al. (2010)	Q	247
	8.6×10^{-4}		Hilal et al. (2008)	Q	
	7.7×10^{-4}	5000	Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
			Yaffe et al. (2003)	Q	358
	3.6×10^{-4}		Yao et al. (2002)	Q	230
	1.2×10^{-3}		English and Carroll (2001)	Q	231, 232
	4.7×10^{-4}		Katritzky et al. (1998)	Q	
	9.2×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	8.0×10^{-4}		Suzuki et al. (1992)	Q	233
	9.2×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	8.6×10^{-4}		Duchowicz et al. (2020)	?	186, 21
		4400	Kühne et al. (2005)	?	
	6.9×10^{-4}		Yaws (1999)	?	21
	5.8×10^{-4}		Abraham and Weathersby (1994)	?	21
	6.8×10^{-4}		Hoff et al. (1993)	?	21
	6.8×10^{-4}		Yaws and Yang (1992)	?	21
	8.8×10^{-4}		Abraham et al. (1990)	?	
			Fogg and Sangster (2003)	W	359
1-ethyl-2-methylbenzene $\text{C}_6\text{H}_4\text{CH}_3\text{C}_2\text{H}_5$ (<i>o</i> -ethyltoluene) [611-14-3] HYFLWBNQFMXCPA-UHFFFAOYSA-N	1.8×10^{-3}		Plyasunov and Shock (2000)	L	
	2.3×10^{-3}		Mackay and Shiu (1981)	L	
	1.8×10^{-3}		Duchowicz et al. (2020)	V	187
	1.9×10^{-3}		Mackay et al. (2006a)	V	
	1.9×10^{-3}		Mackay et al. (1992a)	V	
	1.9×10^{-3}		Eastcott et al. (1988)	V	
	2.2×10^{-3}		Yaws (2003)	X	238
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	
	1.8×10^{-3}		Wang et al. (2017)	Q	81, 239
	1.2×10^{-3}		Wang et al. (2017)	Q	81, 240
	3.0×10^{-3}		Wang et al. (2017)	Q	81, 241
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	272, 244
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	1.5×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.8×10^{-3}		Hilal et al. (2008)	Q	
	8.9×10^{-4}		Modarresi et al. (2007)	Q	68
		4500	Kühne et al. (2005)	Q	
	2.4×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	5.1×10^{-4}		Katritzky et al. (1998)	Q	
	9.5×10^{-4}		Nirmalakhandan et al. (1997)	Q	
		3200	Kühne et al. (2005)	?	
	2.2×10^{-3}		Yaws (1999)	?	21
	2.3×10^{-3}		Yaws and Yang (1992)	?	21

Table A2.5: Mononuclear aromatics (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-ethyl-3-methylbenzene $\text{C}_6\text{H}_4\text{CH}_3\text{C}_2\text{H}_5$ (<i>m</i> -ethyltoluene) [620-14-4] ZLCSFXXPPANWQY-UHFFFAOYSA-N	1.7×10^{-3}		Yaws (2003)	X	238
	1.8×10^{-3}		Wang et al. (2017)	Q	81, 239
	9.8×10^{-4}		Wang et al. (2017)	Q	81, 240
	2.6×10^{-3}		Wang et al. (2017)	Q	81, 241
	1.5×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.3×10^{-3}		Hilal et al. (2008)	Q	
	1.7×10^{-3}		Yaws (1999)	?	21
1-ethyl-4-methylbenzene $\text{C}_6\text{H}_4\text{CH}_3\text{C}_2\text{H}_5$ (<i>p</i> -ethyltoluene) [622-96-8] JRLPEMVDPFPYPJ-UHFFFAOYSA-N	2.0×10^{-3}		Mackay and Shiu (1981)	L	
	2.0×10^{-3}		Duchowicz et al. (2020)	V	187
	1.6×10^{-3}		Duchowicz et al. (2020)	V	187
	2.0×10^{-3}		Mackay et al. (2006a)	V	
	2.0×10^{-3}		Mackay et al. (1992a)	V	
	2.0×10^{-3}		Eastcott et al. (1988)	V	
	2.0×10^{-3}		Yaws (2003)	X	238
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	
	1.8×10^{-3}		Wang et al. (2017)	Q	81, 239
	1.1×10^{-3}		Wang et al. (2017)	Q	81, 240
	2.5×10^{-3}		Wang et al. (2017)	Q	81, 241
	1.5×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-3}		Hilal et al. (2008)	Q	
	7.1×10^{-4}		Modarresi et al. (2007)	Q	68
	2.1×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	1.7×10^{-3}		English and Carroll (2001)	Q	231, 261
	5.1×10^{-4}		Katritzky et al. (1998)	Q	
9.5×10^{-4}		Nirmalakhandan et al. (1997)	Q		
2.0×10^{-3}		Yaws (1999)	?	21	
2.0×10^{-3}		Yaws and Yang (1992)	?	21	
butylbenzene $\text{C}_6\text{H}_5\text{C}_4\text{H}_9$ [104-51-8] OCKPCBLVKNKHBXM-UHFFFAOYSA-N	7.1×10^{-4}	5100	Brockbank (2013)	L	1
	7.1×10^{-4}	5500	Plyasunov and Shock (2000)	L	
	7.7×10^{-4}		Mackay and Shiu (1981)	L	
	2.0×10^{-3}	4500	Hiatt (2013)	M	
	7.4×10^{-4}		Ryu and Park (1999)	M	
	9.1×10^{-4}	2700	Kondoh and Nakajima (1997)	M	
	6.2×10^{-4}	6000	Perlanger et al. (1993)	M	
	7.1×10^{-4}		Li and Carr (1993)	M	
	6.7×10^{-4}		Li et al. (1993)	M	
	6.2×10^{-4}		Duchowicz et al. (2020)	V	187
	6.2×10^{-4}		HSDB (2015)	V	
	9.9×10^{-5}		Abraham and Acree (2007)	V	
	7.5×10^{-4}		Mackay et al. (2006a)	V	
	7.5×10^{-4}		Shiu and Ma (2000)	V	
	7.5×10^{-4}		Mackay et al. (1992a)	V	
	7.6×10^{-4}		Meylan and Howard (1991)	V	
	7.5×10^{-4}		Eastcott et al. (1988)	V	

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.4×10^{-4}		Abraham (1984)	V	
	1.7×10^{-3}	6500	Ben-Naim and Wilf (1980)	V	1
	7.9×10^{-4}		Hine and Mookerjee (1975)	V	
	7.2×10^{-4}	5300	Owens et al. (1986)	T	
	7.5×10^{-4}		Yaws (2003)	X	238
	3.1×10^{-3}		Duchowicz et al. (2020)	Q	
	7.6×10^{-4}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	272, 244
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	7.1×10^{-4}		Gharagheizi et al. (2010)	Q	247
	7.7×10^{-4}		Hilal et al. (2008)	Q	
	4.9×10^{-4}		Modarresi et al. (2007)	Q	68
		5300	Kühne et al. (2005)	Q	
	7.2×10^{-4}		Yaffe et al. (2003)	Q	249, 273
	6.4×10^{-4}		Yao et al. (2002)	Q	230
	7.9×10^{-4}		English and Carroll (2001)	Q	231, 232
	5.7×10^{-4}		Katritzky et al. (1998)	Q	
	6.9×10^{-4}		Russell et al. (1992)	Q	360
	6.9×10^{-4}		Suzuki et al. (1992)	Q	233
	7.1×10^{-4}		Meylan and Howard (1991)	Q	
	8.4×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
		4900	Kühne et al. (2005)	?	
	7.6×10^{-4}		Yaws (1999)	?	21
	7.5×10^{-4}		Yaws and Yang (1992)	?	21
	7.5×10^{-4}		Abraham et al. (1990)	?	
(1-methylpropyl)-benzene $\text{C}_6\text{H}_5\text{C}_4\text{H}_9$ (<i>sec</i> -butylbenzene) [135-98-8] ZJMWRROPADPEA-UHFFFAOYSA-N	5.3×10^{-4}		Plyasunov and Shock (2000)	L	
	7.1×10^{-4}		Mackay and Shiu (1981)	L	
	1.3×10^{-3}	4600	Hiatt (2013)	M	
	7.5×10^{-4}	2300	Kondoh and Nakajima (1997)	M	
	5.6×10^{-4}		Duchowicz et al. (2020)	V	187
	5.5×10^{-4}		HSDB (2015)	V	
	5.3×10^{-4}		Mackay et al. (2006a)	V	
	5.3×10^{-4}		Mackay et al. (1992a)	V	
	5.4×10^{-4}		Eastcott et al. (1988)	V	
	8.6×10^{-4}		Hine and Mookerjee (1975)	V	
	5.9×10^{-4}		Yaws (2003)	X	238
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	5.9×10^{-4}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	6.9×10^{-4}		Gharagheizi et al. (2010)	Q	247
	8.6×10^{-4}		Hilal et al. (2008)	Q	
	6.9×10^{-4}		Modarresi et al. (2007)	Q	68

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.2×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	9.0×10^{-4}		English and Carroll (2001)	Q	231, 232
	9.9×10^{-5}		Nirmalakhandan et al. (1997)	Q	
	6.1×10^{-4}		Suzuki et al. (1992)	Q	233
	7.2×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	1.3×10^{-3}		Yaws (1999)	?	21
(2-methylpropyl)-benzene $\text{C}_6\text{H}_5\text{C}_4\text{H}_9$ (isobutylbenzene) [538-93-2] KXUHSQYYJYAXGZ-UHFFFAOYSA-N	2.9×10^{-4}		Plyasunov and Shock (2000)	L	
	3.0×10^{-4}		Mackay and Shiu (1981)	L	
	2.9×10^{-4}		Duchowicz et al. (2020)	V	187
	3.0×10^{-4}		Mackay et al. (2006a)	V	
	3.0×10^{-4}		Mackay et al. (1992a)	V	
	3.0×10^{-4}		Eastcott et al. (1988)	V	
	5.5×10^{-4}		Yaws (2003)	X	238
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	6.2×10^{-4}		Gharagheizi et al. (2012)	Q	
	6.9×10^{-4}		Gharagheizi et al. (2010)	Q	247
	7.0×10^{-4}		Hilal et al. (2008)	Q	
	5.2×10^{-4}		Modarresi et al. (2007)	Q	68
	3.1×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	4.3×10^{-4}		Yao et al. (2002)	Q	230
	7.7×10^{-4}		English and Carroll (2001)	Q	231, 232
	5.4×10^{-4}		Katritzky et al. (1998)	Q	
	7.0×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	1.3×10^{-3}		Yaws (1999)	?	21
(1,1-dimethylethyl)-benzene $\text{C}_6\text{H}_5\text{C}_4\text{H}_9$ (<i>tert</i> -butylbenzene) [98-06-6] YTZKOQUCBOVLHL-UHFFFAOYSA-N	7.9×10^{-4}		Plyasunov and Shock (2000)	L	
	8.3×10^{-4}		Mackay and Shiu (1981)	L	
	1.6×10^{-3}	4700	Hiatt (2013)	M	
	9.4×10^{-4}	2400	Kondoh and Nakajima (1997)	M	
	7.5×10^{-4}		Duchowicz et al. (2020)	V	187
	7.5×10^{-4}		HSDB (2015)	V	
	7.8×10^{-4}		Mackay et al. (2006a)	V	
	7.8×10^{-4}		Mackay et al. (1992a)	V	
	7.7×10^{-4}		Eastcott et al. (1988)	V	
	8.4×10^{-4}		Hine and Mookerjee (1975)	V	
	6.1×10^{-4}		Yaws (2003)	X	238
	5.3×10^{-4}		Duchowicz et al. (2020)	Q	
	5.3×10^{-4}		Gharagheizi et al. (2012)	Q	
	5.6×10^{-4}		Gharagheizi et al. (2010)	Q	247
	7.7×10^{-4}		Hilal et al. (2008)	Q	
	6.6×10^{-4}		Modarresi et al. (2007)	Q	68
	8.6×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	9.0×10^{-4}		English and Carroll (2001)	Q	231, 232
	4.8×10^{-4}		Katritzky et al. (1998)	Q	
	5.3×10^{-4}		Suzuki et al. (1992)	Q	233
	6.0×10^{-4}		Nirmalakhandan and Speece (1988)	Q	

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.4×10^{-3}		Yaws (1999)	?	21
1-methyl-2-propylbenzene $\text{C}_{10}\text{H}_{14}$ [1074-17-5] YQZBFMJQASEONC-UHFFFAOYSA-N	7.2×10^{-4} 5.3×10^{-4} 1.1×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl-3-propylbenzene $\text{C}_{10}\text{H}_{14}$ [1074-43-7] QUEBYVKXYIKVSO-UHFFFAOYSA-N	7.7×10^{-4} 4.9×10^{-4} 1.1×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl-4-propylbenzene $\text{C}_{10}\text{H}_{14}$ [1074-55-1] JXFVMNFKABWTHD-UHFFFAOYSA-N	9.6×10^{-4} 4.7×10^{-4} 1.1×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-ethyl- <i>m</i> -xylene $\text{C}_{10}\text{H}_{14}$ [2870-04-4] CHIKRULMSSADAF-UHFFFAOYSA-N	1.3×10^{-3} 4.6×10^{-4} 1.1×10^{-3} 1.3×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	238 247 21
2-ethyl- <i>p</i> -xylene $\text{C}_{10}\text{H}_{14}$ [1758-88-9] AXIUBBVSOWPLDA-UHFFFAOYSA-N	1.2×10^{-3} 3.9×10^{-4} 1.1×10^{-3} 1.2×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	238 247 21
3-ethyl- <i>o</i> -xylene $\text{C}_{10}\text{H}_{14}$ [933-98-2] QUBBAXISAHIDNM-UHFFFAOYSA-N	1.2×10^{-3} 4.7×10^{-4} 1.1×10^{-3} 1.2×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	238 247 21
4-ethyl- <i>o</i> -xylene $\text{C}_{10}\text{H}_{14}$ [934-80-5] SBUYFICWQNHBCM-UHFFFAOYSA-N	1.3×10^{-3} 4.2×10^{-4} 1.1×10^{-3} 4.5×10^{-4} 1.3×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	X Q Q Q ?	238 247 230 21
4-ethyl- <i>m</i> -xylene $\text{C}_{10}\text{H}_{14}$ [874-41-9] MEMBJMDZWKVOTB-UHFFFAOYSA-N	1.1×10^{-3} 4.0×10^{-4} 1.1×10^{-3} 3.0×10^{-4} 1.1×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	X Q Q Q ?	238 247 230 21

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
5-ethyl- <i>m</i> -xylene $\text{C}_{10}\text{H}_{14}$ (1-ethyl-3,5-dimethylbenzene) [934-74-7] LMAUULKNZLEMGN-UHFFFAOYSA-N	1.3×10^{-3} 1.1×10^{-3} 9.3×10^{-4} 2.2×10^{-3} 3.3×10^{-4}		Yaws (2003) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Gharagheizi et al. (2012)	X Q Q Q Q	238 81, 239 81, 240 81, 241
	1.1×10^{-3} 1.3×10^{-3}		Gharagheizi et al. (2010) Yaws (1999)	Q ?	247 21
1-methyl-2-(1-methylethyl)- benzene $\text{C}_{10}\text{H}_{14}$ (<i>o</i> -cymene) [527-84-4] WWRCMKNKATXZARA-UHFFFAOYSA-N	1.6×10^{-3} 8.7×10^{-4} 9.0×10^{-4} 1.2×10^{-3} 1.2×10^{-3} 1.3×10^{-3} 6.1×10^{-4} 4.6×10^{-4} 6.2×10^{-4} 9.9×10^{-4} 7.8×10^{-4} 1.2×10^{-3} 1.2×10^{-3} 6.6×10^{-4} 5.3×10^{-4} 1.2×10^{-3}		Plyasunov and Shock (2000) Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Yaws (2003) Dupeux et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Katritzky et al. (1998) Yaws (1999)	L V V X X Q Q Q Q Q Q Q Q Q Q Q Q ?	 187 259 238 260 272, 244 245 246 247 68 21
1-methyl-3-(1-methylethyl)- benzene $\text{C}_{10}\text{H}_{14}$ (<i>m</i> -cymene) [535-77-3] XCYJXPQACVEIOS-UHFFFAOYSA-N	1.4×10^{-3} 1.4×10^{-3} 1.4×10^{-3} 9.0×10^{-4} 1.2×10^{-3} 1.2×10^{-3} 8.2×10^{-4} 6.1×10^{-4} 4.2×10^{-4} 1.2×10^{-3} 8.6×10^{-4} 4.5×10^{-4} 1.2×10^{-3}		Plyasunov and Shock (2000) Duchowicz et al. (2020) HSDB (2015) Copolovici and Niinemets (2005) Yaws (2003) Yaws (2003) Dupeux et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaws (1999)	L V V V X X Q Q Q Q Q Q Q Q ?	 187 259 238 260 247 68 21

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methyl-4-(1-methylethyl)-benzene $\text{C}_{10}\text{H}_{14}$ (<i>p</i> -cymene; <i>p</i> -isopropyltoluene) [99-87-6] HFPZCAJZSCWRBC-UHFFFAOYSA-N	9.6×10^{-4}		Plyasunov and Shock (2000)	L	
	1.3×10^{-3}		Mackay and Shiu (1981)	L	
	1.8×10^{-3}	4900	Hiatt (2013)	M	
	1.0×10^{-3}	2600	Kondoh and Nakajima (1997)	M	
	9.0×10^{-4}		Duchowicz et al. (2020)	V	187
	8.0×10^{-4}		Duchowicz et al. (2020)	V	187
	1.1×10^{-3}		Martins et al. (2017)	V	316
	9.0×10^{-4}		HSDB (2015)	V	
	1.2×10^{-3}		Mackay et al. (2006a)	V	
	1.1×10^{-3}		Copolovici and Niinemets (2005)	V	
	9.1×10^{-4}		Niinemets and Reichstein (2002)	V	
	1.3×10^{-3}		Abraham et al. (1994a)	V	
	1.2×10^{-3}		Mackay et al. (1992a)	V	
	1.2×10^{-3}		Eastcott et al. (1988)	V	
	1.3×10^{-3}		Yaws (2003)	X	259
	1.3×10^{-3}		Yaws (2003)	X	238
	7.6×10^{-4}		Dupeux et al. (2022)	Q	260
	6.1×10^{-4}		Duchowicz et al. (2020)	Q	
	6.1×10^{-4}		Duchowicz et al. (2020)	Q	
	4.2×10^{-4}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	272, 244
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	1.2×10^{-3}		Gharagheizi et al. (2010)	Q	247
	8.8×10^{-4}		Hilal et al. (2008)	Q	
	5.4×10^{-4}		Modarresi et al. (2007)	Q	68
	5.5×10^{-4}		Modarresi et al. (2007)	Q	68
		5300	Kühne et al. (2005)	Q	
	8.0×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	1.4×10^{-3}		English and Carroll (2001)	Q	231, 275
	5.4×10^{-4}		Katritzky et al. (1998)	Q	
	6.5×10^{-4}		Nirmalakhandan et al. (1997)	Q	
		4500	Kühne et al. (2005)	?	
	1.3×10^{-3}		Yaws (1999)	?	21
4- <i>tert</i> -butyltoluene $\text{C}_{11}\text{H}_{16}$ [98-51-1] QCWXDVFZVHKLKLV-UHFFFAOYSA-N	7.8×10^{-4}		Yaws (2003)	X	238
	6.4×10^{-4}		HSDB (2015)	Q	100
	2.7×10^{-4}		Gharagheizi et al. (2012)	Q	
	6.4×10^{-4}		Zhang et al. (2010)	Q	288, 289
	5.2×10^{-4}		Zhang et al. (2010)	Q	288, 290
	1.3×10^{-3}		Zhang et al. (2010)	Q	288, 291
	4.7×10^{-4}		Zhang et al. (2010)	Q	288, 292
	8.2×10^{-4}		Gharagheizi et al. (2010)	Q	247

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
pentylbenzene $\text{C}_6\text{H}_5\text{C}_5\text{H}_{11}$ [538-68-1] PWATWSYOIIXYMA-UHFFFAOYSA-N	6.0×10^{-4}	6000	Brockbank (2013)	L	1, 361
	5.1×10^{-4}	5900	Plyasunov and Shock (2000)	L	
	1.7×10^{-3}		Mackay and Shiu (1981)	L	
	6.1×10^{-4}		Ryu and Park (1999)	M	
	3.9×10^{-4}		Duchowicz et al. (2020)	V	187
	5.9×10^{-4}		Mackay et al. (2006a)	V	
	5.9×10^{-4}		Mackay et al. (1992a)	V	
	1.6×10^{-3}		Eastcott et al. (1988)	V	
	6.0×10^{-4}		Abraham (1984)	V	
	3.0×10^{-3}	7800	Ben-Naim and Wilf (1980)	V	1
	5.3×10^{-4}	5900	Owens et al. (1986)	T	
	4.4×10^{-4}		Yaws (2003)	X	238
	3.1×10^{-3}		Duchowicz et al. (2020)	Q	
	5.6×10^{-4}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	272, 244
	3.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	6.0×10^{-4}		Gharagheizi et al. (2010)	Q	247
	6.1×10^{-4}		Hilal et al. (2008)	Q	
	4.3×10^{-4}		Modarresi et al. (2007)	Q	68
6.1×10^{-4}		Yaffe et al. (2003)	Q	249, 250	
4.4×10^{-4}		Yao et al. (2002)	Q	230	
5.8×10^{-4}		English and Carroll (2001)	Q	231, 261	
5.7×10^{-4}		Katritzky et al. (1998)	Q		
6.4×10^{-4}		Nirmalakhandan et al. (1997)	Q		
4.4×10^{-4}		Yaws (1999)	?	21	
5.9×10^{-4}		Yaws and Yang (1992)	?	21	
6.0×10^{-4}		Abraham et al. (1990)	?		
pentamethylbenzene $\text{C}_{11}\text{H}_{16}$ [700-12-9] BEZDDPMPIDMGJ-UHFFFAOYSA-N	7.7×10^{-3}		Hilal et al. (2008)	Q	
	7.0×10^{-4}		Modarresi et al. (2007)	Q	68
1,2-dimethyl-3-propylbenzene $\text{C}_{11}\text{H}_{16}$ [17059-44-8] IRUSTUOJENXLMN-UHFFFAOYSA-N	8.7×10^{-4}		Yaws (2003)	X	238
	2.9×10^{-4}		Gharagheizi et al. (2012)	Q	
	7.9×10^{-4}		Gharagheizi et al. (2010)	Q	247
1,2-dimethyl-4-propylbenzene $\text{C}_{11}\text{H}_{16}$ [3982-66-9] FZJVYOOQGFZCSY-UHFFFAOYSA-N	8.8×10^{-4}		Yaws (2003)	X	238
	2.8×10^{-4}		Gharagheizi et al. (2012)	Q	
	7.9×10^{-4}		Gharagheizi et al. (2010)	Q	247

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
1,3-dimethyl-2-propylbenzene $C_{11}H_{16}$ [17059-45-9] POVRSTNZQPWAS-UHFFFAOYSA-N	8.9×10^{-4} 2.7×10^{-4} 7.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1,3-dimethyl-4-propylbenzene $C_{11}H_{16}$ [61827-85-8] HPAXKQMKDWCLGU-UHFFFAOYSA-N	9.0×10^{-4} 2.6×10^{-4} 7.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1,3-dimethyl-5-propylbenzene $C_{11}H_{16}$ [3982-64-7] NBICXWXPZRNPMPF-UHFFFAOYSA-N	9.3×10^{-4} 2.3×10^{-4} 7.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1,4-dimethyl-2-propylbenzene $C_{11}H_{16}$ [3042-50-0] PWEDYOIWLZSRP-UHFFFAOYSA-N	9.2×10^{-4} 2.4×10^{-4} 7.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1,2-dimethyl-3-isopropylbenzene $C_{11}H_{16}$ [22539-65-7] GDEQPEBFOYWSA-UHFFFAOYSA-N	8.4×10^{-4} 2.4×10^{-4} 9.4×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1,2-dimethyl-4-isopropylbenzene $C_{11}H_{16}$ [4132-77-8] MGMSKQZIAGFMRU-UHFFFAOYSA-N	8.5×10^{-4} 2.3×10^{-4} 9.4×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1,3-dimethyl-2-isopropylbenzene $C_{11}H_{16}$ [14411-75-7] IVCIQLTVLDOHKA-UHFFFAOYSA-N	8.7×10^{-4} 2.1×10^{-4} 9.4×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1,3-dimethyl-4-isopropylbenzene $C_{11}H_{16}$ [4706-89-2] AADQFNAACHHRLT-UHFFFAOYSA-N	8.7×10^{-4} 2.1×10^{-4} 9.4×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1,3-dimethyl-5-isopropylbenzene $C_{11}H_{16}$ [4706-90-5] RMKJTYPCFNTGQ-UHFFFAOYSA-N	9.2×10^{-4} 1.9×10^{-4} 9.4×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1,4-dimethyl-2-isopropylbenzene $C_{11}H_{16}$ [4132-72-3] CLSBTDGUHSQYTO-UHFFFAOYSA-N	9.0×10^{-4} 1.9×10^{-4} 9.4×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-ethyl-2-propylbenzene $C_{11}H_{16}$ [16021-20-8] DMUVQFCRCMDZPW-UHFFFAOYSA-N	9.4×10^{-4} 3.5×10^{-4} 6.2×10^{-4} 6.2×10^{-4} 6.2×10^{-4} 8.8×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010)	X Q Q Q Q Q	238 243, 244 245 246 247
1-ethyl-3-propylbenzene $C_{11}H_{16}$ [20024-91-3] QCYGXOCMWHXSU-UHFFFAOYSA-N	9.6×10^{-4} 3.3×10^{-4} 8.8×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-ethyl-4-propylbenzene $C_{11}H_{16}$ [20024-90-2] ADQDTIAWIXUACV-UHFFFAOYSA-N	9.2×10^{-4} 3.7×10^{-4} 8.8×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-ethyl-2-isopropylbenzene $C_{11}H_{16}$ [18970-44-0] ZAJYARZMPOEGLK-UHFFFAOYSA-N	9.8×10^{-4} 2.5×10^{-4} 9.1×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-ethyl-3-isopropylbenzene $C_{11}H_{16}$ [4920-99-4] GSLSBTNLESMZTN-UHFFFAOYSA-N	9.6×10^{-4} 2.6×10^{-4} 9.1×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-ethyl-4-isopropylbenzene $C_{11}H_{16}$ [4218-48-8] GUUDUUDWUWUTPD-UHFFFAOYSA-N	9.1×10^{-4} 3.0×10^{-4} 9.1×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl-2,3-diethylbenzene $C_{11}H_{16}$ [13632-93-4] LRJXARIJKBUFE-UHFFFAOYSA-N	9.0×10^{-4} 2.6×10^{-4} 7.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl-2,4-diethylbenzene $C_{11}H_{16}$ [1758-85-6] PZMJNJDRDKPVLB-UHFFFAOYSA-N	9.1×10^{-4} 2.5×10^{-4} 7.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl-2,5-diethylbenzene $C_{11}H_{16}$ [13632-94-5] ZEHGGUIGEDITMM-UHFFFAOYSA-N	9.0×10^{-4} 2.6×10^{-4} 7.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methyl-2,6-diethylbenzene $C_{11}H_{16}$ [13632-95-6] XZZNTLNFQVAKFD-UHFFFAOYSA-N	8.8×10^{-4} 2.8×10^{-4} 7.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl-3,5-diethylbenzene $C_{11}H_{16}$ [2050-24-0] HILAULICMJUOLK-UHFFFAOYSA-N	9.5×10^{-4} 8.7×10^{-4} 5.8×10^{-4} 2.0×10^{-3} 2.2×10^{-4} 7.9×10^{-4}		Yaws (2003) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q Q Q Q	238 81, 239 81, 240 81, 241 247
1-methyl-2-butylbenzene $C_{11}H_{16}$ [1595-11-5] NUJILYKLNKQOOX-UHFFFAOYSA-N	9.0×10^{-4} 4.1×10^{-4} 8.8×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl-3-butylbenzene $C_{11}H_{16}$ [1595-04-6] OAPCPUDMDJIBOQ-UHFFFAOYSA-N	9.2×10^{-4} 3.7×10^{-4} 8.8×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl-4-butylbenzene $C_{11}H_{16}$ [1595-05-7] SBBKUBSYOVDBBC-UHFFFAOYSA-N	9.1×10^{-4} 4.0×10^{-4} 8.8×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl-2-isobutylbenzene $C_{11}H_{16}$ [36301-29-8] XNMPJDZAHSMAMN-UHFFFAOYSA-N	9.1×10^{-4} 2.9×10^{-4} 9.1×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl-3-isobutylbenzene $C_{11}H_{16}$ [5160-99-6] SDHYGAUOCHFYSR-UHFFFAOYSA-N	9.3×10^{-4} 2.8×10^{-4} 9.1×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl-4-isobutylbenzene $C_{11}H_{16}$ [5161-04-6] VCGBZXLLPCGFQM-UHFFFAOYSA-N	9.1×10^{-4} 2.9×10^{-4} 9.1×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl-2-sec-butylbenzene $C_{11}H_{16}$ [1595-06-8] AMBAWAHKHZZAAAY-UHFFFAOYSA-N	9.1×10^{-4} 2.9×10^{-4} 9.1×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methyl-3- <i>sec</i> -butylbenzene $C_{11}H_{16}$ [1772-10-7] RMNILBOMCXQZFC-UHFFFAOYSA-N	9.3×10^{-4} 2.8×10^{-4} 9.1×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl-4- <i>sec</i> -butylbenzene $C_{11}H_{16}$ [1595-16-0] LWCFXYMSEGQWNB-UHFFFAOYSA-N	9.0×10^{-4} 3.0×10^{-4} 9.1×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl-2- <i>tert</i> -butyl benzene $C_{11}H_{16}$ [1074-92-6] AXHVNJGQOJFMHT-UHFFFAOYSA-N	7.2×10^{-4} 3.4×10^{-4} 8.2×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl-3- <i>tert</i> -butylbenzene $C_{11}H_{16}$ [1075-38-3] JTIAYWZZZOZUTK-UHFFFAOYSA-N	8.2×10^{-4} 2.5×10^{-4} 8.2×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methyl-3,4-diethylbenzene $C_{11}H_{16}$ [13732-80-4] MJQJAGGFUBIGIK-UHFFFAOYSA-N	9.2×10^{-4} 2.4×10^{-4} 7.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-phenyl-2,2-dimethylpropane $C_{11}H_{16}$ [1007-26-7] CJGXJKVMUHXVHL-UHFFFAOYSA-N	3.8×10^{-4} 3.4×10^{-4} 4.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-phenyl-2-methylbutane $C_{11}H_{16}$ [3968-85-2] IFDLFCDWOFLKEB-UHFFFAOYSA-N	4.0×10^{-4} 4.5×10^{-4} 5.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-phenyl-3-methylbutane $C_{11}H_{16}$ [2049-94-7] XNXIYYFOYIUJIW-UHFFFAOYSA-N	3.9×10^{-4} 4.8×10^{-4} 5.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-phenyl-3-methylbutane $C_{11}H_{16}$ [4481-30-5] NQRMTOKLHZNAQH-UHFFFAOYSA-N	4.1×10^{-4} 3.6×10^{-4} 5.3×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-phenylpentane $C_{11}H_{16}$ [2719-52-0] LTHAIAJHDPJXLG-UHFFFAOYSA-N	4.3×10^{-4} 3.7×10^{-4} 5.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-phenylpentane $C_{11}H_{16}$ [1196-58-3] PBWHJRFUXUPLZDS-UHFFFAOYSA-N	4.3×10^{-4} 3.8×10^{-4} 5.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
(1,1-dimethylpropyl)-benzene $C_6H_5C_5H_{11}$ (<i>tert</i> -amylbenzene) [2049-95-8] QHTJSSMHBLGUHV-UHFFFAOYSA-N	5.4×10^{-4} 3.5×10^{-4} 4.1×10^{-4} 4.9×10^{-4} 6.2×10^{-4} 4.9×10^{-4} 4.5×10^{-4} 9.9×10^{-4} 5.8×10^{-4} 4.2×10^{-4} 5.1×10^{-4}		Hine and Mookerjee (1975) Yaws (2003) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) English and Carroll (2001) Suzuki et al. (1992) Nirmalakhandan and Speece (1988)	V X Q Q Q Q Q Q Q Q Q	238 243, 244 245 246 247 231, 232 233
hexylbenzene $C_6H_5C_6H_{13}$ [1077-16-3] LTEQMZWBSYACLV-UHFFFAOYSA-N	4.0×10^{-4} 4.0×10^{-4} 3.5×10^{-4} 4.6×10^{-4} 4.6×10^{-4} 4.5×10^{-4} 5.1×10^{-4} 4.5×10^{-4} 7.7×10^{-3} 4.1×10^{-4} 3.9×10^{-4} 3.1×10^{-3} 6.2×10^{-4} 5.3×10^{-4} 4.8×10^{-4} 4.3×10^{-4} 4.6×10^{-4} 3.7×10^{-4} 4.2×10^{-4} 5.0×10^{-4} 4.0×10^{-4} 3.9×10^{-4} 4.6×10^{-4} 4.3×10^{-4}	6500 6300 9000 6300	Brockbank (2013) Plyasunov and Shock (2000) Duchowicz et al. (2020) Mackay et al. (2006a) Mackay et al. (1992a) Meylan and Howard (1991) Eastcott et al. (1988) Abraham (1984) Ben-Naim and Wilf (1980) Owens et al. (1986) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Yao et al. (2002) English and Carroll (2001) Nirmalakhandan et al. (1997) Meylan and Howard (1991) Yaws (1999) Yaws and Yang (1992) Abraham et al. (1990)	L L V V V V V V V T X Q Q Q Q Q Q Q Q Q Q Q Q Q Q	1 187 238 247 68 249, 250 230 231, 232 21 21
hexamethylbenzene $C_{12}H_{18}$ [87-85-4] YUWFEBAXEOLKSG-UHFFFAOYSA-N	8.6×10^{-3} 1.5×10^{-3}		Hilal et al. (2008) Modarresi et al. (2007)	Q Q	68

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3-triethylbenzene $\text{C}_{12}\text{H}_{18}$ [42205-08-3] VIDOPANCAUPXNH-UHFFFAOYSA-N	3.5×10^{-4} 1.4×10^{-4} 6.0×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1,2,4-triethylbenzene $\text{C}_{12}\text{H}_{18}$ [877-44-1] WNLWIOJSURYFIB-UHFFFAOYSA-N	7.2×10^{-4} 1.4×10^{-4} 6.0×10^{-4} 7.2×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	238 247 21
1,3,5-triethylbenzene $\text{C}_{12}\text{H}_{18}$ [102-25-0] WJYMPXJVHNDZHD-UHFFFAOYSA-N	1.0×10^{-3} 3.4×10^{-4} 1.4×10^{-4} 6.0×10^{-4}		Plyasunov and Shock (2000) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	L X Q Q	238 247
4- <i>tert</i> -butyl- <i>o</i> -xylene $\text{C}_{12}\text{H}_{18}$ [7397-06-0] QRPPSTNABSMSCS-UHFFFAOYSA-N	5.8×10^{-4} 7.2×10^{-4} 9.0×10^{-4} 2.7×10^{-4}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1-(1,1-dimethylethyl)-3,5-dimethylbenzene $\text{C}_{12}\text{H}_{18}$ [98-19-1] FZSPYHREEHYLCB-UHFFFAOYSA-N	5.8×10^{-4} 4.5×10^{-4} 7.7×10^{-4} 2.7×10^{-4}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
<i>o</i> -diisopropylbenzene $\text{C}_{12}\text{H}_{18}$ [25321-09-9] OKIRBHVFGXOIS-UHFFFAOYSA-N	4.8×10^{-4}		HSDB (2015)	Q	100
<i>m</i> -diisopropylbenzene $\text{C}_{12}\text{H}_{18}$ [99-62-7] UNEATYXSUBPPKP-UHFFFAOYSA-N	9.5×10^{-4} 7.2×10^{-4} 9.6×10^{-4}		Yaws (2003) Gharagheizi et al. (2010) Yaws (1999)	X Q ?	238 247 21
<i>p</i> -diisopropylbenzene $\text{C}_{12}\text{H}_{18}$ [100-18-5] SPPWGCEYAMHDT-UHFFFAOYSA-N	1.0×10^{-3} 1.8×10^{-4} 7.2×10^{-4} 1.0×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	238 247 21
4-phenylcyclohexene $\text{C}_{12}\text{H}_{14}$ [4994-16-5] XWCWNUSFQVJNDI-UHFFFAOYSA-N	7.9×10^{-3}		Ebert et al. (2023)	?	319

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
heptylbenzene $\text{C}_6\text{H}_5\text{C}_7\text{H}_{15}$ [1078-71-3] LBNXAWYDQUGHGX-UHFFFAOYSA-N	2.7×10^{-4} 6.5×10^{-4} 2.2×10^{-2} 6.5×10^{-4}	11000	Brockbank (2013) Duchowicz et al. (2020) Ben-Naim and Wilf (1980) Yaws (2003)	L V V X	187 1 238
	3.1×10^{-3} 1.0×10^{-3} 5.0×10^{-4} 3.9×10^{-4} 3.5×10^{-4} 1.5×10^{-3}		Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yao et al. (2002) Yaws (1999)	Q Q Q Q Q ?	247 230 21
5- <i>tert</i> -butyl-1,2,3-trimethylbenzene $\text{C}_{13}\text{H}_{20}$ [98-23-7] ZQVJKYPEIPJEIP-UHFFFAOYSA-N	5.3×10^{-4} 9.2×10^{-4} 9.0×10^{-4} 1.5×10^{-4}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
octylbenzene $\text{C}_6\text{H}_5\text{C}_8\text{H}_{17}$ [2189-60-8] CDKDZKXSXLNROY-UHFFFAOYSA-N	1.8×10^{-4} 2.3×10^{-4} 5.4×10^{-2} 8.7×10^{-4}	12000	Brockbank (2013) Duchowicz et al. (2020) Ben-Naim and Wilf (1980) Yaws (2003)	L V V X	187 1 238
	3.1×10^{-3} 1.7×10^{-3} 4.9×10^{-4} 3.2×10^{-4} 2.0×10^{-3}		Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999)	Q Q Q Q ?	247 21
nonylbenzene $\text{C}_{15}\text{H}_{24}$ [1081-77-2] LIXVMPBOGDCSR-M-UHFFFAOYSA-N	1.4×10^{-4} 1.8×10^{-3} 3.3×10^{-3}		Brockbank (2013) Gharagheizi et al. (2012) Yaws (1999)	L Q ?	21
3,5-di- <i>tert</i> -butyltoluene $\text{C}_{15}\text{H}_{24}$ [15181-11-0] WIXDSJRJFDWTNY-UHFFFAOYSA-N	3.7×10^{-3}	9100	Hiatt (2013)	M	
1,3,5-tris(1-methylethyl)benzene $\text{C}_{15}\text{H}_{24}$ [717-74-8] VUMCUSHVMYIRMB-UHFFFAOYSA-N	2.5×10^{-4} 1.8×10^{-4} 5.2×10^{-4} 2.6×10^{-4}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
ethyl(phenylethyl)-benzene $\text{C}_{16}\text{H}_{18}$ [64800-83-5] BDEIYMXBPHSOSG-UHFFFAOYSA-N	1.1×10^{-2} 1.2×10^{-2} 6.4×10^{-2} 1.8×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-(1-phenylethyl)- <i>m</i> -xylene $\text{C}_{16}\text{H}_{18}$ [6165-52-2] JOUBGGHXBLOLFY-UHFFFAOYSA-N	1.3×10^{-2} 1.6×10^{-2} 5.2×10^{-2} 1.5×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
decylbenzene $\text{C}_{16}\text{H}_{26}$ (1-phenyldecane) [104-72-3] UZILCZKXGMQEQR-UHFFFAOYSA-N	7.6×10^{-5} 8.6×10^{-5} 6.5×10^{-5} 1.3×10^{-4} 8.6×10^{-5} 3.1×10^{-3} 1.3×10^{-4} 1.4×10^{-4} 3.4×10^{-4} 2.8×10^{-4} 7.9×10^{-3}		Brockbank (2013) Plyasunov and Shock (2000) Duchowicz et al. (2020) HSDB (2015) Sherblom et al. (1992) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Yaws (1999)	L L V V V Q Q Q Q Q Q ?	187 288, 289 288, 290 288, 291 288, 292 21
2-phenyldecane $\text{C}_{16}\text{H}_{26}$ [4537-13-7] DDTJIQUCOLHYDL-UHFFFAOYSA-N	1.0×10^{-4}		Sherblom et al. (1992)	V	
3-phenyldecane $\text{C}_{16}\text{H}_{26}$ [4621-36-7] PYVIFMPVFLOTLN-UHFFFAOYSA-N	1.1×10^{-4}		Sherblom et al. (1992)	V	
4-phenyldecane $\text{C}_{16}\text{H}_{26}$ [4537-12-6] QTDBKYLPIZUTFN-UHFFFAOYSA-N	9.2×10^{-5}		Sherblom et al. (1992)	V	
5-phenyldecane $\text{C}_{16}\text{H}_{26}$ [4537-11-5] CDOBABYRHHNVZQG-UHFFFAOYSA-N	8.4×10^{-5}		Sherblom et al. (1992)	V	
undecylbenzene $\text{C}_{17}\text{H}_{28}$ (1-phenylundecane) [6742-54-7] XBEADGFTLHRJRB-UHFFFAOYSA-N	9.9×10^{-5}		HSDB (2015)	Q	100
2-phenylundecane $\text{C}_{17}\text{H}_{28}$ [4536-88-3] YHJBCRBYDBNEIK-UHFFFAOYSA-N	8.2×10^{-5}		Sherblom et al. (1992)	V	

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-phenylundecane $C_{17}H_{28}$ [4536-87-2] NVHBFHMWJMQTG-UHFFFAOYSA-N	9.0×10^{-5}		Sherblom et al. (1992)	V	
4-phenylundecane $C_{17}H_{28}$ [4536-86-1] NSQAXMRLBNXEHK-UHFFFAOYSA-N	5.9×10^{-5}		Sherblom et al. (1992)	V	
5-phenylundecane $C_{17}H_{28}$ [4537-15-9] RRPCXIBGXGQNC-UHFFFAOYSA-N	6.1×10^{-5}		Sherblom et al. (1992)	V	
6-phenylundecane $C_{17}H_{28}$ [4537-14-8] WCABIRIFXVXGQH-UHFFFAOYSA-N	6.4×10^{-5}		Sherblom et al. (1992)	V	
dodecylbenzene $C_{18}H_{30}$ (1-phenyldodecane) [123-01-3] KWKXNDCHNDYVRT-UHFFFAOYSA-N	7.6×10^{-5}		HSDB (2015)	Q	100
2-phenyldodecane $C_{18}H_{30}$ [2719-61-1] VRPRIAVYSREHAN-UHFFFAOYSA-N	1.1×10^{-4}		Sherblom et al. (1992)	V	
3-phenyldodecane $C_{18}H_{30}$ [2400-00-2] PGVOXXHNGYYHBB-UHFFFAOYSA-N	1.3×10^{-4}		Sherblom et al. (1992)	V	
4-phenyldodecane $C_{18}H_{30}$ [2719-64-4] RHDHXBLZBVAPTL-UHFFFAOYSA-N	8.3×10^{-5}		Sherblom et al. (1992)	V	
5-phenyldodecane $C_{18}H_{30}$ [2719-63-3] NPAWGLOPKCTCV-UHFFFAOYSA-N	7.8×10^{-5}		Sherblom et al. (1992)	V	
6-phenyldodecane $C_{18}H_{30}$ [2719-62-2] ZYHJQFMTTFCBKH-UHFFFAOYSA-N	6.0×10^{-5}		Sherblom et al. (1992)	V	

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tridecylbenzene $\text{C}_{19}\text{H}_{32}$ (1-phenyltridecane) [123-02-4] MCVUKOYZUCWLQQ-UHFFFAOYSA-N	1.1×10^{-4} 5.5×10^{-5}		Sherblom et al. (1992) HSDB (2015)	V Q	100
2-phenyltridecane $\text{C}_{19}\text{H}_{32}$ [4534-53-6] FCXPVFLIEDIQLLO-UHFFFAOYSA-N	2.7×10^{-4}		Sherblom et al. (1992)	V	
3-phenyltridecane $\text{C}_{19}\text{H}_{32}$ [4534-52-5] VZZMNLVGDGMQQV-UHFFFAOYSA-N	2.1×10^{-4}		Sherblom et al. (1992)	V	
4-phenyltridecane $\text{C}_{19}\text{H}_{32}$ [4534-51-4] RZGVZPAWCGDMCK-UHFFFAOYSA-N	2.0×10^{-4}		Sherblom et al. (1992)	V	
5-phenyltridecane $\text{C}_{19}\text{H}_{32}$ [4534-50-3] MZTIRLOLMGVVEK-UHFFFAOYSA-N	1.5×10^{-4}		Sherblom et al. (1992)	V	
6-phenyltridecane $\text{C}_{19}\text{H}_{32}$ [4534-49-0] OTSYFFDVDLHIKX-UHFFFAOYSA-N	1.5×10^{-4}		Sherblom et al. (1992)	V	
tetradecylbenzene $\text{C}_{20}\text{H}_{34}$ (1-phenyltetradecane) [1459-10-5] JZALLXAUNPOCEU-UHFFFAOYSA-N	4.2×10^{-5}		HSDB (2015)	Q	100
2-phenyltetradecane $\text{C}_{20}\text{H}_{34}$ [4534-59-2] GDFUGKICRHHMOT-UHFFFAOYSA-N	6.7×10^{-4}		Sherblom et al. (1992)	V	
3-phenyltetradecane $\text{C}_{20}\text{H}_{34}$ [4534-58-1] ILOABSZOHZMWLD-UHFFFAOYSA-N	6.2×10^{-4}		Sherblom et al. (1992)	V	
4-phenyltetradecane $\text{C}_{20}\text{H}_{34}$ [4534-57-0] YXLRHYCRTUAPMC-UHFFFAOYSA-N	4.0×10^{-4}		Sherblom et al. (1992)	V	

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
5-phenyltetradecane $\text{C}_{20}\text{H}_{34}$ [4534-56-9] RAWFVRXBPRHWLJ-UHFFFAOYSA-N	5.0×10^{-4}		Sherblom et al. (1992)	V	
6-phenyltetradecane $\text{C}_{20}\text{H}_{34}$ [4534-55-8] MTDIFFBFSKQPIA-UHFFFAOYSA-N	3.6×10^{-4}		Sherblom et al. (1992)	V	
pentadecylbenzene $\text{C}_{21}\text{H}_{36}$ [2131-18-2] JIRNEODMTPGRGV-UHFFFAOYSA-N	1.2×10^{-5}		HSDB (2015)	Q	100
ethenylbenzene C_8H_8 (styrene) [100-42-5] PPBRXRYQALVLMV-UHFFFAOYSA-N	3.6×10^{-3}	3700	Brockbank (2013)	L	
	2.9×10^{-3}	4200	Plyasunov and Shock (2000)	L	
	2.7×10^{-3}		Kim and Kim (2014)	M	
	4.4×10^{-3}	4600	Hiatt (2013)	M	
	3.4×10^{-3}		Dohnal and Hovorka (1999)	M	
	2.5×10^{-3}		Welke et al. (1998)	M	
	3.8×10^{-3}	4100	Kondoh and Nakajima (1997)	M	
	2.9×10^{-3}	4800	Bissonette et al. (1990)	M	
	1.8×10^{-3}		Sato and Nakajima (1979a)	M	14
	3.6×10^{-3}		Lide and Frederikse (1995)	V	
	3.3×10^{-3}		Abraham et al. (1994a)	V	
	3.3×10^{-3}		Mackay et al. (1993)	V	
	3.8×10^{-3}		Yaws (2003)	X	259
	3.8×10^{-3}		Yaws (2003)	X	238
	3.8×10^{-3}	4200	Goldstein (1982)	X	299
	3.8×10^{-3}	3800	Fogg and Sangster (2003)	C	
	3.3×10^{-3}		Dupeux et al. (2022)	Q	260
	1.3×10^{-3}		Keshavarz et al. (2022)	Q	
	1.1×10^{-2}		Duchowicz et al. (2020)	Q	300
	8.7×10^{-3}		Wang et al. (2017)	Q	81, 239
2.6×10^{-3}		Wang et al. (2017)	Q	81, 240	
7.6×10^{-3}		Wang et al. (2017)	Q	81, 241	
1.6×10^{-2}		Gharagheizi et al. (2012)	Q		
4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244	
2.5×10^{-3}		Raventos-Duran et al. (2010)	Q	245	
3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	246	
2.6×10^{-3}		Gharagheizi et al. (2010)	Q	247	
3.2×10^{-3}		Hilal et al. (2008)	Q		
4.4×10^{-3}		Modarresi et al. (2007)	Q	68	
	4800	Kühne et al. (2005)	Q		
3.8×10^{-3}		Yaffe et al. (2003)	Q	249, 250	
3.3×10^{-3}		English and Carroll (2001)	Q	231, 232	

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^{-4}		Katritzky et al. (1998)	Q	
	3.7×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	3.6×10^{-3}	3700	Duchowicz et al. (2020)	?	186, 21
			Kühne et al. (2005)	?	
	3.8×10^{-3}		Yaws (1999)	?	21
	1.9×10^{-3}		Abraham and Weathersby (1994)	?	21
	3.7×10^{-3}		Yaws and Yang (1992)	?	21
			Shiu and Ma (2000)	W	362
(<i>E</i>)-1-propenylbenzene C_9H_{10} [873-66-5] QROGIFZRVHSFLM-QHHAFSJGSA-N	2.9×10^{-3}		Hilal et al. (2008)	Q	
1-propenylbenzene C_9H_{10} [637-50-3] QROGIFZRVHSFLM-UHFFFAOYSA-N	3.7×10^{-3}		HSDB (2015)	Q	100
2-propenylbenzene C_9H_{10} (allylbenzene) [300-57-2] HJWLRCRVIBGQPNF-UHFFFAOYSA-N	1.4×10^{-3}		Sato and Nakajima (1979a)	M	14
	2.2×10^{-3}		Hilal et al. (2008)	Q	
	1.5×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	2.9×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	1.4×10^{-3}		Abraham and Weathersby (1994)	?	21
1-ethenyl-3-methylbenzene C_9H_{10} (<i>m</i> -methylstyrene) [100-80-1] JZHGRUMIRATHIU-UHFFFAOYSA-N	3.0×10^{-3}		Yaws (2003)	X	238
	7.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.8×10^{-3}		Gharagheizi et al. (2010)	Q	247
	3.1×10^{-3}		Hilal et al. (2008)	Q	
	1.6×10^{-3}		Modarresi et al. (2007)	Q	68
	3.0×10^{-3}		Yaws (1999)	?	21
	2.6×10^{-3}		Yaws and Yang (1992)	?	21
1-ethenyl-4-methylbenzene C_9H_{10} (<i>p</i> -methylstyrene) [622-97-9] JLBJTVDPNSHNSKJ-UHFFFAOYSA-N	3.1×10^{-3}		Duchowicz et al. (2020)	V	187
	3.1×10^{-3}		HSDB (2015)	V	
	3.1×10^{-3}		Yaws (2003)	X	238
	5.5×10^{-3}		Duchowicz et al. (2020)	Q	
	7.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	2.5×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	3.8×10^{-3}		Gharagheizi et al. (2010)	Q	247
	3.4×10^{-3}		Hilal et al. (2008)	Q	
	2.8×10^{-3}		Modarresi et al. (2007)	Q	68
	1.5×10^{-3}		Yao et al. (2002)	Q	230
	3.1×10^{-3}		Yaws (1999)	?	21
	3.5×10^{-3}		Yaws and Yang (1992)	?	21

Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(1-methylethenyl)-benzene C_9H_{10} (α -methyl styrene) [98-83-9] XYLMUPLGERFSHI-UHFFFAOYSA-N	3.9×10^{-3} 3.8×10^{-3} 3.3×10^{-3} 3.6×10^{-3} 2.4×10^{-3} 3.9×10^{-3}		Duchowicz et al. (2020) HSDB (2015) Abraham et al. (1994a) Duchowicz et al. (2020) Hilal et al. (2008) English and Carroll (2001)	V V V Q Q Q	187 231, 232
phenylacetylene C_8H_6 [536-74-3] UEXCJVNBTNXOEH-UHFFFAOYSA-N	1.6×10^{-2} 5.7×10^{-3} 2.2×10^{-2} 2.0×10^{-2} 5.0×10^{-3} 3.9×10^{-3} 6.5×10^{-3} 1.5×10^{-3}		Duchowicz et al. (2020) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003)	V X Q Q Q Q Q Q	187 238 247 68 249, 250
α -methylstyrene dimer $\text{C}_{18}\text{H}_{20}$ [6144-04-3] ATSCZMXECPRPEA-BUHFOSPRSA-N	1.1×10^{-2} 5.7×10^{-3} 7.2×10^{-3} 2.4×10^{-1} 9.0×10^{-2}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292

A2.6 Terpenes and terpenoids

Table A2.6: Terpenes and terpenoids

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methyl-4-(1-methylethyl)- cyclohexane $\text{C}_{10}\text{H}_{20}$ (<i>p</i> -menthane) [99-82-1] CFJYNSNXFLKNS-UHFFFAOYSA-N	5.6×10^{-6}		Duchowicz et al. (2020)	V	187
	5.6×10^{-6}		Copolovici and Niinemets (2005)	V	
	2.1×10^{-4}		Duchowicz et al. (2020)	Q	
α -pinene $\text{C}_{10}\text{H}_{16}$ [80-56-8] GRWFGVWFFZKLTU-UHFFFAOYSA-N	7.0×10^{-5}	4700	Plyasunov and Shock (2000)	L	
	2.9×10^{-4}	1800	Leng et al. (2013)	M	
	7.4×10^{-5}	4400	Copolovici and Niinemets (2005)	M	
	5.8×10^{-4}		Karl et al. (2003)	M	88
	1.4×10^{-2}		van Ruth et al. (2002)	M	14
	7.4×10^{-2}		van Ruth and Villeneuve (2002)	M	14, 363
	2.1×10^{-3}		van Ruth et al. (2001)	M	14
	7.0×10^{-5}		Fichan et al. (1999)	M	
	4.7×10^{-5}		Falk et al. (1990)	M	14
	3.4×10^{-5}		Duchowicz et al. (2020)	V	187
	3.4×10^{-5}		HSDB (2015)	V	
	7.4×10^{-5}		Copolovici and Niinemets (2005)	V	
	7.4×10^{-5}		Niinemets and Reichstein (2002)	V	
	2.8×10^{-5}	10000	Li et al. (1998)	V	
	3.5×10^{-5}		Hilal et al. (2008)	C	
	2.2×10^{-4}		Dupeux et al. (2022)	Q	260
	3.0×10^{-4}		Duchowicz et al. (2020)	Q	
	7.6×10^{-4}		Wang et al. (2017)	Q	81, 239
	2.4×10^{-5}		Wang et al. (2017)	Q	81, 240
	5.6×10^{-4}		Wang et al. (2017)	Q	81, 241
	3.1×10^{-5}		Hilal et al. (2008)	Q	
β -pinene $\text{C}_{10}\text{H}_{16}$ [127-91-3] WTARULDDTDQWMU-UHFFFAOYSA-N	2.1×10^{-4}		Plyasunov and Shock (2000)	L	
	1.6×10^{-4}		Helburn et al. (2008)	M	
	1.5×10^{-4}	4500	Copolovici and Niinemets (2005)	M	
	4.9×10^{-4}		Karl et al. (2003)	M	88
	4.7×10^{-5}		Falk et al. (1990)	M	14
	1.5×10^{-4}		Copolovici and Niinemets (2005)	V	
	1.5×10^{-4}		Niinemets and Reichstein (2002)	V	
	4.3×10^{-4}		Dupeux et al. (2022)	Q	260
	4.5×10^{-4}		Wang et al. (2017)	Q	81, 239
	3.2×10^{-5}		Wang et al. (2017)	Q	81, 240
	1.1×10^{-3}		Wang et al. (2017)	Q	81, 241
	6.2×10^{-5}		HSDB (2015)	Q	100

Table A2.6: Terpenes and terpenoids (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methyl-4-(1-methylethyl)-1,3-cyclohexadiene $\text{C}_{10}\text{H}_{16}$ (α -terpinene) [99-86-5] YHQGMUYUVUMAZJR-UHFFFAOYSA-N	5.1×10^{-4} 3.8×10^{-4} 2.9×10^{-4} 4.5×10^{-4} 2.8×10^{-4} 5.1×10^{-4} 5.4×10^{-4}	4800	Plyasunov and Shock (2000) Schuhfried et al. (2015) Copolovici and Niinemets (2005) Karl et al. (2003) Copolovici and Niinemets (2005) Niinemets and Reichstein (2002) Dupeux et al. (2022)	L M M M V V Q	88 260
1-methyl-4-(1-methylethyl)-1,4-cyclohexadiene $\text{C}_{10}\text{H}_{16}$ (γ -terpinene) [99-85-4] YKFLAYDHMOASIJ-UHFFFAOYSA-N	5.7×10^{-4} 4.5×10^{-4} 3.8×10^{-4} 4.4×10^{-4} 3.8×10^{-4} 2.8×10^{-4} 5.4×10^{-4} 6.2×10^{-4} 2.1×10^{-4} 3.4×10^{-4}	4300 4800 8000	Plyasunov and Shock (2000) Schuhfried et al. (2015) Copolovici and Niinemets (2005) Duchowicz et al. (2020) Copolovici and Niinemets (2005) Niinemets and Reichstein (2002) Li et al. (1998) Dupeux et al. (2022) Duchowicz et al. (2020) Katritzky et al. (1998)	L M M V V V V Q Q Q	187 260
1-methyl-4-(1-methylethenyl)-cyclohexene $\text{C}_{10}\text{H}_{16}$ (limonene) [138-86-3] XMGQYMWWDQXJHM-UHFFFAOYSA-N	4.7×10^{-4} 4.8×10^{-4} 2.6×10^{-4} 7.0×10^{-4} 2.4×10^{-4} 7.0×10^{-4} 3.1×10^{-4} 3.1×10^{-4} 3.5×10^{-4} 6.4×10^{-4} 3.5×10^{-4} 1.7×10^{-4} 7.3×10^{-4} 6.4×10^{-4} 5.9×10^{-4} 1.1×10^{-4} 1.5×10^{-3} 1.1×10^{-4} 1.9×10^{-4}	4700 4600 3000 10000	Plyasunov and Shock (2000) Leng et al. (2013) Copolovici and Niinemets (2007) Fichan et al. (1999) Welke et al. (1998) Falk et al. (1990) Duchowicz et al. (2020) HSDB (2015) Copolovici and Niinemets (2005) van Roon et al. (2005) Niinemets and Reichstein (2002) Li et al. (1998) Dupeux et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Hilal et al. (2008) Modarresi et al. (2007)	L M M M M M V V V V V V Q Q Q Q Q Q Q	14 187 260 81, 239 81, 240 81, 241 68

Table A2.6: Terpenes and terpenoids (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(<i>R</i>)-1-methyl-4-(1-methylethenyl)-cyclohexene $\text{C}_{10}\text{H}_{16}$ (<i>R</i> -(+)-limonene; <i>D</i> -limonene) [5989-27-5] XMGQYMWWDQXDJM-SNVBAGLBSA-N	3.8×10^{-4} 2.6×10^{-4} 3.5×10^{-4} 3.8×10^{-4} 3.9×10^{-4} 3.8×10^{-4} 3.8×10^{-4} 3.8×10^{-4} 7.3×10^{-4} 6.4×10^{-4} 1.2×10^{-4} 3.8×10^{-4} 1.9×10^{-4} 3.8×10^{-4}	4500	Schuhfried et al. (2015) Helburn et al. (2008) Copolovici and Niinemets (2005) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006a) Yaws (2003) Yaws (2003) Dupeux et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2007) Yaws (1999)	M M M V V V X X Q Q Q Q Q ?	187 259 238 260 247 68 21
(<i>S</i>)-1-methyl-4-(1-methylethenyl)-cyclohexene $\text{C}_{10}\text{H}_{16}$ (<i>S</i> -(-)-limonene) [5989-54-8] XMGQYMWWDQXDJM-JTQLQIEISA-N	3.7×10^{-4} 3.5×10^{-4}	4400	Schuhfried et al. (2015) Copolovici and Niinemets (2005)	M M	
3,7,7-trimethyl-bicyclo[4.1.0]hept-3-ene $\text{C}_{10}\text{H}_{16}$ (3-carene) [13466-78-9] BQOFWKZOCNGFEC-UHFFFAOYSA-N	1.6×10^{-4} 7.3×10^{-5} 7.3×10^{-5}		Falk et al. (1990) Copolovici and Niinemets (2005) Niinemets and Reichstein (2002)	M V V	14
7-methyl-3-methylene-1,6-octadiene $\text{C}_{10}\text{H}_{16}$ (myrcene) [123-35-3] UAHWPYUMFXJFY-UHFFFAOYSA-N	4.0×10^{-4} 3.6×10^{-4} 8.7×10^{-4} 1.5×10^{-4} 1.1×10^{-4} 1.6×10^{-4} 7.2×10^{-4} 1.6×10^{-4} 1.3×10^{-4} 7.1×10^{-4} 1.6×10^{-4} 6.2×10^{-5} 2.0×10^{-5}	2800	Plyasunov and Shock (2000) Schuhfried et al. (2015) Fichan et al. (1999) Duchowicz et al. (2020) HSDB (2015) Copolovici and Niinemets (2005) van Roon et al. (2005) Niinemets and Reichstein (2002) Dupeux et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	L M M V V V V V Q Q Q Q Q	187 260 272, 244 245 246

Table A2.6: Terpenes and terpenoids (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methyl-4-(1-methylethylidene)- cyclohexene $\text{C}_{10}\text{H}_{16}$ (α -terpinolene) [586-62-9] MOYAFQVGZZPNRA-UHFFFAOYSA-N	7.9×10^{-4} 3.8×10^{-4} 7.0×10^{-4} 3.7×10^{-4} 3.8×10^{-4} 5.7×10^{-4}	5500 5300 12000	Plyasunov and Shock (2000) Copolovici and Niinemets (2005) HSDB (2015) Copolovici and Niinemets (2005) Niinemets and Reichstein (2002) Li et al. (1998)	L M V V V V	
α -phellandrene $\text{C}_{10}\text{H}_{16}$ [99-83-2] OGLDWXZKYODSOB-UHFFFAOYSA-N	1.8×10^{-4} 1.8×10^{-4} 1.8×10^{-4} 1.4×10^{-4} 5.3×10^{-4}	4500	Plyasunov and Shock (2000) Copolovici and Niinemets (2005) Copolovici and Niinemets (2005) Niinemets and Reichstein (2002) Dupeux et al. (2022)	L M V V Q	260
(<i>R</i>)-(-)- α -phellandrene $\text{C}_{10}\text{H}_{16}$ [4221-98-1] OGLDWXZKYODSOB-SNVBAGLBSA-N	3.4×10^{-4}		Schuhfried et al. (2015)	M	
β -phellandrene $\text{C}_{10}\text{H}_{16}$ [555-10-2] LFJQCDVYDGGFCH-UHFFFAOYSA-N	1.8×10^{-4} 1.8×10^{-4} 1.8×10^{-4} 6.1×10^{-4}	5100	Copolovici and Niinemets (2005) Copolovici and Niinemets (2005) Niinemets and Reichstein (2002) Dupeux et al. (2022)	M V V Q	260
3,7-dimethyl-1,3,6-octatriene $\text{C}_{10}\text{H}_{16}$ (β -ocimene) [13877-91-3] IHPKGUQCSIINRJ-UHFFFAOYSA-N	4.0×10^{-4}		Copolovici and Niinemets (2005)	V	
(<i>Z</i>)-3,7-dimethyl-1,3,6-octatriene $\text{C}_{10}\text{H}_{16}$ (<i>cis</i> - β -ocimene) [3338-55-4] IHPKGUQCSIINRJ-NTMALXAHSA-N	4.0×10^{-4}		Niinemets and Reichstein (2002)	V	
(<i>E</i>)-3,7-dimethyl-1,3,6-octatriene $\text{C}_{10}\text{H}_{16}$ (<i>trans</i> - β -ocimene) [3779-61-1] IHPKGUQCSIINRJ-CSKARUKUSA-N	3.0×10^{-4}		Niinemets and Reichstein (2002)	V	
2,2-dimethyl-3-methylene- bicyclo[2.2.1]heptane $\text{C}_{10}\text{H}_{16}$ (camphene) [79-92-5] CRPUJAZIXJMDBK-UHFFFAOYSA-N	2.3×10^{-4} 1.0×10^{-4} 3.1×10^{-4} 6.3×10^{-4}		Plyasunov and Shock (2000) HSDB (2015) Copolovici and Niinemets (2005) Niinemets and Reichstein (2002)	L V V V	

Table A2.6: Terpenes and terpenoids (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methylene-1-(1-methylethyl)- bicyclo[3.1.0]hexane $\text{C}_{10}\text{H}_{16}$ (sabinene) [3387-41-5] NDVASEGYNIMXJL-UHFFFAOYSA-N	1.5×10^{-4} 1.6×10^{-4} 1.6×10^{-4}		Plyasunov and Shock (2000) Copolovici and Niinemets (2005) Niinemets and Reichstein (2002)	L V V	
tricyclo[3.3.1.1(3,7)]decane $\text{C}_{10}\text{H}_{16}$ (adamantane) [281-23-2] ORILYTVJVMKLC-UHFFFAOYSA-N	8.0×10^{-4} 1.1×10^{-4}	3400	van Roon et al. (2005) Hilal et al. (2008)	V Q	
β -caryophyllene $\text{C}_{15}\text{H}_{24}$ [87-44-5] NPNUFJAVOOONJE-IOMPXFEGSA-N	3.7×10^{-4} 2.6×10^{-3} 6.5×10^{-4} 3.4×10^{-5} 1.0×10^{-2}	4500	Copolovici and Niinemets (2015) Dupeux et al. (2022) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	M Q Q Q Q	260 81, 239 81, 240 81, 241
α -cedrene $\text{C}_{15}\text{H}_{24}$ [469-61-4] IRAQOCYXUMOF CW-KYEXWDHISA-N	2.8×10^{-4}	4900	Copolovici and Niinemets (2015)	M	
α -farnesene $\text{C}_{15}\text{H}_{24}$ [502-61-4] CXENHBSYCFKJS-VDQVFBMKS A-N	3.4×10^{-4} 8.1×10^{-6}	4300	Copolovici and Niinemets (2015) Schuhfried et al. (2015)	M M	
α -humulene $\text{C}_{15}\text{H}_{24}$ [6753-98-6] FAMPSKZZVDUYOS-HRGUGZIWSA-N	2.9×10^{-4}	4700	Copolovici and Niinemets (2015)	M	
γ -gurjunene $\text{C}_{15}\text{H}_{24}$ [22567-17-5] DUYRYUZIBGFLDD-UHFFFAOYSA-N	3.3×10^{-4}	3700	Copolovici and Niinemets (2015)	M	
isosativene $\text{C}_{15}\text{H}_{24}$ [24959-83-9] CGZBLYYTRIVTD-UHFFFAOYSA-N	3.9×10^{-4}	3600	Copolovici and Niinemets (2015)	M	
α -longipinene $\text{C}_{15}\text{H}_{24}$ [5989-08-2] HICYDYJTCDBHMZ-UHFFFAOYSA-N	3.4×10^{-4}	4100	Copolovici and Niinemets (2015)	M	

Table A2.6: Terpenes and terpenoids (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
α -neoclovene $\text{C}_{15}\text{H}_{24}$ [4545-68-0] ZCJQJJWNFDNQGZ-UHFFFAOYSA-N	2.9×10^{-4}	3100	Copolovici and Niinemets (2015)	M	
β -neoclovene $\text{C}_{15}\text{H}_{24}$ [56684-96-9] BUDWHMNUSAOQBI-UHFFFAOYSA-N	2.9×10^{-4}	4600	Copolovici and Niinemets (2015)	M	
γ -neoclovene $\text{C}_{15}\text{H}_{24}$ ZYKFQRCKKGFQQR-UHFFFAOYSA-N	2.9×10^{-4}	3200	Copolovici and Niinemets (2015)	M	
valencene $\text{C}_{15}\text{H}_{24}$ [4630-07-3] QEBNYNLSCGVZOH-UHFFFAOYSA-N	3.2×10^{-4}	4500	Copolovici and Niinemets (2015)	M	

A2.7 Polynuclear aromatics

Table A2.7: Polynuclear aromatics

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
bis(1-methylethyl)-1,1'-biphenyl $C_{18}H_{22}$ [36876-13-8] NUEUMFZLNOCRCQ-UHFFFAOYSA-N	4.5×10^{-3}		HSDB (2015)	Q	100
	6.4×10^{-3}		Zhang et al. (2010)	Q	288, 289
	5.0×10^{-3}		Zhang et al. (2010)	Q	288, 290
	3.2×10^{-2}		Zhang et al. (2010)	Q	288, 291
	2.0×10^{-2}		Zhang et al. (2010)	Q	288, 292
1,1-bis(3,4-dimethylphenyl)ethane $C_{18}H_{22}$ [1742-14-9] NCSVCMFDHINRJE-UHFFFAOYSA-N	1.0×10^{-2}		Zhang et al. (2010)	Q	288, 289
	1.8×10^{-2}		Zhang et al. (2010)	Q	288, 290
	6.5×10^{-2}		Zhang et al. (2010)	Q	288, 291
	4.8×10^{-3}		Zhang et al. (2010)	Q	288, 292
	1-benzyl-2-(2-methylbenzyl)benzene $C_{21}H_{20}$ [100404-06-6] SMOZJCPUPPHKQ-UHFFFAOYSA-N	2.1×10^{-1}		Zhang et al. (2010)	Q
2.5×10^{-1}			Zhang et al. (2010)	Q	288, 290
1.4			Zhang et al. (2010)	Q	288, 291
4.1×10^{-1}			Zhang et al. (2010)	Q	288, 292
2,5-dibenzyltoluene $C_{21}H_{20}$ [56310-11-3] INLIRICAUXHSB-UHFFFAOYSA-N		2.1×10^{-1}		Zhang et al. (2010)	Q
	2.9×10^{-1}		Zhang et al. (2010)	Q	288, 290
	4.5		Zhang et al. (2010)	Q	288, 291
	4.1×10^{-1}		Zhang et al. (2010)	Q	288, 292
	biphenyl $(C_6H_5)_2$ [92-52-4] ZUOUZKKEUPVFJK-UHFFFAOYSA-N	3.6×10^{-2}	7000	Brockbank (2013)	L
3.6×10^{-2}			Mackay and Shiu (1981)	L	
3.4×10^{-2}			Destailats and Charles (2002)	M	
			Dewulf et al. (1999)	M	364
3.2×10^{-2}			Shiu and Mackay (1997)	M	
5.1×10^{-2}			Fendinger and Glotfelty (1990)	M	
3.3×10^{-2}			Mackay and Shiu (1981)	M	
2.4×10^{-2}			Mackay et al. (1979)	M	
3.5×10^{-2}			Mackay et al. (2006a)	V	
3.5×10^{-2}			Mackay et al. (2006b)	V	
3.6×10^{-2}			Shiu and Ma (2000)	V	
3.5×10^{-2}			Shiu and Mackay (1997)	V	
3.6×10^{-2}			Abraham et al. (1994a)	V	
1.9×10^{-2}			Mackay et al. (1992a)	V	
1.2×10^{-2}			Eastcott et al. (1988)	V	
1.9×10^{-2}			Shiu and Mackay (1986)	V	
7.3×10^{-2}			Burkhard et al. (1985)	V	
2.0×10^1		6200	Bopp (1983)	V	
3.5×10^{-2}			Cabani et al. (1981)	V	
6.4×10^{-3}			Mackay and Leinonen (1975)	V	
1.2×10^{-2}		Bohon and Claussen (1951)	V		
7.6×10^{-3}	2900	Paasivirta et al. (1999)	T		
1.7×10^{-2}		Yaws (2003)	X	259	
3.9×10^{-2}		Dupeux et al. (2022)	Q	260	

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	2.8×10^{-2}		Duchowicz et al. (2020)	Q	300
	4.5×10^{-2}		Schröder et al. (2010)	Q	365
	1.3×10^{-2}		Hilal et al. (2008)	Q	
	5.0×10^{-2}		Modarresi et al. (2007)	Q	68
		5100	Kühne et al. (2005)	Q	
	3.7×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	2.5×10^{-2}		English and Carroll (2001)	Q	231, 232
	4.4×10^{-4}		Katritzky et al. (1998)	Q	
	8.0×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	2.9×10^{-2}		Arbuckle (1983)	Q	
	3.2×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		6000	Kühne et al. (2005)	?	
	1.2×10^{-2}		Yaws and Yang (1992)	?	21
2-methyl-1,1'-biphenyl $C_{13}H_{12}$ [643-58-3] ALLIZEAXNXSFGD-UHFFFAOYSA-N	2.2×10^{-2}		HSDB (2015)	Q	100
	1.0×10^{-2}		Hilal et al. (2008)	Q	
3-methyl-1,1'-biphenyl $C_{13}H_{12}$ [643-93-6] NPDIDUXTRAITDE-UHFFFAOYSA-N	1.5×10^{-2}		Hilal et al. (2008)	Q	
4-methyl-1,1'-biphenyl $C_{13}H_{12}$ [644-08-6] ZZLCFHIKESPLTH-UHFFFAOYSA-N	1.6×10^{-2}		Hilal et al. (2008)	Q	
diphenylmethane $C_{13}H_{12}$ (1,1'-methylenebisbenzene) [101-81-5] CZZYITDELCSZES-UHFFFAOYSA-N	7.7×10^{-2}		Duchowicz et al. (2020)	V	187
	7.6×10^{-2}		HSDB (2015)	V	
	1.1		Mackay et al. (2006a)	V	
	1.1		Mackay et al. (1993)	V	
	4.5×10^{-2}		Meylan and Howard (1991)	V	
	4.7×10^{-2}		Cabani et al. (1981)	V	
	1.0		Mackay et al. (1992b)	X	366
	4.3×10^{-2}		Yaws (2003)	X	238
	2.1×10^{-2}		Duchowicz et al. (2020)	Q	
	5.7×10^{-3}		Gharagheizi et al. (2010)	Q	247
	2.2×10^{-2}		Hilal et al. (2008)	Q	
	1.6×10^{-2}		Modarresi et al. (2007)	Q	68
	2.1×10^{-2}		Meylan and Howard (1991)	Q	
	4.3×10^{-2}		Yaws (1999)	?	21

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2-diphenylethane $\text{C}_{14}\text{H}_{14}$ (dibenzyl) [103-29-7] QWUWMCYKGHVNAV-UHFFFAOYSA-N	5.9×10^{-2} 5.9×10^{-2} 5.9×10^{-2}		Mackay et al. (2006a) Mackay et al. (1993) Mackay et al. (1992b)	V V X	366
3-isopropyl-1,1'-biphenyl $\text{C}_{15}\text{H}_{16}$ [20282-30-8] LIWRTHVZRZXVFX-UHFFFAOYSA-N	5.8×10^{-3}		Ebert et al. (2023)	?	367
4-isopropyl-1,1'-biphenyl $\text{C}_{15}\text{H}_{16}$ [7116-95-2] KWSHGRJUSUJPQD-UHFFFAOYSA-N	4.2×10^{-3}		Ebert et al. (2023)	?	367
<i>o</i> -terphenyl $\text{C}_{18}\text{H}_{14}$ [84-15-1] OIAQMFOKAXHPNH-UHFFFAOYSA-N	1.6×10^{-1} 1.6×10^{-1} 1.3×10^{-1} 3.1×10^{-1} 8.2×10^{-2} 7.3×10^{-1} 4.0		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V V Q Q Q Q Q	187 288, 289 288, 290 288, 291 288, 292
<i>m</i> -terphenyl $\text{C}_{18}\text{H}_{14}$ [92-06-8] YJTKZCDBKVTBY-UHFFFAOYSA-N	2.8 2.8 1.3×10^{-1} 1.2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Schroder et al. (2010)	V V Q Q	187 365
<i>p</i> -terphenyl $\text{C}_{18}\text{H}_{14}$ [92-94-4] XJKSTNDFUHPQJ-UHFFFAOYSA-N	6.0 2.0×10^{-2} 1.3×10^{-1} 2.9×10^{-1} 3.1×10^{-1} 2.4×10^{-1} 1.1 4.0 2.5×10^{-2}		Duchowicz et al. (2020) Mackay et al. (2006a) Yaws (2003) Duchowicz et al. (2020) HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Gharagheizi et al. (2010)	V V X Q Q Q Q Q Q Q	187 293 238 100 288, 289 288, 290 288, 291 288, 292 247
indene C_9H_8 [95-13-6] YBYIRNPQLQARY-UHFFFAOYSA-N	6.2×10^{-3}		HSDB (2015)	Q	100
5-ethylidene-2-norbornene C_9H_{12} [16219-75-3] OJOWICOBXYCEKR-KRXBUXQSA-N	7.6×10^{-5}		HSDB (2015)	Q	100

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
indane C_9H_{10} [496-11-7] PQNFLJBBNBOBRQ-UHFFFAOYSA-N	4.3×10^{-3}		Plyasunov and Shock (2000)	L	
	4.3×10^{-3}		Mackay et al. (2006a)	V	
	4.7×10^{-3}		Abraham et al. (1994a)	V	
	4.5×10^{-3}		Yaws (2003)	X	259
	4.5×10^{-3}		Yaws (2003)	X	238
	2.4×10^{-3}		Dupeux et al. (2022)	Q	260
	9.6×10^{-2}		Keshavarz et al. (2022)	Q	
	1.2×10^{-2}		Duchowicz et al. (2020)	Q	300
	4.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	5.3×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.2×10^{-2}		Hilal et al. (2008)	Q	
	2.2×10^{-3}		Modarresi et al. (2007)	Q	68
	4.8×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	7.2×10^{-3}		English and Carroll (2001)	Q	231, 232
	5.8×10^{-3}		Nirmalakhandan et al. (1997)	Q	
4.9×10^{-2}		Duchowicz et al. (2020)	?	186, 21	
4.5×10^{-3}		Yaws (1999)	?	21	
azulene C_{10}H_8 [275-51-4] CUFNKYGDVFPHO-UHFFFAOYSA-N	1.5×10^{-1}	7800	Hiatt (2013)	M	
naphthalene C_{10}H_8 [91-20-3] UFWIBTONFRDIAS-UHFFFAOYSA-N	2.1×10^{-2}	4400	Schwardt et al. (2021)	L	1
	2.1×10^{-2}	5400	Brockbank (2013)	L	1
	2.1×10^{-2}		Ma et al. (2010b)	L	368
	2.2×10^{-2}		Ma et al. (2010b)	L	369
	2.2×10^{-2}	5300	Fogg and Sangster (2003)	L	
	2.3×10^{-2}		Mackay and Shiu (1981)	L	
	3.3×10^{-2}	6100	Hiatt (2013)	M	
	6.0×10^{-2}		Lee et al. (2012)	M	
	4.0×10^{-2}		Bobadilla et al. (2003)	M	
	2.4×10^{-2}		Destailats and Charles (2002)	M	
	1.3×10^{-2}	3600	Dewulf et al. (1999)	M	
	1.8×10^{-2}		Altschuh et al. (1999)	M	
	2.2×10^{-2}		De Maagd et al. (1998)	M	12
	2.2×10^{-2}		Shiu and Mackay (1997)	M	
	1.7×10^{-2}	5100	Kondoh and Nakajima (1997)	M	
	2.3×10^{-2}	5700	Alaee et al. (1996)	M	
	2.1×10^{-2}		Zhang and Pawliszyn (1993)	M	
	1.3×10^{-2}		Fendinger and Glotfelty (1990)	M	
	2.7×10^{-2}		Yurteri et al. (1987)	M	12
	2.6×10^{-2}		Webster et al. (1985)	M	
	2.0×10^{-2}		Mackay et al. (1979)	M	
1.8×10^{-2}		Southworth (1979)	M		
2.2×10^{-2}	5400	Schwarz and Wasik (1977)	M		
2.3×10^{-2}		Mackay et al. (2006a)	V		

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	2.3×10^{-2}		Shiu and Ma (2000)	V	
	3.2×10^{-2}		De Maagd et al. (1998)	V	12
	2.3×10^{-2}		Shiu and Mackay (1997)	V	
	2.0×10^{-2}		Lide and Frederikse (1995)	V	
	2.3×10^{-2}		Abraham et al. (1994a)	V	
	9.0×10^{-3}		Hwang et al. (1992)	V	
	7.2×10^{-3}		Eastcott et al. (1988)	V	
	2.3×10^{-2}		Cabani et al. (1981)	V	
	2.4×10^{-2}		Hine and Mookerjee (1975)	V	
	8.4×10^{-3}		Mackay and Leinonen (1975)	V	
	2.5×10^{-2}	5100	Wauchope and Haque (1972)	V	
	2.3×10^{-2}	5600	Wauchope and Haque (1972)	V	
	1.9×10^{-2}		Bohon and Claussen (1951)	V	
	1.1×10^{-2}	2100	Paasivirta et al. (1999)	T	
	2.1×10^{-2}		Mackay et al. (1979)	T	
	7.1×10^{-3}		Yaws (2003)	X	259
	2.1×10^{-2}	3600	Goldstein (1982)	X	299
	2.7×10^{-2}		McCarty (1980)	X	370
	2.0×10^{-2}		Smith et al. (1993)	C	
	2.0×10^{-2}		Ryan et al. (1988)	C	
	1.8×10^{-2}		Dupeux et al. (2022)	Q	260
	1.3×10^{-1}		Keshavarz et al. (2022)	Q	
	2.4×10^{-2}		Duchowicz et al. (2020)	Q	185
	1.8×10^{-2}		Parnis et al. (2015)	Q	371
	2.7×10^{-2}		Schröder et al. (2013)	Q	372
	1.5×10^{-2}		Schröder et al. (2010)	Q	365
	2.1×10^{-2}		Hilal et al. (2008)	Q	
	4.0×10^{-2}		Modarresi et al. (2007)	Q	68
		5200	Kühne et al. (2005)	Q	
	2.4×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	2.1×10^{-2}		English and Carroll (2001)	Q	231, 232
	3.3×10^{-4}		Katritzky et al. (1998)	Q	
	5.6×10^{-2}		Russell et al. (1992)	Q	280
	4.3×10^{-2}		Suzuki et al. (1992)	Q	233
	3.2×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	3.4×10^{-2}		Arbuckle (1983)	Q	
	2.2×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	3.6×10^{-2}		MacBean (2012a)	?	
		5400	Kühne et al. (2005)	?	
	8.0×10^{-3}		Yaws and Yang (1992)	?	21
	2.3×10^{-2}		Abraham et al. (1990)	?	
naphthalene-d8 $C_{10}D_8$ [1146-65-2] UFWIBTONFRDIAS-PGRXLJNUSA-N	3.5×10^{-2}	5300	Hiatt (2013)	M	

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
1-methylnaphthalene $\text{C}_{10}\text{H}_7\text{CH}_3$ [90-12-0] QPUYECUOLPXSFR-UHFFFAOYSA-N	2.0×10^{-2}	5800	Brockbank (2013)	L	
	2.2×10^{-2}	6100	Fogg and Sangster (2003)	L	
	2.2×10^{-2}		Mackay and Shiu (1981)	L	
	4.4×10^{-2}	5900	Hiatt (2013)	M	
	1.9×10^{-2}		Altschuh et al. (1999)	M	
	2.1×10^{-2}	6100	Bamford et al. (1999a)	M	
	4.1×10^{-2}		Shiu and Mackay (1997)	M	
	1.6×10^{-2}		Fendinger and Glotfelty (1990)	M	
	3.8×10^{-2}		Mackay and Shiu (1981)	M	
	2.8×10^{-2}	4900	Schwarz and Wasik (1977)	M	
	2.2×10^{-2}		Mackay et al. (2006a)	V	
	2.2×10^{-2}		Shiu and Ma (2000)	V	
	2.2×10^{-2}		Shiu and Mackay (1997)	V	
	2.5×10^{-2}		Abraham et al. (1994a)	V	
	2.5×10^{-2}		Eastcott et al. (1988)	V	
	2.2×10^{-2}		Cabani et al. (1981)	V	
	2.2×10^{-2}		Yaws (2003)	X	238
	1.6×10^{-2}		Keshavarz et al. (2022)	Q	
	1.2×10^{-2}		Duchowicz et al. (2020)	Q	
	1.6×10^{-2}		Parnis et al. (2015)	Q	371
2.3×10^{-2}		Schröder et al. (2013)	Q	372	
1.6×10^{-2}		Gharagheizi et al. (2010)	Q	247	
2.8×10^{-2}		Hilal et al. (2008)	Q		
3.0×10^{-2}		Modarresi et al. (2007)	Q	68	
	5500	Kühne et al. (2005)	Q		
3.8×10^{-2}		Yaffe et al. (2003)	Q	249, 250	
1.5×10^{-2}		English and Carroll (2001)	Q	231, 261	
1.2×10^{-3}		Katritzky et al. (1998)	Q		
2.3×10^{-2}		Nirmalakhandan and Speece (1988)	Q		
1.9×10^{-2}		Duchowicz et al. (2020)	?	186, 21	
	5700	Kühne et al. (2005)	?		
2.2×10^{-2}		Yaws (1999)	?	21	
2.7×10^{-2}		Yaws and Yang (1992)	?	21	
1-methylnaphthalene-d10 $\text{C}_{10}\text{D}_7\text{CD}_3$ [38072-94-5] QPUYECUOLPXSFR-UZHFFJDZSA-N	4.6×10^{-2}	5400	Hiatt (2013)	M	
2-methylnaphthalene $\text{C}_{10}\text{H}_7\text{CH}_3$ [91-57-6] QIMMUPBPVKWKM-UHFFFAOYSA-N	2.0×10^{-2}	5100	Brockbank (2013)	L	
	1.8×10^{-2}	5600	Fogg and Sangster (2003)	L	
	3.5×10^{-2}	5500	Hiatt (2013)	M	
	1.6×10^{-2}		Altschuh et al. (1999)	M	
	1.9×10^{-2}	5400	Bamford et al. (1999a)	M	
	2.2×10^{-2}		De Maagd et al. (1998)	M	12
5.0×10^{-5}	1200	Hansen et al. (1993)	M	282	
3.1×10^{-2}		Fendinger and Glotfelty (1990)	M		

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	2.0×10^{-2}		Mackay et al. (2006a)	V	
	2.6×10^{-2}		De Maagd et al. (1998)	V	12
	2.0×10^{-2}		Shiu and Mackay (1997)	V	
	2.4×10^{-2}		Meylan and Howard (1991)	V	
	2.0×10^{-2}		Eastcott et al. (1988)	V	
	2.4×10^{-2}		Mackay and Shiu (1981)	V	
	2.0×10^{-2}		Mackay et al. (1992b)	X	366
	2.3×10^{-2}		Yaws (2003)	X	238
	1.6×10^{-2}		Keshavarz et al. (2022)	Q	
	1.2×10^{-2}		Duchowicz et al. (2020)	Q	
	1.6×10^{-2}		Parnis et al. (2015)	Q	371
	2.2×10^{-2}		Schröder et al. (2013)	Q	372
	1.6×10^{-2}		Gharagheizi et al. (2010)	Q	247
	2.6×10^{-2}		Hilal et al. (2008)	Q	
	2.4×10^{-2}		Modarresi et al. (2007)	Q	68
		5500	Kühne et al. (2005)	Q	
	2.4×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	1.2×10^{-3}		Katritzky et al. (1998)	Q	
	1.7×10^{-2}		Meylan and Howard (1991)	Q	
	1.9×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		5700	Kühne et al. (2005)	?	
	2.3×10^{-2}		Yaws (1999)	?	21
	2.0×10^{-2}		Yaws and Yang (1992)	?	21
			Shiu and Ma (2000)	W	362
1-ethylnaphthalene $\text{C}_{10}\text{H}_7\text{C}_2\text{H}_5$ [1127-76-0] ZMXIYERNXPIYFR-UHFFFAOYSA-N	2.0×10^{-2}	5900	Brockbank (2013)	L	
	2.6×10^{-2}		Mackay and Shiu (1981)	L	
	1.4×10^{-2}		Altschuh et al. (1999)	M	
	2.2×10^{-2}	4800	Schwarz and Wasik (1977)	M	
	2.6×10^{-2}		Mackay et al. (2006a)	V	
	2.7×10^{-2}		Eastcott et al. (1988)	V	
	2.3×10^{-2}		Cabani et al. (1981)	V	
	2.6×10^{-2}		Mackay et al. (1992b)	X	366
	2.0×10^{-2}		Yaws (2003)	X	238
	2.2×10^{-2}		Keshavarz et al. (2022)	Q	
	1.2×10^{-2}		Duchowicz et al. (2020)	Q	185
	1.9×10^{-2}		Schröder et al. (2013)	Q	372
	1.6×10^{-2}		Gharagheizi et al. (2010)	Q	247
	2.8×10^{-2}		Hilal et al. (2008)	Q	
	2.2×10^{-2}		Modarresi et al. (2007)	Q	68
	4.8×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	9.5×10^{-3}		English and Carroll (2001)	Q	231, 232
	2.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.4×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	2.0×10^{-2}		Yaws (1999)	?	21
	2.7×10^{-2}		Yaws and Yang (1992)	?	21

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2-ethylnaphthalene $\text{C}_{10}\text{H}_7\text{C}_2\text{H}_5$ [939-27-5] RJTJVYVYSTUQWNI-UHFFFAOYSA-N	1.2×10^{-2}		Mackay and Shiu (1981)	L	
	1.8×10^{-2}		Altschuh et al. (1999)	M	
	1.3×10^{-2}		Mackay et al. (2006a)	V	
	1.6×10^{-2}		Eastcott et al. (1988)	V	
	1.3×10^{-2}		Mackay et al. (1992b)	X	366
	8.8×10^{-3}		Yaws (2003)	X	238
	2.2×10^{-2}		Keshavarz et al. (2022)	Q	
	1.2×10^{-2}		Duchowicz et al. (2020)	Q	300
	1.9×10^{-2}		Schröder et al. (2013)	Q	372
	3.6×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-2}		Gharagheizi et al. (2010)	Q	247
	1.9×10^{-2}		Hilal et al. (2008)	Q	
	2.2×10^{-2}		Modarresi et al. (2007)	Q	68
1.2×10^{-2}		Yaffe et al. (2003)	Q	249, 250	
1.8×10^{-2}		Duchowicz et al. (2020)	?	186, 21	
1.6×10^{-2}		Yaws and Yang (1992)	?	21	
1,2,3,4-tetrahydronaphthalene $\text{C}_{10}\text{H}_{12}$ (tetralin) [119-64-2] CXWXQJXEFPUDZ-UHFFFAOYSA-N	6.4×10^{-3}	5300	Plyasunov and Shock (2000)	L	
	5.1×10^{-3}	5400	Ashworth et al. (1988)	M	279
	7.3×10^{-3}		Duchowicz et al. (2020)	V	187
	2.1×10^{-3}		Mackay et al. (1993)	V	
	5.8×10^{-3}		Yaws (2003)	X	238, 298
	1.2×10^{-2}		Duchowicz et al. (2020)	Q	
	5.8×10^{-3}		HSDB (2015)	Q	100
	3.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.3×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.2×10^{-2}		Hilal et al. (2008)	Q	
	4.3×10^{-3}		Modarresi et al. (2007)	Q	68
		4900	Kühne et al. (2005)	Q	
		5300	Kühne et al. (2005)	?	
7.2×10^{-3}		Yaws (1999)	?	21, 298	
1,2-dimethylnaphthalene $\text{C}_{12}\text{H}_{12}$ [573-98-8] QNLZIZAQLLYXTC-UHFFFAOYSA-N	4.8×10^{-2}		Yaws (2003)	X	259
	4.8×10^{-2}		Yaws (2003)	X	238
	2.6×10^{-2}		Dupeux et al. (2022)	Q	260
	4.2×10^{-2}		Schröder et al. (2013)	Q	372
	1.3×10^{-2}		Gharagheizi et al. (2010)	Q	247
1,3-dimethylnaphthalene $\text{C}_{12}\text{H}_{12}$ [575-41-7] QHJMFMSPSZREIF-UHFFFAOYSA-N	1.7×10^{-2}		Duchowicz et al. (2020)	V	187
	2.6×10^{-2}		Cabani et al. (1981)	V	
	6.1×10^{-3}		Duchowicz et al. (2020)	Q	
	2.0×10^{-2}		Schröder et al. (2013)	Q	372
	2.8×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.9×10^{-2}		Hilal et al. (2008)	Q	
	4.6×10^{-2}		Yaffe et al. (2003)	Q	249, 273
	1.1×10^{-2}		English and Carroll (2001)	Q	231, 232
1.9×10^{-1}		Nirmalakhandan et al. (1997)	Q		

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.4×10^{-2}		Yaws and Yang (1992)	?	21
1,4-dimethylnaphthalene $\text{C}_{12}\text{H}_{12}$ [571-58-4] APQSQLNWAIUULLK-UHFFFAOYSA-N	2.6×10^{-2} 3.2×10^{-2} 4.7×10^{-2} 6.1×10^{-3} 2.0×10^{-2} 2.9×10^{-2} 4.4×10^{-2} 3.7×10^{-2} 1.9×10^{-1} 1.3×10^{-2} 2.0×10^{-2}		Duchowicz et al. (2020) Mackay et al. (2006a) Cabani et al. (1981) Duchowicz et al. (2020) Schröder et al. (2013) Gharagheizi et al. (2012) Hilal et al. (2008) Yaffe et al. (2003) Nirmalakhandan et al. (1997) Maniere et al. (2011) Yaws and Yang (1992)	V V V Q Q Q Q Q Q ? ?	187 372 249, 273 166 21
1,5-dimethylnaphthalene $\text{C}_{12}\text{H}_{12}$ [571-61-9] SDBBCEWUYXVGCQ-UHFFFAOYSA-N	2.8×10^{-2} 1.3×10^{-2} 2.2×10^{-2} 6.1×10^{-3} 1.4×10^{-2} 2.1×10^{-2} 2.7×10^{-2} 1.3×10^{-2} 3.3×10^{-2} 2.4×10^{-2} 2.9×10^{-2} 1.1×10^{-1} 2.8×10^{-2} 1.6×10^{-2}		Shiu and Mackay (1997) Yaws (2003) Keshavarz et al. (2022) Duchowicz et al. (2020) Parnis et al. (2015) Schröder et al. (2013) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Nirmalakhandan and Speece (1988) Duchowicz et al. (2020) Yaws and Yang (1992)	M X Q Q Q Q Q Q Q Q Q Q ? ?	238 185 371 372 247 68 249, 250 186, 21 21
1,6-dimethylnaphthalene $\text{C}_{12}\text{H}_{12}$ [575-43-9] CBMXCNPQDUJNHT-UHFFFAOYSA-N	2.3×10^{-2} 3.8×10^{-2}		HSDB (2015) Schröder et al. (2013)	Q Q	100 372
1,7-dimethylnaphthalene $\text{C}_{12}\text{H}_{12}$ [575-37-1] SPUWFVKLHHEKGV-UHFFFAOYSA-N	3.9×10^{-2}		Ebert et al. (2023)	?	373
1,8-dimethylnaphthalene $\text{C}_{12}\text{H}_{12}$ [569-41-5] XAABPYINPXOLM-UHFFFAOYSA-N	2.6×10^{-2}		Schröder et al. (2013)	Q	372

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,3-dimethylnaphthalene $C_{12}H_{12}$ [581-40-8] WWGUMAYGTYSQA-UHFFFAOYSA-N	1.6×10^{-2}		Mackay et al. (2006a)	V	
	6.4×10^{-2}		Eastcott et al. (1988)	V	
	4.4×10^{-2}		Cabani et al. (1981)	V	
	1.3×10^{-2}		Yaws (2003)	X	238
	1.1×10^{-2}		Meylan and Howard (1991)	C	
	2.2×10^{-2}		Keshavarz et al. (2022)	Q	
	6.1×10^{-3}		Duchowicz et al. (2020)	Q	300
	2.5×10^{-2}		Schröder et al. (2013)	Q	372
	3.0×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-2}		Gharagheizi et al. (2010)	Q	247
	3.6×10^{-2}		Hilal et al. (2008)	Q	
	2.0×10^{-2}		Modarresi et al. (2007)	Q	68
	4.6×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	1.3×10^{-1}		Nirmalakhanda et al. (1997)	Q	
1.5×10^{-2}		Meylan and Howard (1991)	Q		
1.1×10^{-2}		Duchowicz et al. (2020)	?	186, 21	
1.7×10^{-2}		Yaws and Yang (1992)	?	21	
2,6-dimethylnaphthalene $C_{12}H_{12}$ [581-42-0] YGYNBBAUIYTWF-UHFFFAOYSA-N	7.8×10^{-3}		Mackay et al. (2006a)	V	
	6.2×10^{-2}		Eastcott et al. (1988)	V	
	3.4×10^{-2}		Cabani et al. (1981)	V	
	2.0×10^{-2}		Schröder et al. (2013)	Q	372
	2.8×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.2×10^{-2}		Hilal et al. (2008)	Q	
	2.2×10^{-2}		Modarresi et al. (2007)	Q	68
	3.7×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	1.9×10^{-1}		Nirmalakhanda et al. (1997)	Q	
	8.2×10^{-3}		Yaws and Yang (1992)	?	21
2,7-dimethylnaphthalene $C_{12}H_{12}$ [582-16-1] LRQYSMQNJLZKPS-UHFFFAOYSA-N	2.1×10^{-2}		Schröder et al. (2013)	Q	372
acenaphthene $C_{12}H_{10}$ [83-32-9] CWRYPZZKDGJXCA-UHFFFAOYSA-N	5.4×10^{-2}	6500	Schwardt et al. (2021)	L	1
	7.2×10^{-2}	5400	Brockbank (2013)	L	
	7.2×10^{-2}		Ma et al. (2010b)	L	368
	7.0×10^{-2}		Ma et al. (2010b)	L	369
	5.5×10^{-2}	6500	Fogg and Sangster (2003)	L	
	4.2×10^{-2}		Mackay and Shiu (1981)	L	
	2.6×10^{-1}		Lee et al. (2012)	M	
	5.4×10^{-2}	6600	Bamford et al. (1999a)	M	
	6.2×10^{-2}		Shiu and Mackay (1997)	M	
	1.1×10^{-1}		Zhang and Pawliszyn (1993)	M	
	1.6×10^{-1}		Fendinger and Glotfelty (1990)	M	
	6.4×10^{-3}		Mackay and Shiu (1981)	M	
	4.1×10^{-2}		Warner et al. (1980)	M	

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.8×10^{-2}		Mackay et al. (1979)	M	
	8.2×10^{-2}		Mackay et al. (2006a)	V	
	8.2×10^{-2}		Shiu and Ma (2000)	V	
	8.2×10^{-2}		Shiu and Mackay (1997)	V	
	1.2×10^{-2}		Hwang et al. (1992)	V	
	9.5×10^{-2}		Eastcott et al. (1988)	V	
	8.2×10^{-2}		Cabani et al. (1981)	V	
	1.2×10^{-1}		Hine and Mookerjee (1975)	V	
	1.2×10^{-1}	6000	Wauchope and Haque (1972)	V	
	3.4×10^{-2}	2900	Paasivirta et al. (1999)	T	
	4.1×10^{-2}	2800	Goldstein (1982)	X	299
	5.2×10^{-2}		McCarty (1980)	X	370
	6.4×10^{-2}		HSDB (2015)	C	
	4.1×10^{-2}		Smith et al. (1993)	C	
	4.0×10^{-2}		Ryan et al. (1988)	C	
	4.1×10^{-2}		Shen (1982)	C	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	4.8×10^{-2}		Duchowicz et al. (2020)	Q	
	9.2×10^{-2}		Abraham et al. (2019)	Q	
	3.4×10^{-2}		Parnis et al. (2015)	Q	371
	9.2×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.9×10^{-2}		Schröder et al. (2010)	Q	365
	2.2×10^{-1}		Hilal et al. (2008)	Q	
	4.4×10^{-2}		Modarresi et al. (2007)	Q	68
		5500	Kühne et al. (2005)	Q	
	6.7×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	9.9×10^{-2}		Suzuki et al. (1992)	Q	233
	1.1×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	7.9×10^{-2}		Arbuckle (1983)	Q	
	5.4×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		6600	Kühne et al. (2005)	?	
acenaphthylene	8.5×10^{-2}	6300	Brockbank (2013)	L	
C_{12}H_8	8.2×10^{-2}		Ma et al. (2010b)	L	368
[208-96-8]	1.0×10^{-1}		Ma et al. (2010b)	L	369
HXGDTGS AIMULJN-UHFFFAOYSA-N	9.1×10^{-2}	6700	Fogg and Sangster (2003)	L	
	7.9×10^{-2}	6600	Bamford et al. (1999a)	M	
	8.8×10^{-2}		Fendinger and Glotfelty (1990)	M	
	8.7×10^{-2}		Warner et al. (1980)	M	
	8.7×10^{-1}		HSDB (2015)	V	
	1.2×10^{-1}		Mackay et al. (2006a)	V	
	1.2×10^{-1}		Shiu and Mackay (1997)	V	
	1.2×10^{-1}	5000	Paasivirta et al. (1999)	T	
	8.7×10^{-2}		Smith et al. (1993)	C	
	8.4×10^{-2}		Ryan et al. (1988)	C	
	8.7×10^{-2}		Shen (1982)	C	

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	5.7×10^{-2}		Duchowicz et al. (2020)	Q	185
	6.2×10^{-2}		Parnis et al. (2015)	Q	371
	1.1×10^{-1}		Hilal et al. (2008)	Q	
	2.2×10^{-2}		Modarresi et al. (2007)	Q	68
		5600	Kühne et al. (2005)	Q	
	8.6×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	8.7×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		6600	Kühne et al. (2005)	?	
			Shiu and Ma (2000)	W	362
1,2,4-trimethylnaphthalene $C_{13}H_{14}$ [2717-42-2] JCNGSJUYPCVGAM-UHFFFAOYSA-N	1.3×10^{-2}		Parnis et al. (2015)	Q	371
1,3,7-trimethylnaphthalene $C_{13}H_{14}$ [2131-38-6] HXDVFJRDVUZFT-UHFFFAOYSA-N	6.0×10^{-2}		Ebert et al. (2023)	?	373
1,3,8-trimethylnaphthalene $C_{13}H_{14}$ [17057-91-9] XYTKCJHHXQVFCCK-UHFFFAOYSA-N	6.7×10^{-2}		Ebert et al. (2023)	?	373
1,4,5-trimethylnaphthalene $C_{13}H_{14}$ [2131-41-1] FSAWRQYDMHSDRN-UHFFFAOYSA-N	1.8×10^{-2} 4.3×10^{-2} 2.3×10^{-2}		Mackay et al. (2006a) Eastcott et al. (1988) Schröder et al. (2013)	V V Q	372
1,4,6-trimethylnaphthalene $C_{13}H_{14}$ [2131-42-2] VGKRZAKNKJAKDN-UHFFFAOYSA-N	4.3×10^{-2}		Ebert et al. (2023)	?	373
2,3,6-trimethylnaphthalene $C_{13}H_{14}$ [829-26-5] UNBZRJCHIWTUHB-UHFFFAOYSA-N	2.8×10^{-2}		Ebert et al. (2023)	?	373
1-(1-methylethyl)naphthalene $C_{13}H_{14}$ (1-isopropylnaphthalene) [6158-45-8] PMPBFICDXLLSRM-UHFFFAOYSA-N	3.3×10^{-2}		Schröder et al. (2013)	Q	372

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-(1-methylethyl)naphthalene $\text{C}_{13}\text{H}_{14}$ (2-isopropylnaphthalene) [2027-17-0] TVYVQNHYIHJTD-UHFFFAOYSA-N	1.2×10^{-2}		HSDB (2015)	Q	100
	3.1×10^{-2}		Schröder et al. (2013)	Q	372
2-ethyl-6-methylnaphthalene $\text{C}_{13}\text{H}_{14}$ [7372-86-3] ZOYUJOHRFWIQTH-UHFFFAOYSA-N	1.2×10^{-2}		Parnis et al. (2015)	Q	371
2,3-benzindene $\text{C}_{13}\text{H}_{10}$ (fluorene) [86-73-7] NIHNNQXNPWCJQ-UHFFFAOYSA-N	1.3×10^{-1}	6100	Brockbank (2013)	L	
	1.1×10^{-1}		Ma et al. (2010b)	L	368
	1.1×10^{-1}		Ma et al. (2010b)	L	369
	1.1×10^{-1}	6000	Fogg and Sangster (2003)	L	
	1.2×10^{-1}		Mackay and Shiu (1981)	L	
	3.2×10^{-1}		Lee et al. (2012)	M	
	1.0×10^{-1}	6200	Bamford et al. (1999a)	M	
	7.9×10^{-2}	7400	Bamford et al. (1999b)	M	
	1.5×10^{-1}		De Maagd et al. (1998)	M	12
	1.0×10^{-1}		Shiu and Mackay (1997)	M	
	1.6×10^{-1}		Fendinger and Glotfelty (1990)	M	
	9.9×10^{-2}		Mackay and Shiu (1981)	M	
	8.4×10^{-2}		Warner et al. (1980)	M	
	1.3×10^{-1}		Mackay et al. (2006a)	V	
	1.3×10^{-1}		Shiu and Ma (2000)	V	
	1.7×10^{-1}		De Maagd et al. (1998)	V	12
	1.3×10^{-1}		Shiu and Mackay (1997)	V	
	1.5×10^{-2}		Hwang et al. (1992)	V	
	1.1×10^{-1}		Eastcott et al. (1988)	V	
	1.3×10^{-1}		Cabani et al. (1981)	V	
	1.3×10^{-1}	6400	Wauchope and Haque (1972)	V	
	2.3×10^{-2}	3700	Paasivirta et al. (1999)	T	
	8.4×10^{-2}	3000	Goldstein (1982)	X	299
	4.7×10^{-2}		McCarty (1980)	X	370
	9.9×10^{-2}		HSDB (2015)	C	
	8.4×10^{-2}		Smith et al. (1993)	C	
8.4×10^{-2}		Ryan et al. (1988)	C		
8.4×10^{-2}		Shen (1982)	C		
3.2×10^{-1}		Keshavarz et al. (2022)	Q		
5.7×10^{-2}		Duchowicz et al. (2020)	Q	300	
1.1×10^{-1}		Abraham et al. (2019)	Q		
1.0×10^{-1}		Parnis et al. (2015)	Q	371	
9.0×10^{-2}		Schröder et al. (2010)	Q	365	
9.2×10^{-2}		Hilal et al. (2008)	Q		
4.1×10^{-2}		Modarresi et al. (2007)	Q	68	
	5100	Kühne et al. (2005)	Q		

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	5.4×10^{-2}		English and Carroll (2001)	Q	231, 275
	2.0×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	1.0×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		5400	Kühne et al. (2005)	?	
	1.2×10^{-1}		Abraham et al. (1990)	?	
1-methyl-9H-fluorene $C_{14}H_{12}$ [1730-37-6] GKEUODMJRFDLJY-UHFFFAOYSA-N	1.5×10^{-1}		Duchowicz et al. (2020)	V	187
	2.9×10^{-2}		Duchowicz et al. (2020)	Q	
2-methyl-9H-fluorene $C_{14}H_{12}$ [1430-97-3] RKJHJMAZNPASHY-UHFFFAOYSA-N	8.6×10^{-2}		Parnis et al. (2015)	Q	371
9-methyl-9H-fluorene $C_{14}H_{12}$ [2523-37-7] ZVEJRZRAUYJYCO-UHFFFAOYSA-N	9.1×10^{-2}		Parnis et al. (2015)	Q	371
1,2,5,6-tetramethylnaphthalene $C_{14}H_{16}$ [2131-43-3] ONIJFQFZCKJNDH-UHFFFAOYSA-N	1.3×10^{-2}		Parnis et al. (2015)	Q	371
1,4,6,7-tetramethylnaphthalene $C_{14}H_{16}$ [13764-18-6] VPSPONBLZCLIU-UHFFFAOYSA-N	8.6×10^{-2}		Ebert et al. (2023)	?	373
1-methyl-7-(1-methylethyl)- naphthalene $C_{14}H_{16}$ [490-65-3] UZVVHZJKXPCUQU-UHFFFAOYSA-N	1.2×10^{-2}		Parnis et al. (2015)	Q	371
(<i>E</i>)-stilbene $C_{14}H_{12}$ (<i>trans</i> -1,2-diphenylethene) [103-30-0] PJANXHGTPQOBST-VAWYXS NFS A-N	1.4×10^{-2}		Duchowicz et al. (2020)	V	187
	1.4×10^{-2}		HSDB (2015)	V	
	2.5×10^{-2}		Mackay et al. (2006a)	V	
	2.5×10^{-2}		Mackay et al. (1992b)	X	366
	2.5×10^{-2}		Duchowicz et al. (2020)	Q	
	1.1×10^{-1}		Abraham et al. (2019)	Q	

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
phenanthrene	2.1×10^{-1}	4500	Schwardt et al. (2021)	L	1
$C_{14}H_{10}$	3.4×10^{-1}	7100	Brockbank (2013)	L	1
[85-01-8]	2.3×10^{-1}		Ma et al. (2010b)	L	368
YNPNZTXNASCQKK-UHFFFAOYSA-N	2.3×10^{-1}		Ma et al. (2010b)	L	369
	2.3×10^{-1}	4200	Fogg and Sangster (2003)	L	
	2.5×10^{-1}		Mackay and Shiu (1981)	L	
	1.8×10^{-1}		Lee et al. (2012)	M	
	2.7×10^{-1}	7700	Odabasi et al. (2006)	M	
	2.3×10^{-1}	6000	Bamford et al. (1999a)	M	
	1.6×10^{-1}	7600	Bamford et al. (1999b)	M	
	3.4×10^{-1}		De Maagd et al. (1998)	M	12
	2.8×10^{-1}		Shiu and Mackay (1997)	M	
	2.1×10^{-1}	3800	Alaee et al. (1996)	M	
	2.5×10^{-1}		Zhang and Pawliszyn (1993)	M	
	4.2×10^{-1}		Fendinger and Glotfelty (1990)	M	
	2.7×10^{-1}		Mackay and Shiu (1981)	M	
	2.5×10^{-1}		Mackay et al. (1979)	M	
	1.8×10^{-1}		Southworth (1979)	M	
	3.1×10^{-1}		Mackay et al. (2006a)	V	
	3.1×10^{-1}		Shiu and Ma (2000)	V	
	3.8×10^{-1}		De Maagd et al. (1998)	V	12
	3.1×10^{-1}		Shiu and Mackay (1997)	V	
	3.2×10^{-2}		Hwang et al. (1992)	V	
	2.8×10^{-1}		Eastcott et al. (1988)	V	
	3.2×10^{-1}		Cabani et al. (1981)	V	
	2.0×10^{-1}		Southworth (1979)	V	
	3.9×10^{-1}		Hine and Mookerjee (1975)	V	
	2.8×10^{-1}	6500	Wauchope and Haque (1972)	V	
	9.3×10^{-2}	4900	Paasivirta et al. (1999)	T	
	9.0×10^{-2}		Yaws (2003)	X	259
	9.0×10^{-2}		Yaws (2003)	X	238
	9.3×10^{-2}	4700	Goldstein (1982)	X	299
	7.6×10^{-2}		McCarty (1980)	X	370
	2.5×10^{-1}		Smith et al. (1993)	C	295
	2.5×10^{-1}		Ryan et al. (1988)	C	
	2.5×10^{-1}		Dupeux et al. (2022)	Q	260
	4.3×10^{-1}		Keshavarz et al. (2022)	Q	
	9.2×10^{-2}		Duchowicz et al. (2020)	Q	185
	2.1×10^{-1}		Parnis et al. (2015)	Q	371
	7.2×10^{-2}		Gharagheizi et al. (2010)	Q	247
	1.7×10^{-1}		Schröder et al. (2010)	Q	365
	2.6×10^{-1}		Hilal et al. (2008)	Q	
	6.4×10^{-1}		Modarresi et al. (2007)	Q	68
		4800	Kühne et al. (2005)	Q	
	2.5×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	9.2×10^{-1}		Suzuki et al. (1992)	Q	233

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.8×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	2.6×10^{-1}		Arbuckle (1983)	Q	
	2.3×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		5300	Kühne et al. (2005)	?	
	2.7×10^{-1}		Abraham et al. (1990)	?	
9,10-dihydrophenanthrene $\text{C}_{14}\text{H}_{12}$ [776-35-2] XXPBFNVKTVJZKF-UHFFFAOYSA-N	1.2×10^{-1}	7500	Reza and Trejo (2004)	M	
	3.2×10^{-1}		Duchowicz et al. (2020)	V	187
	5.8×10^{-2}		Duchowicz et al. (2020)	Q	
	9.0×10^{-2}		Schröder et al. (2010)	Q	365
	4.1×10^{-2}		Hilal et al. (2008)	Q	
		5400	Kühne et al. (2005)	Q	
		7500	Kühne et al. (2005)	?	
anthracene $\text{C}_{14}\text{H}_{10}$ [120-12-7] MWPLVEDNUUSJAV-UHFFFAOYSA-N	1.8×10^{-1}	4800	Schwardt et al. (2021)	L	1
	3.3×10^{-1}	6700	Brockbank (2013)	L	1
	2.0×10^{-1}		Ma et al. (2010b)	L	368
	2.0×10^{-1}		Ma et al. (2010b)	L	369
	1.7×10^{-1}	5700	Fogg and Sangster (2003)	L	
	1.7×10^{-1}		Mackay and Shiu (1981)	L	
	1.6×10^{-1}		Lee et al. (2012)	M	
	2.3×10^{-1}	5600	Reza and Trejo (2004)	M	
	1.8×10^{-1}	6000	Bamford et al. (1999a)	M	
	1.5×10^{-1}	6500	Bamford et al. (1999b)	M	
	1.3×10^{-1}		Shiu and Mackay (1997)	M	
	2.0×10^{-1}	3500	Alaee et al. (1996)	M	
	1.1×10^{-1}		Zhang and Pawliszyn (1993)	M	
	5.1×10^{-1}		Fendinger and Glotfelty (1990)	M	
	2.7×10^{-1}		Webster et al. (1985)	M	
	1.4×10^{-2}		Mackay and Shiu (1981)	M	
	1.5×10^{-1}		Southworth (1979)	M	
	2.5×10^{-1}		Mackay et al. (2006a)	V	
	2.5×10^{-1}		Shiu and Ma (2000)	V	
	2.5×10^{-1}		Shiu and Mackay (1997)	V	
	3.0×10^{-2}		Hwang et al. (1992)	V	
	6.1×10^{-1}		Eastcott et al. (1988)	V	
	5.1×10^{-1}		Cabani et al. (1981)	V	
	3.4×10^{-2}		Southworth (1979)	V	
	5.6×10^{-1}		Hine and Mookerjee (1975)	V	
	2.6×10^1	7000	Wauchope and Haque (1972)	V	
	4.6×10^{-3}	3100	Paasivirta et al. (1999)	T	
	3.5×10^{-1}	4000	Goldstein (1982)	X	299
	7.0×10^{-3}		McCarty (1980)	X	370
	1.1×10^{-1}		Smith et al. (1993)	C	
	3.7×10^{-2}		Ryan et al. (1988)	C	
	1.0×10^{-1}		Smith et al. (1981a)	C	
	4.3×10^{-1}		Keshavarz et al. (2022)	Q	

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	9.2×10^{-2}		Duchowicz et al. (2020)	Q	
	1.9×10^{-1}		Parnis et al. (2015)	Q	371
	1.5×10^{-1}		Schröder et al. (2010)	Q	365
	3.3×10^{-1}		Hilal et al. (2008)	Q	
	4.5×10^{-1}		Modarresi et al. (2007)	Q	68
		6400	Kühne et al. (2005)	Q	
	1.7×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	7.0×10^{-1}		Russell et al. (1992)	Q	280
	9.0×10^{-1}		Suzuki et al. (1992)	Q	233
	9.0×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.8×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		5100	Kühne et al. (2005)	?	
9,10-dihydroanthracene $C_{14}H_{12}$ [613-31-0] WPDVAVTQEQEGMS-UHFFFAOYSA-N	1.5×10^{-1}		Schröder et al. (2010)	Q	365
2,3-dihydro-1,1,3,3,5-pentamethyl-1H-indene $C_{14}H_{20}$ [81-03-8] NNXHDILUOAXSPU-UHFFFAOYSA-N	7.5×10^{-4}		Zhang et al. (2010)	Q	288, 289
	1.9×10^{-3}		Zhang et al. (2010)	Q	288, 290
	2.1×10^{-3}		Zhang et al. (2010)	Q	288, 291
	3.9×10^{-4}		Zhang et al. (2010)	Q	288, 292
1-methylanthracene $C_{15}H_{12}$ [610-48-0] KZNFJFHJUQDYHE-UHFFFAOYSA-N	1.7×10^{-1}		Parnis et al. (2015)	Q	371
2-methylanthracene $C_{15}H_{12}$ [613-12-7] GYMFBYVZOGMSQJ-UHFFFAOYSA-N	1.6×10^{-2}		Duchowicz et al. (2020)	V	187
	4.7×10^{-2}		Duchowicz et al. (2020)	Q	
9-methylanthracene $C_{15}H_{12}$ [779-02-2] CPGPAVAKSZHMBP-UHFFFAOYSA-N	2.5×10^{-1}		Duchowicz et al. (2020)	V	187
	6.1×10^{-1}		Mackay et al. (2006a)	V	
	9.4×10^{-3}		Eastcott et al. (1988)	V	
	4.7×10^{-2}		Duchowicz et al. (2020)	Q	
	1.9×10^{-1}		Parnis et al. (2015)	Q	371
	4.2×10^{-1}		Hilal et al. (2008)	Q	
9-methyl-phenanthrene $C_{15}H_{12}$ [883-20-5] DALBHIYZSZWBS-UHFFFAOYSA-N	1.9×10^{-1}		Parnis et al. (2015)	Q	371

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
9-ethylfluorene $C_{15}H_{14}$ [2294-82-8] QBBCCEYJCKGWIK-UHFFFAOYSA-N	7.4×10^{-2}		Parnis et al. (2015)	Q	371
1,7-dimethylfluorene $C_{15}H_{14}$ [442-66-0] NHPVHXMCRWRSNW-UHFFFAOYSA-N	9.1×10^{-2}		Parnis et al. (2015)	Q	371
1-methylphenanthrene $C_{15}H_{12}$ [832-69-9] DOWJXOHBXRUOD-UHFFFAOYSA-N	2.0×10^{-1} 5.8×10^{-1} 4.7×10^{-2} 1.9×10^{-1} 3.3×10^{-1} 3.8×10^{-1}	4600 5200 4600	Bamford et al. (1999a) Keshavarz et al. (2022) Duchowicz et al. (2020) Parnis et al. (2015) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Duchowicz et al. (2020) Kühne et al. (2005)	M Q Q Q Q Q Q ? ?	 185 371 68 186, 21
1,3-diisopropylnaphthalene $C_{16}H_{20}$ [57122-16-4] JDBFIFNXALGSOF-UHFFFAOYSA-N	1.6×10^{-2}		Schröder et al. (2013)	Q	372
1,5-diisopropylnaphthalene $C_{16}H_{20}$ [27351-96-8] GFZWCYSEPXDDRI-UHFFFAOYSA-N	1.6×10^{-2}		Schröder et al. (2013)	Q	372
1,7-diisopropylnaphthalene $C_{16}H_{20}$ [94133-80-9] XNSUVOOWWSAQMZ-UHFFFAOYSA-N	7.8×10^{-3}		Ebert et al. (2023)	?	319
2,6-diisopropylnaphthalene $C_{16}H_{20}$ [24157-81-1] GWLLTEXUIOFAFE-UHFFFAOYSA-N	1.3×10^{-2}		Schröder et al. (2013)	Q	372
2,7-diisopropylnaphthalene $C_{16}H_{20}$ [40458-98-8] YGDMAJYAQC DTNG-UHFFFAOYSA-N	1.3×10^{-2}		Schröder et al. (2013)	Q	372
2-ethylanthracene $C_{16}H_{14}$ [52251-71-5] ZXAGXLDDEMUNQSH-UHFFFAOYSA-N	1.9×10^{-1} 4.7×10^{-2}		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3-dimethylphenanthrene $C_{16}H_{14}$ [16664-45-2] UJUUQKOWULNFNG-UHFFFAOYSA-N	1.7×10^{-1}		Parnis et al. (2015)	Q	371
3,6-dimethylphenanthrene $C_{16}H_{14}$ [1576-67-6] OMIBPZBOAJFEJS-UHFFFAOYSA-N	1.8×10^{-1}		Parnis et al. (2015)	Q	371
2,3-dimethylantracene $C_{16}H_{14}$ [613-06-9] OGVRJXPGSVLDRD-UHFFFAOYSA-N	2.1×10^{-1}		Parnis et al. (2015)	Q	371
9,10-dimethylantracene $C_{16}H_{14}$ [781-43-1] JTGMTYWYUZDRBK-UHFFFAOYSA-N	1.8 3.4×10^{-1} 1.5×10^{-1}		Mackay et al. (2006a) HSDB (2015) Parnis et al. (2015)	V Q Q	100 371
9-propyl-9H-fluorene $C_{16}H_{16}$ [4037-45-0] ZTBWLZNGULENBG-UHFFFAOYSA-N	6.1×10^{-2}		Parnis et al. (2015)	Q	371
pyrene $C_{16}H_{10}$ [129-00-0] BBEAQIROQSPTKN-UHFFFAOYSA-N	5.9×10^{-1} 1.1 7.5×10^{-1} 7.5×10^{-1} 6.6×10^{-1} 8.3×10^{-1} 4.1×10^{-1} 8.5×10^{-1} 2.0 5.9×10^{-1} 5.0×10^{-1} 1.1 8.3×10^{-1} 9.1×10^{-1} 5.3×10^{-1} 1.1 1.1 1.4 1.1 3.6×10^{-2} 1.1 7.6×10^{-1} 9.4×10^{-1} 2.2	5500 6900	Schwardt et al. (2021) Brockbank (2013) Ma et al. (2010b) Ma et al. (2010b) Fogg and Sangster (2003) Mackay and Shiu (1981) Lee et al. (2012) Reza and Trejo (2004) Altschuh et al. (1999) Bamford et al. (1999a) De Maagd et al. (1998) De Maagd et al. (1998) Shiu and Mackay (1997) Mackay and Shiu (1981) Southworth (1979) Mackay et al. (2006a) Shiu and Ma (2000) De Maagd et al. (1998) Shiu and Mackay (1997) Hwang et al. (1992) Eastcott et al. (1988) Cabani et al. (1981) Southworth (1979) Wauchope and Haque (1972)	L L L L L L M M M M M M M V V V V V V V V V V V	1 1 368 369 12 12 12 7600

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	1.4×10^{-1}	5700	Paasivirta et al. (1999)	T	
	1.9		Smith et al. (1993)	C	374
	1.4×10^{-3}		Ryan et al. (1988)	C	
	7.6		Petrasek et al. (1983)	C	
	7.8×10^{-1}		Keshavarz et al. (2022)	Q	
	3.0×10^{-1}		Duchowicz et al. (2020)	Q	185
	1.3		Abraham et al. (2019)	Q	
	4.7×10^{-1}		Parnis et al. (2015)	Q	371
	3.6×10^{-1}		Schröder et al. (2010)	Q	365
	2.3×10^{-1}		Hilal et al. (2008)	Q	
	2.3		Modarresi et al. (2007)	Q	68
		5200	Kühne et al. (2005)	Q	
	8.4×10^{-1}		English and Carroll (2001)	Q	231, 232
	5.4×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	8.3×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		5500	Kühne et al. (2005)	?	
	9.0×10^{-1}		Abraham et al. (1990)	?	
benzo[<i>jk</i>]fluorene $\text{C}_{16}\text{H}_{10}$ (fluoranthene) [206-44-0] GVEPBJHOBDDJJI-UHFFFAOYSA-N	5.8×10^{-1}	5900	Schwardt et al. (2021)	L	1
	7.0×10^{-1}	6900	Brockbank (2013)	L	
	6.9×10^{-1}		Ma et al. (2010b)	L	368
	7.5×10^{-1}		Ma et al. (2010b)	L	369
	5.4×10^{-1}	4800	Fogg and Sangster (2003)	L	
	4.5×10^{-3}		Mackay and Shiu (1981)	L	
	3.4×10^{-1}		Lee et al. (2012)	M	
	5.1×10^{-1}	4900	Bamford et al. (1999a)	M	
	9.1×10^{-1}		De Maagd et al. (1998)	M	12
	1.1	6900	ten Hulscher et al. (1992)	M	
	1.9	8700	Abou-Naccoul et al. (2014)	V	
	1.0		Mackay et al. (2006a)	V	
	1.0		Shiu and Ma (2000)	V	
	1.4		De Maagd et al. (1998)	V	12
	1.0		Shiu and Mackay (1997)	V	
	2.1		McLachlan et al. (1990)	V	375
	1.1		Eastcott et al. (1988)	V	
	4.0×10^{-1}	5400	Paasivirta et al. (1999)	T	
	1.5		Smith et al. (1993)	C	
	1.0		Ryan et al. (1988)	C	
	9.9×10^{-1}		Petrasek et al. (1983)	C	
	7.8×10^{-1}		Keshavarz et al. (2022)	Q	
	3.0×10^{-1}		Duchowicz et al. (2020)	Q	
	1.1		Abraham et al. (2019)	Q	
	5.8×10^{-1}		Parnis et al. (2015)	Q	371
	4.6×10^{-1}		Schröder et al. (2010)	Q	365
	4.4×10^{-1}		Hilal et al. (2008)	Q	
	2.2×10^{-1}		Modarresi et al. (2007)	Q	68
		5100	Kühne et al. (2005)	Q	

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1	5000	Duchowicz et al. (2020) Kühne et al. (2005)	? ?	186, 21
1,2,3,4-tetrahydro-1,1,3,4,4,6-hexamethylnaphthalene $C_{16}H_{24}$ [2084-69-7] JIVANURAWUCQIG-UHFFFAOYSA-N	4.2×10^{-4} 1.3×10^{-3} 3.2×10^{-3} 2.7×10^{-4}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
[2.2]paracyclophane $C_{16}H_{16}$ [1633-22-3] OOLUVSIJOMLOCB-UHFFFAOYSA-N	2.9×10^{-2} 8.4×10^{-2} 9.5×10^{-1} 4.3×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
benzo[<i>a</i>]fluorene $C_{17}H_{12}$ [238-84-6] HKMTVMBEALTRRR-UHFFFAOYSA-N	3.7×10^{-1} 1.1 2.2×10^{-1} 4.6×10^{-1}	4400 6300 4400	Bamford et al. (1999a) Keshavarz et al. (2022) Duchowicz et al. (2020) Modarresi et al. (2007) Kühne et al. (2005) Duchowicz et al. (2020) Kühne et al. (2005) Shiu and Ma (2000)	M Q Q Q Q ? ? W	 185 68 186, 21 362
1-methylpyrene $C_{17}H_{12}$ [2381-21-7] KBSPJIWZDWBDM-UHFFFAOYSA-N	3.1 4.5×10^{-1}		HSDB (2015) Parnis et al. (2015)	Q Q	100 371
2-methylpyrene $C_{17}H_{12}$ [3442-78-2] VIRFPLJXRDHVEI-UHFFFAOYSA-N	3.1		HSDB (2015)	Q	100
2-methylfluoranthene $C_{17}H_{12}$ [30997-39-8] VVRGMNWZFPXQZ-UHFFFAOYSA-N	5.4×10^{-1}		Parnis et al. (2015)	Q	371
9-n-propylphenanthrene $C_{17}H_{16}$ [17024-03-2] PIWHTUVAMGSIC-UHFFFAOYSA-N	1.3×10^{-1}		Parnis et al. (2015)	Q	371
1,2,6-trimethylphenanthrene $C_{17}H_{16}$ [30436-55-6] MYWOJODOMFBVCB-UHFFFAOYSA-N	1.8×10^{-1}		Parnis et al. (2015)	Q	371

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
triphenylene $C_{18}H_{12}$ (benzo[<i>l</i>]phenanthrene) [217-59-4] SLGBZMMZGDRARJ-UHFFFAOYSA-N	6.4×10^1		Duchowicz et al. (2020)	V	187
			Mackay et al. (2006a)	V	293
	1.0×10^2		Mackay et al. (1992b)	X	366
	3.6×10^{-1}		Duchowicz et al. (2020)	Q	
	8.6		Schröder et al. (2010)	Q	365
	2.9		Hilal et al. (2008)	Q	
	4.7		Modarresi et al. (2007)	Q	68
	3.1		Ferreira (2001)	Q	12
benz[<i>a</i>]anthracene $C_{18}H_{12}$ [56-55-3] DXBHBZVCASKNBY-UHFFFAOYSA-N	1.4		Ma et al. (2010b)	L	368
	1.6		Ma et al. (2010b)	L	369
	9.0×10^{-1}	7900	Fogg and Sangster (2003)	L	
	1.7		Lee et al. (2012)	M	
	8.2×10^{-1}	8300	Bamford et al. (1999a)	M	
	9.9		Zhang and Pawliszyn (1993)	M	
	1.2		Southworth (1979)	M	
	1.7		Mackay et al. (2006a)	V	
	2.4		Eastcott et al. (1988)	V	
	7.5×10^1		Smith and Bomberger (1980)	V	24
	4.0		Southworth (1979)	V	
	1.5×10^{-1}	6100	Paasivirta et al. (1999)	T	
	8.5		Smith et al. (1993)	C	80
	9.8		Ryan et al. (1988)	C	
	8.2×10^1		Petrasek et al. (1983)	C	
	1.4		Keshavarz et al. (2022)	Q	
	3.6×10^{-1}		Duchowicz et al. (2020)	Q	
	2.2		Parnis et al. (2015)	Q	371
	1.6		Schröder et al. (2010)	Q	365
	4.4		Hilal et al. (2008)	Q	
5.0		Modarresi et al. (2007)	Q	68	
	6100	Kühne et al. (2005)	Q		
5.6		Ferreira (2001)	Q	12	
8.2×10^{-1}		Duchowicz et al. (2020)	?	186, 21	
	8300	Kühne et al. (2005)	?		
		Shiu and Ma (2000)	W	362	
4,5-dimethylpyrene $C_{18}H_{14}$ [15679-25-1] MCZKPUHBCIHFBZ-UHFFFAOYSA-N	4.5×10^{-1}		Parnis et al. (2015)	Q	371
3-ethylfluoranthene $C_{18}H_{14}$ [20496-16-6] JXUOLJXLPPIRTP-UHFFFAOYSA-N	4.8×10^{-1}		Parnis et al. (2015)	Q	371

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,6,9-tetramethylphenanthrene $C_{18}H_{18}$ [204256-39-3] XFJWRZAPBOJONX-UHFFFAOYSA-N	1.6×10^{-1}		Parnis et al. (2015)	Q	371
1,9-dimethyl-5-ethylphenanthrene $C_{18}H_{18}$ MDZYWNWRMJOPN-UHFFFAOYSA-N	1.0×10^{-1}		Parnis et al. (2015)	Q	371
1,9-dimethyl-7-ethylphenanthrene $C_{18}H_{18}$ NFFCDFHAMXFVEK-UHFFFAOYSA-N	1.4×10^{-1}		Parnis et al. (2015)	Q	371
1,2,3,4-tetrahydro-5-(1-phenylethyl)-naphthalene $C_{18}H_{20}$ [60466-61-7] TXOHWLOHKUPOKO-UHFFFAOYSA-N	1.6×10^{-2} 1.0×10^{-1} 2.0×10^{-1} 2.9×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
4-methylchrysene $C_{19}H_{14}$ [3351-30-2] BLVHWJCLSMYFMT-UHFFFAOYSA-N	1.9		Parnis et al. (2015)	Q	371
5-methylchrysene $C_{19}H_{14}$ [3697-24-3] GOHBXWHNJHENRX-UHFFFAOYSA-N	5.2		HSDB (2015)	Q	100
6-methylchrysene $C_{19}H_{14}$ [1705-85-7] ASVDRLYVNFOSCI-UHFFFAOYSA-N	2.2		Parnis et al. (2015)	Q	371
1-propylpyrene $C_{19}H_{16}$ [42211-33-6] HIOZPFGGCXEPAP-UHFFFAOYSA-N	3.2×10^{-1}		Parnis et al. (2015)	Q	371
7-methylbenz[<i>a</i>]anthracene $C_{19}H_{14}$ [2541-69-7] DIIFUCUPDHMNIV-UHFFFAOYSA-N	5.2		HSDB (2015)	Q	100
10-methylbenz[<i>a</i>]anthracene $C_{19}H_{14}$ [2381-15-9] WUMGYHICFXGLAB-UHFFFAOYSA-N	5.2		HSDB (2015)	Q	100

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
12-methylbenz[<i>a</i>]anthracene $C_{19}H_{14}$ [2422-79-9] ACYOLKMEHHTLAB-UHFFFAOYSA-N	5.2		HSDB (2015)	Q	100	
6-ethylchrysene $C_{20}H_{16}$ [2732-58-3] ZJSYTTGSPQNXKT-UHFFFAOYSA-N	1.8		Parnis et al. (2015)	Q	371	
3,9-dimethylbenz[<i>a</i>]anthracene $C_{20}H_{16}$ [316-51-8] DBPDWIZRMPUWRH-UHFFFAOYSA-N	1.9		Parnis et al. (2015)	Q	371	
1-butylpyrene $C_{20}H_{18}$ [35980-18-8] UFOTZLIYHMGVAV-UHFFFAOYSA-N	2.8×10^{-1}		Parnis et al. (2015)	Q	371	
7,12-dimethyl-benz[<i>a</i>]anthracene $C_{20}H_{16}$ [57-97-6] ARSRBNBHOADGJU-UHFFFAOYSA-N	2.6		Duchowicz et al. (2020)	V	187	
	5.1×10^3		Mackay et al. (2006a)	V		
	9.2×10^{-2}		Duchowicz et al. (2020)	Q		
	4.9		HSDB (2015)	Q		100
	1.5		Parnis et al. (2015)	Q		371
9,10-dimethyl-benz[<i>a</i>]anthracene $C_{20}H_{16}$ [58429-99-5] GKVUDAZMZLMNJQ-UHFFFAOYSA-N			Mackay et al. (2006a)	V	293	
benzo[<i>b</i>]fluoranthene $C_{20}H_{12}$ [205-99-2] FTOVXSOBNPWTSH-UHFFFAOYSA-N	1.5×10^1	5400	Brockbank (2013)	L		
	1.5×10^1		Ma et al. (2010b)	L	368	
	1.5×10^1		Ma et al. (2010b)	L	369	
	1.5×10^1	5400	ten Hulscher et al. (1992)	M		
	1.4×10^1	7500	Paasivirta et al. (1999)	T		
	8.3×10^{-1}		Smith et al. (1993)	C		
	1.4		Keshavarz et al. (2022)	Q		
	1.2		Duchowicz et al. (2020)	Q	185	
	6.0		Parnis et al. (2015)	Q	371	
	5.6		Hilal et al. (2008)	Q		
	2.1		Modarresi et al. (2007)	Q	68	
		4700	Kühne et al. (2005)	Q		
	2.0×10^{-2}		Yaffe et al. (2003)	Q	249, 250	
1.5×10^1		Duchowicz et al. (2020)	?	186, 21		
	5400	Kühne et al. (2005)	?			

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
benzo[<i>k</i>]fluoranthene $\text{C}_{20}\text{H}_{12}$ [207-08-9] HAXBWFMXWRORI-UHFFFAOYSA-N	1.7×10^1		Ma et al. (2010b)	L	368
	1.8×10^1		Ma et al. (2010b)	L	369
	1.0×10^1		Lee et al. (2012)	M	
	1.7×10^1	5900	ten Hulscher et al. (1992)	M	
			Mackay et al. (2006a)	V	293
	8.3×10^1		De Maagd et al. (1998)	V	12
	6.2×10^1		Shiu and Mackay (1997)	V	
	1.5	6900	Paasivirta et al. (1999)	T	
	9.6×10^{-3}	1900	Goldstein (1982)	X	299
	2.5×10^{-1}		Smith et al. (1993)	C	
	2.6		Keshavarz et al. (2022)	Q	
	1.2		Duchowicz et al. (2020)	Q	300
	5.9		Parnis et al. (2015)	Q	371
	8.0		Hilal et al. (2008)	Q	
	2.4		Modarresi et al. (2007)	Q	68
	6300	Kühne et al. (2005)	Q		
	2.0×10^{-2}	Yaffe et al. (2003)	Q	249, 273	
	1.7×10^1	Duchowicz et al. (2020)	?	186, 21	
		5800	Kühne et al. (2005)	?	
benzo[<i>a</i>]pyrene $\text{C}_{20}\text{H}_{12}$ (benz[<i>a</i>]pyrene) [50-32-8] FMMWHPNWAFZXNH-UHFFFAOYSA-N	4.5	8500	Brockbank (2013)	L	
	2.0×10^1		Ma et al. (2010b)	L	368
	1.3×10^1		Ma et al. (2010b)	L	369
	6.2		Lee et al. (2012)	M	
	1.3×10^1		Altschuh et al. (1999)	M	
	2.2×10^1	4700	ten Hulscher et al. (1992)	M	
	2.2×10^1		Mackay et al. (2006a)	V	
	2.9×10^1		De Maagd et al. (1998)	V	12
	2.2×10^1		Shiu and Mackay (1997)	V	
	1.3×10^2		McLachlan et al. (1990)	V	375
	1.8×10^1		Eastcott et al. (1988)	V	
	7.5		Smith and Bomberger (1980)	V	24
	1.9×10^1		Southworth (1979)	V	
	8.2×10^{-1}	8200	Paasivirta et al. (1999)	T	
	1.6×10^{-3}	110	Goldstein (1982)	X	299
	2.0×10^1		Smith et al. (1993)	C	
	8.2×10^{-4}		Ryan et al. (1988)	C	
	2.6		Keshavarz et al. (2022)	Q	
	1.2		Duchowicz et al. (2020)	Q	300
	5.1		Parnis et al. (2015)	Q	371
2.9		Hilal et al. (2008)	Q		
1.5×10^1		Modarresi et al. (2007)	Q	68	
	4900	Kühne et al. (2005)	Q		
	2.9×10^{-2}	Yaffe et al. (2003)	Q	249, 250	
	2.2×10^1	Duchowicz et al. (2020)	?	186, 21	
		4700	Kühne et al. (2005)	?	
			Shiu and Ma (2000)	W	362

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
benzo[<i>e</i>]pyrene $\text{C}_{20}\text{H}_{12}$ [192-97-2] TXVHTIQJNYSSKO-UHFFFAOYSA-N	3.3×10^1	8300	Duchowicz et al. (2020)	V	187
	3.3×10^1		HSDB (2015)	V	
	2.1×10^1		Mackay et al. (2006a)	V	
	2.7		Paasivirta et al. (1999)	T	
	1.2		Duchowicz et al. (2020)	Q	
	1.5×10^1		Ferreira (2001)	Q	12
perylene $\text{C}_{20}\text{H}_{12}$ (dibenz[<i>de, kl</i>]anthracene) [198-55-0] CSHWQDPOILHKBI-UHFFFAOYSA-N	2.7	6300	Duchowicz et al. (2020)	V	187
			Mackay et al. (2006a)	V	293
	2.3		Riederer (1990)	V	
	2.5×10^{-1}		Paasivirta et al. (1999)	T	
	3.3×10^2		Mackay et al. (1992b)	X	366
	1.2		Duchowicz et al. (2020)	Q	
	5.7		Parnis et al. (2015)	Q	371
1,2-benzfluoranthene $\text{C}_{20}\text{H}_{12}$ [203-33-8] OQDXASJSCOTNQS-UHFFFAOYSA-N	2.3		Hilal et al. (2008)	Q	
	1.1×10^1		Ferreira (2001)	Q	12
	6.9		Hilal et al. (2008)	Q	
benzo[<i>j</i>]fluoranthene $\text{C}_{20}\text{H}_{12}$ [205-82-3] KHNYNFUTFKJLDD-UHFFFAOYSA-N	4.9×10^1		HSDB (2015)	Q	100
1,3,6-trimethylchrysene $\text{C}_{21}\text{H}_{18}$ [1586755-28-3] UGLPREDFUVNEMJ-UHFFFAOYSA-N	1.8		Parnis et al. (2015)	Q	371
6-propylchrysene $\text{C}_{21}\text{H}_{18}$ [6910-41-4] PGBSMHMYMMBHFF-UHFFFAOYSA-N	1.5		Parnis et al. (2015)	Q	371
20-methylcholanthrene $\text{C}_{21}\text{H}_{16}$ [56-49-5] PPQNQXQZIWJHRB-UHFFFAOYSA-N	1.9		Duchowicz et al. (2020)	V	187
	1.9		HSDB (2015)	V	
			Mackay et al. (2006a)	V	293
	3.7×10^{-1}		Duchowicz et al. (2020)	Q	
6-butylchrysene $\text{C}_{22}\text{H}_{20}$ [6901-71-9] XJQKMLMKECCWEO-UHFFFAOYSA-N	1.3		Parnis et al. (2015)	Q	371

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dibenz[<i>a, h</i>]anthracene $C_{22}H_{14}$ [53-70-3] LHRCREOYAASXPZ-UHFFFAOYSA-N	7.0×10^1		Duchowicz et al. (2020)	V	187
	1.8×10^2	12000	Abou-Naccoul et al. (2014)	V	
	5.8×10^3		Mackay et al. (2006a)	V	
	1.3×10^2		Eastcott et al. (1988)	V	
	1.2	7800	Paasivirta et al. (1999)	T	
	1.4×10^2		Smith et al. (1993)	C	
	1.4		Duchowicz et al. (2020)	Q	
	1.4×10^2		HSDB (2015)	Q	100
	2.6×10^1		Parnis et al. (2015)	Q	371
	1.2×10^1		Hilal et al. (2008)	Q	
8.3×10^1		Ferreira (2001)	Q	12	
indeno[1,2,3- <i>cd</i>]pyrene $C_{22}H_{12}$ [193-39-5] SXQBHARYMNFBS-UHFFFAOYSA-N	2.9×10^1		Ma et al. (2010b)	L	368
	2.0×10^1		Ma et al. (2010b)	L	369
	2.8×10^1	3600	ten Hulscher et al. (1992)	M	
	2.5	7400	Paasivirta et al. (1999)	T	
	1.4×10^2		Smith et al. (1993)	C	
	4.7		Keshavarz et al. (2022)	Q	
	3.7		Duchowicz et al. (2020)	Q	185
	1.3×10^1		Parnis et al. (2015)	Q	371
	5.0		Hilal et al. (2008)	Q	
	9.4		Modarresi et al. (2007)	Q	68
	5100	Kühne et al. (2005)	Q		
	2.8×10^1	Duchowicz et al. (2020)	?	186, 21	
		Kühne et al. (2005)	?		
benzo[<i>ghi</i>]perylene $C_{22}H_{12}$ [191-24-2] GYFAGKUZYNFMBN-UHFFFAOYSA-N	3.0×10^1		Ma et al. (2010b)	L	368
	2.4×10^1		Ma et al. (2010b)	L	369
	3.0×10^1	3200	ten Hulscher et al. (1992)	M	
	1.8×10^1		De Maagd et al. (1998)	V	12
	1.3×10^1		Shiu and Mackay (1997)	V	
	6.9×10^1		Eastcott et al. (1988)	V	
	4.0	9200	Paasivirta et al. (1999)	T	
	1.3×10^1		Mackay et al. (1992b)	X	366
	1.8×10^2		Smith et al. (1993)	C	
	4.7		Keshavarz et al. (2022)	Q	
	3.7		Duchowicz et al. (2020)	Q	
	1.1×10^1		Parnis et al. (2015)	Q	371
	2.6		Hilal et al. (2008)	Q	
	6.1×10^1		Modarresi et al. (2007)	Q	68
	3700	Kühne et al. (2005)	Q		
3.7×10^{-2}		Yaffe et al. (2003)	Q	249, 250	
3.0×10^1		Duchowicz et al. (2020)	?	186, 21	
	3300	Kühne et al. (2005)	?		

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
benzo[<i>b</i>]triphenylene $\text{C}_{22}\text{H}_{14}$ (dibenz[<i>a, c</i>]anthracene) [215-58-7] RAASUWZPTOJQAY-UHFFFAOYSA-N	1.9×10^1 4.4×10^3 1.9×10^1 1.4×10^2	8600	Abou-Naccoul et al. (2014) Mackay et al. (2006a) Hilal et al. (2008) Ferreira (2001)	V V Q Q	12
dibenz[<i>a, j</i>]anthracene $\text{C}_{22}\text{H}_{14}$ [224-41-9] KLIHYVJAYWCEDM-UHFFFAOYSA-N	8.6×10^1 8.3×10^1		Hilal et al. (2008) Ferreira (2001)	Q Q	12
picene $\text{C}_{22}\text{H}_{14}$ [213-46-7] GBROPGWFBFCKAG-UHFFFAOYSA-N	6.2 7.7×10^1		Hilal et al. (2008) Ferreira (2001)	Q Q	12
benzo[<i>c</i>]chrysene $\text{C}_{22}\text{H}_{14}$ [194-69-4] YZWGEMSQAMDWEM-UHFFFAOYSA-N	8.0×10^1		HSDB (2015)	Q	100
benzo[<i>g</i>]chrysene $\text{C}_{22}\text{H}_{14}$ [196-78-1] JZOIZKBKSZMVRV-UHFFFAOYSA-N	8.0×10^1		HSDB (2015)	Q	100
dibenzo[<i>a, e</i>]pyrene $\text{C}_{24}\text{H}_{14}$ [192-65-4] KGHMWBNEFMFJFZ-UHFFFAOYSA-N	7.0×10^2		HSDB (2015)	Q	100
dibenzo[<i>a, h</i>]pyrene $\text{C}_{24}\text{H}_{14}$ [189-64-0] RXUSYFJGDZVFND-UHFFFAOYSA-N	7.0×10^2		HSDB (2015)	Q	100
dibenzo[<i>a, i</i>]pyrene $\text{C}_{24}\text{H}_{14}$ [189-55-9] TUGYIJVAYAHHMH-UHFFFAOYSA-N	7.0×10^2		HSDB (2015)	Q	100
coronene $\text{C}_{24}\text{H}_{12}$ [191-07-1] VPUGDVKSQVFFS-UHFFFAOYSA-N			Mackay et al. (2006a)	V	293
dibenz[<i>a, e</i>]aceanthrylene $\text{C}_{24}\text{H}_{14}$ [5385-75-1] JHOWUOKQHJHGMU-UHFFFAOYSA-N	7.0×10^2		HSDB (2015)	Q	100

Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dibenzo[<i>b, k</i>]chrysene $\text{C}_{26}\text{H}_{16}$ [217-54-9] DHCSBRKYHMINPB-UHFFFAOYSA-N	1.2×10^3		HSDB (2015)	Q	100

A3 Organic species with oxygen (O)

A3.1 Carbon oxides

Table A3.1: Carbon oxides

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
carbon monoxide	9.7×10^{-6}	1300	Burkholder et al. (2019)	L	1
CO	8.0×10^{-6}	1400	Burkholder et al. (2019)	L	71
[630-08-0]	9.7×10^{-6}	1300	Burkholder et al. (2015)	L	1
UGFAIRIUMAVXCW-UHFFFAOYSA-N	8.0×10^{-6}	1400	Burkholder et al. (2015)	L	71
	9.7×10^{-6}	1300	Warneck and Williams (2012)	L	
	9.7×10^{-6}	1300	Sander et al. (2011)	L	1
	9.7×10^{-6}	1300	Sander et al. (2006)	L	1
	9.7×10^{-6}	1300	Fernández-Prini et al. (2003)	L	3
			Cargill (1990)	L	376
	9.4×10^{-6}	1300	Wilhelm et al. (1977)	L	
	9.7×10^{-6}	1300	Rettich et al. (1982)	M	377
	7.0×10^{-6}	1500	Schmidt (1979)	M	33, 34
	7.9×10^{-5}		Meadows and Spedding (1974)	M	
	8.3×10^{-6}		Power and Stegall (1970)	M	14
	7.9×10^{-6}	1200	Douglas (1967)	M	378, 379
	9.4×10^{-6}	1300	Winkler (1901)	M	380
	9.5×10^{-6}	1200	Bunsen (1855a)	M	43
	6.0×10^{-6}		Pierotti (1965)	T	
	1.0×10^{-5}		Hayer et al. (2022)	Q	20
	8.7×10^{-6}		Yaws (1999)	?	21
	9.4×10^{-6}	1300	Yaws et al. (1999)	?	21
	8.4×10^{-6}		Abraham and Weathersby (1994)	?	21
	9.4×10^{-6}	1400	Dean and Lange (1999)	?	381, 23
	8.6×10^{-6}		Yaws and Yang (1992)	?	21
carbon dioxide	3.4×10^{-4}	2300	Burkholder et al. (2019)	L	1
CO ₂	2.8×10^{-4}	2600	Burkholder et al. (2019)	L	71
[124-38-9]	3.4×10^{-4}	2300	Burkholder et al. (2015)	L	1
CURLTUGMZLYLDI-UHFFFAOYSA-N	2.8×10^{-4}	2600	Burkholder et al. (2015)	L	71
	3.3×10^{-4}	2400	Sander et al. (2011)	L	1
	3.3×10^{-4}	2400	Sander et al. (2006)	L	1
	3.3×10^{-4}	2300	Fernández-Prini et al. (2003)	L	3
	3.4×10^{-4}	2300	Carroll et al. (1991)	L	
	3.4×10^{-4}	2400	Crovetto (1991)	L	
	3.4×10^{-4}	2300	Yoo et al. (1986)	L	1
	3.4×10^{-4}	2400	Edwards et al. (1978)	L	1
	3.3×10^{-4}	2400	Wilhelm et al. (1977)	L	
	3.4×10^{-4}	2400	Weiss (1974)	L	1
	3.4×10^{-4}	2300	Zheng et al. (1997)	M	382
	3.3×10^{-4}	2400	Murray and Riley (1971)	M	383
	2.4×10^{-4}		Power and Stegall (1970)	M	14
	3.3×10^{-4}	2400	Morrison and Billett (1952)	M	384
	3.3×10^{-4}		Orcutt and SeEVERS (1937a)	M	

Table A3.1: Carbon oxides (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.3×10^{-4}	2300	Kunerth (1922)	M	
	3.3×10^{-4}	2500	Geffcken (1904)	M	
	3.4×10^{-4}	2400	Bohr (1899)	M	385
	3.4×10^{-4}	2500	Bunsen (1855a)	M	43
	6.5×10^{-4}		Duchowicz et al. (2020)	V	187
	3.4×10^{-4}	2400	Chen et al. (1979)	R	1
	3.1×10^{-4}	2400	Chameides (1984)	T	
	3.3×10^{-4}	2400	Edwards et al. (1975)	T	1
	3.4×10^{-4}		Perry and Chilton (1973)	X	29
	3.4×10^{-4}	2400	Lelieveld and Crutzen (1991)	C	
	3.4×10^{-4}	2400	Pandis and Seinfeld (1989)	C	
	3.9×10^{-4}		Nunn (1958)	C	12
	2.3×10^{-4}		Hayer et al. (2022)	Q	20
	4.0		Duchowicz et al. (2020)	Q	
		2900	Kühne et al. (2005)	Q	
			Scharlin (1996)	E	1, 386
		2400	Kühne et al. (2005)	?	
	4.5×10^{-4}		Yaws (1999)	?	21
	3.3×10^{-4}	2400	Yaws et al. (1999)	?	21
	2.6×10^{-4}		Abraham and Weathersby (1994)	?	21
	3.3×10^{-4}	2400	Dean and Lange (1999)	?	387, 23
	4.5×10^{-4}		Yaws and Yang (1992)	?	21
	3.4×10^{-4}	2400	Seinfeld (1986)	?	21
	3.3×10^{-4}	2400	Hoffmann and Jacob (1984)	?	21
carbon suboxide C_3O_2 [504-64-3] GNEVIACKFGQMHB-UHFFFAOYSA-N	1.1×10^{-2}		Keßel et al. (2017)	M	388

A3.2 Alcohols (ROH)

Table A3.2: Alcohols (ROH)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methanol	2.0	5500	Burkholder et al. (2019)	L	1
CH ₃ OH	2.0	5500	Burkholder et al. (2015)	L	1
[67-56-1]	2.0	5400	Brockbank (2013)	L	1
OKKJLVBELUTLKV-UHFFFAOYSA-N	2.0	5600	Sander et al. (2011)	L	389, 1
	2.1	5300	Warneck (2006)	L	
	2.2	5200	Sander et al. (2006)	L	
	2.0	5500	Dohnal et al. (2006)	L	1
	1.7	4500	Fogg and Sangster (2003)	L	
	2.1	5400	Plyasunov and Shock (2000)	L	
	3.6×10^{-2}		St-Pierre et al. (2014)	M	174
	2.2	5300	O'Farrell and Waghorne (2010)	M	
	2.1		Vitenberg and Dobryakov (2008)	M	
	7.8×10^{-1}		Helburn et al. (2008)	M	
	2.2	5300	Lin and Chou (2006)	M	
	2.0	5600	Teja et al. (2001)	M	11, 340
	2.6	5900	Zhu et al. (2000)	M	
	2.0	5500	Gupta et al. (2000)	M	
	1.6		Altschuh et al. (1999)	M	
	2.1		Merk and Riederer (1997)	M	
	1.3		Kaneko et al. (1994)	M	14
	2.2		Li and Carr (1993)	M	
	2.6	3900	Pividal et al. (1992)	M	
	2.2	5200	Snider and Dawson (1985)	M	
	2.0		Richon et al. (1985)	M	
	1.3×10^1		Mazza (1980)	M	
	2.2		Rytting et al. (1978)	M	
	2.3		Burnett (1963)	M	
	2.3		Butler et al. (1935)	M	390
	7.6×10^{-2}		Abraham and Acree (2007)	V	
	1.8	6200	Fukuchi et al. (2002)	V	
	1.9		Hwang et al. (1992)	V	
	2.8		Riederer (1990)	V	
		5400	Abraham (1984)	V	
	2.2	5700	Glew and Moelwyn-Hughes (1953)	R	
	2.1	5400	Plyasunov et al. (2001)	T	
	1.5		Yaws (2003)	X	259
	1.5		Yaws (2003)	X	238
	1.6	5600	Schaffer and Daubert (1969)	X	299
	2.2		Gaffney and Senum (1984)	X	391
	2.1		Timmermans (1960)	X	392
	1.6		Dupeux et al. (2022)	Q	260
	2.1		Hayer et al. (2022)	Q	20
	5.0×10^{-1}		Keshavarz et al. (2022)	Q	
	2.8		Duchowicz et al. (2020)	Q	185
	3.4×10^{-1}		Wang et al. (2017)	Q	81, 239

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.1		Wang et al. (2017)	Q	81, 240
	6.6		Wang et al. (2017)	Q	81, 241
	2.1		Li et al. (2014)	Q	242
	2.0		Raventos-Duran et al. (2010)	Q	243, 244
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	2.5		Raventos-Duran et al. (2010)	Q	246
	2.6×10^{-1}		Gharagheizi et al. (2010)	Q	247
	2.0		Hilal et al. (2008)	Q	
	2.9		Modarresi et al. (2007)	Q	68
		6200	Kühne et al. (2005)	Q	
	2.2		Yaffe et al. (2003)	Q	249, 250
	1.1		Yao et al. (2002)	Q	230, 268
	2.6		English and Carroll (2001)	Q	231, 232
	1.6		Katritzky et al. (1998)	Q	
	1.5		Yaws et al. (1997)	Q	
	2.0		Suzuki et al. (1992)	Q	233
	1.8		Nirmalakhandan and Speece (1988)	Q	
	2.4		Taft et al. (1985)	Q	
	2.2		Duchowicz et al. (2020)	?	186, 21
		5000	Kühne et al. (2005)	?	
	1.9		Yaws (1999)	?	21
	1.1		Abraham and Weathersby (1994)	?	21
	1.4		Yaws and Yang (1992)	?	21
	2.2		Abraham et al. (1990)	?	
ethanol	1.9	6400	Burkholder et al. (2019)	L	1
C ₂ H ₅ OH	1.9	6400	Burkholder et al. (2015)	L	1
[64-17-5]	1.8	6300	Brockbank (2013)	L	1
LFQSCWFLJHTTHZ-UHFFFAOYSA-N	1.9	6400	Sander et al. (2011)	L	1
	1.9	6300	Warneck (2006)	L	
	2.0	6600	Sander et al. (2006)	L	
	1.8	6300	Dohnal et al. (2006)	L	1
	1.7	5700	Fogg and Sangster (2003)	L	
	1.9	6300	Plyasunov and Shock (2000)	L	
	1.9	6200	Dubowski (1979)	L	1
	1.8	5900	Willey et al. (2017)	M	
	2.2	5500	O'Farrell and Waghorne (2010)	M	
	1.8		Vitenberg and Dobryakov (2008)	M	
	1.9	5800	Falabella et al. (2006)	M	11, 340
	1.9		Straver and de Loos (2005)	M	
			Cheng et al. (2004)	M	330
	1.1		Ueberfeld et al. (2001)	M	
	1.8	5800	Gupta et al. (2000)	M	
	1.3		Altschuh et al. (1999)	M	
	1.0		Eger et al. (1999)	M	14
	1.9		Merk and Riederer (1997)	M	
	8.3×10^{-1}		Kaneko et al. (1994)	M	14
	1.9		Li and Carr (1993)	M	

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.1	3900	Pividal et al. (1992)	M	
	1.9		Park et al. (1987)	M	
	1.9	6600	Snider and Dawson (1985)	M	
	2.0		Richon et al. (1985)	M	
	1.9	6000	Jones (1983)	M	1
	6.2		Mazza (1980)	M	
	1.9		Rytting et al. (1978)	M	
	2.3		Rohrschneider (1973)	M	
	2.1		Burnett (1963)	M	
	1.9	6500	Harger et al. (1950)	M	
	1.9		Butler et al. (1935)	M	
	4.7×10^{-2}		Abraham and Acree (2007)	V	
	1.7	6300	Fukuchi et al. (2002)	V	
	1.3		Hwang et al. (1992)	V	
		6300	Abraham (1984)	V	
	1.9	6300	Plyasunov et al. (2001)	T	
	1.4		Yaws (2003)	X	238
	1.5	6400	Schaffer and Daubert (1969)	X	299
	2.0		Gaffney and Senum (1984)	X	391
	1.6		Timmermans (1960)	X	392
	1.7		Hayer et al. (2022)	Q	20
	6.7×10^{-1}		Keshavarz et al. (2022)	Q	
	1.1		Duchowicz et al. (2020)	Q	
	3.1×10^{-1}		Wang et al. (2017)	Q	81, 239
	2.0		Wang et al. (2017)	Q	81, 240
	2.3		Wang et al. (2017)	Q	81, 241
	1.6		Raventos-Duran et al. (2010)	Q	243, 244
	1.6		Raventos-Duran et al. (2010)	Q	245
	1.6		Raventos-Duran et al. (2010)	Q	246
	1.3		Gharagheizi et al. (2010)	Q	247
	1.1		Hilal et al. (2008)	Q	
	1.8		Modarresi et al. (2007)	Q	68
		6500	Kühne et al. (2005)	Q	
	2.0		Yaffe et al. (2003)	Q	249, 250
	1.4		Yao et al. (2002)	Q	230
	1.4		English and Carroll (2001)	Q	231, 232
	1.2		Katritzky et al. (1998)	Q	
	1.3		Yaws et al. (1997)	Q	
	1.4		Russell et al. (1992)	Q	280
	1.4		Suzuki et al. (1992)	Q	233
	1.6		Nirmalakhandan and Speece (1988)	Q	
	2.0		Duchowicz et al. (2020)	?	186, 21
	1.9		Bartelt-Hunt et al. (2008)	?	21
		6400	Kühne et al. (2005)	?	
	1.2		Yaws (1999)	?	21
	8.2×10^{-1}		Abraham and Weathersby (1994)	?	21
	1.2		Yaws and Yang (1992)	?	21

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.9		Abraham et al. (1990)	?	
1-propanol $\text{C}_3\text{H}_7\text{OH}$ [71-23-8] BDERNNFJNOPAEC-UHFFFAOYSA-N	1.4	6900	Burkholder et al. (2019)	L	393, 1
	1.4	6900	Burkholder et al. (2015)	L	394, 1
	1.5	7000	Brockbank (2013)	L	1, 395
	1.4	6900	Sander et al. (2011)	L	396, 1
	1.3	7500	Sander et al. (2006)	L	
	1.4	6900	Dohnal et al. (2006)	L	1
	1.4	6200	Fogg and Sangster (2003)	L	
	1.5	6900	Plyasunov and Shock (2000)	L	
	1.5		Vitenberg and Dobryakov (2008)	M	
	1.2	6200	Falabella et al. (2006)	M	11, 340
	1.5		Straver and de Loos (2005)	M	
	3.2×10^{-1}		van Ruth et al. (2002)	M	14
	3.2×10^{-1}		van Ruth and Villeneuve (2002)	M	14, 363
	6.5×10^{-1}		van Ruth et al. (2001)	M	14
	1.2	6200	Gupta et al. (2000)	M	
	2.7		Altschuh et al. (1999)	M	
	1.5		Merk and Riederer (1997)	M	
	7.2×10^{-1}		Kaneko et al. (1994)	M	14
	1.4		Li and Carr (1993)	M	
	1.3	7500	Snider and Dawson (1985)	M	
	1.8		Richon et al. (1985)	M	
	3.7		Mazza (1980)	M	
	1.5		Rytting et al. (1978)	M	
	1.6		Burnett (1963)	M	
	1.4		Butler et al. (1935)	M	390
	3.1×10^{-2}		Abraham and Acree (2007)	V	
	1.8	7700	Fukuchi et al. (2002)	V	
	8.0×10^{-2}	4500	Djerki and Laub (1988)	V	
		6900	Abraham (1984)	V	
	1.5	6900	Plyasunov et al. (2001)	T	
	1.2		Yaws (2003)	X	259
	1.2		Dupeux et al. (2022)	Q	260
	1.5		Hayer et al. (2022)	Q	20
	9.0×10^{-1}		Keshavarz et al. (2022)	Q	
	1.2		Duchowicz et al. (2020)	Q	
	2.5×10^{-1}		Wang et al. (2017)	Q	81, 239
	1.3		Wang et al. (2017)	Q	81, 240
	1.2		Wang et al. (2017)	Q	81, 241
	1.2		Raventos-Duran et al. (2010)	Q	243, 244
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	1.2		Raventos-Duran et al. (2010)	Q	246
	7.0×10^{-1}		Hilal et al. (2008)	Q	
	1.1		Modarresi et al. (2007)	Q	68
		6900	Kühne et al. (2005)	Q	
	1.2		Yaffe et al. (2003)	Q	249, 273

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1		Yao et al. (2002)	Q	230
	1.2		English and Carroll (2001)	Q	231, 232
	1.7		Katritzky et al. (1998)	Q	
	1.2		Yaws et al. (1997)	Q	
	1.1		Russell et al. (1992)	Q	280
	1.1		Suzuki et al. (1992)	Q	233
	1.2		Nirmalakhandan and Speece (1988)	Q	
	1.3		Duchowicz et al. (2020)	?	186, 21
		7500	Kühne et al. (2005)	?	
	1.3		Yaws (1999)	?	21
	6.0×10^{-1}		Abraham and Weathersby (1994)	?	21
	1.1		Yaws and Yang (1992)	?	21
	1.5		Abraham et al. (1990)	?	
2-propanol $\text{C}_3\text{H}_7\text{OH}$ (isopropanol) [67-63-0] KFZMGEQAYNKOFK-UHFFFAOYSA-N	1.2	7100	Burkholder et al. (2019)	L	1
	1.2	7100	Burkholder et al. (2015)	L	1
	1.2	6900	Brockbank (2013)	L	1
	1.3	7500	Sander et al. (2011)	L	
	1.3	7500	Sander et al. (2006)	L	
	1.2	6200	Fogg and Sangster (2003)	L	
	1.2	7000	Plyasunov and Shock (2000)	L	
	1.1	8400	Hiatt (2013)	M	
	6.8×10^{-1}		Helburn et al. (2008)	M	
	1.3	7300	Lin and Chou (2006)	M	
			Cheng et al. (2004)	M	330
			Cheng et al. (2003)	M	330
	1.8×10^{-1}		Ayuttaya et al. (2001)	M	342
	1.0×10^{-3}		Ayuttaya et al. (2001)	M	343
	5.7×10^{-1}		Ayuttaya et al. (2001)	M	344
	1.1		Kim et al. (2000)	M	
	9.2×10^{-1}		Altschuh et al. (1999)	M	
	1.2		Merk and Riederer (1997)	M	
	5.8×10^{-1}		Kaneko et al. (1994)	M	14
	7.9×10^{-1}	5700	Kolb et al. (1992)	M	278
	1.4		Pividal et al. (1992)	M	81
	9.8×10^{-1}		Yu (1992)	M	12
	1.2	7400	Snider and Dawson (1985)	M	
	2.1		Mazza (1980)	M	
	1.2		Rytting et al. (1978)	M	
	1.2		Butler et al. (1935)	M	
	1.2	7100	Fenclová et al. (2007)	V	1
	1.2	7600	Fukuchi et al. (2002)	V	
	1.7		Hine and Weimar (1965)	R	
	7.6×10^{-1}		Yaws (2003)	X	259
	2.4		Dupeux et al. (2022)	Q	260
	1.2		Hayer et al. (2022)	Q	20
	9.0×10^{-1}		Keshavarz et al. (2022)	Q	

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.8×10^{-1}		Duchowicz et al. (2020)	Q	185
	2.8×10^{-1}		Wang et al. (2017)	Q	81, 239
	1.0		Wang et al. (2017)	Q	81, 240
	1.2		Wang et al. (2017)	Q	81, 241
	1.2		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	1.2		Raventos-Duran et al. (2010)	Q	246
	4.3×10^{-1}		Hilal et al. (2008)	Q	
	7.0×10^{-1}		Modarresi et al. (2007)	Q	68
		6900	Kühne et al. (2005)	Q	
			Yaffe et al. (2003)	Q	358
	7.7×10^{-1}		Yao et al. (2002)	Q	230
	1.0		English and Carroll (2001)	Q	231, 275
	1.1		Katritzky et al. (1998)	Q	
	8.9×10^{-1}		Yaws et al. (1997)	Q	
	1.4		Russell et al. (1992)	Q	280
	9.7×10^{-1}		Suzuki et al. (1992)	Q	233
	1.1		Nirmalakhandan and Speece (1988)	Q	
	1.3		Taft et al. (1985)	Q	
	1.2		Duchowicz et al. (2020)	?	186, 21
		6000	Kühne et al. (2005)	?	
	8.0×10^{-1}		Yaws (1999)	?	21
	5.0×10^{-1}		Abraham and Weathersby (1994)	?	21
	8.8×10^{-1}		Yaws and Yang (1992)	?	21
	1.2		Abraham et al. (1990)	?	
glycidol $\text{C}_3\text{H}_6\text{O}_2$ [556-52-5] CTKINSOISVBQLD-UHFFFAOYSA-N	1.7×10^3		HSDB (2015)	Q	100
1-butanol $\text{C}_4\text{H}_9\text{OH}$ [71-36-3] LRHPLDYGYMQRHN-UHFFFAOYSA-N	1.2	7500	Burkholder et al. (2019)	L	1
	1.2	7500	Burkholder et al. (2015)	L	1
	1.2	7500	Brockbank (2013)	L	1
	1.2	7500	Sander et al. (2011)	L	1
	1.3	7200	Sander et al. (2006)	L	
	1.2	7500	Dohnal et al. (2006)	L	1
	1.1	6300	Fogg and Sangster (2003)	L	
	1.2	7400	Plyasunov and Shock (2000)	L	
	1.0	7000	Wu et al. (2022a)	M	
	2.0		Chao et al. (2017)	M	
	1.0	6800	Shunthirasingham et al. (2013)	M	
	1.3		Vitenberg and Dobryakov (2008)	M	
	1.1	6000	Lei et al. (2007)	M	397
	8.2×10^{-1}	6200	Falabella et al. (2006)	M	11, 340
	9.4×10^{-1}	6100	Hovorka et al. (2002)	M	11
	4.5×10^{-1}		van Ruth et al. (2002)	M	14
	4.4×10^{-1}		van Ruth and Villeneuve (2002)	M	14, 363

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.8×10^{-1}		van Ruth et al. (2001)	M	14
	1.1		Kim et al. (2000)	M	
	8.2×10^{-1}	6200	Gupta et al. (2000)	M	
	1.2		Altschuh et al. (1999)	M	
	5.5×10^{-1}		Eger et al. (1999)	M	14
	1.1		Merk and Riederer (1997)	M	
	1.4×10^{-1}		Chaintreau et al. (1995)	M	
	5.1×10^{-1}		Kaneko et al. (1994)	M	14
	1.1		Li and Carr (1993)	M	
	6.1×10^{-1}	5600	Kolb et al. (1992)	M	278
	1.2	7200	Snider and Dawson (1985)	M	
	5.3×10^{-1}		Friant and Suffet (1979)	M	38
	1.2		Rytting et al. (1978)	M	
	1.1		Amoore and Buttery (1978)	M	
	1.1		Buttery et al. (1969)	M	
	1.4		Burnett (1963)	M	
	1.2		Butler et al. (1935)	M	390
	1.1		Chao et al. (2017)	V	
	1.1		Mackay et al. (2006c)	V	
	7.3×10^{-1}		Mackay et al. (1995)	V	
	8.3×10^{-1}		Hwang et al. (1992)	V	
	2.2×10^{-1}	4700	Djerki and Laub (1988)	V	
		7400	Abraham (1984)	V	
	1.2		Amoore and Buttery (1978)	V	
	1.2		Butler et al. (1935)	V	
	1.2		Yaws (2003)	X	259
	9.4×10^{-1}		Dupeux et al. (2022)	Q	260
	1.9		Hayer et al. (2022)	Q	20
	1.2		Keshavarz et al. (2022)	Q	
	1.3		Duchowicz et al. (2020)	Q	185
	2.0×10^{-1}		Wang et al. (2017)	Q	81, 239
	9.1×10^{-1}		Wang et al. (2017)	Q	81, 240
	1.3		Wang et al. (2017)	Q	81, 241
	1.2		Li et al. (2014)	Q	242
	9.4×10^{-1}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	5.6×10^{-1}		Hilal et al. (2008)	Q	
	1.0		Modarresi et al. (2007)	Q	68
		7200	Kühne et al. (2005)	Q	
	1.2		Yaffe et al. (2003)	Q	249, 273
	1.1		Yao et al. (2002)	Q	230
	9.5×10^{-1}		English and Carroll (2001)	Q	231, 261
	1.8		Katritzky et al. (1998)	Q	
	1.1		Yaws et al. (1997)	Q	
	8.6×10^{-1}		Russell et al. (1992)	Q	280

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	8.4×10^{-1}		Suzuki et al. (1992)	Q	233
	9.9×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	1.1	6900	Duchowicz et al. (2020)	?	186, 21
			Kühne et al. (2005)	?	
	1.1		Yaws (1999)	?	21
	1.2		Abraham et al. (1990)	?	
	1.8		Mackay and Yeun (1983)	?	
2-butanol $\text{C}_4\text{H}_{10}\text{O}$ (<i>sec</i> -butanol) [78-92-2] BTANRVKQNVYAZ-UHFFFAOYSA-N	1.1	7600	Burkholder et al. (2019)	L	1
	1.1	7600	Burkholder et al. (2015)	L	1
	9.5×10^{-1}	7600	Brockbank (2013)	L	1
	1.1	7300	Sander et al. (2011)	L	
	1.1	7300	Sander et al. (2006)	L	
	1.0	7400	Fogg and Sangster (2003)	L	
	9.9×10^{-1}	7600	Plyasunov and Shock (2000)	L	
	8.3×10^{-1}		Merk and Riederer (1997)	M	
	1.1	7300	Snider and Dawson (1985)	M	
	9.8×10^{-1}		Rytting et al. (1978)	M	
	9.6×10^{-1}		Butler et al. (1935)	M	
	9.5×10^{-1}	7600	Fenclová et al. (2007)	V	1
	1.1		Mackay et al. (2006c)	V	
	1.1		Mackay et al. (1995)	V	
	9.1×10^{-1}	7500	Cabani et al. (1975b)	T	
	6.7×10^{-1}		Yaws (2003)	X	259
	1.1		Dupeux et al. (2022)	Q	260
	1.2		Hayer et al. (2022)	Q	20
	1.2		Keshavarz et al. (2022)	Q	
	5.1×10^{-1}		Duchowicz et al. (2020)	Q	300
	2.3×10^{-1}		Wang et al. (2017)	Q	81, 239
	8.9×10^{-1}		Wang et al. (2017)	Q	81, 240
	7.3×10^{-1}		Wang et al. (2017)	Q	81, 241
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	3.9×10^{-1}		Hilal et al. (2008)	Q	
	4.9×10^{-1}		Modarresi et al. (2007)	Q	68
		7200	Kühne et al. (2005)	Q	
	1.2		Yaffe et al. (2003)	Q	249, 250
	6.2×10^{-1}		Yao et al. (2002)	Q	230
	8.4×10^{-1}		English and Carroll (2001)	Q	231, 232
	5.7×10^{-1}		Katritzky et al. (1998)	Q	
	1.2		Yaws et al. (1997)	Q	
	7.7×10^{-1}		Suzuki et al. (1992)	Q	233
	9.0×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	1.1		Duchowicz et al. (2020)	?	186, 21
		7100	Kühne et al. (2005)	?	
	1.2		Yaws (1999)	?	21

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	9.9×10^{-1}		Abraham et al. (1990)	?	
2-methyl-1-propanol $\text{C}_4\text{H}_{10}\text{O}$ (isobutanol) [78-83-1] ZXEKIIBDNHEJQC-UHFFFAOYSA-N	8.3×10^{-1}	7200	Burkholder et al. (2019)	L	1
	8.3×10^{-1}	7200	Burkholder et al. (2015)	L	1
	8.0×10^{-1}	7400	Brockbank (2013)	L	1
	1.0		Sander et al. (2011)	L	
	1.0		Sander et al. (2006)	L	
	8.5×10^{-1}	7200	Plyasunov and Shock (2000)	L	
	1.2		Chao et al. (2017)	M	
	2.2×10^{-1}		Kim and Kim (2014)	M	
			Cheng et al. (2004)	M	330
	6.7×10^{-1}	6100	Hovorka et al. (2002)	M	11
	1.1		Altschuh et al. (1999)	M	
	3.7×10^{-1}		Shiu and Mackay (1997)	M	
	7.8×10^{-1}		Merk and Riederer (1997)	M	
	4.4×10^{-1}		Kaneko et al. (1994)	M	14
	1.0		Snider and Dawson (1985)	M	
	8.0×10^{-1}		Rytting et al. (1978)	M	
	8.3×10^{-1}		Butler et al. (1935)	M	
	9.2×10^{-1}		Chao et al. (2017)	V	
	7.6×10^{-1}	7200	Fenclová et al. (2007)	V	1
	7.3×10^{-1}		Mackay et al. (2006c)	V	
	7.3×10^{-1}		Shiu and Mackay (1997)	V	
	7.3×10^{-1}		Mackay et al. (1995)	V	
	1.2		Keshavarz et al. (2022)	Q	
	5.1×10^{-1}		Duchowicz et al. (2020)	Q	
	2.3×10^{-1}		Wang et al. (2017)	Q	81, 239
	9.1×10^{-1}		Wang et al. (2017)	Q	81, 240
	7.6×10^{-1}		Wang et al. (2017)	Q	81, 241
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	5.1×10^{-1}		Hilal et al. (2008)	Q	
	6.1×10^{-1}		Modarresi et al. (2007)	Q	68
		7200	Kühne et al. (2005)	Q	
	3.7×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	6.2×10^{-1}		Yao et al. (2002)	Q	230
	5.7×10^{-1}		English and Carroll (2001)	Q	231, 232
	1.8		Katritzky et al. (1998)	Q	
	8.3×10^{-1}		Yaws et al. (1997)	Q	
	7.7×10^{-1}		Suzuki et al. (1992)	Q	233
	8.4×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	1.0		Duchowicz et al. (2020)	?	186, 21
		8100	Kühne et al. (2005)	?	
	8.4×10^{-1}		Yaws (1999)	?	21
	3.1×10^{-1}		Abraham and Weathersby (1994)	?	21
	8.0×10^{-1}		Abraham et al. (1990)	?	

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	9.6×10^{-1}		Mackay and Yeun (1983)	?	
2-methyl-2-propanol $\text{C}_4\text{H}_{10}\text{O}$ (<i>tert</i> -butanol) [75-65-0] DKGAVHZHDRPRBM-UHFFFAOYSA-N	7.9×10^{-1}	7600	Brockbank (2013)	L	1
	6.9×10^{-1}	8300	Sander et al. (2011)	L	
	6.9×10^{-1}	8300	Sander et al. (2006)	L	
	7.9×10^{-1}	7700	Plyasunov and Shock (2000)	L	
	1.4	7900	Hiatt (2013)	M	
	1.1		Altschuh et al. (1999)	M	
	8.1×10^{-1}		Merk and Riederer (1997)	M	
			Koga (1995)	M	398
	6.8×10^{-1}	8300	Snider and Dawson (1985)	M	
	7.6×10^{-1}		Rytting et al. (1978)	M	
	8.3×10^{-1}		Butler et al. (1935)	M	
	8.0×10^{-1}	7700	Fenclová et al. (2007)	V	1
	2.4×10^{-1}		Yaws (2003)	X	259
	8.0×10^{-1}	6500	Pankow et al. (1996)	C	
	2.0		Dupeux et al. (2022)	Q	260
	1.2		Keshavarz et al. (2022)	Q	
	2.2×10^{-1}		Duchowicz et al. (2020)	Q	185
	1.6×10^{-1}		Wang et al. (2017)	Q	81, 239
	6.6×10^{-1}		Wang et al. (2017)	Q	81, 240
	1.1		Wang et al. (2017)	Q	81, 241
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	2.2×10^{-1}		Hilal et al. (2008)	Q	
	4.1×10^{-1}		Modarresi et al. (2007)	Q	68
		7200	Kühne et al. (2005)	Q	
	7.9×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	2.9×10^{-1}		Yao et al. (2002)	Q	230
	9.0×10^{-1}		English and Carroll (2001)	Q	231, 232
	7.5×10^{-1}		Katritzky et al. (1998)	Q	
	7.3×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	3.0×10^{-1}		Yaws et al. (1997)	Q	
	6.1×10^{-1}		Suzuki et al. (1992)	Q	233
	7.0×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	1.1		Duchowicz et al. (2020)	?	186, 21
		8300	Kühne et al. (2005)	?	
	5.7×10^{-1}		Yaws (1999)	?	21
	7.7×10^{-1}		Abraham et al. (1990)	?	
			Burkholder et al. (2019)	W	399
			Burkholder et al. (2015)	W	400

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-pentanol	8.6×10^{-1}	7400	Brockbank (2013)	L	1
$\text{C}_5\text{H}_{11}\text{OH}$	1.0	7900	Dohnal et al. (2006)	L	1
(amyl alcohol)	8.9×10^{-1}	7800	Plyasunov and Shock (2000)	L	
[71-41-0]	8.1×10^{-1}	7100	Shunthirasingham et al. (2013)	M	
AMQJEAYHLZJPGS-UHFFFAOYSA-N	7.5×10^{-1}	6100	Lei et al. (2007)	M	397
	9.4×10^{-1}	6800	Falabella et al. (2006)	M	11, 340
	9.5×10^{-1}	6900	Gupta et al. (2000)	M	
	7.7×10^{-1}		Merk and Riederer (1997)	M	
	4.2×10^{-1}		Kaneko et al. (1994)	M	14
	8.4×10^{-1}		Li and Carr (1993)	M	
	9.0×10^{-1}		Rytting et al. (1978)	M	
	7.8×10^{-1}		Butler et al. (1935)	M	
	8.3×10^{-1}		Mackay et al. (2006c)	V	
	8.3×10^{-1}		Mackay et al. (1995)	V	
	6.1×10^{-1}	4900	Djerki and Laub (1988)	V	
		7800	Abraham (1984)	V	
	7.8×10^{-1}		Amoore and Buttery (1978)	V	
	7.6×10^{-1}		Butler et al. (1935)	V	
	7.6×10^{-1}		Yaws (2003)	X	259
	7.3×10^{-1}		Dupeux et al. (2022)	Q	260
	1.6		Keshavarz et al. (2022)	Q	
	1.4		Duchowicz et al. (2020)	Q	
	1.8×10^{-1}		Wang et al. (2017)	Q	81, 239
	6.6×10^{-1}		Wang et al. (2017)	Q	81, 240
	9.1×10^{-1}		Wang et al. (2017)	Q	81, 241
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	4.5×10^{-1}		Hilal et al. (2008)	Q	
	7.6×10^{-1}		Modarresi et al. (2007)	Q	68
		7600	Kühne et al. (2005)	Q	
	7.9×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	5.3×10^{-1}		Yao et al. (2002)	Q	230
	7.7×10^{-1}		English and Carroll (2001)	Q	231, 232
	1.3		Katritzky et al. (1998)	Q	
	7.7×10^{-1}		Yaws et al. (1997)	Q	
	6.2×10^{-1}		Russell et al. (1992)	Q	360
	6.5×10^{-1}		Suzuki et al. (1992)	Q	233
	7.9×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	7.6×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		7700	Kühne et al. (2005)	?	
	7.7×10^{-1}		Yaws (1999)	?	21
	8.1×10^{-1}		Yaws and Yang (1992)	?	21
	9.0×10^{-1}		Abraham et al. (1990)	?	
	9.6×10^{-1}		Mackay and Yeun (1983)	?	

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-pentanol	6.7×10^{-1}	7900	Brockbank (2013)	L	1
$\text{C}_5\text{H}_{12}\text{O}$	6.5×10^{-1}	8000	Plyasunov and Shock (2000)	L	
(<i>sec</i> -pentanol)	7.1×10^{-1}	8000	Fenclová et al. (2010)	M	1
[6032-29-7]	3.0×10^{-1}		van Ruth et al. (2002)	M	14
JYVLIDXNZAXMDK-UHFFFAOYSA-N	2.6×10^{-1}		van Ruth and Villeneuve (2002)	M	14, 363
	2.3×10^{-1}		van Ruth et al. (2001)	M	14
	6.6×10^{-1}		Merk and Riederer (1997)	M	
	6.7×10^{-1}		Butler et al. (1935)	M	
	6.6×10^{-1}		Mackay et al. (2006c)	V	
	6.6×10^{-1}		Mackay et al. (1995)	V	
	6.5×10^{-1}		Yaws (2003)	X	259
	7.6×10^{-1}		Dupeux et al. (2022)	Q	260
	1.6		Keshavarz et al. (2022)	Q	
	5.3×10^{-1}		Duchowicz et al. (2020)	Q	
	1.8×10^{-1}		Wang et al. (2017)	Q	81, 239
	6.3×10^{-1}		Wang et al. (2017)	Q	81, 240
	6.2×10^{-1}		Wang et al. (2017)	Q	81, 241
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	272, 244
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	3.1×10^{-1}		Hilal et al. (2008)	Q	
	3.5×10^{-1}		Modarresi et al. (2007)	Q	68
		7600	Kühne et al. (2005)	Q	
	6.7×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	6.4×10^{-1}		Yao et al. (2002)	Q	230
	7.0×10^{-1}		English and Carroll (2001)	Q	231, 261
	9.0×10^{-1}		Katritzky et al. (1998)	Q	
	6.5×10^{-1}		Yaws et al. (1997)	Q	
	5.8×10^{-1}		Suzuki et al. (1992)	Q	233
	7.2×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	6.7×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		7900	Kühne et al. (2005)	?	
	6.5×10^{-1}		Yaws (1999)	?	21
	6.7×10^{-1}		Abraham et al. (1990)	?	
3-pentanol	6.0×10^{-1}	7600	Brockbank (2013)	L	1
$\text{C}_5\text{H}_{12}\text{O}$	5.5×10^{-1}		Plyasunov and Shock (2000)	L	
[584-02-1]	6.4×10^{-1}	8000	Fenclová et al. (2010)	M	1
AQIXEPGDORPWBK-UHFFFAOYSA-N	5.0×10^{-1}		Duchowicz et al. (2020)	V	187
	6.3×10^{-1}	7900	Cabani et al. (1975b)	T	
	5.3×10^{-1}		Duchowicz et al. (2020)	Q	
	1.8×10^{-1}		Wang et al. (2017)	Q	81, 239
	6.6×10^{-1}		Wang et al. (2017)	Q	81, 240
	2.3×10^{-1}		Wang et al. (2017)	Q	81, 241
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	3.2×10^{-1}		Hilal et al. (2008)	Q	
	5.2×10^{-1}	7600	Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	
	6.7×10^{-1}		Yaffe et al. (2003)	Q	249, 273
	6.1×10^{-1}		Yao et al. (2002)	Q	230
	7.0×10^{-1}		English and Carroll (2001)	Q	231, 232
	5.0×10^{-1}		Katritzky et al. (1998)	Q	
	7.7×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	5.2×10^{-1}	7500	Yaws et al. (1997)	Q	
			Kühne et al. (2005)	?	
	5.3×10^{-1}		Yaws (1999)	?	21
	6.2×10^{-1}		Abraham et al. (1990)	?	
2-methyl-1-butanol $\text{C}_5\text{H}_{12}\text{O}$ [137-32-6] QPRQEDXDYOZYLA-UHFFFAOYSA-N	7.6×10^{-1}	7900	Brockbank (2013)	L	1
	7.1×10^{-1}		Plyasunov and Shock (2000)	L	
	7.8×10^{-1}	7700	Fenclová et al. (2010)	M	1
	3.3×10^{-1}		Kaneko et al. (1994)	M	14
	7.0×10^{-1}		Butler et al. (1935)	M	
	8.4×10^{-1}		Yaws (2003)	X	259
	4.6×10^{-1}		Dupeux et al. (2022)	Q	260
	1.6		Keshavarz et al. (2022)	Q	
	5.3×10^{-1}		Duchowicz et al. (2020)	Q	300
	1.8×10^{-1}		Wang et al. (2017)	Q	81, 239
	7.6×10^{-1}		Wang et al. (2017)	Q	81, 240
	5.5×10^{-1}		Wang et al. (2017)	Q	81, 241
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	3.9×10^{-1}		Hilal et al. (2008)	Q	
	5.9×10^{-1}	7600	Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	
	7.0×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	4.7×10^{-1}		English and Carroll (2001)	Q	231, 275
	1.9		Katritzky et al. (1998)	Q	
	8.3×10^{-1}		Yaws et al. (1997)	Q	
	6.0×10^{-1}		Suzuki et al. (1992)	Q	233
	6.9×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	7.0×10^{-1}	6800	Duchowicz et al. (2020)	?	186, 21
			Kühne et al. (2005)	?	
	8.4×10^{-1}		Yaws (1999)	?	21
	7.0×10^{-1}		Abraham et al. (1990)	?	

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	272, 244
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	2.7×10^{-1}		Hilal et al. (2008)	Q	
	1.1		Modarresi et al. (2007)	Q	68
		7600	Kühne et al. (2005)	Q	
	7.9×10^{-1}		Yaffe et al. (2003)	Q	249, 273
	2.8×10^{-1}		Yao et al. (2002)	Q	230
	7.5×10^{-1}		English and Carroll (2001)	Q	231, 232
	6.9×10^{-1}		Katritzky et al. (1998)	Q	
	6.1×10^{-1}		Yaws et al. (1997)	Q	
	5.0×10^{-1}		Suzuki et al. (1992)	Q	233
	6.0×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	7.2×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		7200	Kühne et al. (2005)	?	
	5.6×10^{-2}		Yaws (1999)	?	21
	7.2×10^{-1}		Abraham et al. (1990)	?	
3-methyl-2-butanol $\text{C}_5\text{H}_{12}\text{O}$ [598-75-4] MXLMTQWGSQIYOW-UHFFFAOYSA-N	5.1×10^{-1}	7600	Brockbank (2013)	L	1
	5.4×10^{-1}	7800	Fenclová et al. (2010)	M	1
	5.6×10^{-1}		Duchowicz et al. (2020)	V	187
	2.1×10^{-1}		Duchowicz et al. (2020)	Q	
	2.1×10^{-1}		Wang et al. (2017)	Q	81, 239
	6.9×10^{-1}		Wang et al. (2017)	Q	81, 240
	4.2×10^{-1}		Wang et al. (2017)	Q	81, 241
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	272, 244
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	3.1×10^{-1}		Hilal et al. (2008)	Q	
	7.1×10^{-1}		Modarresi et al. (2007)	Q	68
		7600	Kühne et al. (2005)	Q	
	6.1×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	4.5×10^{-1}		Katritzky et al. (1998)	Q	
	5.4×10^{-1}		Yaws et al. (1997)	Q	
		7500	Kühne et al. (2005)	?	
	5.5×10^{-1}		Yaws (1999)	?	21
2,2-dimethyl-1-propanol $\text{C}_5\text{H}_{12}\text{O}$ [75-84-3] KPSSIOMAKSHJG-UHFFFAOYSA-N	3.0×10^{-1}	7800	Brockbank (2013)	L	1, 402
	1.9×10^{-1}		Duchowicz et al. (2020)	V	187
	1.9×10^{-1}		HSDB (2015)	V	
	5.7×10^{-1}		Yaws (2003)	X	259
	3.7×10^{-1}		Dupeux et al. (2022)	Q	260
	2.3×10^{-1}		Duchowicz et al. (2020)	Q	
	1.2×10^{-1}		Wang et al. (2017)	Q	81, 239
	5.9×10^{-1}		Wang et al. (2017)	Q	81, 240
	3.0×10^{-1}		Wang et al. (2017)	Q	81, 241
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	3.1×10^{-1}		Hilal et al. (2008)	Q	
	5.7×10^{-1}		Modarresi et al. (2007)	Q	68
		7600	Kühne et al. (2005)	Q	
	4.9×10^{-1}		Saxena and Hildemann (1996)	E	403
		7900	Kühne et al. (2005)	?	
1-hexanol $\text{C}_6\text{H}_{14}\text{O}$ [111-27-3] ZSIAUFGUXNUGDI-UHFFFAOYSA-N	7.6×10^{-1}	7800	Brockbank (2013)	L	1
	6.6×10^{-1}	8200	Plyasunov and Shock (2000)	L	
	5.7×10^{-1}	7300	Shunthirasingham et al. (2013)	M	
	5.1×10^{-1}	6100	Lei et al. (2007)	M	397
	3.9×10^{-1}	5800	Falabella et al. (2006)	M	11, 340
	3.8×10^{-1}		Souchon et al. (2004)	M	
	2.5×10^{-1}		van Ruth et al. (2002)	M	14
	7.3×10^{-1}		van Ruth and Villeneuve (2002)	M	14, 363
	1.6×10^{-1}		van Ruth et al. (2001)	M	14
	3.9×10^{-1}	5800	Gupta et al. (2000)	M	
	9.8×10^{-1}		Altschuh et al. (1999)	M	
	3.5×10^{-1}		Eger et al. (1999)	M	14
	5.8×10^{-1}		Merk and Riederer (1997)	M	
	6.4×10^{-1}		Li and Carr (1993)	M	
	6.9×10^{-1}		Rytting et al. (1978)	M	
	5.8×10^{-1}		Buttery et al. (1969)	M	
	5.3×10^{-1}		Mackay et al. (2006c)	V	
	5.3×10^{-1}		Mackay et al. (1995)	V	
	7.6×10^{-1}		Hwang et al. (1992)	V	
	1.7	5100	Djerki and Laub (1988)	V	
		8200	Abraham (1984)	V	
	6.4×10^{-1}		Hine and Mookerjee (1975)	V	
	6.4×10^{-1}		Butler et al. (1935)	V	
	5.2×10^{-1}		Yaws (2003)	X	259
	5.8×10^{-1}		Dupeux et al. (2022)	Q	260
	2.1×10^{-1}		Keshavarz et al. (2022)	Q	
	1.4		Duchowicz et al. (2020)	Q	300
	1.4×10^{-1}		Wang et al. (2017)	Q	81, 239
	5.0×10^{-1}		Wang et al. (2017)	Q	81, 240
	8.5×10^{-1}		Wang et al. (2017)	Q	81, 241
	6.4×10^{-1}		Li et al. (2014)	Q	242
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	272, 244
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	3.7×10^{-1}		Hilal et al. (2008)	Q	
	1.1		Modarresi et al. (2007)	Q	68
		7900	Kühne et al. (2005)	Q	
	4.1×10^{-1}		Yao et al. (2002)	Q	230, 268

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.2×10^{-1}		English and Carroll (2001)	Q	231, 232
	1.5		Katritzky et al. (1998)	Q	
	4.7×10^{-1}		Yaws et al. (1997)	Q	
	3.9×10^{-1}		Russell et al. (1992)	Q	280
	5.1×10^{-1}		Suzuki et al. (1992)	Q	233
	6.2×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	5.8×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		8400	Kühne et al. (2005)	?	
	4.7×10^{-1}		Yaws (1999)	?	21
	5.3×10^{-1}		Yaws and Yang (1992)	?	21
	6.9×10^{-1}		Abraham et al. (1990)	?	
2-hexanol $\text{C}_6\text{H}_{14}\text{O}$ [626-93-7] QNVRIHYSUZMSGM-UHFFFAOYSA-N	3.9×10^{-1}	8100	Brockbank (2013)	L	1
	5.2×10^{-1}		Plyasunov and Shock (2000)	L	
	4.8×10^{-1}		Merk and Riederer (1997)	M	
	4.0×10^{-1}		Duchowicz et al. (2020)	V	187
	4.2×10^{-1}		Yaws (2003)	X	259
	7.3×10^{-1}		Dupeux et al. (2022)	Q	260
	5.4×10^{-1}		Duchowicz et al. (2020)	Q	
	1.7×10^{-1}		Wang et al. (2017)	Q	81, 239
	4.6×10^{-1}		Wang et al. (2017)	Q	81, 240
	5.6×10^{-1}		Wang et al. (2017)	Q	81, 241
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	272, 244
	2.5×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	2.5×10^{-1}		Hilal et al. (2008)	Q	
	2.8×10^{-1}		Modarresi et al. (2007)	Q	68
	4.0×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	2.8×10^{-1}		Yao et al. (2002)	Q	230
	1.1		Katritzky et al. (1998)	Q	
	4.2×10^{-1}		Yaws et al. (1997)	Q	
	4.2×10^{-1}		Yaws (1999)	?	21
3-hexanol $\text{C}_6\text{H}_{14}\text{O}$ [623-37-0] ZOCHHNOQQHDWHG-UHFFFAOYSA-N	3.7×10^{-1}	8400	Brockbank (2013)	L	1
	4.2×10^{-1}	8400	Plyasunov and Shock (2000)	L	
	2.5×10^{-1}		Duchowicz et al. (2020)	V	187
	2.3×10^{-1}		Meylan and Howard (1991)	V	
	2.0×10^{-1}		Hine and Mookerjee (1975)	V	
	3.9×10^{-1}	8400	Cabani et al. (1975b)	T	
	2.2×10^{-1}		Yaws (2003)	X	238
	5.4×10^{-1}		Duchowicz et al. (2020)	Q	
	1.7×10^{-1}		Wang et al. (2017)	Q	81, 239
	5.3×10^{-1}		Wang et al. (2017)	Q	81, 240
	2.5×10^{-1}		Wang et al. (2017)	Q	81, 241
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	246

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.0×10^{-1}		Gharagheizi et al. (2010)	Q	247
	2.8×10^{-1}		Hilal et al. (2008)	Q	
	4.1×10^{-1}		Modarresi et al. (2007)	Q	68
	4.0×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	5.8×10^{-1}		English and Carroll (2001)	Q	231, 232
	4.1×10^{-1}		Yaws et al. (1997)	Q	
	4.8×10^{-1}		Suzuki et al. (1992)	Q	233
	5.6×10^{-1}		Meylan and Howard (1991)	Q	
	6.0×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	3.9×10^{-1}		Abraham et al. (1990)	?	
2-methyl-1-pentanol $\text{C}_6\text{H}_{14}\text{O}$ [105-30-6] PFNHSEQQEPMLNI-UHFFFAOYSA-N	4.6×10^{-1}		Plyasunov and Shock (2000)	L	
	2.3×10^{-1}		Duchowicz et al. (2020)	V	187
	2.3×10^{-1}		HSDB (2015)	V	
	5.4×10^{-1}		Duchowicz et al. (2020)	Q	
	1.7×10^{-1}		Wang et al. (2017)	Q	81, 239
	6.0×10^{-1}		Wang et al. (2017)	Q	81, 240
	5.5×10^{-1}		Wang et al. (2017)	Q	81, 241
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	272, 244
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	4.4×10^{-1}		Hilal et al. (2008)	Q	
	4.6×10^{-1}		Modarresi et al. (2007)	Q	68
	3.1×10^{-1}		Yaws et al. (1997)	Q	
	3.1×10^{-1}		Yaws (1999)	?	21
3-methyl-1-pentanol $\text{C}_6\text{H}_{14}\text{O}$ [589-35-5] IWTBVKIGCDZRPL-UHFFFAOYSA-N	7.5×10^{-1}	8600	Brockbank (2013)	L	1
	1.7×10^{-1}		Wang et al. (2017)	Q	81, 239
	6.8×10^{-1}		Wang et al. (2017)	Q	81, 240
	9.6×10^{-1}		Wang et al. (2017)	Q	81, 241
	3.3×10^{-1}		Gharagheizi et al. (2012)	Q	
	3.8×10^{-1}		Hilal et al. (2008)	Q	
2-methyl-2-pentanol $\text{C}_6\text{H}_{14}\text{O}$ [590-36-3] WFRBDWRZVBPBDO-UHFFFAOYSA-N	2.8×10^{-1}		Duchowicz et al. (2020)	V	187
	3.1×10^{-1}		Hine and Mookerjee (1975)	V	
	2.4×10^{-1}		Duchowicz et al. (2020)	Q	
	1.0×10^{-1}		Wang et al. (2017)	Q	81, 239
	5.1×10^{-1}		Wang et al. (2017)	Q	81, 240
	3.9×10^{-1}		Wang et al. (2017)	Q	81, 241
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	3.2×10^{-1}		Hilal et al. (2008)	Q	
	7.7×10^{-1}		Modarresi et al. (2007)	Q	68
	2.9×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	6.2×10^{-1}		English and Carroll (2001)	Q	231, 232
	6.7×10^{-1}		Katritzky et al. (1998)	Q	

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.0×10^{-1}		Yaws et al. (1997)	Q	
	3.9×10^{-1}		Suzuki et al. (1992)	Q	233
	4.7×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	3.1×10^{-1}		Abraham et al. (1990)	?	
3-methyl-2-pentanol $\text{C}_6\text{H}_{14}\text{O}$ [565-60-6] ZXNBBWHRUSXUFZ-UHFFFAOYSA-N	5.0×10^{-1}		Plyasunov and Shock (2000)	L	
	1.7×10^{-1}		Wang et al. (2017)	Q	81, 239
	8.1×10^{-1}		Wang et al. (2017)	Q	81, 240
	3.6×10^{-1}		Wang et al. (2017)	Q	81, 241
	4.0×10^{-1}		Yaffe et al. (2003)	Q	249, 273
	2.8×10^{-1}		Yaws et al. (1997)	Q	
4-methyl-2-pentanol $\text{C}_6\text{H}_{14}\text{O}$ [108-11-2] WVYWICLMDOOCFB-UHFFFAOYSA-N	2.2×10^{-1}	7300	Brockbank (2013)	L	1
	3.5×10^{-1}		Plyasunov and Shock (2000)	L	
	2.1×10^{-1}		Meylan and Howard (1991)	V	
	2.2×10^{-1}		Hine and Mookerjee (1975)	V	
	2.1×10^{-1}		Keshavarz et al. (2022)	Q	
	2.1×10^{-1}		Duchowicz et al. (2020)	Q	
	1.7×10^{-1}		Wang et al. (2017)	Q	81, 239
	5.6×10^{-1}		Wang et al. (2017)	Q	81, 240
	4.7×10^{-1}		Wang et al. (2017)	Q	81, 241
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	2.6×10^{-1}		Hilal et al. (2008)	Q	
	2.8×10^{-1}		Modarresi et al. (2007)	Q	68
		7900	Kühne et al. (2005)	Q	
	2.3×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	5.3×10^{-1}		Katritzky et al. (1998)	Q	
	1.9×10^{-1}		Yaws et al. (1997)	Q	
	4.0×10^{-1}		Suzuki et al. (1992)	Q	233
	5.6×10^{-1}		Meylan and Howard (1991)	Q	
	4.8×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	2.2×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		8700	Kühne et al. (2005)	?	
	2.1×10^{-1}		Yaws (1999)	?	21, 404
	2.2×10^{-1}		Abraham et al. (1990)	?	
2-methyl-3-pentanol $\text{C}_6\text{H}_{14}\text{O}$ [565-67-3] ISTJMQSHILQAEC-UHFFFAOYSA-N	2.9×10^{-1}		Hine and Mookerjee (1975)	V	
	1.7×10^{-1}		Wang et al. (2017)	Q	81, 239
	6.9×10^{-1}		Wang et al. (2017)	Q	81, 240
	1.4×10^{-1}		Wang et al. (2017)	Q	81, 241
	3.3×10^{-1}		Hilal et al. (2008)	Q	
	5.8×10^{-1}		Modarresi et al. (2007)	Q	68
	2.9×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	3.7×10^{-1}		English and Carroll (2001)	Q	231, 275
	3.7×10^{-1}		Yaws et al. (1997)	Q	

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.2×10^{-1}		Suzuki et al. (1992)	Q	233
	5.2×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	2.9×10^{-1}		Abraham et al. (1990)	?	
3-methyl-3-pentanol $\text{C}_6\text{H}_{14}\text{O}$ [77-74-7] FRDAATYAJDYRNW-UHFFFAOYSA-N	2.4×10^{-1}	7300	Brockbank (2013)	L	1
	4.7×10^{-1}		Plyasunov and Shock (2000)	L	
	4.8×10^{-1}		Merk and Riederer (1997)	M	
	5.6×10^{-1}		Duchowicz et al. (2020)	V	187
	2.4×10^{-1}		Duchowicz et al. (2020)	Q	
	1.0×10^{-1}		Wang et al. (2017)	Q	81, 239
	5.5×10^{-1}		Wang et al. (2017)	Q	81, 240
	2.8×10^{-1}		Wang et al. (2017)	Q	81, 241
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	2.1×10^{-1}		Hilal et al. (2008)	Q	
	3.3×10^{-1}		Modarresi et al. (2007)	Q	68
	2.9×10^{-1}		Yaffe et al. (2003)	Q	249, 273
	5.6×10^{-1}		Katritzky et al. (1998)	Q	
	7.0×10^{-1}		Yaws et al. (1997)	Q	
2-ethyl-1-butanol $\text{C}_6\text{H}_{14}\text{O}$ [97-95-0] TZYRSLHNPKEFV-UHFFFAOYSA-N	5.4×10^{-1}		Plyasunov and Shock (2000)	L	
	1.9×10^{-1}		Duchowicz et al. (2020)	V	187
	5.4×10^{-1}		Duchowicz et al. (2020)	Q	
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	4.7×10^{-1}		Hilal et al. (2008)	Q	
	5.5×10^{-1}		Modarresi et al. (2007)	Q	68
	3.5×10^{-1}		Yao et al. (2002)	Q	230
	2.0		Katritzky et al. (1998)	Q	
	4.8×10^{-1}		Yaws et al. (1997)	Q	
	4.8×10^{-1}		Yaws (1999)	?	21
2,2-dimethyl-1-butanol $\text{C}_6\text{H}_{14}\text{O}$ [1185-33-7] XRMVWAKMXZNZIL-UHFFFAOYSA-N	1.0×10^{-1}		Wang et al. (2017)	Q	81, 239
	5.4×10^{-1}		Wang et al. (2017)	Q	81, 240
	2.7×10^{-1}		Wang et al. (2017)	Q	81, 241
	4.0×10^{-1}		Yaffe et al. (2003)	Q	249, 273
	2.8×10^{-1}		Yaws et al. (1997)	Q	
2,3-dimethyl-1-butanol $\text{C}_6\text{H}_{14}\text{O}$ [19550-30-2] SXSWMAUXEHKFGX-UHFFFAOYSA-N	1.7×10^{-1}		Wang et al. (2017)	Q	81, 239
	9.1×10^{-1}		Wang et al. (2017)	Q	81, 240
	5.1×10^{-1}		Wang et al. (2017)	Q	81, 241
	8.2×10^{-1}		Yaws et al. (1997)	Q	
	4.2×10^{-1}		Suzuki et al. (1992)	Q	405, 233
	4.7×10^{-1}		Nirmalakhandan and Speece (1988)	Q	

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3-dimethyl-2-butanol $\text{C}_6\text{H}_{14}\text{O}$ [594-60-5] IKECULIHBUCAKR-UHFFFAOYSA-N	3.8×10^{-1} 9.9×10^{-1} 3.0×10^{-1} 9.3×10^{-2} 1.2×10^{-1} 6.3×10^{-1} 3.0×10^{-1} 2.0×10^{-1} 2.4×10^{-1} 1.0 6.0×10^{-1}		Plyasunov and Shock (2000) Duchowicz et al. (2020) Hine and Mookerjee (1975) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998)	L V V Q Q Q Q Q Q Q Q	187 406 81, 239 81, 240 81, 241 68 249, 250
3,3-dimethyl-1-butanol $\text{C}_6\text{H}_{14}\text{O}$ [624-95-3] DUXCSEISVMREAX-UHFFFAOYSA-N	1.0×10^{-1} 5.6×10^{-1} 1.6 2.4×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Gharagheizi et al. (2012)	Q Q Q Q	81, 239 81, 240 81, 241
3,3-dimethyl-2-butanol $\text{C}_6\text{H}_{14}\text{O}$ [464-07-3] DFOXKPDFWGNLJU-UHFFFAOYSA-N	1.2×10^{-1} 5.3×10^{-1} 2.0×10^{-1} 5.6×10^{-1} 4.0×10^{-1} 4.9×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015) Yaffe et al. (2003) Yaws et al. (1997)	Q Q Q Q Q Q	81, 239 81, 240 81, 241 100 249, 250
2,2-bis(hydroxymethyl)-1-butanol $\text{C}_6\text{H}_{14}\text{O}_3$ [77-99-6] ZJCCRDAZUWHFQH-UHFFFAOYSA-N	1.2×10^6 8.8×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
1-heptanol $\text{C}_7\text{H}_{16}\text{O}$ [111-70-6] BBMCTIGTTCKYKF-UHFFFAOYSA-N	5.3×10^{-1} 5.4×10^{-1} 3.8×10^{-1} 3.6×10^{-1} 8.6×10^{-1} 1.8×10^{-1} 6.2×10^{-1} 6.2×10^{-1} 6.2×10^{-1} 4.6 4.9×10^{-1} 5.3×10^{-1} 5.2×10^{-1} 5.2×10^{-1} 4.6×10^{-1} 2.8×10^{-1} 1.4 3.9×10^{-1} 2.5×10^{-1}	8200 8600 7200 6300 5300 8700	Brockbank (2013) Plyasunov and Shock (2000) Shunthirasingham et al. (2013) Lei et al. (2007) Altschuh et al. (1999) Shiu and Mackay (1997) Mackay et al. (2006c) Shiu and Mackay (1997) Mackay et al. (1995) Djerki and Laub (1988) Abraham (1984) Hine and Mookerjee (1975) Butler et al. (1935) Yaws (2003) Dupeux et al. (2022) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	L L M M M M V V V V V V X Q Q Q Q Q	1 397 259 260 272, 244 245

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	3.0×10^{-1}		Hilal et al. (2008)	Q	
	7.3×10^{-1}	8300	Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	
	1.9×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	2.9×10^{-1}		Yao et al. (2002)	Q	230
	5.0×10^{-1}		English and Carroll (2001)	Q	231, 232
	1.3		Katritzky et al. (1998)	Q	
	5.2×10^{-1}		Yaws et al. (1997)	Q	
	1.8×10^{-1}		Russell et al. (1992)	Q	280
	3.9×10^{-1}		Suzuki et al. (1992)	Q	233
	5.0×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	3.8×10^{-1}		Rumble (2021)	?	407
	5.2×10^{-1}	9400	Duchowicz et al. (2020)	?	186, 21
			Kühne et al. (2005)	?	
	5.2×10^{-1}		Yaws (1999)	?	21
	8.5×10^{-1}		Yaws and Yang (1992)	?	21
	5.0×10^{-1}		Abraham et al. (1990)	?	
2-heptanol $\text{C}_7\text{H}_{16}\text{O}$ [543-49-7] CETWDUZRCINIHU-UHFFFAOYSA-N	3.3×10^{-1}	8700	Brockbank (2013)	L	1
	4.1×10^{-1}		Plyasunov and Shock (2000)	L	
	1.8×10^{-1}		Duchowicz et al. (2020)	V	187
	1.2×10^{-1}		Yaws (2003)	X	259
	1.2×10^{-1}		Yaws (2003)	X	238, 38
	5.8×10^{-1}		Dupeux et al. (2022)	Q	260
	5.5×10^{-1}		Duchowicz et al. (2020)	Q	
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	1.2×10^{-1}		Gharagheizi et al. (2010)	Q	247
	2.0×10^{-1}		Hilal et al. (2008)	Q	
	2.5×10^{-1}		Modarresi et al. (2007)	Q	68
	2.6×10^{-1}		Yao et al. (2002)	Q	230
	1.2×10^{-1}		Yaws et al. (1997)	Q	
	1.7×10^{-1}		Yaws (1999)	?	21, 38
3-heptanol $\text{C}_7\text{H}_{16}\text{O}$ [589-82-2] RZKSECIXORKHQS-UHFFFAOYSA-N	3.2×10^{-1}	9100	Brockbank (2013)	L	1
	3.1×10^{-1}		Plyasunov and Shock (2000)	L	
	3.5×10^{-1}		Duchowicz et al. (2020)	V	187
	5.5×10^{-1}		Duchowicz et al. (2020)	Q	
	1.3×10^{-1}		Wang et al. (2017)	Q	81, 239
	4.1×10^{-1}		Wang et al. (2017)	Q	81, 240
	2.2×10^{-1}		Wang et al. (2017)	Q	81, 241
	1.9×10^{-1}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	2.5×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	246

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.0×10^{-1}		Modarresi et al. (2007)	Q	68
	3.7×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	5.3×10^{-1}		Katritzky et al. (1998)	Q	
	2.1×10^{-1}		Yaws et al. (1997)	Q	
4-heptanol $C_7H_{16}O$ [589-55-9] YVBCULSIZWMTFY-UHFFFAOYSA-N	3.4×10^{-1}	9100	Plyasunov and Shock (2000)	L	
	3.5×10^{-1}	9100	Cabani et al. (1975b)	T	
	1.8×10^{-1}		Gharagheizi et al. (2012)	Q	
	2.2×10^{-1}		Yaws et al. (1997)	Q	
2-methyl-1-hexanol $C_7H_{16}O$ [624-22-6] LCFKURIJYJNRU-UHFFFAOYSA-N	6.9×10^{-1}	11000	Hiatt (2013)	M	
	1.7×10^{-1}		Yaws et al. (1997)	Q	
3-methyl-1-hexanol $C_7H_{16}O$ [13231-81-7] YGZVAQICDGBHMD-UHFFFAOYSA-N	1.3×10^{-1}		Yaws et al. (1997)	Q	
4-methyl-1-hexanol $C_7H_{16}O$ [818-49-5] YNPVLNWKVZZBTM-UHFFFAOYSA-N	1.3×10^{-1}		Yaws et al. (1997)	Q	
5-methyl-1-hexanol $C_7H_{16}O$ [627-98-5] ZVHAANQQQZVVD-UHFFFAOYSA-N	2.8×10^{-1}		Yaws et al. (1997)	Q	
2-methyl-2-hexanol $C_7H_{16}O$ [625-23-0] KRIMXCDMVRMCTC-UHFFFAOYSA-N	9.1×10^{-2}		Wang et al. (2017)	Q	81, 239
	4.0×10^{-1}		Wang et al. (2017)	Q	81, 240
	3.8×10^{-1}		Wang et al. (2017)	Q	81, 241
	6.7×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	6.4×10^{-1}		Yaws et al. (1997)	Q	
3-methyl-2-hexanol $C_7H_{16}O$ [2313-65-7] IRLSKJITMWPWNY-UHFFFAOYSA-N	1.5×10^{-1}		Yaws (2003)	X	238
	1.7×10^{-1}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-1}		Gharagheizi et al. (2010)	Q	247
	4.9×10^{-1}		Yaws et al. (1997)	Q	
4-methyl-2-hexanol $C_7H_{16}O$ [2313-61-3] KZUBXUKRWLMPIO-UHFFFAOYSA-N	1.6×10^{-1}		Wang et al. (2017)	Q	81, 239
	5.1×10^{-1}		Wang et al. (2017)	Q	81, 240
	4.7×10^{-1}		Wang et al. (2017)	Q	81, 241
	5.0×10^{-1}		Yaws et al. (1997)	Q	

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
5-methyl-2-hexanol $\text{C}_7\text{H}_{16}\text{O}$ [627-59-8] ZDVJGWXFXGJSIU-UHFFFAOYSA-N	1.6×10^{-1} 4.3×10^{-1} 5.9×10^{-1} 2.4×10^{-1} 4.2×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Gharagheizi et al. (2012) Yaws et al. (1997)	Q Q Q Q Q	81, 239 81, 240 81, 241
2-methyl-3-hexanol $\text{C}_7\text{H}_{16}\text{O}$ [617-29-8] RGRUUTLDBCWYBL-UHFFFAOYSA-N	5.8×10^{-1}		Yaws et al. (1997)	Q	
3-methyl-3-hexanol $\text{C}_7\text{H}_{16}\text{O}$ [597-96-6] KYWJZCSJMOILIZ-UHFFFAOYSA-N	9.1×10^{-2} 4.7×10^{-1} 2.6×10^{-1} 9.2×10^{-1} 7.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Yaffe et al. (2003) Yaws et al. (1997)	Q Q Q Q Q	81, 239 81, 240 81, 241 249, 273
4-methyl-3-hexanol $\text{C}_7\text{H}_{16}\text{O}$ [615-29-2] NZPGYIBESMMUFU-UHFFFAOYSA-N	1.1×10^{-1} 1.0×10^{-1} 1.3×10^{-1} 5.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
5-methyl-3-hexanol $\text{C}_7\text{H}_{16}\text{O}$ [623-55-2] RGCZULIFYUPTAR-UHFFFAOYSA-N	1.6×10^{-1} 1.5×10^{-1} 1.2×10^{-1} 5.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2-ethyl-1-pentanol $\text{C}_7\text{H}_{16}\text{O}$ [27522-11-8] UKFQWAVMIMCNEH-UHFFFAOYSA-N	1.0×10^{-1} 1.1×10^{-1} 1.1×10^{-1} 3.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3-ethyl-1-pentanol $\text{C}_7\text{H}_{16}\text{O}$ [66225-51-2] DVEFUHVVVWJONKR-UHFFFAOYSA-N	9.1×10^{-2} 1.7×10^{-1} 1.2×10^{-1} 3.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3-ethyl-2-pentanol $\text{C}_7\text{H}_{16}\text{O}$ [609-27-8] NEHRITNOSGFGGS-UHFFFAOYSA-N	1.1×10^{-1} 1.7×10^{-1} 1.2×10^{-1} 4.9×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3-ethyl-3-pentanol $\text{C}_7\text{H}_{16}\text{O}$ [597-49-9] XKIRHOWVQWCYBT-UHFFFAOYSA-N	3.0×10^{-1} 1.2 1.1		Plyasunov and Shock (2000) Yaffe et al. (2003) Yaws et al. (1997)	L Q Q	249, 250

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2-dimethyl-1-pentanol $\text{C}_7\text{H}_{16}\text{O}$ [2370-12-9] QTOMCRXZFDHJOL-UHFFFAOYSA-N	9.6×10^{-2} 5.4×10^{-2} 1.1×10^{-1} 3.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,3-dimethyl-1-pentanol $\text{C}_7\text{H}_{16}\text{O}$ [10143-23-4] MIBBFRQOCRYDDB-UHFFFAOYSA-N	3.6×10^{-1}		Yaws et al. (1997)	Q	
2,4-dimethyl-1-pentanol $\text{C}_7\text{H}_{16}\text{O}$ [6305-71-1] OVVDHYEQJKMD-UHFFFAOYSA-N	9.4×10^{-2} 9.5×10^{-2} 1.0×10^{-1} 3.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3,3-dimethyl-1-pentanol $\text{C}_7\text{H}_{16}\text{O}$ [19264-94-9] IFDHMBHPLKHMOY-UHFFFAOYSA-N	3.5×10^{-1}		Yaws et al. (1997)	Q	
3,4-dimethyl-1-pentanol $\text{C}_7\text{H}_{16}\text{O}$ [6570-87-2] SVJNECJVNWYQG-UHFFFAOYSA-N	1.6×10^{-1} 1.6×10^{-1} 1.1×10^{-1} 3.5×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
4,4-dimethyl-1-pentanol $\text{C}_7\text{H}_{16}\text{O}$ [3121-79-7] OWCNPTHAWPMOJU-UHFFFAOYSA-N	8.5×10^{-2} 1.4×10^{-1} 1.1×10^{-1} 3.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,3-dimethyl-2-pentanol $\text{C}_7\text{H}_{16}\text{O}$ [4911-70-0] YRSIFCHKXFKNME-UHFFFAOYSA-N	9.2×10^{-1} 8.6×10^{-1}		Yaffe et al. (2003) Yaws et al. (1997)	Q Q	249, 250
2,4-dimethyl-2-pentanol $\text{C}_7\text{H}_{16}\text{O}$ [625-06-9] FMLSQAUAAGVTJO-UHFFFAOYSA-N	4.0×10^{-1} 5.7×10^{-1}		Yaffe et al. (2003) Yaws et al. (1997)	Q Q	249, 273
3,3-dimethyl-2-pentanol $\text{C}_7\text{H}_{16}\text{O}$ [19781-24-9] FCUOIGTWJDBTHR-UHFFFAOYSA-N	9.0×10^{-2} 1.0×10^{-1} 1.2×10^{-1} 5.5×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3,4-dimethyl-2-pentanol $\text{C}_7\text{H}_{16}\text{O}$ [64502-86-9] SODKTKJZYBOMMT-UHFFFAOYSA-N	1.8×10^{-1} 4.7×10^{-1}		Gharagheizi et al. (2012) Yaws et al. (1997)	Q Q	

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,4-dimethyl-2-pentanol $\text{C}_7\text{H}_{16}\text{O}$ [6144-93-0] OIBKGNPMOMMSSI-UHFFFAOYSA-N	6.8×10^{-1}		Yaws et al. (1997)	Q	
2,2-dimethyl-3-pentanol $\text{C}_7\text{H}_{16}\text{O}$ [3970-62-5] HMSVXZJWPVIVIV-UHFFFAOYSA-N	4.0×10^{-1} 4.0×10^{-1}		Yaffe et al. (2003) Yaws et al. (1997)	Q Q	249, 250
2,3-dimethyl-3-pentanol $\text{C}_7\text{H}_{16}\text{O}$ [595-41-5] RFZJHSHNHYIRNE-UHFFFAOYSA-N	9.2×10^{-1} 9.2×10^{-1}		Yaffe et al. (2003) Yaws et al. (1997)	Q Q	249, 250
2,4-dimethyl-3-pentanol $\text{C}_7\text{H}_{16}\text{O}$ [600-36-2] BAYAKMPRFGNNFW-UHFFFAOYSA-N	4.0×10^{-1} 3.8×10^{-1}		Yaffe et al. (2003) Yaws et al. (1997)	Q Q	249, 250
2-ethyl-2-methyl-1-butanol $\text{C}_7\text{H}_{16}\text{O}$ [18371-13-6] KMWHQWJVSALJAW-UHFFFAOYSA-N	4.3×10^{-1}		Yaws et al. (1997)	Q	
2-ethyl-3-methyl-1-butanol $\text{C}_7\text{H}_{16}\text{O}$ [32444-34-1] OXFFPTMSBXLZ-UHFFFAOYSA-N	3.8×10^{-1}		Yaws et al. (1997)	Q	
2,2,3-trimethyl-1-butanol $\text{C}_7\text{H}_{16}\text{O}$ [55505-23-2] FAMOAJMEFGYSNY-UHFFFAOYSA-N	8.3×10^{-2} 6.2×10^{-2} 1.0×10^{-1} 4.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,3,3-trimethyl-1-butanol $\text{C}_7\text{H}_{16}\text{O}$ [36794-64-6] IWWWVOLLGZHKFWKK-UHFFFAOYSA-N	7.9×10^{-2} 1.0×10^{-1} 1.0×10^{-1} 4.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,3,3-trimethyl-2-butanol $\text{C}_7\text{H}_{16}\text{O}$ [594-83-2] OKXVARYIKDXAEO-UHFFFAOYSA-N	2.7×10^{-1}		Yaws et al. (1997)	Q	

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-octanol $\text{C}_8\text{H}_{18}\text{O}$ [111-87-5] KBPLFHHGFOOTCA-UHFFFAOYSA-N	3.4×10^{-1}	9000	Brockbank (2013)	L	1
	4.1×10^{-1}	8900	Plyasunov and Shock (2000)	L	
	1.7×10^{-1}	7000	Wu et al. (2022a)	M	
	2.1×10^{-1}	6900	Shunthirasingham et al. (2013)	M	
	1.9×10^{-1}	6000	Lei et al. (2007)	M	397
	6.5×10^{-1}		Altschuh et al. (1999)	M	
	2.7×10^{-1}		Eger et al. (1999)	M	14
	4.0×10^{-1}		Buttery et al. (1969)	M	
	3.8×10^{-1}		Mackay et al. (2006c)	V	
	2.4×10^{-1}		Mackay et al. (1995)	V	
		8900	Abraham (1984)	V	
	4.1×10^{-1}		Hine and Mookerjee (1975)	V	
	4.1×10^{-1}		Butler et al. (1935)	V	
	3.9×10^{-1}		Yaws (2003)	X	259
	3.6×10^{-1}		Dupeux et al. (2022)	Q	260
	3.8×10^{-1}		Keshavarz et al. (2022)	Q	
	1.4		Duchowicz et al. (2020)	Q	300
	3.3×10^{-1}		Savary et al. (2014)	Q	
	4.1×10^{-1}		Li et al. (2014)	Q	242
	2.5×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	2.5×10^{-1}		Hilal et al. (2008)	Q	
	5.6×10^{-1}		Modarresi et al. (2007)	Q	68
		8600	Kühne et al. (2005)	Q	
	3.2×10^{-1}		Yaffe et al. (2003)	Q	249, 273
	2.6×10^{-1}		Yao et al. (2002)	Q	230
	4.0×10^{-1}		English and Carroll (2001)	Q	231, 261
	1.2		Katritzky et al. (1998)	Q	
	3.9×10^{-1}		Yaws et al. (1997)	Q	
	3.0×10^{-1}		Suzuki et al. (1992)	Q	233
	3.9×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	4.0×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		7700	Kühne et al. (2005)	?	
	3.9×10^{-1}		Yaws (1999)	?	21
	6.2×10^{-1}		Yaws and Yang (1992)	?	21
	4.0×10^{-1}		Abraham et al. (1990)	?	
2-octanol $\text{C}_8\text{H}_{18}\text{O}$ [123-96-6] SJWFXCIHNDVPSH-UHFFFAOYSA-N	2.7×10^{-1}	9600	Brockbank (2013)	L	1
	3.5×10^{-1}		Plyasunov and Shock (2000)	L	
	2.7×10^{-1}		HSDB (2015)	V	
	2.7×10^{-1}		Meylan and Howard (1991)	V	
	9.6×10^{-1}		Yaws (2003)	X	259
	4.2×10^{-1}		Dupeux et al. (2022)	Q	260
	3.8×10^{-1}		Keshavarz et al. (2022)	Q	
	5.6×10^{-1}		Duchowicz et al. (2020)	Q	300

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.5×10^{-1}		Raventos-Duran et al. (2010)	Q	272, 244
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	1.7×10^{-1}		Hilal et al. (2008)	Q	
	2.0×10^{-1}		Modarresi et al. (2007)	Q	68
	3.0×10^{-1}		Yaws et al. (1997)	Q	
	3.2×10^{-1}		Meylan and Howard (1991)	Q	
	8.0×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	9.6×10^{-1}		Yaws (1999)	?	21
3-octanol $\text{C}_8\text{H}_{18}\text{O}$ [589-98-0] NMRBPVERJPACX-UHFFFAOYSA-N	3.2×10^{-1}	8300	Plyasunov and Shock (2000)	L	
	1.2×10^{-1}		Wu et al. (2022a)	M	
	1.3×10^{-1}		Yaws (2003)	X	238
	1.1×10^{-1}		Wang et al. (2017)	Q	81, 239
	3.2×10^{-1}		Wang et al. (2017)	Q	81, 240
	2.3×10^{-1}		Wang et al. (2017)	Q	81, 241
	1.2×10^{-1}		Gharagheizi et al. (2012)	Q	
	7.9×10^{-2}		Gharagheizi et al. (2010)	Q	247
	3.1×10^{-1}	Yaws et al. (1997)	Q		
4-octanol $\text{C}_8\text{H}_{18}\text{O}$ [589-62-8] WOFPPJOZXUTRAU-UHFFFAOYSA-N	1.3×10^{-1}		Gharagheizi et al. (2012)	Q	
	2.9×10^{-1}		Yaws et al. (1997)	Q	
2-methyl-1-heptanol $\text{C}_8\text{H}_{18}\text{O}$ [60435-70-3] QZSESEQBMSFFHRY-UHFFFAOYSA-N	9.1×10^{-2}		Yaws (2003)	X	238
	5.7×10^{-2}		Gharagheizi et al. (2012)	Q	
	7.4×10^{-2}		Gharagheizi et al. (2010)	Q	247
	3.4×10^{-1}		Yaws et al. (1997)	Q	408
3-methyl-1-heptanol $\text{C}_8\text{H}_{18}\text{O}$ [1070-32-2] MUPPEBVXFKNMCI-UHFFFAOYSA-N	8.9×10^{-2}		Yaws (2003)	X	238
	7.5×10^{-2}		Gharagheizi et al. (2010)	Q	247
	2.1×10^{-1}		Yaws et al. (1997)	Q	
4-methyl-1-heptanol $\text{C}_8\text{H}_{18}\text{O}$ [817-91-4] LLUQZGDMUIMPTC-UHFFFAOYSA-N	9.3×10^{-2}		Yaws (2003)	X	238
	7.5×10^{-2}		Gharagheizi et al. (2010)	Q	247
	2.3×10^{-1}		Yaws et al. (1997)	Q	
5-methyl-1-heptanol $\text{C}_8\text{H}_{18}\text{O}$ [7212-53-5] KFARNLMRENFOHE-UHFFFAOYSA-N	1.1×10^{-1}		Gharagheizi et al. (2012)	Q	
	2.1×10^{-1}		Yaws et al. (1997)	Q	
6-methyl-1-heptanol $\text{C}_8\text{H}_{18}\text{O}$ [1653-40-3] BWDBEAQIHAEVLV-UHFFFAOYSA-N	1.1×10^{-1}		Duchowicz et al. (2020)	V	187
	1.1×10^{-1}		HSDB (2015)	V	
	5.6×10^{-1}		Duchowicz et al. (2020)	Q	
	2.0×10^{-1}		Yaws et al. (1997)	Q	

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-2-heptanol $\text{C}_8\text{H}_{18}\text{O}$ [625-25-2] ACBMYYZWKYLIP-UHFFFAOYSA-N	5.1×10^{-1}		Yaws et al. (1997)	Q	
3-methyl-2-heptanol $\text{C}_8\text{H}_{18}\text{O}$ [31367-46-1] SZERMVMTUUYAML-UHFFFAOYSA-N	7.8×10^{-2} 9.5×10^{-2} 7.9×10^{-2} 3.9×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
4-methyl-2-heptanol $\text{C}_8\text{H}_{18}\text{O}$ [56298-90-9] GUHWHNUGIGOSCN-UHFFFAOYSA-N	1.6×10^{-1} 3.4×10^{-1}		Gharagheizi et al. (2012) Yaws et al. (1997)	Q Q	
5-methyl-2-heptanol $\text{C}_8\text{H}_{18}\text{O}$ [54630-50-1] FYMBAYNKBWGEIK-UHFFFAOYSA-N	1.0×10^{-1} 1.7×10^{-1} 7.7×10^{-2} 3.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
6-methyl-2-heptanol $\text{C}_8\text{H}_{18}\text{O}$ [4730-22-7] FCOUHTHQYOMLJT-UHFFFAOYSA-N	1.6×10^{-1} 3.3×10^{-1}		Gharagheizi et al. (2012) Yaws et al. (1997)	Q Q	
2-methyl-3-heptanol $\text{C}_8\text{H}_{18}\text{O}$ [18720-62-2] QGVFLDUEHSIZIG-UHFFFAOYSA-N	3.8×10^{-1}		Yaws et al. (1997)	Q	
3-methyl-3-heptanol $\text{C}_8\text{H}_{18}\text{O}$ [5582-82-1] PQOSNJHBSNZITJ-UHFFFAOYSA-N	2.9×10^{-1}		Yaws et al. (1997)	Q	
4-methyl-3-heptanol $\text{C}_8\text{H}_{18}\text{O}$ [14979-39-6] BKQICAFUAMYRLZ-UHFFFAOYSA-N	7.4×10^{-2} 4.7×10^{-2} 8.2×10^{-2} 5.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
5-methyl-3-heptanol $\text{C}_8\text{H}_{18}\text{O}$ [18720-65-5] SECKOSOTZOBWEI-UHFFFAOYSA-N	8.7×10^{-2} 6.6×10^{-2} 7.9×10^{-2} 5.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
6-methyl-3-heptanol $\text{C}_8\text{H}_{18}\text{O}$ [18720-66-6] MNBIBGDICHMQFN-UHFFFAOYSA-N	8.8×10^{-2} 7.9×10^{-2} 7.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-4-heptanol $\text{C}_8\text{H}_{18}\text{O}$ [21570-35-4] QXPLZEKPCGUWEM-UHFFFAOYSA-N	3.9×10^{-1}		Yaws et al. (1997)	Q	
3-methyl-4-heptanol $\text{C}_8\text{H}_{18}\text{O}$ [1838-73-9] JMRDKKYZLXDPLN-UHFFFAOYSA-N	8.2×10^{-2} 6.2×10^{-2} 8.2×10^{-2} 4.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
4-methyl-4-heptanol $\text{C}_8\text{H}_{18}\text{O}$ [598-01-6] IQXKGRKRIRMQCQ-UHFFFAOYSA-N	4.5×10^{-1}		Yaws et al. (1997)	Q	
2-ethyl-1-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [104-76-7] YIWUKEYIRIRTPP-UHFFFAOYSA-N	4.6×10^{-1} 1.5×10^{-1} 3.7×10^{-1} 3.8×10^{-1} 5.6×10^{-1} 7.0×10^{-2} 2.5×10^{-1} 3.1×10^{-1} 3.1×10^{-1} 3.1×10^{-1} 4.0×10^{-1} 1.1×10^{-1} 4.3×10^{-1} 4.2×10^{-2}	7200	Plyasunov and Shock (2000) Wu et al. (2022a) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yao et al. (2002) Yaws et al. (1997) Yaws (1999)	L M V V Q Q Q Q Q Q Q Q Q ?	187 272, 244 245 246 68 230, 268 21
3-ethyl-1-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [41065-95-6] LWWJDXKGGQVEZKT-UHFFFAOYSA-N	7.0×10^{-2} 9.5×10^{-2} 7.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-ethyl-1-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [66576-32-7] RLGDVTUGYZAYIX-UHFFFAOYSA-N	7.0×10^{-2} 9.5×10^{-2} 7.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyl-1-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [2370-13-0] GSSDZVRLQDXOPL-UHFFFAOYSA-N	4.9×10^{-1}		Yaws et al. (1997)	Q	
2,3-dimethyl-1-hexanol $\text{C}_8\text{H}_{18}\text{O}$ HIYTVAULOHUDEC-UHFFFAOYSA-N	7.0×10^{-2} 5.5×10^{-2} 6.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4-dimethyl-1-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [3965-59-1] GDRBQWCGBCJTLB-UHFFFAOYSA-N	6.9×10^{-2} 5.7×10^{-2} 6.8×10^{-2} 4.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,5-dimethyl-1-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [6886-16-4] OBOHUKJIPIBYTA-UHFFFAOYSA-N	6.5×10^{-2} 6.4×10^{-2} 6.8×10^{-2} 4.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3,3-dimethyl-1-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [10524-70-6] RAKYQWCHMSXUEG-UHFFFAOYSA-N	5.7×10^{-2} 1.0×10^{-1} 7.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyl-1-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [66576-57-6] QVFKMROLSPXCIX-UHFFFAOYSA-N	6.3×10^{-2} 9.9×10^{-2} 7.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,5-dimethyl-1-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [13501-73-0] WETBJXIDTZXCBL-UHFFFAOYSA-N	6.1×10^{-2} 1.1×10^{-1} 7.0×10^{-2} 3.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
4,4-dimethyl-1-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [6481-95-4] VZWIUKUDEGQHIO-UHFFFAOYSA-N	5.6×10^{-2} 1.0×10^{-1} 7.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,5-dimethyl-1-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [60564-76-3] QABJATQYUASJEM-UHFFFAOYSA-N	6.2×10^{-2} 1.0×10^{-1} 7.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5,5-dimethyl-1-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [2768-18-5] QYFVEEMPFRFRFNN-UHFFFAOYSA-N	5.6×10^{-2} 1.0×10^{-1} 7.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-ethyl-2-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [24448-19-9] YBQZSEZVMFENOM-UHFFFAOYSA-N	7.7×10^{-2} 1.0×10^{-1} 7.9×10^{-2} 5.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
4-ethyl-2-hexanol $\text{C}_8\text{H}_{18}\text{O}$ ALAPJJMGVQNJIU-UHFFFAOYSA-N	7.7×10^{-2} 1.5×10^{-1} 7.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3-dimethyl-2-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [19550-03-9] BFKOEFFCVMWPF-UHFFFAOYSA-N	7.0×10^{-1}		Yaws et al. (1997)	Q	
2,4-dimethyl-2-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [42328-76-7] RTRZHEPXWQXCGI-UHFFFAOYSA-N	8.9×10^{-1}		Yaws et al. (1997)	Q	
2,5-dimethyl-2-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [3730-60-7] JPUIYNHIEXIFMV-UHFFFAOYSA-N	8.5×10^{-1}		Yaws et al. (1997)	Q	
3,3-dimethyl-2-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [22025-20-3] LTTHCWFLXSQOD-UHFFFAOYSA-N	7.5×10^{-2} 5.5×10^{-2} 7.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4-dimethyl-2-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [19550-05-1] LBJWJHMCZHLQU-UHFFFAOYSA-N	6.8×10^{-2} 1.1×10^{-1} 7.7×10^{-2} 5.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3,5-dimethyl-2-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [66576-27-0] VGGMROOHXNLMTP-UHFFFAOYSA-N	8.1×10^{-2} 8.1×10^{-2} 7.7×10^{-2} 7.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
4,4-dimethyl-2-hexanol $\text{C}_8\text{H}_{18}\text{O}$ CJGWLHDFPXIKQX-UHFFFAOYSA-N	7.2×10^{-2} 1.3×10^{-1} 7.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,5-dimethyl-2-hexanol $\text{C}_8\text{H}_{18}\text{O}$ KHSOOQUMPPYGAW-UHFFFAOYSA-N	7.9×10^{-2} 1.3×10^{-1} 7.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5,5-dimethyl-2-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [31841-77-7] NMSUCVXVCHZTEH-UHFFFAOYSA-N	6.7×10^{-2} 1.4×10^{-1} 7.4×10^{-2} 6.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3-ethyl-3-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [597-76-2] WNDLTOTUHMHNOC-UHFFFAOYSA-N	7.2×10^{-1}		Yaws et al. (1997)	Q	

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-ethyl-3-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [19780-44-0] BOJLCKCKQMGKD-UHFFFAOYSA-N	1.3×10^{-1} 8.2×10^{-2} 6.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	238 247
2,2-dimethyl-3-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [4209-90-9] PFHLGQKVKALLMD-UHFFFAOYSA-N	6.2×10^{-2} 3.4×10^{-2} 8.1×10^{-2} 7.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,3-dimethyl-3-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [4166-46-5] CGWJMIUMPDDHQC-UHFFFAOYSA-N	7.4×10^{-1}		Yaws et al. (1997)	Q	
2,4-dimethyl-3-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [13432-25-2] UCRQJBCLZKHOGX-UHFFFAOYSA-N	7.0×10^{-2} 3.7×10^{-2} 8.1×10^{-2} 7.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,5-dimethyl-3-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [19550-07-3] SNKTZHPKPYBPT-UHFFFAOYSA-N	7.2×10^{-1}		Yaws et al. (1997)	Q	
3,4-dimethyl-3-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [19550-08-4] FJXOYCIYKQJAAF-UHFFFAOYSA-N	8.6×10^{-1}		Yaws et al. (1997)	Q	
3,5-dimethyl-3-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [4209-91-0] INMGJWCKWKMPN-UHFFFAOYSA-N	8.9×10^{-2} 1.4×10^{-1} 7.4×10^{-2} 8.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
4,4-dimethyl-3-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [19550-09-5] BARKHVPKOOSMNW-UHFFFAOYSA-N	7.2×10^{-1}		Yaws et al. (1997)	Q	
4,5-dimethyl-3-hexanol $\text{C}_8\text{H}_{18}\text{O}$ UAVZZCGGBCLHIP-UHFFFAOYSA-N	8.7×10^{-2} 4.9×10^{-2} 7.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5,5-dimethyl-3-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [66576-31-6] NPZRPUOKIPAIEL-UHFFFAOYSA-N	8.4×10^{-1}		Yaws et al. (1997)	Q	

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-propyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [58175-57-8] LASHFHFLDRTERB-UHFFFAOYSA-N	4.1×10^{-1}		Yaws et al. (1997)	Q	
2-ethyl-2-methyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [5970-63-8] VZCOFGHOKLEML-UHFFFAOYSA-N	4.3×10^{-1}		Yaws et al. (1997)	Q	
2-ethyl-3-methyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ ALPFTHGDLMTYRM-UHFFFAOYSA-N	6.7×10^{-2} 6.0×10^{-2} 6.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-ethyl-4-methyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [106-67-2] QCHSJPKDWOFACC-UHFFFAOYSA-N	4.4×10^{-1}		Yaws et al. (1997)	Q	
3-ethyl-2-methyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ VWQDMMBTEFDWNM-UHFFFAOYSA-N	6.9×10^{-2} 5.7×10^{-2} 6.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-ethyl-3-methyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [10524-71-7] XYUCPYMMHKJSS-UHFFFAOYSA-N	6.3×10^{-2} 8.4×10^{-2} 7.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-ethyl-4-methyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [38514-13-5] RWIFVESHBTZEM-UHFFFAOYSA-N	6.9×10^{-2} 8.3×10^{-2} 7.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3-trimethyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [57409-53-7] GBONVOIRPAJSLA-UHFFFAOYSA-N	4.7×10^{-1}		Yaws et al. (1997)	Q	
2,2,4-trimethyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [123-44-4] CWPPDTVYIJETDF-UHFFFAOYSA-N	5.6×10^{-1}		Yaws et al. (1997)	Q	
2,3,3-trimethyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ LFRFDOWJBVDJGD-UHFFFAOYSA-N	5.7×10^{-2} 6.0×10^{-2} 6.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4-trimethyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [6570-88-3] PAZDSSMTPLLLIR-UHFFFAOYSA-N	5.5×10^{-2} 7.3×10^{-2} 6.3×10^{-2} 3.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4,4-trimethyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [16325-63-6] ZNRVVRWHPZZOTIE-UHFFFAOYSA-N	5.2×10^{-2} 5.2×10^{-1}		Gharagheizi et al. (2012) Yaws et al. (1997)	Q Q	
3,3,4-trimethyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ OIPMJVCOSACDS-UHFFFAOYSA-N	6.2×10^{-2} 7.6×10^{-2} 6.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,4-trimethyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [16325-64-7] FQNYRSRCONKFCN-UHFFFAOYSA-N	6.2×10^{-2} 7.6×10^{-2} 6.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-ethyl-2-methyl-2-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [19780-63-3] FRUMTAZIGSJVOJ-UHFFFAOYSA-N	7.4×10^{-1}		Yaws et al. (1997)	Q	
3-ethyl-4-methyl-2-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [66576-23-6] PFRFNYYIOSQSDD-UHFFFAOYSA-N	7.6×10^{-2} 9.1×10^{-2} 7.7×10^{-2} 6.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,3,3-trimethyl-2-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [23171-85-9] FBWWGYIEJGQWJP-UHFFFAOYSA-N	8.0×10^{-2} 1.2×10^{-1} 6.8×10^{-2} 7.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,3,4-trimethyl-2-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [66576-26-9] FTPXXARYDFWPGE-UHFFFAOYSA-N	7.2×10^{-2} 1.7×10^{-1} 6.9×10^{-2} 7.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,4,4-trimethyl-2-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [690-37-9] BSYJHYLAMMJNRC-UHFFFAOYSA-N	9.9×10^{-1}		Yaws et al. (1997)	Q	
3,3,4-trimethyl-2-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [19411-41-7] BOBYQFFCQPQLOB-UHFFFAOYSA-N	6.3×10^{-2} 6.5×10^{-2} 7.5×10^{-2} 6.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3,4,4-trimethyl-2-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [10575-56-1] MXDGSCZQIMQLII-UHFFFAOYSA-N	7.4×10^{-1}		Yaws et al. (1997)	Q	

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-ethyl-2-methyl-3-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [597-05-7] DMHIJUVUPKGLJ-UHFFFAOYSA-N	7.5×10^{-2} 8.1×10^{-2} 7.8×10^{-2} 7.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3-ethyl-3-methyl-2-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [66576-22-5] SLBLSROGXMXPPF-UHFFFAOYSA-N	7.5×10^{-2} 5.5×10^{-2} 7.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3-trimethyl-3-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [7294-05-5] KLIHWYNSISMOMR-UHFFFAOYSA-N	1.2 1.1		Yaffe et al. (2003) Yaws et al. (1997)	Q Q	249, 250
2,2,4-trimethyl-3-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [5162-48-1] AXINNNJHLJWMTC-UHFFFAOYSA-N	8.9×10^{-1}		Yaws et al. (1997)	Q	
2,3,4-trimethyl-3-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [3054-92-0] PLSMHHUFDLYURK-UHFFFAOYSA-N	6.4×10^{-2} 7.6×10^{-2} 7.1×10^{-2} 7.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3-methyl-2-(1-methylethyl)-1-butanol $\text{C}_8\text{H}_{18}\text{O}$ [18593-92-5] IDGDEUZERZKYHG-UHFFFAOYSA-N	6.6×10^{-2} 5.5×10^{-2} 6.3×10^{-2} 4.9×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,2,3,3-tetramethyl-1-butanol $\text{C}_8\text{H}_{18}\text{O}$ [66576-24-7] OCTRJUXIYWWVAR-UHFFFAOYSA-N	5.0×10^{-2} 3.8×10^{-2} 6.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-diethyl-1-butanol $\text{C}_8\text{H}_{18}\text{O}$ [13023-60-4] CBHXDVOSUKFRBE-UHFFFAOYSA-N	6.5×10^{-2} 3.7×10^{-2} 7.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl-2-ethyl-1-butanol $\text{C}_8\text{H}_{18}\text{O}$ YPIJMPDVZUWJO-UHFFFAOYSA-N	6.0×10^{-2} 3.7×10^{-2} 6.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3-dimethyl-2-ethyl-1-butanol $\text{C}_8\text{H}_{18}\text{O}$ [66576-56-5] WOVMYJCSISMAU-UHFFFAOYSA-N	6.0×10^{-2} 5.5×10^{-2} 6.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-nonanol $\text{C}_9\text{H}_{20}\text{O}$ [624-51-1] GYSCXPVAKHVAAY-UHFFFAOYSA-N	5.2×10^{-2} 9.6×10^{-2} 2.6×10^{-1} 2.0×10^{-1}		Yaws (2003) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	X Q Q Q	238 81, 239 81, 240 81, 241
4-nonanol $\text{C}_9\text{H}_{20}\text{O}$ [5932-79-6] IXUOEGRSQCCHEB-UHFFFAOYSA-N	5.4×10^{-2} 8.0×10^{-2} 5.2×10^{-2} 3.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247 247
5-nonanol $\text{C}_9\text{H}_{20}\text{O}$ [623-93-8] FCBBRODPXVPZAH-UHFFFAOYSA-N	5.2×10^{-2} 8.5×10^{-2} 5.2×10^{-2} 2.9×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247 247
2-methyl-1-octanol $\text{C}_9\text{H}_{20}\text{O}$ [818-81-5] IGVGCQGTEINVOH-UHFFFAOYSA-N	4.8×10^{-2} 4.5×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-1-octanol $\text{C}_9\text{H}_{20}\text{O}$ [38514-02-2] CLFSZAMBOZSCOS-UHFFFAOYSA-N	4.8×10^{-2} 6.6×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-1-octanol $\text{C}_9\text{H}_{20}\text{O}$ [38514-03-3] MWWWKESKJRHQWEF-UHFFFAOYSA-N	4.8×10^{-2} 6.6×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-methyl-1-octanol $\text{C}_9\text{H}_{20}\text{O}$ [38514-04-4] CGCDFYUPZXVGIX-UHFFFAOYSA-N	4.8×10^{-2} 6.6×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
6-methyl-1-octanol $\text{C}_9\text{H}_{20}\text{O}$ [38514-05-5] WWRGKAMABZHMEN-UHFFFAOYSA-N	4.3×10^{-2} 5.0×10^{-2} 2.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	238 247
7-methyl-1-octanol $\text{C}_9\text{H}_{20}\text{O}$ [2430-22-0] QDSDKYHPHANITQ-UHFFFAOYSA-N	4.3×10^{-2} 5.0×10^{-2} 2.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-2-octanol $\text{C}_9\text{H}_{20}\text{O}$ [628-44-4] KBCNUEXDHWIDIFX-UHFFFAOYSA-N	5.7×10^{-2} 1.7×10^{-1} 5.3×10^{-2} 4.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3-methyl-2-octanol $\text{C}_9\text{H}_{20}\text{O}$ [27644-49-1] WQADSKJNOTZWML-UHFFFAOYSA-N	6.0×10^{-2} 5.7×10^{-2} 5.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-methyl-2-octanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-81-5] IWFICVXFFNDWOJ-UHFFFAOYSA-N	6.0×10^{-2} 8.3×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
7-methyl-2-octanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-83-7] NOEKZKTXHKNAQ-UHFFFAOYSA-N	6.0×10^{-2} 8.3×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-3-octanol $\text{C}_9\text{H}_{20}\text{O}$ [26533-34-6] DIVBBSLQUDHECU-UHFFFAOYSA-N	5.7×10^{-2} 4.2×10^{-2} 5.5×10^{-2} 4.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3-methyl-3-octanol $\text{C}_9\text{H}_{20}\text{O}$ [5340-36-3] JEWXYDDSLPIBBO-UHFFFAOYSA-N	5.4×10^{-2} 4.8×10^{-2} 1.3×10^{-1} 1.6×10^{-1} 5.6×10^{-2} 5.6×10^{-2} 3.6×10^{-1}		Yaws (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Gharagheizi et al. (2010) Yaws et al. (1997)	X X Q Q Q Q Q	238 238 247 247
4-methyl-3-octanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-80-4] XPWBBDJJRZCPW-UHFFFAOYSA-N	5.6×10^{-2} 4.5×10^{-2} 5.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
6-methyl-3-octanol $\text{C}_9\text{H}_{20}\text{O}$ [40225-75-0] MFYHIHFYDULUQP-UHFFFAOYSA-N	5.6×10^{-2} 6.6×10^{-2} 5.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
7-methyl-3-octanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-84-8] IDCFJIMYNKBKMB-UHFFFAOYSA-N	5.6×10^{-2} 6.6×10^{-2} 5.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-4-octanol $\text{C}_9\text{H}_{20}\text{O}$ [40575-41-5] BIAVIOIDPRPYJK-UHFFFAOYSA-N	5.7×10^{-2} 6.2×10^{-2} 5.2×10^{-2} 4.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3-methyl-4-octanol $\text{C}_9\text{H}_{20}\text{O}$ [26533-35-7] MJOKZMZDONULOD-UHFFFAOYSA-N	6.1×10^{-2} 3.8×10^{-2} 5.5×10^{-2} 4.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
4-methyl-4-octanol $\text{C}_9\text{H}_{20}\text{O}$ [23418-37-3] RXSIKQJLQRQQY-UHFFFAOYSA-N	5.5×10^{-2} 1.2×10^{-1} 5.6×10^{-2} 4.5×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
5-methyl-4-octanol $\text{C}_9\text{H}_{20}\text{O}$ [59734-23-5] YLTHHPQUTLMNIF-UHFFFAOYSA-N	5.9×10^{-2} 4.0×10^{-2} 5.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
6-methyl-4-octanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-82-6] KFRCBGHGDZSOJV-UHFFFAOYSA-N	5.9×10^{-2} 5.8×10^{-2} 5.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
7-methyl-4-octanol $\text{C}_9\text{H}_{20}\text{O}$ [33933-77-6] KJMBBHZOLRRVMV-UHFFFAOYSA-N	5.9×10^{-2} 5.8×10^{-2} 5.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-ethyl-1-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [817-60-7] QNJAZNNWHWYOE-UHFFFAOYSA-N	4.9×10^{-2} 4.4×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-ethyl-1-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [3525-25-5] VRZRVMXNGMZLDB-UHFFFAOYSA-N	4.2×10^{-2} 5.0×10^{-2} 2.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	238 247
5-ethyl-1-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [998-65-2] GOJBFVJUMYSMJJ-UHFFFAOYSA-N	4.9×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
3-ethyl-2-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [19780-39-3] MMQDVLWWGWJSFS-UHFFFAOYSA-N	5.9×10^{-2} 7.1×10^{-2} 5.8×10^{-2} 5.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-ethyl-3-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [19780-41-7] XKRZDNKKANUBPV-UHFFFAOYSA-N	5.4×10^{-2} 8.7×10^{-2} 5.9×10^{-2} 4.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
4-ethyl-4-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [597-90-0] GNROHGFUVTWFNG-UHFFFAOYSA-N	5.7×10^{-2} 7.9×10^{-2} 5.9×10^{-2} 4.7×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,2-dimethyl-1-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [14250-79-4] WENIXZFPXMQPQQ-UHFFFAOYSA-N	4.5×10^{-2} 2.5×10^{-2} 4.8×10^{-2} 3.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
4,6-dimethyl-1-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [820-05-3] GCBXGQPBCBPHSP-UHFFFAOYSA-N	5.9×10^{-2} 4.0×10^{-2} 4.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
6,6-dimethyl-1-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [65769-10-0] IOFUAVGBFVXDAO-UHFFFAOYSA-N	5.4×10^{-2} 4.0×10^{-2} 4.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl-2-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [66794-00-1] PQSMEVPHTJECZ-UHFFFAOYSA-N	5.0×10^{-2} 1.3×10^{-1} 5.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyl-2-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [65822-93-7] VORBOMMQBCSRQF-UHFFFAOYSA-N	5.0×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
2,5-dimethyl-2-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [1561-18-8] LVIFBEPHIBJBEU-UHFFFAOYSA-N	5.0×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
2,6-dimethyl-2-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [13254-34-7] HGDVHRITGWMIJK-UHFFFAOYSA-N	5.9×10^{-2} 1.4×10^{-1} 5.0×10^{-2} 5.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
4,6-dimethyl-2-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [51079-52-8] YYUGBYFBCFRGNZ-UHFFFAOYSA-N	4.4×10^{-2} 1.2×10^{-1} 4.9×10^{-2} 3.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
5,6-dimethyl-2-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [58795-24-7] ONBXNGYZXZBRJA-UHFFFAOYSA-N	4.6×10^{-2} 1.2×10^{-1} 4.9×10^{-2} 3.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,2-dimethyl-3-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [19549-70-3] QENWAAAGDINHGE-UHFFFAOYSA-N	5.3×10^{-2} 2.5×10^{-2} 5.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl-3-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [19549-71-4] JIEGVNXCNNWVPH-UHFFFAOYSA-N	5.7×10^{-2} 7.0×10^{-2} 5.4×10^{-2} 5.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,6-dimethyl-3-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [19549-73-6] XZDMJRIWJSNEGC-UHFFFAOYSA-N	6.1×10^{-2} 3.3×10^{-2} 5.4×10^{-2} 5.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3,5-dimethyl-3-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [19549-74-7] NOSOEGQQQMHBFB-UHFFFAOYSA-N	5.4×10^{-2} 1.1×10^{-1} 5.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyl-4-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-99-5] ZIKNXBYJTDTRQA-UHFFFAOYSA-N	5.7×10^{-2} 4.7×10^{-2} 5.0×10^{-2} 5.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,4-dimethyl-4-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [19549-77-0] QKRRAXACNUNGCF-UHFFFAOYSA-N	5.9×10^{-2} 9.5×10^{-2} 5.2×10^{-2} 5.7×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,5-dimethyl-4-heptanol $\text{C}_9\text{H}_{20}\text{O}$ NXLQTSHQSAVKJB-UHFFFAOYSA-N	1.6×10^{-1}		Yaws et al. (1997)	Q	
2,6-dimethyl-4-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [108-82-7] HXQPUEQDBSPXTE-UHFFFAOYSA-N	1.0×10^{-1} 7.7×10^{-2} 8.6×10^{-2} 2.0×10^{-1} 1.6×10^{-1} 2.5×10^{-1} 1.7×10^{-1} 3.7×10^{-1} 1.6×10^{-1} 1.7×10^{-1} 1.7×10^{-1}	9300	Brockbank (2013) Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Katritzky et al. (1998) Yaws et al. (1997) Yaws (1999)	L V Q Q Q Q Q Q Q Q ?	1 187 243, 244 245 246 68 21

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3-dimethyl-4-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [19549-78-1] UGAZGYFCTFGQQH-UHFFFAOYSA-N	5.5×10^{-2} 2.3×10^{-2} 5.5×10^{-2} 2.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3,5-dimethyl-4-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [19549-79-2] ZKXITRNXHWEQJU-UHFFFAOYSA-N	5.0×10^{-2} 3.2×10^{-2} 5.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,6-dimethyl-3-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [1573-28-0] HVPGGLNDHUWMLS-UHFFFAOYSA-N	6.8×10^{-2} 1.0×10^{-1} 5.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-ethyl-3-methyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66794-04-5] DXXCMAACWSRPE-UHFFFAOYSA-N	4.9×10^{-2} 3.7×10^{-2} 4.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-ethyl-4-methyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66794-06-7] NRZVENBFUCASY-UHFFFAOYSA-N	4.7×10^{-2} 4.0×10^{-2} 4.6×10^{-2} 1.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2-ethyl-5-methyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66794-07-8] KVJOU CNJVQBRAO-UHFFFAOYSA-N	4.9×10^{-2} 3.7×10^{-2} 4.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-ethyl-1-methyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ YNZQSDTXBBBFQH-UHFFFAOYSA-N	5.0×10^{-2} 1.2×10^{-1} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-ethyl-2-methyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66794-01-2] UDZCUJOKBNABRS-UHFFFAOYSA-N	1.3×10^{-1}		Yaws et al. (1997)	Q	
3,3,5-trimethyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [1484-87-3] HRXNWQMMTLLJJQ-UHFFFAOYSA-N	4.1×10^{-2} 5.6×10^{-2} 4.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,4-trimethyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-73-5] OLRPKAJSAOYYCY-UHFFFAOYSA-N	4.2×10^{-2} 5.3×10^{-2} 4.5×10^{-2} 1.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,5,5-trimethyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [3452-97-9] BODRLKRKXPBDBN-UHFFFAOYSA-N	4.1×10^{-2} 5.6×10^{-2} 4.5×10^{-2} 1.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
4,5,5-trimethyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-75-7] IECJUMYEWJOKHM-UHFFFAOYSA-N	3.4×10^{-2} 7.3×10^{-2} 4.5×10^{-2} 9.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2-propyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [817-46-9] JSUXZEJWGVYJG-UHFFFAOYSA-N	5.8×10^{-2} 3.3×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-propyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-85-9] MHJIVMDBGUHH-UHFFFAOYSA-N	5.8×10^{-2} 4.8×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-ethyl-2-methyl-2-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66794-02-3] HTOYXTGJEOUKPM-UHFFFAOYSA-N	5.3×10^{-2} 1.2×10^{-1} 5.2×10^{-2} 2.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,3,4-trimethyl-2-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [21102-13-6] JTOONBKGYWVPOY-UHFFFAOYSA-N	3.7×10^{-2} 4.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
2,4,4-trimethyl-2-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-91-7] QMEHJTXRYVSFES-UHFFFAOYSA-N	3.4×10^{-2} 4.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
2,4,5-trimethyl-2-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-93-9] CIVZBWYMPDUPSQ-UHFFFAOYSA-N	3.7×10^{-2} 4.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
2,5,5-trimethyl-2-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-71-3] ASOCSFZHADJKFU-UHFFFAOYSA-N	3.4×10^{-2} 4.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
3-ethyl-2-methyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66794-03-4] VUMFTWNZYFBYEB-UHFFFAOYSA-N	4.8×10^{-2} 6.4×10^{-2} 5.5×10^{-2} 1.7×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-ethyl-4-methyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [51200-80-7] YOCLWWFBEJQTBM-UHFFFAOYSA-N	5.2×10^{-2} 5.5×10^{-2} 5.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-ethyl-5-methyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [597-77-3] RMBUNHOAKTUXTC-UHFFFAOYSA-N	5.8×10^{-2} 6.6×10^{-2} 5.4×10^{-2} 2.5×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
4-ethyl-2-methyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [33943-21-4] GBUYIUMHXBYBONU-UHFFFAOYSA-N	5.7×10^{-2} 2.5×10^{-2} 5.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-ethyl-3-methyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66794-05-6] DUGZCTGTSJAPCV-UHFFFAOYSA-N	5.2×10^{-2} 8.0×10^{-2} 5.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3-trimethyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [5340-41-0] DHNHHYWBZLNQHGK-UHFFFAOYSA-N	4.8×10^{-2} 4.7×10^{-2} 5.0×10^{-2} 2.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,2,4-trimethyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-89-3] YMBVVPXERVAJTB-UHFFFAOYSA-N	5.7×10^{-2} 5.5×10^{-2} 2.7×10^{-1}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	238 247
2,2,5-trimethyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [3970-60-3] UCLXUUYYVWJKXIK-UHFFFAOYSA-N	6.6×10^{-2} 5.3×10^{-2} 3.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	238 247
2,3,4-trimethyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-90-6] LTKHKGAPVGSECA-UHFFFAOYSA-N	6.0×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
2,3,5-trimethyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [65927-60-8] ZVKQNIUBLJYSGN-UHFFFAOYSA-N	6.0×10^{-2} 4.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
2,4,4-trimethyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-92-8] PDIVDRVTPZNRDZ-UHFFFAOYSA-N	5.5×10^{-2} 5.5×10^{-2} 2.5×10^{-1}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,5,5-trimethyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-72-4] NPUIBFBNZSKEAP-UHFFFAOYSA-N	5.7×10^{-2} 2.8×10^{-2} 5.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,4-trimethyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-74-6] QWJDXMFJOMPTCV-UHFFFAOYSA-N	5.5×10^{-2} 5.0×10^{-2} 2.9×10^{-1}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	238 247
3,5,5-trimethyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66810-87-5] HGGJNDQMCKTKCR-UHFFFAOYSA-N	5.5×10^{-2} 4.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
4-methyl-2-propyl-1-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [54004-41-0] IGSWOIOCVJEQRH-UHFFFAOYSA-N	5.0×10^{-2} 3.8×10^{-2} 4.6×10^{-2} 1.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
4-methyl-2-(1-methylethyl)-1-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [55505-24-3] CBHPZSADBWMIGE-UHFFFAOYSA-N	5.0×10^{-2} 3.1×10^{-2} 4.3×10^{-2} 1.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2-ethyl-2,4-dimethyl-1-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-98-4] JIZZVMCXCJUHI-UHFFFAOYSA-N	4.4×10^{-2} 2.2×10^{-2} 4.5×10^{-2} 1.5×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3-ethyl-2,2-dimethyl-1-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-95-1] HEQYMZTUSVDQBW-UHFFFAOYSA-N	4.5×10^{-2} 2.2×10^{-2} 4.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,3,4-tetramethyl-2-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-86-0] HLWCPAJEXXTJHY-UHFFFAOYSA-N	3.9×10^{-2} 8.6×10^{-2} 4.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3,4,4-tetramethyl-2-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-87-1] DBCCRNDJIOKIO-UHFFFAOYSA-N	3.9×10^{-2} 1.3×10^{-1} 4.3×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,3,4,4-tetramethyl-2-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-88-2] AIQOKYGLKGGWOI-UHFFFAOYSA-N	3.9×10^{-2} 4.0×10^{-2} 4.8×10^{-2} 2.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3-diethyl-2-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-94-0] IENXYHLNFHBNRR-UHFFFAOYSA-N	4.5×10^{-2} 4.8×10^{-2} 5.3×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,3-dimethyl-3-ethyl-2-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-97-3] AVQHNUMJWCRCBA-UHFFFAOYSA-N	3.7×10^{-2} 1.1×10^{-1} 4.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,4-dimethyl-3-ethyl-2-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [21102-09-0] YGQDLQQRBCOMKJ-UHFFFAOYSA-N	4.1×10^{-2} 7.2×10^{-2} 4.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-ethyl-2,2-dimethyl-3-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-96-2] CFWIFHZJKFFDFU-UHFFFAOYSA-N	4.8×10^{-2} 3.3×10^{-2} 5.1×10^{-2} 2.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3-ethyl-2,4-dimethyl-3-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [3970-59-0] PZPYIRQFCOFLGJ-UHFFFAOYSA-N	4.9×10^{-2} 4.8×10^{-2} 3.7×10^{-2} 3.6×10^{-2} 5.1×10^{-2} 5.1×10^{-2} 2.1×10^{-1}		Yaws (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Gharagheizi et al. (2010) Yaws et al. (1997)	X X Q Q Q Q Q	238 238 247 247
2,2,3,4-tetramethyl-3-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [29772-39-2] KNTFAYXQHRNXSM-UHFFFAOYSA-N	4.4×10^{-2} 3.4×10^{-2} 4.6×10^{-2} 2.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,2,4,4-tetramethyl-3-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [14609-79-1] WFJSIIHYLLHRHB-UHFFFAOYSA-N	5.0×10^{-2} 5.4×10^{-2} 2.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	238 247
1-decanol $\text{C}_{10}\text{H}_{22}\text{O}$ [112-30-1] MWKFXSUHUHTGQN-UHFFFAOYSA-N	2.0×10^{-1} 7.6×10^{-2} 6.5×10^{-2} 3.1×10^{-1} 1.9×10^{-1} 2.1×10^{-1} 2.8×10^{-1} 1.3×10^{-1} 1.5 1.6×10^{-1} 1.2×10^{-1}	9200 6600 5300	Brockbank (2013) Shunthirasingham et al. (2013) Lei et al. (2007) Altschuh et al. (1999) Abraham (1984) Yaws (2003) Dupeux et al. (2022) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	L M M M V X Q Q Q Q Q	1, 410 397 259 260 272, 244 245

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	2.0×10^{-1}		Hilal et al. (2008)	Q	
	4.6×10^{-1}		Modarresi et al. (2007)	Q	68
	2.1×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	2.2×10^{-1}		Yao et al. (2002)	Q	230
	9.9×10^{-1}		Katritzky et al. (1998)	Q	
	2.4×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	2.1×10^{-1}		Yaws et al. (1997)	Q	
	3.1×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	4.4×10^{-2}		Maniere et al. (2011)	?	242, 166
	2.1×10^{-1}		Yaws (1999)	?	21
	3.7×10^{-1}		Yaws and Yang (1992)	?	21
	1.9×10^{-1}		Abraham et al. (1990)	?	
2-decanol $\text{C}_{10}\text{H}_{22}\text{O}$ [1120-06-5] ACUZDYFTRHEKOS-UHFFFAOYSA-N	5.4×10^{-1}		Yaws et al. (1997)	Q	
3-decanol $\text{C}_{10}\text{H}_{22}\text{O}$ [1565-81-7] ICEQLCZWXUUIJ-UHFFFAOYSA-N	3.8×10^{-2}		Yaws (2003)	X	238
	7.8×10^{-2}		Wang et al. (2017)	Q	81, 239
	2.1×10^{-1}		Wang et al. (2017)	Q	81, 240
	2.0×10^{-1}		Wang et al. (2017)	Q	81, 241
	7.9×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.5×10^{-2}		Gharagheizi et al. (2010)	Q	247
4-decanol $\text{C}_{10}\text{H}_{22}\text{O}$ [2051-31-2] DTDMYWXTWWFLGJ-UHFFFAOYSA-N	3.8×10^{-2}		Yaws (2003)	X	238
	7.9×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.5×10^{-2}		Gharagheizi et al. (2010)	Q	247
	5.3×10^{-1}		Yaws et al. (1997)	Q	
5-decanol $\text{C}_{10}\text{H}_{22}\text{O}$ [5205-34-5] SZMNDOUFZGODBR-UHFFFAOYSA-N	4.5×10^{-2}		Yaws (2003)	X	238
	6.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.5×10^{-2}		Gharagheizi et al. (2010)	Q	247
	7.3×10^{-1}		Yaws et al. (1997)	Q	
2-methyl-1-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ [40589-14-8] BEGNRPGEHZBNKK-UHFFFAOYSA-N	3.0×10^{-2}		Yaws (2003)	X	238
	3.6×10^{-2}		Gharagheizi et al. (2010)	Q	247
	3.4×10^{-1}		Yaws et al. (1997)	Q	
2-methyl-2-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ [10297-57-1] VREDNSVJXRJXRI-UHFFFAOYSA-N	2.9×10^{-2}		Yaws (2003)	X	238
	3.9×10^{-2}		Gharagheizi et al. (2010)	Q	247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-3-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ [26533-33-5] OFIYMUXECPHIPZ-UHFFFAOYSA-N	3.6×10^{-2} 3.4×10^{-2} 3.9×10^{-2} 5.7×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2-methyl-4-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ [26533-31-3] IBHHTADZYDLHPM-UHFFFAOYSA-N	3.6×10^{-2} 5.1×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methyl-5-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ [29843-62-7] RLQVUGAVOCBRNQ-UHFFFAOYSA-N	3.6×10^{-2} 5.1×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-1-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ [22663-64-5] BXQPYGLPOMTAPU-UHFFFAOYSA-N	3.5×10^{-2} 4.0×10^{-2} 3.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-2-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ [60671-32-1] QCBDLZKDRUKOFS-UHFFFAOYSA-N	3.2×10^{-2} 5.9×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-3-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ [21078-72-8] VZBFPIMCUSPDL-UHFFFAOYSA-N	3.2×10^{-2} 1.1×10^{-1} 4.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methyl-5-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ QRZAYHZIHWIJHD-UHFFFAOYSA-N	3.6×10^{-2} 5.1×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-1-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ [1489-47-0] HECVGHIJHFNAIL-UHFFFAOYSA-N	3.1×10^{-2} 4.2×10^{-2} 3.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-methyl-4-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ [23418-38-4] GDCKOAKPWVJCNIGI-UHFFFAOYSA-N	3.2×10^{-2} 1.1×10^{-1} 4.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-methyl-1-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ [2768-16-3] DBJSFYCKLLBKGB-UHFFFAOYSA-N	3.5×10^{-2} 4.0×10^{-2} 3.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
5-methyl-2-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66731-95-1] KZTLXVUOEODDMR-UHFFFAOYSA-N	3.2×10^{-2} 8.7×10^{-2} 3.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-methyl-3-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66719-43-5] CCSZLOPBDJWYHV-UHFFFAOYSA-N	3.6×10^{-2} 5.1×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-methyl-4-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66719-44-6] BFYIAZULSQBFQ-UHFFFAOYSA-N	3.6×10^{-2} 3.5×10^{-2} 3.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5-methyl-5-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ [33933-78-7] AGSIGVZAVLOKLP-UHFFFAOYSA-N	4.9×10^{-2} 9.1×10^{-2} 4.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
6-methyl-2-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66256-60-8] OYTRLQQIHEJFE-UHFFFAOYSA-N	3.2×10^{-2} 8.7×10^{-2} 3.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
7-methyl-1-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ [33234-93-4] BJKXZCGJAOWNTN-UHFFFAOYSA-N	3.5×10^{-2} 4.0×10^{-2} 3.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
7-methyl-2-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66256-61-9] GCOBJHFUTQUABB-UHFFFAOYSA-N	3.2×10^{-2} 3.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
7-methyl-4-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ [26981-98-6] KLZAWUYSXUGWGQ-UHFFFAOYSA-N	3.6×10^{-2} 5.1×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
8-methyl-1-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ (isodecanol) [25339-17-7] PLLBRTOLHQQAQQ-UHFFFAOYSA-N	1.8×10^{-1}		HSDB (2015)	Q	100
8-methyl-2-nonanol $\text{C}_{10}\text{H}_{22}\text{O}$ [14779-92-1] ZVZKLBCGIYWGOU-UHFFFAOYSA-N	3.2×10^{-2} 8.7×10^{-2} 3.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2-dimethyl-1-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [2370-14-1] KEXGXAGJHHC TKD-UHFFFAOYSA-N	3.3×10^{-2} 1.6×10^{-2} 3.4×10^{-2} 5.7×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,2-dimethyl-3-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [19841-72-6] AZIWNWYAWODSERA-UHFFFAOYSA-N	3.9×10^{-2} 1.6×10^{-2} 4.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethyl-4-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66719-52-6] IVLDCRDTRQCTIY-UHFFFAOYSA-N	4.2×10^{-2} 3.0×10^{-2} 3.5×10^{-2} 1.0		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,3-dimethyl-3-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [19781-10-3] AWHYRPPRRQITHX-UHFFFAOYSA-N	4.2×10^{-2} 4.3×10^{-2} 3.9×10^{-2} 1.0		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,4-dimethyl-2-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [18675-20-2] WHJCLXRPLJSSV-UHFFFAOYSA-N	2.7×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
2,4-dimethyl-4-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [33933-79-8] VRFMFHBPJUSGFK-UHFFFAOYSA-N	4.1×10^{-2} 6.7×10^{-2} 3.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,5-dimethyl-4-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66719-53-7] VIHAZZPWGKHJQE-UHFFFAOYSA-N	4.5×10^{-2} 2.1×10^{-2} 3.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,6-dimethyl-1-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [62417-08-7] ZKWASVBZSAGDBI-UHFFFAOYSA-N	3.5×10^{-2} 2.4×10^{-2} 3.3×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,6-dimethyl-2-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [18479-57-7] WRFXXJKURVTLISY-UHFFFAOYSA-N	2.7×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
2,6-dimethyl-4-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66719-54-8] ZFOGJEKQQNVCFB-UHFFFAOYSA-N	3.5×10^{-2} 3.5×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,7-dimethyl-2-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [42007-73-8] JJZZVQICFJITMO-UHFFFAOYSA-N	2.7×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
2,7-dimethyl-3-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66719-55-9] VFUOFVONEDBLIJ-UHFFFAOYSA-N	4.3×10^{-2} 2.3×10^{-2} 3.8×10^{-2} 9.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247 247
2,7-dimethyl-4-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [19781-11-4] FRJOBNOTOHIMIH-UHFFFAOYSA-N	2.3×10^{-2} 4.2×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247 247
3,4-dimethyl-4-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66719-30-0] JEBZCASOCDXENQ-UHFFFAOYSA-N	4.1×10^{-2} 4.5×10^{-2} 3.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247 247
3,5-dimethyl-3-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [56065-42-0] DMIBTMSBSULJMT-UHFFFAOYSA-N	4.0×10^{-2} 7.0×10^{-2} 3.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247 247
3,6-dimethyl-3-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [151-19-9] NPHCXUPGMINOPP-UHFFFAOYSA-N	4.0×10^{-2} 6.9×10^{-2} 3.7×10^{-2} 9.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247 247
3,6-dimethyl-4-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66719-31-1] XFUFFAQPWAGSDK-UHFFFAOYSA-N	4.5×10^{-2} 2.1×10^{-2} 3.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247 247
3,7-dimethyl-1-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ (pelargol) [106-21-8] PRNCMAKCNVRZFX-UHFFFAOYSA-N	3.3×10^{-2} 3.3×10^{-2} 3.7×10^{-1} 3.8×10^{-2} 3.2×10^{-2} 5.0×10^{-1}		Yaws (2003) Yaws (2003) Dupeux et al. (2022) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X X Q Q Q Q	259 238 260 247 247
3,7-dimethyl-2-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [15340-96-2] XCWMPYBKUYTLZ-UHFFFAOYSA-N	3.0×10^{-2} 5.6×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,7-dimethyl-3-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [78-69-3] DLHQZZUEERVIGQ-UHFFFAOYSA-N	3.7×10^{-2} 7.7×10^{-2} 3.7×10^{-2} 8.5×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
4,5-dimethyl-1-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66719-32-2] UQKHXPWOMZBLN-UHFFFAOYSA-N	3.3×10^{-2} 3.8×10^{-2} 3.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,6-dimethyl-1-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66719-33-3] JOWDWXPTKVUHBV-UHFFFAOYSA-N	3.3×10^{-2} 3.8×10^{-2} 3.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,6-dimethyl-4-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [56065-43-1] QJVDAQVYZBSYCB-UHFFFAOYSA-N	4.1×10^{-2} 6.7×10^{-2} 3.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,7-dimethyl-1-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66719-34-4] UWAGZVFFZJGLJU-UHFFFAOYSA-N	3.3×10^{-2} 3.8×10^{-2} 3.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4,7-dimethyl-4-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [19781-13-6] OTISWHNJCUMBFI-UHFFFAOYSA-N	4.0×10^{-2} 6.9×10^{-2} 3.7×10^{-2} 9.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
7,7-dimethyl-1-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66719-35-5] RYFZXYYQFYLUHM-UHFFFAOYSA-N	3.0×10^{-2} 3.8×10^{-2} 3.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-ethyl-1-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [20592-10-3] HTRVTKUOKQWGMU-UHFFFAOYSA-N	3.9×10^{-2} 2.3×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-ethyl-1-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66719-36-6] VXOCEIUJVCHLRR-UHFFFAOYSA-N	3.9×10^{-2} 3.4×10^{-2} 3.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-ethyl-3-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [2051-32-3] NPQPNSNHJTUSA-UHFFFAOYSA-N	3.9×10^{-2} 5.7×10^{-2} 4.3×10^{-2} 7.7×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-ethyl-4-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [63126-48-7] WXJDPIWUPZLVSF-UHFFFAOYSA-N	4.8×10^{-2} 2.2×10^{-2} 3.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
4-ethyl-4-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [38395-42-5] OYBUBRUQIKTRET-UHFFFAOYSA-N	4.3×10^{-2} 4.7×10^{-2} 4.3×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
6-ethyl-3-octanol $\text{C}_{10}\text{H}_{22}\text{O}$ [19781-27-2] JWZFCOOWAQHCBP-UHFFFAOYSA-N	4.3×10^{-2} 3.8×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,3-trimethyl-3-heptanol $\text{C}_{10}\text{H}_{22}\text{O}$ [29772-40-5] GCLFPNQSLCWZQA-UHFFFAOYSA-N	3.7×10^{-2} 2.7×10^{-2} 3.6×10^{-2} 1.1		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,2,4-trimethyl-4-heptanol $\text{C}_{10}\text{H}_{22}\text{O}$ [57233-31-5] KNACVESXMPHLNM-UHFFFAOYSA-N	4.1×10^{-2} 3.4×10^{-2} 1.3		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	238 247
2,2,5-trimethyl-4-heptanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66256-42-6] JHHGGYCQTXZCTL-UHFFFAOYSA-N	4.4×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
2,2,6-trimethyl-3-heptanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66256-43-7] AXUPPSSNJCYJOX-UHFFFAOYSA-N	3.8×10^{-2} 1.4×10^{-2} 3.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2,6-trimethyl-4-heptanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66256-44-8] ITTQYDBLGDGLMB-UHFFFAOYSA-N	4.4×10^{-2} 3.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
2,3,6-trimethyl-3-heptanol $\text{C}_{10}\text{H}_{22}\text{O}$ [58046-40-5] BAZNZYUOJWCTIQ-UHFFFAOYSA-N	3.8×10^{-2} 4.4×10^{-2} 3.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,5-trimethyl-4-heptanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66256-46-0] RCSCLTAI PNDFGC-UHFFFAOYSA-N	4.4×10^{-2} 3.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4,6-trimethyl-2-heptanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66256-47-1] VUZHGXHGZVRACMM-UHFFFAOYSA-N	3.6×10^{-2} 1.0×10^{-1} 3.3×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,6-trimethyl-4-heptanol $\text{C}_{10}\text{H}_{22}\text{O}$ [60836-07-9] QSVYJSJPLCSACO-UHFFFAOYSA-N	4.4×10^{-2} 3.4×10^{-2} 1.3		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	238 247
2,5,6-trimethyl-2-heptanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66256-48-2] LQQYOLMGDBGEBC-UHFFFAOYSA-N	3.6×10^{-2} 1.1×10^{-1} 3.3×10^{-2} 9.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3,3,6-trimethyl-4-heptanol $\text{C}_{10}\text{H}_{22}\text{O}$ LTDMOZOPTDNTLG-UHFFFAOYSA-N	4.4×10^{-2} 3.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
3,5,5-trimethyl-3-heptanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66256-50-6] WOUVARFKMJYBY-UHFFFAOYSA-N	3.1×10^{-2} 7.7×10^{-2} 3.4×10^{-2} 8.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
4,6,6-trimethyl-2-heptanol $\text{C}_{10}\text{H}_{22}\text{O}$ [51079-79-9] FHQUDZUTAZYJRH-UHFFFAOYSA-N	3.6×10^{-2} 4.8×10^{-2} 3.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-(1-methylethyl)-1-heptanol $\text{C}_{10}\text{H}_{22}\text{O}$ [38514-15-7] NTGBCQFKKOCODF-UHFFFAOYSA-N	3.1×10^{-2} 4.2×10^{-2} 3.2×10^{-2} 4.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
4-(1-methylethyl)-4-heptanol $\text{C}_{10}\text{H}_{22}\text{O}$ [51200-82-9] OHSMBKPEDBXYDU-UHFFFAOYSA-N	4.2×10^{-2} 3.0×10^{-2} 4.1×10^{-2} 1.0		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3-ethyl-2-methyl-3-heptanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66719-37-7] GYCRUUSYQLIIBA-UHFFFAOYSA-N	4.0×10^{-2} 3.3×10^{-2} 4.1×10^{-2} 9.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3-ethyl-5-methyl-3-heptanol $\text{C}_{10}\text{H}_{22}\text{O}$ FGJMKJVRSBVZPS-UHFFFAOYSA-N	4.0×10^{-2} 4.8×10^{-2} 3.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
5-ethyl-4-methyl-3-heptanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66731-94-0] XVSHXHABYNUHNI-UHFFFAOYSA-N	4.4×10^{-2} 2.2×10^{-2} 3.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-propyl-1-heptanol $\text{C}_{10}\text{H}_{22}\text{O}$ [10042-59-8] YLQLIQIAXYRMDL-UHFFFAOYSA-N	3.3×10^{-2} 3.0×10^{-2} 3.6×10^{-2} 4.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
4-propyl-4-heptanol $\text{C}_{10}\text{H}_{22}\text{O}$ [2198-72-3] SJTPBRMACCDJPZ-UHFFFAOYSA-N	4.2×10^{-2} 4.9×10^{-2} 4.3×10^{-2} 9.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,2,3,4-tetramethyl-3-hexanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66256-63-1] SAFMWGCEQYLRLS-UHFFFAOYSA-N	3.1×10^{-2} 2.2×10^{-2} 3.3×10^{-2} 9.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,2,4,4-tetramethyl-3-hexanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66256-65-3] LKAPNEGVXBMYKE-UHFFFAOYSA-N	3.2×10^{-2} 6.7×10^{-3} 4.0×10^{-2} 1.0		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,2,5,5-tetramethyl-3-hexanol $\text{C}_{10}\text{H}_{22}\text{O}$ [55073-86-4] CFEYPBVKHMZCFR-UHFFFAOYSA-N	4.6×10^{-2} 3.6×10^{-2} 1.7		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	238 247
2,3,4,4-tetramethyl-2-hexanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66256-66-4] IELWGTFRBDDCZ-UHFFFAOYSA-N	3.2×10^{-2} 6.7×10^{-2} 3.0×10^{-2} 1.0		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,3,4,4-tetramethyl-3-hexanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66256-67-5] ZQFIWHYOYWCJIHU-UHFFFAOYSA-N	2.5×10^{-2} 2.9×10^{-2} 3.3×10^{-2} 7.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,3,5,5-tetramethyl-3-hexanol $\text{C}_{10}\text{H}_{22}\text{O}$ [5396-09-8] KTSYBVKVNWGHBC-UHFFFAOYSA-N	2.5×10^{-2} 6.4×10^{-2} 3.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4,4,5-tetramethyl-3-hexanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66256-68-6] VVRHXTVKOHXZJX-UHFFFAOYSA-N	2.8×10^{-2} 1.4×10^{-2} 3.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3,5,5-tetramethyl-2-hexanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66256-69-7] USWQOMRDCYQMW-UHFFFAOYSA-N	3.2×10^{-2} 2.1×10^{-2} 3.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3,4,4,5-tetramethyl-3-hexanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66256-39-1] UHJSHWWLQIIU-UHFFFAOYSA-N	2.5×10^{-2} 4.4×10^{-2} 3.2×10^{-2} 7.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3,4,5,5-tetramethyl-3-hexanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66256-40-4] LBUJHQJRJVUQJR-UHFFFAOYSA-N	2.9×10^{-2} 5.2×10^{-2} 3.1×10^{-2} 8.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,4-dimethyl-4-ethyl-3-hexanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66719-48-0] NLGGBBOPZSANIC-UHFFFAOYSA-N	4.0×10^{-2} 4.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
2-butyl-1-hexanol $\text{C}_{10}\text{H}_{22}\text{O}$ [2768-15-2] LAPDPWPIZBBJY-UHFFFAOYSA-N	4.4×10^{-1}		Yaws et al. (1997)	Q	
4-ethyl-2,2-dimethyl-3-hexanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66719-47-9] UOYRABPBVDJLW-UHFFFAOYSA-N	4.0×10^{-2} 4.0×10^{-2} 1.1		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	238 247
4-methyl-2-(1-methylethyl)-1-hexanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66719-41-3] VHGVOODVCUKVCL-UHFFFAOYSA-N	3.7×10^{-2} 1.8×10^{-2} 3.0×10^{-2} 7.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
4-methyl-2-propyl-1-hexanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66256-62-0] VZXWJVFQXZUFQS-UHFFFAOYSA-N	3.6×10^{-2} 2.3×10^{-2} 3.3×10^{-2} 5.7×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
5,5-dimethyl-2-ethyl-1-hexanol $\text{C}_{10}\text{H}_{22}\text{O}$ DXDJMJLAABGHOH-UHFFFAOYSA-N	2.7×10^{-2} 2.7×10^{-2} 3.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
5,5-dimethyl-3-ethyl-3-hexanol $\text{C}_{10}\text{H}_{22}\text{O}$ [5340-62-5] FVVBGHIXYRKNGT-UHFFFAOYSA-N	3.7×10^{-2} 4.1×10^{-2} 3.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
5-methyl-2-(1-methylethyl)-1-hexanol $\text{C}_{10}\text{H}_{22}\text{O}$ [2051-33-4] SFIQHFBITUEIBP-UHFFFAOYSA-N	3.0×10^{-2} 2.7×10^{-2} 3.0×10^{-2} 4.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2-methyl-3-(1-methylethyl)-3-hexanol $\text{C}_{10}\text{H}_{22}\text{O}$ (2,4-dimethyl-3-propyl-3-pentanol) [51200-81-8] GGOIYPAZTVTJBE-UHFFFAOYSA-N	4.3×10^{-2} 3.7×10^{-2} 2.1×10^{-2} 1.7×10^{-2} 3.7×10^{-2} 3.7×10^{-2} 9.6×10^{-1} 1.2		Yaws (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Gharagheizi et al. (2010) Yaws et al. (1997) Yaws et al. (1997)	X X Q Q Q Q Q Q	238 238 247 247
2,2,3,4,4-pentamethyl-3-pentanol $\text{C}_{10}\text{H}_{22}\text{O}$ [5857-69-2] UYFZQUABCZILAI-UHFFFAOYSA-N	2.4×10^{-2} 1.7×10^{-2} 3.1×10^{-2} 8.9×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
2,3-dimethyl-2- <i>tert</i> -butyl-1-butanol $\text{C}_{10}\text{H}_{22}\text{O}$ [81931-81-9] WQRJEFGWAMKEBO-UHFFFAOYSA-N	3.0×10^{-2} 1.1×10^{-2} 3.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,4-dimethyl-3-(1-methylethyl)-3-pentanol $\text{C}_{10}\text{H}_{22}\text{O}$ [51200-83-0] IFXNWIUSZUHIDG-UHFFFAOYSA-N	3.2×10^{-2} 1.6×10^{-2} 3.3×10^{-2} 8.9×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
3,4-dimethyl-3-isopropyl-2-pentanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66719-50-4] DNBJFVXHMLZKHP-UHFFFAOYSA-N	4.0×10^{-2} 3.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
4,4-dimethyl-3-isopropyl-1-pentanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66719-51-5] DQWFOEIWLQBIFY-UHFFFAOYSA-N	4.3×10^{-2} 3.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
3-ethyl-2,2,4-trimethyl-3-pentanol $\text{C}_{10}\text{H}_{22}\text{O}$ [66256-41-5] CHZVHXPAKQDRSE-UHFFFAOYSA-N	3.1×10^{-2} 1.5×10^{-2} 3.4×10^{-2} 9.9×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methyl-2-(2-methylpropyl)-1-pentanol $\text{C}_{10}\text{H}_{22}\text{O}$ [22417-45-4] FXXCTCCA ZGTNNO-UHFFFAOYSA-N	3.5×10^{-2} 2.0×10^{-2} 3.0×10^{-2} 6.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	238 247
1-undecanol $\text{C}_{11}\text{H}_{24}\text{O}$ [112-42-5] KJIOQYGTQBHNH-UHFFFAOYSA-N	1.4×10^{-1} 2.2×10^{-1} 2.1×10^{-1} 1.4×10^{-1} 1.2×10^{-1} 1.7×10^{-1} 2.2×10^{-1} 3.0×10^{-1}		Brockbank (2013) Yaws (2003) Dupeux et al. (2022) HSDB (2015) Hilal et al. (2008) Yao et al. (2002) Yaws et al. (1997) Yaws (1999)	L X Q Q Q Q Q ?	259 260 100 230 21
2-undecanol $\text{C}_{11}\text{H}_{24}\text{O}$ [1653-30-1] XMUJIPoftaHSOK-UHFFFAOYSA-N	1.2×10^{-1} 2.3×10^{-1}		Yaws (2003) Dupeux et al. (2022)	X Q	259 260
3-undecanol $\text{C}_{11}\text{H}_{24}\text{O}$ [6929-08-4] HCARCYFXWDRVBZ-UHFFFAOYSA-N	6.0×10^{-2} 1.7×10^{-1} 1.6×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
1-dodecanol $\text{C}_{12}\text{H}_{26}\text{O}$ [112-53-8] LQZZUXJYWNFBMV-UHFFFAOYSA-N	1.2×10^{-1} 4.4×10^{-1} 1.4×10^{-1} 1.9×10^{-1} 1.8×10^{-1} 2.4×10^{-1} 1.5 7.8×10^{-2} 9.9×10^{-2} 9.9×10^{-2} 1.5×10^{-1} 3.5×10^{-1} 2.1×10^{-1} 1.6×10^{-1} 1.9×10^{-1} 4.4×10^{-1} 1.9×10^{-1} 1.1×10^{-1}	9800	Brockbank (2013) Altschuh et al. (1999) Abraham (1984) Yaws (2003) Dupeux et al. (2022) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Yao et al. (2002) Yaws et al. (1997) Duchowicz et al. (2020) Yaws (1999) Yaws and Yang (1992)	L M V X Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q ?	259 260 185 243, 244 245 246 68 249, 250 230, 268 186, 21 21 21
3-dodecanol $\text{C}_{12}\text{H}_{26}\text{O}$ [10203-30-2] OKDGZLITBCRLJ-UHFFFAOYSA-N	4.8×10^{-2} 1.5×10^{-1} 1.5×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,6,8-trimethyl-4-nonanol $\text{C}_{12}\text{H}_{26}\text{O}$ [123-17-1] LFEHSRSSAGQWNI-UHFFFAOYSA-N	1.0×10^{-1} 1.1×10^{-1} 6.0×10^{-2} 2.6×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1-tridecanol $\text{C}_{13}\text{H}_{28}\text{O}$ [112-70-9] XFRVVPUIAFSTFO-UHFFFAOYSA-N	1.2×10^{-1} 1.5×10^{-1} 7.6×10^{-2} 1.3×10^{-1} 1.2×10^{-1} 1.8×10^{-1}		Yaws (2003) Dupeux et al. (2022) HSDB (2015) Yao et al. (2002) Yaws et al. (1997) Yaws (1999)	X Q Q Q Q ?	259 260 100 230 21
1-tetradecanol $\text{C}_{14}\text{H}_{30}\text{O}$ [112-72-1] HLZKNKRTKFSKGZ-UHFFFAOYSA-N	6.2×10^{-2} 6.2×10^{-2} 2.2×10^{-1} 9.4×10^{-2} 1.2×10^{-1} 1.5 6.2×10^{-2} 2.7×10^{-1} 9.7×10^{-2} 6.6×10^{-2} 9.5×10^{-2} 9.5×10^{-2} 3.9×10^3		Duchowicz et al. (2020) HSDB (2015) Abraham (1984) Yaws (2003) Dupeux et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Yao et al. (2002) Yaws et al. (1997) Yaws (1999) Yaws and Yang (1992)	V V R X Q Q Q Q Q Q Q ? ?	187 259 260 68 249, 250 230 21 21, 411
2-tetradecanol $\text{C}_{14}\text{H}_{30}\text{O}$ [4706-81-4] BRGJIMZXMWMCC-UHFFFAOYSA-N	1.7×10^{-1}		Gharagheizi et al. (2012)	Q	
1-pentadecanol $\text{C}_{15}\text{H}_{32}\text{O}$ [629-76-5] REIUXOLGHVXAEU-UHFFFAOYSA-N	2.2×10^{-1} 2.5×10^{-2} 8.9×10^{-2} 2.7×10^{-2} 2.5×10^{-1} 2.5×10^{-1} 3.0×10^3		Abraham (1984) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaffe et al. (2003) Yaws et al. (1997) Yaws and Yang (1992)	V X Q Q Q Q ?	238 247 249, 250 21, 412
1-hexadecanol $\text{C}_{16}\text{H}_{34}\text{O}$ (cetyl alcohol) [124-29-8] BXWNKGSJHAJOGX-UHFFFAOYSA-N	2.1×10^{-1} 2.1×10^{-1} 3.5×10^{-1} 6.4×10^{-2} 1.5 7.4×10^{-2} 3.8×10^{-2} 3.9×10^{-2} 2.1×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Abraham (1984) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V V R X Q Q Q Q Q	187 238 247 68

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.5×10^{-1}		Yaffe et al. (2003)	Q	249, 273
	1.0×10^{-1}		Yaws et al. (1997)	Q	
	1.0×10^{-1}		Yaws (1999)	?	21
	5.9×10^{-1}		Yaws and Yang (1992)	?	21
2-hexadecanol $\text{C}_{16}\text{H}_{34}\text{O}$ [14852-31-4] FVDRFBGMOWJEOR-UHFFFAOYSA-N	1.6×10^{-2}		Yaws (2003)	X	238
	1.1×10^{-2}		Gharagheizi et al. (2010)	Q	247
1-heptadecanol $\text{C}_{17}\text{H}_{36}\text{O}$ [1454-85-9] GOQYKNQRPGWPLP-UHFFFAOYSA-N	4.5×10^{-2}		Yaws (2003)	X	238
	7.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.6×10^{-2}		Gharagheizi et al. (2010)	Q	247
	4.6×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	4.5×10^{-2}		Yaws et al. (1997)	Q	
	1.2×10^1		Yaws and Yang (1992)	?	21
2-heptadecanol $\text{C}_{17}\text{H}_{36}\text{O}$ [16813-18-6] ZNYQHFLBAPNPRC-UHFFFAOYSA-N	8.7×10^{-3}		Yaws (2003)	X	238
	1.2×10^{-2}		Gharagheizi et al. (2010)	Q	247
1-octadecanol $\text{C}_{18}\text{H}_{38}\text{O}$ [112-92-5] GLDOVTGHNKAZLK-UHFFFAOYSA-N	1.2×10^{-2}		Duchowicz et al. (2020)	V	187
	1.2×10^{-2}		HSDB (2015)	V	
	3.8×10^{-1}		Abraham (1984)	R	
	1.5		Duchowicz et al. (2020)	Q	
	2.5×10^{-2}		Hilal et al. (2008)	Q	
	1.7×10^{-1}		Modarresi et al. (2007)	Q	68
	3.1×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	3.1×10^{-3}		Yaws et al. (1997)	Q	
	1.2×10^{-2}		Yaws (1999)	?	21, 413
	9.1×10^{-1}		Yaws and Yang (1992)	?	21, 413
1-nonadecanol $\text{C}_{19}\text{H}_{40}\text{O}$ [1454-84-8] XGFDHKJUJZCCPKQ-UHFFFAOYSA-N	9.9×10^{-2}		Yaws et al. (1997)	Q	
1-eicosanol $\text{C}_{20}\text{H}_{42}\text{O}$ [629-96-9] BTFJIXJCSYFAL-UHFFFAOYSA-N	4.7×10^{-1}		HSDB (2015)	Q	100
	5.5×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.8×10^{-2}		Yaws et al. (1997)	Q	
1-docosanol $\text{C}_{22}\text{H}_{46}\text{O}$ (behenic alcohol) [661-19-8] NOPFSRXAKWQILS-UHFFFAOYSA-N	6.2×10^{-3}		HSDB (2015)	Q	100

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
1-tetracosanol $C_{24}H_{50}O$ [506-51-4] TYWMIZZBOVGFV-UHFFFAOYSA-N	3.4×10^{-3}		HSDB (2015)	Q	100
cyclopentanol C_5H_9OH [96-41-3] XCIXKGXIYUWCLL-UHFFFAOYSA-N	4.2 2.2 4.3 3.8 2.0 4.4 4.3	8200 5900 8000 7200 7300	Plyasunov and Shock (2000) Hovorka et al. (2002) Cabani et al. (1975b) HSDB (2015) Hilal et al. (2008) Kühne et al. (2005) Nirmalakhandan et al. (1997) Kühne et al. (2005) Abraham et al. (1990)	L M T Q Q Q ? ?	 11 100
cyclohexanol $C_6H_{11}OH$ [108-93-0] HPXRVGTGHNJAIH-UHFFFAOYSA-N	4.3 4.4 2.5 4.3 2.2 2.7 4.5 4.5 3.5 1.7 4.1 3.9 3.6 6.2 1.1 4.1 4.5×10^{-1} 4.5 6.3 1.6 2.0 2.5 2.0 3.3 2.3 3.8 1.3 4.1 2.3 2.7 3.6 2.0	 7700 8500 7700 8500 7500	Brockbank (2013) Plyasunov and Shock (2000) Chao et al. (2017) Hovorka et al. (2002) Altschuh et al. (1999) Chao et al. (2017) Mackay et al. (2006c) Mackay et al. (1995) Meylan and Howard (1991) Hine and Mookerjee (1975) Cabani et al. (1975b) Yaws (2003) Howard (1993) Dupeux et al. (2022) Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Li et al. (2014) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Yaffe et al. (2003) Yao et al. (2002) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Russell et al. (1992) Suzuki et al. (1992)	L L M M M V V V V V T X X Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	 11 259 414 260 81, 239 81, 240 81, 241 242 243, 244 245 246 68 249, 250 230 231, 232 280 233

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.0		Meylan and Howard (1991)	Q	
	3.4		Nirmalakhandan and Speece (1988)	Q	
	2.2	7500	Duchowicz et al. (2020)	?	186, 21
			Kühne et al. (2005)	?	
	3.9		Yaws (1999)	?	21
	4.1		Abraham et al. (1990)	?	
cycloheptanol $\text{C}_7\text{H}_{13}\text{OH}$ [502-41-0] QCRFMSUKWRQZEM-UHFFFAOYSA-N	4.6	9000	Plyasunov and Shock (2000)	L	
	4.2	9000	Cabani et al. (1975b)	T	
	1.0		Hilal et al. (2008)	Q	
	3.7		English and Carroll (2001)	Q	231, 232
	4.2		Abraham et al. (1990)	?	
4-methylcyclohexanol $\text{C}_7\text{H}_{13}\text{OH}$ [589-91-3] MQWCXKKGKQLNYQG-UHFFFAOYSA-N	2.5		Ebert et al. (2023)	?	319
2-methylcyclohexanol $\text{C}_7\text{H}_{14}\text{O}$ [583-59-5] NDVWOBVBYJYUSMF-UHFFFAOYSA-N	1.4		Chao et al. (2017)	M	
	1.3		Altschuh et al. (1999)	M	
	5.9		Keshavarz et al. (2022)	Q	
	1.7		Duchowicz et al. (2020)	Q	185
	1.6		Raventos-Duran et al. (2010)	Q	243, 244
	1.6		Raventos-Duran et al. (2010)	Q	245
	1.6		Raventos-Duran et al. (2010)	Q	246
	1.3		Hilal et al. (2008)	Q	
	3.2		Modarresi et al. (2007)	Q	68
	1.3		Duchowicz et al. (2020)	?	186, 21
3-methylcyclohexanol $\text{C}_7\text{H}_{14}\text{O}$ [591-23-1] HTSABYAWKQAHBT-UHFFFAOYSA-N	2.9		Chao et al. (2017)	M	
	2.7		Altschuh et al. (1999)	M	
	5.9		Keshavarz et al. (2022)	Q	
	1.7		Duchowicz et al. (2020)	Q	300
	1.6		Raventos-Duran et al. (2010)	Q	243, 244
	1.6		Raventos-Duran et al. (2010)	Q	245
	1.6		Raventos-Duran et al. (2010)	Q	246
	1.7		Modarresi et al. (2007)	Q	68
	2.7		Duchowicz et al. (2020)	?	186, 21
MCM:C8BCOH $\text{C}_8\text{H}_{14}\text{O}$ CEOBYJRLFASWKF-UHFFFAOYSA-N	8.7×10^{-1}		Wang et al. (2017)	Q	81, 239
	2.4		Wang et al. (2017)	Q	81, 240
	1.5		Wang et al. (2017)	Q	81, 241
(4-methylcyclohexyl)methanol $\text{C}_8\text{H}_{16}\text{O}$ [34885-03-5] OSINZLLLLCUKJH-UHFFFAOYSA-N	1.5		HSDB (2015)	Q	100

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
borneol $\text{C}_{10}\text{H}_{18}\text{O}$ [507-70-0] DTGKSKDOIYIVQL-UHFFFAOYSA-N	4.4×10^{-1}		Ebert et al. (2023)	?	317
fenchol $\text{C}_{10}\text{H}_{18}\text{O}$ (fenchyl alcohol) [1632-73-1] IAIHUHQCLTYTSF-UHFFFAOYSA-N	3.5×10^{-1}		Ebert et al. (2023)	?	373
menthol $\text{C}_{10}\text{H}_{20}\text{O}$ [1490-04-6] NOOLISFMXDJSKH-UHFFFAOYSA-N	3.1×10^{-1}		Ebert et al. (2023)	?	319
2-methylisoborneol $\text{C}_{11}\text{H}_{20}\text{O}$ [2371-42-8] LFYXNXGVLGKVCJ-BOBPJJCASA-N	8.9×10^{-2} 1.6	9800	Ömür-Özbek and Dietrich (2005) Wu et al. (2022a)	M Q	415
geosmin $\text{C}_{12}\text{H}_{22}\text{O}$ [19700-21-1] JLPUXFOGCDVKGO-GRYCIOLGSA-N	8.1×10^{-2} 4.1	9800	Ömür-Özbek and Dietrich (2005) Wu et al. (2022a)	M Q	415
cyclododecanol $\text{C}_{12}\text{H}_{24}\text{O}$ [1724-39-6] SFVWPXMPCIVOK-UHFFFAOYSA-N	3.4 6.8 4.5 3.7×10^{-1} 3.4 8.0 5.3×10^{-2} 1.6 2.5×10^{-1} 3.4		Altschuh et al. (1999) Keshavarz et al. (2022) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	M Q Q Q Q Q Q Q Q ?	288, 289 288, 290 288, 291 288, 292 68 186, 21
cedrol $\text{C}_{15}\text{H}_{26}\text{O}$ [77-53-2] SVURIXNDRWRAFU-OGMFBOKVSA-N	6.7		Dupeux et al. (2022)	Q	260
patchoulol $\text{C}_{15}\text{H}_{26}\text{O}$ [5986-55-0] GGHMUJJBZYLWFD-CUZKYEQNSA-N	1.3×10^1		Dupeux et al. (2022)	Q	260

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
perhydrobisphenol a $\text{C}_{15}\text{H}_{28}\text{O}_2$ [80-04-6] CDBAMNGURPMUTG-UHFFFAOYSA-N	9.7 6.1×10^4 3.4×10^4 1.8×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
3-(5,5,6-trimethyl-2-norbornyl)cyclohexanol $\text{C}_{16}\text{H}_{28}\text{O}$ [3407-42-9] BWVZAZPLUTUBKD-UHFFFAOYSA-N	6.1×10^{-1} 1.6×10^1 1.1×10^1 2.7×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
4-(5,5,6-trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol $\text{C}_{16}\text{H}_{28}\text{O}$ [66068-84-6] PCFHYANYPQEMPU-UHFFFAOYSA-N	6.1×10^{-1} 1.8×10^1 4.4×10^1 2.7×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
4-((1R,2R,4R)-born-2-yl)cyclohexanol $\text{C}_{16}\text{H}_{28}\text{O}$ [66072-32-0] LFHQKYSBKVWWS-UHFFFAOYSA-N	6.1×10^{-1} 9.9 4.3×10^1 1.6×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
ethenol $\text{C}_2\text{H}_4\text{O}$ (vinyl alcohol) [557-75-5] IMROMDMJAWUWLK-UHFFFAOYSA-N	8.5×10^{-1} 2.0 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2-propen-1-ol $\text{C}_3\text{H}_5\text{OH}$ (allyl alcohol) [107-18-6] XXROGKLTLLUQVRX-UHFFFAOYSA-N	2.0 1.6 4.3 2.0 1.5 9.0×10^{-1} 4.0 6.9×10^{-1} 5.9 2.1 2.0 4.9 3.9 1.6 2.8 3.7 2.0 3.8	6500 7200	Plyasunov and Shock (2000) Lide and Frederikse (1995) Yaws (2003) Goldstein (1982) Pierotti et al. (1959) Dupeux et al. (2022) Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Li et al. (2014) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Yao et al. (2002)	L V X X X Q Q Q Q Q Q Q Q Q Q Q Q Q Q	259 299 416 260 300 81, 239 81, 240 81, 241 242 243, 244 245 246 242 68 249, 250 230

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	5.1		English and Carroll (2001)	Q	231, 232
	4.4		Katritzky et al. (1998)	Q	
	3.5		Nirmalakhandan et al. (1997)	Q	
	4.4		Suzuki et al. (1992)	Q	233
	3.4		Nirmalakhandan and Speece (1988)	Q	
	2.0		Duchowicz et al. (2020)	?	186, 21
	1.6		Yaws (1999)	?	21
	1.8		Yaws and Yang (1992)	?	21
	2.0		Abraham et al. (1990)	?	
2-propyn-1-ol $\text{C}_3\text{H}_4\text{O}$ (propargyl alcohol) [107-19-7] TVDSBUOJIPERQY-UHFFFAOYSA-N	3.8	7400	Hiatt (2013)	M	
	8.6		Duchowicz et al. (2020)	V	187
	9.0		HSDB (2015)	V	
	7.0		Duchowicz et al. (2020)	Q	
	5.4		Hilal et al. (2008)	Q	
	7.0		Modarresi et al. (2007)	Q	68
2-buten-1-ol $\text{CH}_3\text{CHCHCH}_2\text{OH}$ [6117-91-5] WCASXYBKJHWFMY-UHFFFAOYSA-N		6900	Plyasunov and Shock (2000)	L	
	3.1		Raventos-Duran et al. (2010)	Q	243, 244
	3.9		Raventos-Duran et al. (2010)	Q	245
	1.2		Raventos-Duran et al. (2010)	Q	246
	2.7		Hilal et al. (2008)	Q	
	3.0		Saxena and Hildemann (1996)	E	403
3-buten-1-ol $\text{C}_4\text{H}_8\text{O}$ [627-27-0] ZSPTYLOMNJNZNG-UHFFFAOYSA-N		7000	Plyasunov and Shock (2000)	L	
4-penten-1-ol $\text{C}_5\text{H}_{10}\text{O}$ [821-09-0] LQAVWYMTUMSFBE-UHFFFAOYSA-N		7300	Plyasunov and Shock (2000)	L	
3-pentyn-1-ol $\text{C}_5\text{H}_8\text{O}$ [10229-10-4] IDYNOORNKYEHHO-UHFFFAOYSA-N		7800	Plyasunov and Shock (2000)	L	
2-methyl-3-buten-2-ol $\text{C}_5\text{H}_{10}\text{O}$ [115-18-4] HNVRHSXBLFLIG-UHFFFAOYSA-N	6.4×10^{-1}		Iraci et al. (1999)	M	38
	4.7×10^{-1}		Altschuh et al. (1999)	M	
	1.6		Keshavarz et al. (2022)	Q	
	7.9×10^{-1}		Duchowicz et al. (2020)	Q	300
	3.6×10^{-1}		Wang et al. (2017)	Q	81, 239
	1.2		Wang et al. (2017)	Q	81, 240
	7.3×10^{-1}		Wang et al. (2017)	Q	81, 241
	2.5		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	6.0×10^{-1}		Hilal et al. (2008)	Q	

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.6 4.7×10^{-1}		Modarresi et al. (2007) Duchowicz et al. (2020)	Q ?	68 186, 21
2-methyl-3-butyn-2-ol $\text{C}_5\text{H}_8\text{O}$ [115-19-5] CEBKHWANWSNTI-UHFFFAOYSA-N	2.5 1.6 1.5 1.0		Altschuh et al. (1999) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008)	M Q Q Q	
	8.3 2.5		Modarresi et al. (2007) Duchowicz et al. (2020)	Q ?	68 186, 21
3-methyl-1-pentyn-3-ol $\text{C}_6\text{H}_{10}\text{O}$ (meparfynol; methyl pentynol) [77-75-8] QXLPXWSKPNOQLE-UHFFFAOYSA-N	9.9×10^{-1} 7.0 4.3		Hilal et al. (2008) Modarresi et al. (2007) Katritzky et al. (1998)	Q Q Q	68
2-cyclohexen-1-ol $\text{C}_6\text{H}_{10}\text{O}$ [822-67-3] PQANGXXSEABURG-UHFFFAOYSA-N		8500	Plyasunov and Shock (2000)	L	
bicyclo[2.2.1]heptan-2-ol $\text{C}_7\text{H}_{12}\text{O}$ (norborneol) [1632-68-4] ZQTYQMYDIHMKQB-UHFFFAOYSA-N	2.2	5000	van Roon et al. (2005)	V	
2-octen-1-ol $\text{C}_8\text{H}_{16}\text{O}$ [22104-78-5] AYQPVPFZWIGERS-UHFFFAOYSA-N	7.7×10^{-1}		Wu et al. (2022a)	Q	415
1-octen-3-ol $\text{C}_8\text{H}_{16}\text{O}$ [3391-86-4] VSMOENVRRABVKN-UHFFFAOYSA-N	1.9×10^{-1} 2.5×10^{-1} 1.3×10^{-1}	7900	Wu et al. (2022a) Druaux et al. (1998) Roberts and Pollien (1997)	M M M	
3,7-dimethyl-6-octen-1-ol $\text{C}_{10}\text{H}_{20}\text{O}$ (citronellol) [106-22-9] QMVPMAAFGQKVCJ-UHFFFAOYSA-N	5.2 4.9×10^{-1}		Martins et al. (2017) Dupeux et al. (2022)	V Q	316 260
3,7-dimethyl-1,6-octadien-3-ol $\text{C}_{10}\text{H}_{18}\text{O}$ (linalool) [78-70-6] CDOSHBSFJOMGT-UHFFFAOYSA-N	2.0×10^{-1} 3.8×10^{-1} 4.6×10^{-1} 4.0×10^{-1} 4.8×10^{-1} 4.8×10^{-1} 2.1×10^{-1} 1.6	4400 14000	Leng et al. (2013) Copolovici and Niinemets (2007) Altschuh et al. (1999) Martins et al. (2017) Copolovici and Niinemets (2005) Niinemets and Reichstein (2002) Li et al. (1998) Dupeux et al. (2022)	M M M V V V V Q	316 260

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.3×10^{-1}		Keshavarz et al. (2022)	Q	
	3.3×10^{-1}		Duchowicz et al. (2020)	Q	185
	2.5×10^{-1}		Savary et al. (2014)	Q	
	2.5		Raventos-Duran et al. (2010)	Q	272, 244
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	6.9×10^{-1}		Hilal et al. (2008)	Q	
	1.4		Modarresi et al. (2007)	Q	68
	1.5×10^{-2}		Hertel and Sommer (2006)	Q	417
	4.6×10^{-1}		Duchowicz et al. (2020)	?	186, 21
linalool oxide $\text{C}_{10}\text{H}_{18}\text{O}_2$ [1365-19-1] BXOURKNXQXLKRK-UHFFFAOYSA-N	3.0×10^2		Dupeux et al. (2022)	Q	260
(<i>E</i>)-3,7-dimethyl-2,6-octadien-1-ol $\text{C}_{10}\text{H}_{18}\text{O}$ (geraniol) [106-24-1] GLZPCOQZEFWAFX-JXMROGBWSA-N	3.1		Martins et al. (2017)	V	316
	1.6		Dupeux et al. (2022)	Q	260
	1.7×10^{-1}		HSDB (2015)	Q	100
(<i>Z</i>)-3,7-dimethyl-2,6-octadien-1-ol $\text{C}_{10}\text{H}_{18}\text{O}$ [106-25-2] GLZPCOQZEFWAFX-YFHOEESVSA-N	8.6×10^{-1}		Duchowicz et al. (2020)	V	187
	2.1×10^{-1}		Duchowicz et al. (2020)	Q	
tricyclo[3.3.1.1(3,7)]decan-1-ol $\text{C}_{10}\text{H}_{16}\text{O}$ (1-adamantanol) [768-95-6] VLLNJDMHDJRNFK-UHFFFAOYSA-N	6.0	5300	van Roon et al. (2005)	V	
3,7,11-trimethyl-2,6,10-dodecatrien-1-ol $\text{C}_{15}\text{H}_{26}\text{O}$ (farnesol) [4602-84-0] CRDAMVZIKSXFV-YFVJMOTDSA-N	3.9×10^{-2}		HSDB (2015)	Q	100
(<i>Z</i>)-9-octadecen-1-ol $\text{C}_{18}\text{H}_{36}\text{O}$ (oleyl alcohol) [143-28-2] ALSTYHKOOCGGFT-KTKRTIGZSA-N	2.1×10^{-2}		HSDB (2015)	Q	100
(3 <i>E</i> ,13 <i>Z</i>)-octadeca-3,13-dien-1-ol $\text{C}_{18}\text{H}_{34}\text{O}$ [66410-28-4] QBNCGBJHGBGHLS-IYUNJCAVSA-N	2.4×10^{-1}		Ebert et al. (2023)	?	319

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.1×10^1		Ryan et al. (1988)	C	
	7.6		Shen (1982)	C	
	1.8×10^1		Dupeux et al. (2022)	Q	260
	6.4×10^1		Keshavarz et al. (2022)	Q	
	4.2×10^1		Duchowicz et al. (2020)	Q	185
	6.3×10^1		Wang et al. (2017)	Q	81, 239
	1.1×10^1		Wang et al. (2017)	Q	81, 240
	3.6×10^1		Wang et al. (2017)	Q	81, 241
	2.5×10^1		Li et al. (2014)	Q	242
	9.9		Raventos-Duran et al. (2010)	Q	243, 244
	7.8		Raventos-Duran et al. (2010)	Q	245
	1.6×10^1		Raventos-Duran et al. (2010)	Q	246
	4.4		Hilal et al. (2008)	Q	
	1.8×10^1		Modarresi et al. (2007)	Q	68
		6200	Kühne et al. (2005)	Q	
	3.0×10^1		Yaffe et al. (2003)	Q	249, 250
	2.9×10^1		English and Carroll (2001)	Q	231, 232
	6.9		Katritzky et al. (1998)	Q	
	2.0×10^1		Russell et al. (1992)	Q	280
	2.0×10^1		Suzuki et al. (1992)	Q	233
	9.9		Nirmalakhandan and Speece (1988)	Q	
	3.0×10^1		Duchowicz et al. (2020)	?	186, 21
		5400	Kühne et al. (2005)	?	
	1.3×10^1		Yaws (1999)	?	21
	1.6×10^1		Abraham et al. (1990)	?	
(hydroxymethyl)-benzene	1.7×10^1		Chao et al. (2017)	M	
$\text{C}_6\text{H}_5\text{CH}_2\text{OH}$	$>3.7 \times 10^1$		Altschuh et al. (1999)	M	
(benzyl alcohol)	2.5×10^1		Chao et al. (2017)	V	
[100-51-6]	6.2×10^{-2}		Mackay et al. (2006c)	V	
WVDDGKGOMKODPV-UHFFFAOYSA-N	6.2×10^{-2}		Mackay et al. (1995)	V	
	2.9×10^1		Abraham et al. (1994a)	R	
	3.8×10^1		Yaws (2003)	X	259
	3.8×10^1		Yaws (2003)	X	238
	2.5×10^1		Howard (1993)	X	414
	1.6×10^1		Dupeux et al. (2022)	Q	260
	2.3×10^1		Keshavarz et al. (2022)	Q	
	2.3×10^1		Duchowicz et al. (2020)	Q	300
	3.8×10^1		Wang et al. (2017)	Q	81, 239
	4.9×10^1		Wang et al. (2017)	Q	81, 240
	3.8×10^1		Wang et al. (2017)	Q	81, 241
	8.6×10^1		Gharagheizi et al. (2012)	Q	
	9.9×10^1		Raventos-Duran et al. (2010)	Q	243, 244
	3.9×10^1		Raventos-Duran et al. (2010)	Q	245
	4.9×10^1		Raventos-Duran et al. (2010)	Q	246
	4.1×10^1		Gharagheizi et al. (2010)	Q	247

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.2×10^1		Hilal et al. (2008)	Q	
	5.5×10^1		Modarresi et al. (2007)	Q	68
	1.1×10^1		Yao et al. (2002)	Q	230
	2.1×10^1		English and Carroll (2001)	Q	231, 232
	6.9×10^1		Nirmalakhandan et al. (1997)	Q	
	8.9×10^1		Saxena and Hildemann (1996)	E	403
	2.9×10^1		Duchowicz et al. (2020)	?	186, 21
	2.9×10^1		HSDB (2015)	?	421
	3.8×10^1		Yaws (1999)	?	21
	1.8×10^1		Abraham et al. (1990)	?	
1-hydroxy-2-methylbenzene HOC ₆ H ₄ CH ₃ (2-cresol; <i>o</i> -cresol) [95-48-7] QWVGKYWNOKOFNN-UHFFFAOYSA-N	6.7	7400	Brockbank (2013)	L	1
	6.5		Chao et al. (2017)	M	
	4.2	8500	Feigenbrugel et al. (2004b)	M	
	1.1×10^1	6700	Harrison et al. (2002)	M	
	6.3		Altschuh et al. (1999)	M	
	5.6	5800	Dohnal and Fenclová (1995)	M	
	7.1		Tremp et al. (1993)	M	12
	8.2	7300	Parsons et al. (1972)	M	419
	5.8		Chao et al. (2017)	V	
			Mackay et al. (2006c)	V	422
	6.2		Lide and Frederikse (1995)	V	
	6.4		Mackay et al. (1995)	V	
	3.5×10^1		Leuenberger et al. (1985)	V	418
	8.8		Yaws (2003)	X	259
	2.6	4600	Janini and Quaddora (1986)	X	299
	6.2		Howard (1989)	X	420
	8.2		Gaffney and Senum (1984)	X	391
	8.3		Schüürmann (2000)	C	21
	8.4		Dupeux et al. (2022)	Q	260
	5.9		Keshavarz et al. (2022)	Q	
	2.3×10^1		Duchowicz et al. (2020)	Q	
	3.9×10^1		Wang et al. (2017)	Q	81, 239
	1.2×10^1		Wang et al. (2017)	Q	81, 240
	1.1×10^1		Wang et al. (2017)	Q	81, 241
	8.0		Li et al. (2014)	Q	242
	1.2×10^1		Gharagheizi et al. (2012)	Q	
	5.3		Hilal et al. (2008)	Q	
	6.2		Modarresi et al. (2007)	Q	68
		6500	Kühne et al. (2005)	Q	
	8.8		Yaffe et al. (2003)	Q	249, 250
	9.9		Yao et al. (2002)	Q	230, 268
	9.5		English and Carroll (2001)	Q	231, 232
	4.6		Katritzky et al. (1998)	Q	
	1.5×10^1		Suzuki et al. (1992)	Q	233
	7.2		Nirmalakhandan and Speece (1988)	Q	
	8.2		Duchowicz et al. (2020)	?	186, 21

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
		8100	Kühne et al. (2005)	?	
	5.8		Yaws (1999)	?	21, 12
	1.2×10^1		Yaws and Yang (1992)	?	21, 12
	8.0		Abraham et al. (1990)	?	
1-hydroxy-3-methylbenzene $\text{HO}C_6\text{H}_4\text{CH}_3$ (3-cresol; <i>m</i> -cresol) [108-39-4] RLSSMJSEOOYNOY-UHFFFAOYSA-N	1.2×10^1	6200	Brockbank (2013)	L	1
	7.9	9000	Feigenbrugel et al. (2004b)	M	
	1.2×10^1		Altschuh et al. (1999)	M	
	1.2×10^1	6000	Dohnal and Fenclová (1995)	M	
	1.3×10^1		Mackay et al. (2006c)	V	
	1.2×10^1		Schüürmann (2000)	V	
	1.1×10^1		Lide and Frederikse (1995)	V	
	1.1×10^1		Mackay et al. (1995)	V	
	1.1×10^1		Meylan and Howard (1991)	V	
	4.9×10^1		Leuenberger et al. (1985)	V	418
	2.2×10^1		Yaws (2003)	X	259
	6.1	7700	Janini and Quaddora (1986)	X	299
	1.1×10^1		Howard (1989)	X	420
	1.8×10^1		Dupeux et al. (2022)	Q	260
	5.9		Keshavarz et al. (2022)	Q	
	2.3×10^1		Duchowicz et al. (2020)	Q	185
	1.2×10^1		Gharagheizi et al. (2012)	Q	
	3.9		Hilal et al. (2008)	Q	
	1.1×10^1		Modarresi et al. (2007)	Q	68
		6500	Kühne et al. (2005)	Q	
	1.2×10^1		Yaffe et al. (2003)	Q	249, 250
	1.0×10^1		Yao et al. (2002)	Q	230
	1.7×10^1		Katritzky et al. (1998)	Q	
	1.6×10^1		Meylan and Howard (1991)	Q	
	1.2×10^1		Duchowicz et al. (2020)	?	186, 21
		6500	Kühne et al. (2005)	?	
	1.4×10^1		Yaws (1999)	?	21, 12
	1.4×10^1		Yaws and Yang (1992)	?	21, 12
	4.3		Abraham et al. (1990)	?	
1-hydroxy-4-methylbenzene $\text{HO}C_6\text{H}_4\text{CH}_3$ (4-cresol; <i>p</i> -cresol) [106-44-5] IWDCCLRJOBRRNH-UHFFFAOYSA-N	1.3×10^1	6600	Brockbank (2013)	L	1
	1.0×10^1	9300	Feigenbrugel et al. (2004b)	M	
	>2.9		Altschuh et al. (1999)	M	
	1.3×10^1	6100	Dohnal and Fenclová (1995)	M	
	1.3×10^1		Tremp et al. (1993)	M	12
	1.3×10^1	7200	Parsons et al. (1972)	M	419
	1.8×10^1		Mackay et al. (2006c)	V	
	1.0×10^1		Lide and Frederikse (1995)	V	
	1.5×10^1		Mackay et al. (1995)	V	
	4.5×10^1		Leuenberger et al. (1985)	V	418
	1.2		Smith and Bomberger (1980)	V	24
	2.2×10^1		Yaws (2003)	X	259

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.2	4600	Janini and Quaddora (1986)	X	299
	1.0×10^1		Howard (1989)	X	420
	9.9		Gaffney and Senum (1984)	X	391
	1.3×10^1		Schüürmann (2000)	C	21
	1.6×10^1		Dupeux et al. (2022)	Q	260
	5.9		Keshavarz et al. (2022)	Q	
	2.3×10^1		Duchowicz et al. (2020)	Q	185
	1.8×10^1		Gharagheizi et al. (2012)	Q	
	4.2		Hilal et al. (2008)	Q	
	1.7×10^1		Modarresi et al. (2007)	Q	68
		6500	Kühne et al. (2005)	Q	
	8.8		Yaffe et al. (2003)	Q	249, 273
	1.5×10^1		Yao et al. (2002)	Q	230
	1.7×10^1		English and Carroll (2001)	Q	231, 232
	1.5×10^1		Katritzky et al. (1998)	Q	
	1.4×10^1		Suzuki et al. (1992)	Q	233
	7.0		Nirmalakhandan and Speece (1988)	Q	
	9.9		Duchowicz et al. (2020)	?	186, 21
		6000	Kühne et al. (2005)	?	
	1.3×10^1		Yaws (1999)	?	21, 12
	2.5×10^1		Yaws and Yang (1992)	?	21, 12
	1.3×10^1		Abraham et al. (1990)	?	
1-hydroxy-2,3-dimethylbenzene $\text{C}_8\text{H}_{10}\text{O}$	6.7	6100	Brockbank (2013)	L	
(2,3-xyleneol; 2,3-dimethylphenol) [526-75-0] QWBPPBRQALCEIZ-UHFFFAOYSA-N	9.3		Sheikheldin et al. (2001)	M	12
	1.0×10^1	6800	Dohnal and Fenclová (1995)	M	
	3.2		HSDB (2015)	V	
	1.8×10^1		Mackay et al. (2006c)	V	
	1.9×10^1		Mackay et al. (1995)	V	
	4.9×10^1		Leuenberger et al. (1985)	V	418
	1.3×10^1		Abraham et al. (1994a)	R	
	7.9		Keshavarz et al. (2022)	Q	
	1.2×10^1		Duchowicz et al. (2020)	Q	185
	2.2×10^1		Wang et al. (2017)	Q	81, 239
	1.4×10^1		Wang et al. (2017)	Q	81, 240
	9.6		Wang et al. (2017)	Q	81, 241
	6.2		Raventos-Duran et al. (2010)	Q	243, 244
	7.8		Raventos-Duran et al. (2010)	Q	245
	1.6×10^1		Raventos-Duran et al. (2010)	Q	246
	5.8		Hilal et al. (2008)	Q	
	5.2		Modarresi et al. (2007)	Q	68
	1.4×10^1		Yaffe et al. (2003)	Q	249, 250
	1.2×10^1		English and Carroll (2001)	Q	231, 232
	4.6×10^1		Nirmalakhandan et al. (1997)	Q	
	1.3×10^1		Duchowicz et al. (2020)	?	186, 21

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-hydroxy-2,4-dimethylbenzene	3.5	5500	Brockbank (2013)	L	
$\text{C}_8\text{H}_{10}\text{O}$	6.6		Sheikheldin et al. (2001)	M	12
(2,4-xylenol; 2,4-dimethylphenol)	4.9	6100	Dohnal and Fenclová (1995)	M	
[105-67-9]	1.9×10^{-3}	-3200	Ashworth et al. (1988)	M	33, 279
KUFFULVDNCHOFZ-UHFFFAOYSA-N	5.5		Mackay et al. (2006c)	V	
	1.6×10^1		Lide and Frederikse (1995)	V	
	5.5		Mackay et al. (1995)	V	
	5.5×10^{-1}		Hwang et al. (1992)	V	
	4.9		Meylan and Howard (1991)	V	
	1.6×10^1		Leuenberger et al. (1985)	V	418
	1.0×10^1		Abraham et al. (1994a)	R	
	4.7		Yaws (2003)	X	259
	4.1	6600	Goldstein (1982)	X	299
	1.6×10^1		Howard (1989)	X	420
	5.8×10^{-1}		Smith et al. (1993)	C	
	5.4×10^{-1}		Ryan et al. (1988)	C	
	1.7×10^1		Petrasek et al. (1983)	C	
	6.7		Dupeux et al. (2022)	Q	260
	7.9		Keshavarz et al. (2022)	Q	
	1.2×10^1		Duchowicz et al. (2020)	Q	300
	2.2×10^1		Wang et al. (2017)	Q	81, 239
	1.2×10^1		Wang et al. (2017)	Q	81, 240
	8.7		Wang et al. (2017)	Q	81, 241
	4.6		Gharagheizi et al. (2012)	Q	
	6.2		Raventos-Duran et al. (2010)	Q	243, 244
	6.2		Raventos-Duran et al. (2010)	Q	245
	1.6×10^1		Raventos-Duran et al. (2010)	Q	246
	5.1		Hilal et al. (2008)	Q	
	4.3		Modarresi et al. (2007)	Q	68
	1.1×10^1		Yaffe et al. (2003)	Q	249, 250
	1.6×10^1		English and Carroll (2001)	Q	231, 232
	6.7		Katritzky et al. (1998)	Q	
	4.6×10^1		Nirmalakhandan et al. (1997)	Q	
	1.4×10^1		Meylan and Howard (1991)	Q	
	1.0×10^1		Duchowicz et al. (2020)	?	186, 21
1-hydroxy-2,5-dimethylbenzene	8.2	8700	Brockbank (2013)	L	1
$\text{C}_8\text{H}_{10}\text{O}$	7.5	6800	Dohnal and Fenclová (1995)	M	
(2,5-xylenol; 2,5-dimethylphenol)	1.4		HSDB (2015)	V	
[95-87-4]	7.5		Mackay et al. (2006c)	V	
NKTOLZVEWDHZMU-UHFFFAOYSA-N	7.4		Mackay et al. (1995)	V	
	3.8×10^1		Leuenberger et al. (1985)	V	418
	8.8		Abraham et al. (1994a)	R	
	1.9		Yaws (2003)	X	259
	5.7		Dupeux et al. (2022)	Q	260
	7.9		Keshavarz et al. (2022)	Q	
	1.2×10^1		Duchowicz et al. (2020)	Q	300

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.2×10^1		Wang et al. (2017)	Q	81, 239
	1.2×10^1		Wang et al. (2017)	Q	81, 240
	8.9		Wang et al. (2017)	Q	81, 241
	6.2		Raventos-Duran et al. (2010)	Q	243, 244
	6.2		Raventos-Duran et al. (2010)	Q	245
	1.6×10^1		Raventos-Duran et al. (2010)	Q	246
	5.2		Hilal et al. (2008)	Q	
	4.8		Modarresi et al. (2007)	Q	68
	3.1		Yaffe et al. (2003)	Q	249, 273
	1.4×10^1		English and Carroll (2001)	Q	231, 275
	4.6×10^1		Nirmalakhandan et al. (1997)	Q	
	8.8		Duchowicz et al. (2020)	?	186, 21
1-hydroxy-2,6-dimethylbenzene $\text{C}_8\text{H}_{10}\text{O}$ (2,6-xylenol; 2,6-dimethylphenol) [576-26-1] NXXYKOUNUYWIHA-UHFFFAOYSA-N	1.6	6300	Brockbank (2013)	L	1
	2.3	6200	Dohnal and Fenclová (1995)	M	
	1.3		Hawthorne et al. (1985)	M	
	2.5		Mackay et al. (2006c)	V	
	2.6		Mackay et al. (1995)	V	
	2.6		Shiu et al. (1994)	V	
	5.2		Leuenberger et al. (1985)	V	418
	2.9		Abraham et al. (1994a)	R	
	1.4		Yaws (2003)	X	259
	1.6		Dupeux et al. (2022)	Q	260
	7.9		Keshavarz et al. (2022)	Q	
	3.0		Duchowicz et al. (2020)	Q	300
	6.2		Raventos-Duran et al. (2010)	Q	243, 244
	3.9		Raventos-Duran et al. (2010)	Q	245
	1.6×10^1		Raventos-Duran et al. (2010)	Q	246
	9.2		Hilal et al. (2008)	Q	
	1.8		Modarresi et al. (2007)	Q	68
	3.1		Yaffe et al. (2003)	Q	249, 250
	1.2×10^{-2}		Katritzky et al. (1998)	Q	
	4.6×10^1		Nirmalakhandan et al. (1997)	Q	
	1.5		Duchowicz et al. (2020)	?	186, 21
	1.4		Yaws (1999)	?	21
1-hydroxy-3,4-dimethylbenzene $\text{C}_8\text{H}_{10}\text{O}$ (3,4-xylenol; 3,4-dimethylphenol) [95-65-8] YCOXTKKNXUZSKD-UHFFFAOYSA-N	2.6×10^1	7200	Brockbank (2013)	L	
	2.4×10^1	7100	Dohnal and Fenclová (1995)	M	
	8.2		HSDB (2015)	V	
	4.6×10^1		Mackay et al. (2006c)	V	
	4.7×10^1		Mackay et al. (1995)	V	
	4.7×10^1		Shiu et al. (1994)	V	
	1.1×10^2		Leuenberger et al. (1985)	V	418
	2.4×10^1		Abraham et al. (1994a)	R	
	1.1×10^1		Yaws (2003)	X	259
	1.8×10^1		Dupeux et al. (2022)	Q	260
	7.9		Keshavarz et al. (2022)	Q	
	1.2×10^1		Duchowicz et al. (2020)	Q	300

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1×10^1		Gharagheizi et al. (2012)	Q	
	6.2		Raventos-Duran et al. (2010)	Q	243, 244
	7.8		Raventos-Duran et al. (2010)	Q	245
	1.6×10^1		Raventos-Duran et al. (2010)	Q	246
	4.4		Hilal et al. (2008)	Q	
	1.2×10^1		Modarresi et al. (2007)	Q	68
	2.4×10^1		Yaffe et al. (2003)	Q	249, 250
	2.1×10^1		English and Carroll (2001)	Q	231, 261
	4.6×10^1		Nirmalakhandan et al. (1997)	Q	
	2.4×10^1		Duchowicz et al. (2020)	?	186, 21
1-hydroxy-3,5-dimethylbenzene $\text{C}_8\text{H}_{10}\text{O}$ (3,5-xyleneol; 3,5-dimethylphenol) [108-68-9] TUAMRELNJMMDMT-UHFFFAOYSA-N	1.5×10^1	7600	Brockbank (2013)	L	1
	1.6×10^1	6900	Dohnal and Fenclová (1995)	M	
	7.6		HSDB (2015)	V	
	2.8×10^1		Mackay et al. (2006c)	V	
	3.1×10^1		Mackay et al. (1995)	V	
	2.5×10^1		Shiu et al. (1994)	V	
	6.2×10^1		Leuenberger et al. (1985)	V	418
	1.6×10^1		Abraham et al. (1994a)	R	
	7.3		Yaws (2003)	X	259
	1.2×10^1		Dupeux et al. (2022)	Q	260
	7.9		Keshavarz et al. (2022)	Q	
	1.2×10^1		Duchowicz et al. (2020)	Q	185
	6.2		Raventos-Duran et al. (2010)	Q	243, 244
	4.9		Raventos-Duran et al. (2010)	Q	245
	1.6×10^1		Raventos-Duran et al. (2010)	Q	246
	3.2		Hilal et al. (2008)	Q	
	1.1×10^1		Modarresi et al. (2007)	Q	68
	1.6×10^1		Yaffe et al. (2003)	Q	249, 250
	1.7×10^1		English and Carroll (2001)	Q	231, 232
	4.6×10^1		Nirmalakhandan et al. (1997)	Q	
	1.6×10^1		Duchowicz et al. (2020)	?	186, 21
2-methylbenzenemethanol $\text{C}_8\text{H}_{10}\text{O}$ [89-95-2] XPNGNIFUDRPBFJ-UHFFFAOYSA-N	2.2×10^1		Wang et al. (2017)	Q	81, 239
	5.6×10^1		Wang et al. (2017)	Q	81, 240
	1.7×10^1		Wang et al. (2017)	Q	81, 241
3-methylbenzenemethanol $\text{C}_8\text{H}_{10}\text{O}$ [587-03-1] JJCKHVUTVOPLBV-UHFFFAOYSA-N	2.2×10^1		Wang et al. (2017)	Q	81, 239
	4.5×10^1		Wang et al. (2017)	Q	81, 240
	3.4×10^1		Wang et al. (2017)	Q	81, 241
4-methylbenzenemethanol $\text{C}_8\text{H}_{10}\text{O}$ [589-18-4] KMTDMTZBNYGUNX-UHFFFAOYSA-N	9.0		HSDB (2015)	V	
	2.2×10^1		Wang et al. (2017)	Q	81, 239
	5.3×10^1		Wang et al. (2017)	Q	81, 240
	4.6×10^1		Wang et al. (2017)	Q	81, 241

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
α -methylbenzyl alcohol $\text{C}_8\text{H}_{10}\text{O}$ [98-85-1] WAPNOHKVXSQRPX-UHFFFAOYSA-N	3.4×10^1		HSDB (2015)	Q	100
1-hydroxy-2-ethylbenzene $\text{C}_8\text{H}_{10}\text{O}$ (2-ethylphenol) [90-00-6] IXQGCWUGDFDQMF-UHFFFAOYSA-N	2.1 2.1 5.6 2.4×10^1 3.0×10^1 8.1 7.3 6.2 4.9 1.2×10^1 1.6 2.2 3.1		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998)	V V V Q Q Q Q Q Q Q Q Q Q	187 81, 239 81, 240 81, 241 243, 244 245 246 68 249, 250
1-hydroxy-3-ethylbenzene $\text{C}_8\text{H}_{10}\text{O}$ (3-ethylphenol) [620-17-7] HMNKTRSOROOSPP-UHFFFAOYSA-N	4.9 1.6×10^1 7.9 2.4×10^1 9.0 6.2 4.9 1.2×10^1 3.4 2.1×10^1 1.5×10^1 1.8×10^1 5.4×10^1 1.6×10^1		Karl et al. (2003) Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) HSDB (2015) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Nirmalakhanda et al. (1997) Duchowicz et al. (2020)	M R Q Q Q Q Q Q Q Q Q Q Q ?	185 100 243, 244 245 246 68 249, 250 231, 232 186, 21
1-hydroxy-4-ethylbenzene $\text{C}_8\text{H}_{10}\text{O}$ (4-ethylphenol) [123-07-9] HXDOZKJGKXYMEW-UHFFFAOYSA-N	8.2 2.1×10^1 1.3×10^1 7.9 2.4×10^1 6.2 6.2 1.2×10^1 3.8 9.4 1.6×10^1 5.4×10^1 1.3×10^1		HSDB (2015) Mackay et al. (2006c) Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhanda et al. (1997) Duchowicz et al. (2020)	V V R Q Q Q Q Q Q Q Q Q ?	300 272, 244 245 246 68 231, 232 186, 21

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,4-trimethylphenol $\text{C}_9\text{H}_{12}\text{O}$ [526-85-2] XRUGBBIQLIVCSI-UHFFFAOYSA-N	1.3×10^1 1.8×10^1 8.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2,3,5-trimethylphenol $\text{C}_9\text{H}_{12}\text{O}$ [697-82-5] OGRAOKJKVGDSEFR-UHFFFAOYSA-N	1.2×10^1 1.2×10^1		Mackay et al. (2006c) Mackay et al. (1995)	V V	
2,3,6-trimethylphenol $\text{C}_9\text{H}_{12}\text{O}$ [2416-94-6] QQOMQLYQAXGHSU-UHFFFAOYSA-N	2.5 2.5 1.6 2.5 1.1×10^1 1.3 1.1×10^1 4.1×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q Q Q Q	187 81, 239 81, 240 81, 241 68
2,4,6-trimethylphenol $\text{C}_9\text{H}_{12}\text{O}$ [527-60-6] BPRYUXCVCCNUFE-UHFFFAOYSA-N	3.8 3.2 1.3 1.4 1.6 2.5 8.9 1.2 4.9 3.1 1.2×10^1 9.2 1.2		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Mackay et al. (1995) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V V V V Q Q Q Q Q Q Q Q Q	187 81, 239 81, 240 81, 241 243, 244 245 246 68
3,4,5-trimethylphenol $\text{C}_9\text{H}_{12}\text{O}$ [527-54-8] FDQQNNZKEJIHMS-UHFFFAOYSA-N	3.4×10^1 3.8×10^1		Mackay et al. (2006c) Mackay et al. (1995)	V V	
1-hydroxy-4-propylbenzene $\text{C}_9\text{H}_{12}\text{O}$ (4-propylphenol) [645-56-7] KLSLBUSXWBJMEC-UHFFFAOYSA-N	1.7 8.6 1.1×10^1 2.5×10^1 4.9 3.9 9.9 3.1 1.0×10^1 8.8 1.2×10^1		Mackay et al. (2006c) Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001)	V R Q Q Q Q Q Q Q Q Q Q	272, 244 245 246 68 249, 250 231, 261

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.3×10^1		Nirmalakhandan et al. (1997)	Q	
	8.7		Duchowicz et al. (2020)	?	186, 21
2-(1-methylethyl)-phenol $\text{C}_9\text{H}_{12}\text{O}$ [88-69-7] CRBJBYGJVIBWIY-UHFFFAOYSA-N	2.6 2.8×10^1 3.9 4.5 2.8		Mackay et al. (2006c) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Hilal et al. (2008)	V Q Q Q Q	 81, 239 81, 240 81, 241
2-phenylisopropanol $\text{C}_9\text{H}_{12}\text{O}$ [617-94-7] BDCFWIDZNLCTMF-UHFFFAOYSA-N	2.0×10^1 1.4×10^1 1.2×10^1 2.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	Q Q Q Q	81, 239 81, 240 81, 241 100
2-ethyl-3-methylphenol $\text{C}_9\text{H}_{12}\text{O}$ [6161-62-2] OCKYMBMCPAFLU-UHFFFAOYSA-N	1.8×10^1 8.9 5.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2-ethyl-5-methylphenol $\text{C}_9\text{H}_{12}\text{O}$ [1687-61-2] LTRVUFFOMIUCPJ-UHFFFAOYSA-N	1.8×10^1 8.0 4.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2-ethyl-6-methylphenol $\text{C}_9\text{H}_{12}\text{O}$ [1687-64-5] CIRRFQIWFQSS-UHFFFAOYSA-N	3.3 6.2 6.9×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
5-ethyl-3-methylphenol $\text{C}_9\text{H}_{12}\text{O}$ [698-71-5] XTCHLXABLZQNNN-UHFFFAOYSA-N	1.5×10^1 1.3×10^1 4.9 3.9 9.9 2.9 1.8×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q Q Q Q	187 243, 244 245 246 68
1-(2-methylphenyl)ethanol $\text{C}_9\text{H}_{12}\text{O}$ [7287-82-3] SDCBYRLJYGORNK-UHFFFAOYSA-N	2.1×10^1 2.9×10^1 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2-propylphenol $\text{C}_9\text{H}_{12}\text{O}$ [644-35-9] LCHYEKKJCUJAKN-UHFFFAOYSA-N	2.7×10^1 5.6 5.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-phenyl-1-propanol $\text{C}_9\text{H}_{12}\text{O}$ [93-54-9] DYUQAZSOFZSPHD-UHFFFAOYSA-N	2.8×10^1 2.3×10^1 9.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2,3-dimethylbenzyl alcohol $\text{C}_9\text{H}_{12}\text{O}$ [13651-14-4] ZQQIVMXQYUZKIQ-UHFFFAOYSA-N	1.3×10^1 7.4×10^1 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
3,4-dimethylbenzyl alcohol $\text{C}_9\text{H}_{12}\text{O}$ [6966-10-5] OKGZCXPDKKZAP-UHFFFAOYSA-N	1.3×10^1 6.2×10^1 5.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
3,5-dimethylbenzyl alcohol $\text{C}_9\text{H}_{12}\text{O}$ [27129-87-9] IQWWTJDRVBWBEL-UHFFFAOYSA-N	1.3×10^1 3.7×10^1 4.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2-(1,1-dimethylethyl)-phenol $\text{C}_{10}\text{H}_{14}\text{O}$ [88-18-6] WJQOZHUYUIDYNHM-UHFFFAOYSA-N	3.9×10^{-1} 4.4 7.0		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015)	V Q Q	187 100
3-(1,1-dimethylethyl)-phenol $\text{C}_{10}\text{H}_{14}\text{O}$ [585-34-2] CYEKUDPFBLGHH-UHFFFAOYSA-N	5.1 4.4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
2-(1-methylpropyl)phenol $\text{C}_{10}\text{H}_{14}\text{O}$ [89-72-5] NGFPWHGISWUQOI-UHFFFAOYSA-N	4.7		HSDB (2015)	Q	100
4-(1-methylpropyl)-phenol $\text{C}_{10}\text{H}_{14}\text{O}$ (4-sec-butylphenol) [99-71-8] ZUTYZAFDFLLILI-UHFFFAOYSA-N	3.6 4.3		Mackay et al. (2006c) Mackay et al. (1995)	V V	
4-tert-butylphenol $\text{C}_{10}\text{H}_{14}\text{O}$ [98-54-4] QHPQWRBYOIRBIT-UHFFFAOYSA-N	8.9 1.6×10^1 2.1×10^1 1.4×10^1 4.4 2.1 4.8 8.8 6.7 2.5×10^1	7700	Parsons et al. (1972) Mackay et al. (2006c) Mackay et al. (1995) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Katritzky et al. (1998)	M V V Q Q Q Q Q Q Q	419 68 249, 250 231, 232

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.4×10^1		Nirmalakhandan et al. (1997)	Q	
	5.2		Suzuki et al. (1992)	Q	233
	2.7		Nirmalakhandan and Speece (1988)	Q	
	8.3		Duchowicz et al. (2020)	?	186, 21
	1.5×10^{-1}		Betterton (1992)	?	423
	8.8		Abraham et al. (1990)	?	
2-methyl-5-(1-methylethyl)-phenol $\text{C}_{10}\text{H}_{14}\text{O}$ (carvacrol) [499-75-2] RECUKUPTGUEGMW-UHFFFAOYSA-N	1.5 2.4	9300	Martins et al. (2017) van Roon et al. (2005)	V V	316
5-methyl-2-(1-methylethyl)-phenol $\text{C}_{10}\text{H}_{14}\text{O}$ (thymol) [89-83-8] MGSRCZKZVOBKFT-UHFFFAOYSA-N	2.0×10^1 1.5 3.0 5.1 3.1	9300	Duchowicz et al. (2020) Martins et al. (2017) van Roon et al. (2005) Duchowicz et al. (2020) Raventos-Duran et al. (2010)	V V V Q Q	187 316 243, 244
	2.0 7.8 2.8 7.1×10^{-1}		Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	Q Q Q Q	245 246 68
1-(3,5-dimethylphenyl)ethanol $\text{C}_{10}\text{H}_{14}\text{O}$ [5379-18-0] RHBAJFPGUNNLFA-UHFFFAOYSA-N	1.2×10^1 1.8×10^1 1.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
6-ethyl-2,4-xyleneol $\text{C}_{10}\text{H}_{14}\text{O}$ [2219-79-6] MXHAHSBTOVFDBK-UHFFFAOYSA-N	2.0 5.8 6.0×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2-(1,1-dimethylethyl)-4-methylphenol $\text{C}_{11}\text{H}_{16}\text{O}$ [2409-55-4] IKEHOXWJQXIAG-UHFFFAOYSA-N	6.6		HSDB (2015)	Q	100
4-(1,1-dimethylpropyl)phenol $\text{C}_{11}\text{H}_{16}\text{O}$ [80-46-6] NRZWYNLFLDQXQX-UHFFFAOYSA-N	4.9		HSDB (2015)	V	
MCM:DE35TOH $\text{C}_{11}\text{H}_{16}\text{O}$ OZZOZHUMWFILP-UHFFFAOYSA-N	1.0×10^1 1.6×10^1 1.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:DEMPHOH $\text{C}_{11}\text{H}_{16}\text{O}$ VUDWBUZLGAXSDX-UHFFFAOYSA-N	1.8 3.8 6.3×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
josenol $\text{C}_{11}\text{H}_{14}\text{O}$ (2-methyl-3-(4-methylphenyl)-2-propen-1-ol) [56138-10-4] WWHATUWNHYNMNW-UHFFFAOYSA-N	4.5×10^1		Dupeux et al. (2022)	Q	260
lilyflore $\text{C}_{12}\text{H}_{16}\text{O}$ [285977-85-7] UWSPWQQZFOSTHS-UHFFFAOYSA-N	1.3×10^1		Dupeux et al. (2022)	Q	260
benzhydrol $\text{C}_{13}\text{H}_{12}\text{O}$ [91-01-0] QILSFLSDHQAZET-UHFFFAOYSA-N	3.8×10^2		Ebert et al. (2023)	?	319
1-hydroxy-4-octylbenzene $\text{C}_{14}\text{H}_{22}\text{O}$ (4-octylphenol) [1806-26-4] NTDQQZYCCIDJRK-UHFFFAOYSA-N	1.3 2.0		Mackay et al. (2006c) Mackay et al. (1995)	V V	
4-(1,1,3,3-tetramethylbutyl)-phenol $\text{C}_{14}\text{H}_{22}\text{O}$ (<i>p-tert</i> -octylphenol) [140-66-9] ISAVYTVYFVQUDY-UHFFFAOYSA-N	2.3 1.4 2.2 2.3 1.0×10^1 1.8	9000	Xie et al. (2004) HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	M Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
1-hydroxy-4-nonylbenzene $\text{C}_{15}\text{H}_{24}\text{O}$ (4-nonylphenol) [104-40-5] IGFHQQFPSIBGKE-UHFFFAOYSA-N	2.9×10^{-1} 2.9×10^{-1} 3.6×10^{-1} 6.4×10^{-1} 2.8×10^1		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Mackay et al. (1995) Duchowicz et al. (2020)	V V V V Q	187
2,6-bis(1,1-dimethylethyl)-4-methylphenol $\text{C}_{15}\text{H}_{24}\text{O}$ (butylated hydroxytoluene; BHT) [128-37-0] NLZUEZXRPGMBCV-UHFFFAOYSA-N	2.9×10^{-3}		Yoshida et al. (1983)	V	

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-(3',5'-dimethyl-3'-heptyl)-phenol(+) C ₁₅ H ₂₄ O RYIHVIPUIXFRNI-IUODEOHRSA-N	2.9	8700	Xie et al. (2004)	M	
4-(3',5'-dimethyl-3'-heptyl)-phenol(-) C ₁₅ H ₂₄ O RYIHVIPUIXFRNI-SWLSCSKDSA-N	3.3	8600	Xie et al. (2004)	M	
2-phenylethanol C ₈ H ₁₀ O [60-12-8] WRMNZCZEMHIOCP-UHFFFAOYSA-N	1.7 × 10 ¹	7200	Brockbank (2013)	L	1
	>3.7 × 10 ¹		Altschuh et al. (1999)	M	
	6.6 × 10 ¹		HSDB (2015)	V	
	3.9 × 10 ¹		Abraham et al. (1994a)	R	
	3.5		Yaws (2003)	X	259
	1.6 × 10 ¹		Dupeux et al. (2022)	Q	260
	3.0 × 10 ¹		Keshavarz et al. (2022)	Q	
	2.0 × 10 ⁻³		Abney (2021)	Q	401
	8.5		Duchowicz et al. (2020)	Q	185
	8.5		Wang et al. (2017)	Q	81, 239
	3.9 × 10 ¹		Wang et al. (2017)	Q	81, 240
	3.9 × 10 ¹		Wang et al. (2017)	Q	81, 241
	7.8 × 10 ¹		Raventos-Duran et al. (2010)	Q	243, 244
	2.5 × 10 ¹		Raventos-Duran et al. (2010)	Q	245
	3.1 × 10 ¹		Raventos-Duran et al. (2010)	Q	246
	1.9 × 10 ¹		Hilal et al. (2008)	Q	
	3.2 × 10 ¹		Modarresi et al. (2007)	Q	68
	2.4 × 10 ⁻¹		Emel'yanenko et al. (2007)	Q	417
	2.4 × 10 ⁻¹		Hertel and Sommer (2005)	Q	417
	3.9 × 10 ¹		Yaffe et al. (2003)	Q	249, 250
	1.0 × 10 ¹		Yao et al. (2002)	Q	230
2.8 × 10 ¹	English and Carroll (2001)	Q	231, 275		
5.4 × 10 ¹	Katritzky et al. (1998)	Q			
5.3 × 10 ¹	Nirmalakhandan et al. (1997)	Q			
3.9 × 10 ¹	Duchowicz et al. (2020)	?	186, 21		
3.5	Yaws (1999)	?	21		
3-phenyl-1-propanol C ₉ H ₁₂ O [122-97-4] VAJVDVSGBWFCLW-UHFFFAOYSA-N	>1.8 × 10 ²		Altschuh et al. (1999)	M	
	4.8 × 10 ¹		Abraham et al. (1994a)	R	
	4.1 × 10 ¹		Keshavarz et al. (2022)	Q	
	8.8		Duchowicz et al. (2020)	Q	300
	1.4 × 10 ¹		Hilal et al. (2008)	Q	
	2.0 × 10 ¹		Modarresi et al. (2007)	Q	68
	3.4 × 10 ¹		English and Carroll (2001)	Q	231, 232
	4.2 × 10 ¹		Nirmalakhandan et al. (1997)	Q	
4.9 × 10 ¹	Duchowicz et al. (2020)	?	186, 21		

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-phenyl-1-butanol $\text{C}_{10}\text{H}_{14}\text{O}$ [3360-41-6] LDZLXQFDGRCELX-UHFFFAOYSA-N	>6.7 1.2×10^1		Altschuh et al. (1999) Hilal et al. (2008)	M Q	
1-naphthalenol $\text{C}_{10}\text{H}_8\text{O}$ (1-naphthol) [90-15-3] KJCVRFUGPWSIIH-UHFFFAOYSA-N	1.6×10^2 2.9×10^1 1.7×10^2 2.1×10^2 1.7×10^2 6.9×10^1 8.4×10^1 4.5×10^2 1.5×10^3 1.6×10^2		HSDB (2015) Mackay et al. (2006c) Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	V V R Q Q Q Q Q Q Q ?	
2-naphthalenol $\text{C}_{10}\text{H}_8\text{O}$ (2-naphthol) [135-19-3] JWAZRIHNYRIHIV-UHFFFAOYSA-N	1.1×10^2 3.6×10^2 2.1×10^2 1.7×10^2 2.1×10^2 7.0×10^1 2.7×10^2 5.8×10^2 1.7×10^3 3.6×10^2		Mackay et al. (2006c) Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) HSDB (2015) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) English and Carroll (2001) Nirmalakhandan et al. (1997) Duchowicz et al. (2020) Kühne et al. (2005)	V R Q Q Q Q Q Q Q Q ? ?	
<i>o</i> -hydroxybiphenyl $\text{C}_{12}\text{H}_{10}\text{O}$ [90-43-7] LLEMOWNGBBNAJR-UHFFFAOYSA-N	9.4 9.4 2.9×10^{-1} 2.1×10^2 3.1×10^1 1.1×10^1		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V V V Q Q Q	187
<i>p</i> -hydroxybiphenyl $\text{C}_{12}\text{H}_{10}\text{O}$ [92-69-3] YXVFYQXJAXKLAK-UHFFFAOYSA-N	1.6×10^{-1} 1.9×10^2		Mackay et al. (2006c) HSDB (2015)	V Q	100
2,4,6-tris(1,1-dimethylethyl)phenol $\text{C}_{18}\text{H}_{30}\text{O}$ [732-26-3] PFEOFYRSMXVNEL-UHFFFAOYSA-N	1.0 5.6×10^{-2} 3.3×10^{-2} 5.3×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dehydroabietol $\text{C}_{20}\text{H}_{30}\text{O}$ [3772-55-2] WSKGRAGZAQRSED-IOJLRTSASA-N	8.4 1.8×10^2 2.4×10^1 7.2×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2,2'-methylenebis(6-(1,1-dimethylethyl)-4-methylphenol) $\text{C}_{23}\text{H}_{32}\text{O}_2$ [119-47-1] KGRVJHAUYBGFFP-UHFFFAOYSA-N	1.2×10^6		HSDB (2015)	Q	100
2,4-dinonylphenol $\text{C}_{24}\text{H}_{42}\text{O}$ [137-99-5] FDAJTLBHNHECW-UHFFFAOYSA-N	1.5×10^{-1} 1.6×10^{-1} 3.8×10^{-1} 7.0×10^{-1} 2.5×10^{-1}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292

A3.3 Polyols (R(OH)_n)Table A3.3: Polyols (R(OH)_n)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methanediol	9.9×10^1		Franco et al. (2021)	R	424
HOCH ₂ OH	4.0×10^3		Mansfield (2020)	T	425
[463-57-0] CKFGINPQOCXMAZ-UHFFFAOYSA-N	7.1×10^2		Mansfield (2020)	T	425
1,1-ethanediol	4.0×10^1		Mansfield (2020)	T	425
CH ₃ CH ₂ (OH) ₂ [4433-56-1] AZHSSKPUVBVXLK-UHFFFAOYSA-N	1.4×10^1		Mansfield (2020)	T	425
1,2-ethanediol	6.5×10^3		Burkholder et al. (2019)	L	
HO(CH ₂) ₂ OH	6.5×10^3		Burkholder et al. (2015)	L	
(ethylene glycol)	4.0×10^3		Bone et al. (1983)	M	12
[107-21-1] LYCAIKOWRPUZTN-UHFFFAOYSA-N	1.6×10^2		Butler and Ramchandani (1935)	M	426
	4.7		HSDB (2015)	V	
	6.5×10^3	8800	Compernelle and Müller (2014b)	V	
	5.0×10^3		Hwang et al. (1992)	V	
	7.0×10^3		Yaws (2003)	X	259
	7.0×10^3		Yaws (2003)	X	238
	4.8×10^3		Dupeux et al. (2022)	Q	260
	2.9×10^2		Keshavarz et al. (2022)	Q	
	6.4×10^2		Duchowicz et al. (2020)	Q	185
	3.3×10^2		Wang et al. (2017)	Q	81, 239
	1.3×10^3		Wang et al. (2017)	Q	81, 240
	6.3×10^3		Wang et al. (2017)	Q	81, 241
	5.6×10^2		Olsen et al. (2016)	Q	427
	4.0×10^2		Olsen et al. (2016)	Q	428
	4.3×10^2		Olsen et al. (2016)	Q	429
	1.3×10^4		Gharagheizi et al. (2012)	Q	
	7.8×10^3		Raventos-Duran et al. (2010)	Q	243, 244
	4.9×10^2		Raventos-Duran et al. (2010)	Q	245
	7.8×10^1		Raventos-Duran et al. (2010)	Q	246
	2.5×10^3		Gharagheizi et al. (2010)	Q	247
	7.2×10^2		Hilal et al. (2008)	Q	
	3.1×10^3		Modarresi et al. (2007)	Q	68
	6.9×10^3		Yao et al. (2002)	Q	230
	8.6×10^2		Katritzky et al. (1998)	Q	
	1.6×10^2		Duchowicz et al. (2020)	?	186, 21
	5.2×10^3		Yaws (1999)	?	21

Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
1,2-propanediol $\text{C}_3\text{H}_8\text{O}_2$ (propylene glycol) [57-55-6] DNIAPMSPPWPWGF-UHFFFAOYSA-N	2.7×10^3 2.7×10^3 7.7×10^2 7.6×10^2 2.7×10^3 2.7×10^3 2.7×10^3 1.9×10^3 3.5×10^2 3.1×10^2 1.0×10^3 1.3×10^3 3.9×10^3 2.7×10^3	9500	Burkholder et al. (2019) Burkholder et al. (2015) Duchowicz et al. (2020) HSDB (2015) Compernelle and Müller (2014b) Yaws (2003) Yaws (2003) Dupeux et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Saxena and Hildemann (1996)	L L V V V X X Q Q Q Q Q Q Q E	187 259 238 260 81, 239 81, 240 81, 241 247 403, 430
1,3-propanediol $\text{C}_3\text{H}_8\text{O}_2$ [504-63-2] YPFDHNVEDLHUCE-UHFFFAOYSA-N	1.6×10^4 1.6×10^4 9.1×10^3 1.6×10^4 7.4×10^2 6.3×10^3 4.8×10^3 3.1×10^3 2.5×10^3 6.2×10^1 4.0×10^2 2.0×10^3	9500	Burkholder et al. (2019) Burkholder et al. (2015) Bone et al. (1983) Compernelle and Müller (2014b) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	L L M V Q Q Q Q Q Q Q Q	12 81, 239 81, 240 81, 241 272, 244 245 246 68
1,2,3-propanetriol $\text{C}_3\text{H}_8\text{O}_3$ (glycerol) [56-81-5] PEDCQBHIVMGVHV-UHFFFAOYSA-N	4.7×10^6 4.7×10^6 5.8×10^2 4.7×10^6 5.0×10^6 3.8×10^2 1.7×10^5 5.7×10^2	11000	Burkholder et al. (2019) Burkholder et al. (2015) Butler and Ramchandani (1935) Compernelle and Müller (2014b) Hwang et al. (1992) Keshavarz et al. (2022) Duchowicz et al. (2020) Saxena and Hildemann (1996) Duchowicz et al. (2020)	L L M V V Q Q E ?	426 403, 431 186, 21
1,2-butanediol $\text{C}_4\text{H}_{10}\text{O}_2$ [584-03-2] BMRWNKZVCUKKSR-UHFFFAOYSA-N	2.1×10^3 2.1×10^3 $> 3.4 \times 10^2$ 1.7×10^3 2.1×10^3 4.4×10^2 2.9×10^2 7.6×10^2	9900	Burkholder et al. (2019) Burkholder et al. (2015) Altschuh et al. (1999) Duchowicz et al. (2020) Compernelle and Müller (2014b) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017)	L L M V V Q Q Q	432 433 187 81, 239 81, 240

Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.8×10^2		Wang et al. (2017)	Q	81, 241
1,3-butanediol $\text{C}_4\text{H}_{10}\text{O}_2$ [107-88-0] PUPZLDCDOIYMWBV-UHFFFAOYSA-N	7.0×10^3 7.0×10^3 4.1×10^3 7.0×10^3 9.5×10^2 6.9×10^2 4.0×10^3 2.5×10^3 4.9×10^4	10000	Burkholder et al. (2019) Burkholder et al. (2015) Duchowicz et al. (2020) Compernelle and Müller (2014b) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Saxena and Hildemann (1996)	L L V V Q Q Q Q E	187 81, 239 81, 240 81, 241 403
1,4-butanediol $\text{C}_4\text{H}_{10}\text{O}_2$ [110-63-4] WERYXYBDKMZEQL-UHFFFAOYSA-N	3.5×10^4 3.5×10^4 $>9.0 \times 10^2$ 7.6×10^3 7.6×10^3 3.5×10^4 2.4×10^3 6.0×10^2 7.6×10^3 9.6×10^3 3.1×10^4 4.9×10^3 3.9×10^1 8.0×10^3 1.6×10^3 1.9×10^4	11000	Burkholder et al. (2019) Burkholder et al. (2015) Altschuh et al. (1999) Duchowicz et al. (2020) HSDB (2015) Compernelle and Müller (2014b) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Saxena and Hildemann (1996) Yaws (1999)	L L M V V V Q Q Q Q Q Q Q Q Q E ?	187 81, 239 81, 240 81, 241 243, 244 245 246 68 403, 434 21, 12
2,3-butanediol $\text{C}_4\text{H}_{10}\text{O}_2$ [513-85-9] OWBTYPJTUOEWEK-UHFFFAOYSA-N	1.1×10^3 1.1×10^3 3.4×10^2 3.4×10^2 1.1×10^3 9.7×10^2 1.7×10^2 3.3×10^2 1.2×10^3 4.1×10^2 1.7×10^3 7.8×10^2	9900	Burkholder et al. (2019) Burkholder et al. (2015) Duchowicz et al. (2020) HSDB (2015) Compernelle and Müller (2014b) Yaws (2003) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Saxena and Hildemann (1996)	L L V V V X Q Q Q Q Q Q E	187 238, 12 81, 239 81, 240 81, 241 247 403, 435

Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>meso</i> -2,3-butanediol C ₄ H ₁₀ O ₂ [5341-95-7] OWBTYPJTUOEWEK-ZXZARUISSA-N	2.2 × 10 ² 6.8 × 10 ² 1.7 × 10 ² 1.6 × 10 ³ 7.8 × 10 ²		Duchowicz et al. (2020) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q Q	187 238, 12 247
2-methylpropane-1,2-diol C ₄ H ₁₀ O ₂ [558-43-0] BTVWZWFKMIUSGS-UHFFFAOYSA-N	1.8 × 10 ² 5.1 × 10 ² 3.2 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2-methylpropane-1,3-diol C ₄ H ₁₀ O ₂ [2163-42-0] QWGRWMMWWDWRQN-UHFFFAOYSA-N	6.9 × 10 ² 5.0 × 10 ³ 2.6 × 10 ³ 4.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	Q Q Q Q	81, 239 81, 240 81, 241 100
1,2,3-butanetriol C ₄ H ₁₀ O ₃ [4435-50-1] YAXKTBLXMTYWDQ-UHFFFAOYSA-N	3.0 × 10 ⁹		Saxena and Hildemann (1996)	E	403
1,2,4-butanetriol C ₄ H ₁₀ O ₃ [3068-00-6] ARXKVVRRQIIQZGF-UHFFFAOYSA-N	7.1 × 10 ⁵ 1.9 × 10 ⁶ 3.2 × 10 ⁵ 3.0 × 10 ⁹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Saxena and Hildemann (1996)	Q Q Q E	81, 239 81, 240 81, 241 403
1,2,3,4-butanetetrol C ₄ H ₁₀ O ₄ (1,2,3,4-tetrahydroxybutane; tetritol) [7541-59-5] UNXHWFMMPAWVPI-UHFFFAOYSA-N	2.0 × 10 ¹⁴		Saxena and Hildemann (1996)	E	403
2(<i>R</i>),3(<i>S</i>)-1,2,3,4-butanetetrol C ₄ H ₁₀ O ₄ (erythritol) [149-32-6] UNXHWFMMPAWVPI-ZXZARUISSA-N	1.1 × 10 ¹⁰ 1.1 × 10 ¹⁰ 2.5 × 10 ⁹ 1.1 × 10 ¹⁰ 3.2 × 10 ⁴ 4.1 × 10 ⁸ 3.2 × 10 ⁴	16000	Burkholder et al. (2019) Burkholder et al. (2015) Qin et al. (2021) Compernelle and Müller (2014b) Qin et al. (2021) Qin et al. (2021) HSDB (2015)	L L M V Q Q Q	436 437 438 100
1,2-pentanediol C ₅ H ₁₂ O ₂ [5343-92-0] WCVRQHFDJLLWFE-UHFFFAOYSA-N	1.4 × 10 ³ 2.2 × 10 ² 5.9 × 10 ² 4.2 × 10 ²		Compernelle and Müller (2014b) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	V Q Q Q	81, 239 81, 240 81, 241
1,3-pentanediol C ₅ H ₁₂ O ₂ [3174-67-2] RUOPINZRYMFPBF-UHFFFAOYSA-N	5.6 × 10 ² 3.1 × 10 ³ 1.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,4-pentanediol $C_5H_{12}O_2$ [626-95-9] GLOBUAZSRIOKLN-UHFFFAOYSA-N	2.3×10^4 5.6×10^2 3.9×10^3 4.8×10^3		Compernelle and Müller (2014b) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	V Q Q Q	 81, 239 81, 240 81, 241
1,5-pentanediol $C_5H_{12}O_2$ [111-29-5] ALQSHHUCVQOPAS-UHFFFAOYSA-N	7.0×10^4 2.0×10^4 1.6×10^4 3.1×10^1 7.7×10^3 3.9×10^4	12000	Compernelle and Müller (2014b) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Saxena and Hildemann (1996)	V Q Q Q Q E	 243, 244 245 246 403
2,3-pentanediol $C_5H_{12}O_2$ [42027-23-6] XLMFDCKSFJWJTP-UHFFFAOYSA-N	2.6×10^2 1.2×10^3 1.7×10^2 3.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Saxena and Hildemann (1996)	Q Q Q E	81, 239 81, 240 81, 241 403
2,4-pentanediol $C_5H_{12}O_2$ [625-69-4] GTCCGKPBJSZVRZ-UHFFFAOYSA-N	3.8×10^3 6.5×10^2 5.4×10^3 2.3×10^3 3.0×10^4		Compernelle and Müller (2014b) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Saxena and Hildemann (1996)	V Q Q Q E	 81, 239 81, 240 81, 241 403
3-methylbutane-1,2-diol $C_5H_{12}O_2$ [50468-22-9] HJZIMFAIMUSBW-UHFFFAOYSA-N	2.6×10^2 8.5×10^2 3.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
3-methylbutane-1,3-diol $C_5H_{12}O_2$ [2568-33-4] XPFCZYUVICHKDS-UHFFFAOYSA-N	4.0×10^2 2.6×10^3 2.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2-methylbutane-1,2-diol $C_5H_{12}O_2$ [41051-72-3] DOPZLYNWNJHAOS-UHFFFAOYSA-N	1.6×10^2 4.3×10^2 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2-methylbutane-1,3-diol $C_5H_{12}O_2$ [684-84-4] GNBPEYCELNIMS-UHFFFAOYSA-N	6.5×10^2 4.7×10^3 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2-methylbutane-1,4-diol $C_5H_{12}O_2$ [2938-98-9] MWCBGWLCXSUTHK-UHFFFAOYSA-N	5.6×10^2 6.0×10^3 6.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methylbutane-2,3-diol $C_5H_{12}O_2$ [5396-58-7] IDEOPBXRUBNYBN-UHFFFAOYSA-N	1.8×10^2 7.3×10^2 2.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2,2-dimethylpropane-1,3-diol $C_5H_{12}O_2$ [126-30-7] SLCVBVVWLSEKPL-UHFFFAOYSA-N	4.0×10^2 3.1×10^3 6.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2-(hydroxymethyl)-2-methyl-1,3-propanediol $C_5H_{12}O_3$ [77-85-0] QXJQHYBHAIHNGG-UHFFFAOYSA-N	9.0×10^2		HSDB (2015)	Q	100
2-methylbutane-1,2,4-triol $C_5H_{12}O_3$ [62875-07-4] XYHGSPUTABMVOC-UHFFFAOYSA-N	3.9×10^5 1.0×10^6 1.7×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C56OH $C_5H_{12}O_3$ RXEJCNRKXVSXDJ-UHFFFAOYSA-N	6.6×10^5 2.0×10^6 8.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO124C5 $C_5H_{12}O_3$ MOIOWCZVZKHQIC-UHFFFAOYSA-N	6.6×10^5 1.3×10^6 1.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO134C5 $C_5H_{12}O_3$ ANUUQAHHHEZMTAS-UHFFFAOYSA-N	6.6×10^5 3.2×10^6 1.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MBOAOH $C_5H_{12}O_3$ QFZITDCVRJQLMZ-UHFFFAOYSA-N	3.0×10^5 1.1×10^6 5.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2-pentene-2,4,5-triol $C_5H_{10}O_3$ (ME1TRIOL) MTMASQITBHTGFW-UHFFFAOYSA-N	4.8×10^7	11000	Wieser et al. (2023)	Q	439
2-methyl-3-butene-1,2,3-triol $C_5H_{10}O_3$ YXPJRFSSYSVRDQI-UHFFFAOYSA-N	3.9×10^8 1.5×10^2 3.1×10^2		Qin et al. (2021) Qin et al. (2021) Qin et al. (2021)	M Q Q	436 437 438
(E)-2-methyl-1-butene-1,3,4-triol $C_5H_{10}O_3$ FVYHKVMWBMOFGS-DUXPHYPUA-N	6.2×10^8 1.3×10^2 3.7×10^6		Qin et al. (2021) Qin et al. (2021) Qin et al. (2021)	M Q Q	436 437 438

Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(Z)-2-methyl-1-butene-1,3,4-triol C ₅ H ₁₀ O ₃ FVYHKVMWBMOFGS-RQOWECAXSA-N	7.8 × 10 ⁸ 1.3 × 10 ² 3.7 × 10 ⁶		Qin et al. (2021) Qin et al. (2021) Qin et al. (2021)	M Q Q	436 437 438
2-methylthreitol C ₅ H ₁₂ O ₄ HGVJFBSSLICXEM-WHFBIKZSA-N	2.0 × 10 ⁸ 2.4 × 10 ⁴ 3.3 × 10 ⁸		Qin et al. (2021) Qin et al. (2021) Qin et al. (2021)	M Q Q	436 437 438
2-methylerythritol C ₅ H ₁₂ O ₄ [93921-83-6] HGVJFBSSLICXEM-CRCLSJGQSA-N	3.1 × 10 ⁸ 2.4 × 10 ⁴ 3.3 × 10 ⁸ 6.2 × 10 ¹⁰ 3.1 × 10 ⁸ 3.1 × 10 ⁴		Qin et al. (2021) Qin et al. (2021) Qin et al. (2021) Isaacman-VanWertz et al. (2016) Isaacman-VanWertz et al. (2016) Isaacman-VanWertz et al. (2016)	M Q Q Q Q Q	436 437 438 440, 441 442, 443 444
2-Methylbutane-1,2,3,4-tetrol C ₅ H ₁₂ O ₄ (MeBuTETROL) [42933-13-1] HGVJFBSSLICXEM-UHFFFAOYSA-N	6.1 × 10 ¹⁰	14000	Wieser et al. (2023)	Q	439
2,2-bis(hydroxymethyl)1,3-propanediol C ₅ H ₁₂ O ₄ (pentaerythritol) [115-77-5] WXZMFSXDPGVJJK-UHFFFAOYSA-N	7.3 × 10 ¹⁰ 7.3 × 10 ¹⁰ 7.3 × 10 ¹⁰ 1.5 × 10 ⁹ 2.4 × 10 ⁴ 1.2 × 10 ⁸ 2.4 × 10 ⁹	16000	Burkholder et al. (2019) Burkholder et al. (2015) Compernelle and Müller (2014b) Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	L L V X Q Q Q	238, 12 100 247
1,2,3,4,5-pentanepentol C ₅ H ₁₂ O ₅ [7643-75-6] HEBKCHPVOIAQTA-UHFFFAOYSA-N	8.9 × 10 ¹⁸		Saxena and Hildemann (1996)	E	403
(2R,3R,4S)-pentane-1,2,3,4,5-pentol C ₅ H ₁₂ O ₅ (xylitol) [87-99-0] HEBKCHPVOIAQTA-SCDXWVJYSA-N	4.9 × 10 ⁸ 3.9 × 10 ¹¹ 6.6 × 10 ⁵ 7.3 × 10 ¹¹ 6.6 × 10 ⁵	17000	Qin et al. (2021) Compernelle and Müller (2014b) Qin et al. (2021) Qin et al. (2021) HSDB (2015)	M V Q Q Q	436 437 438 100
(2R,3S,4S)-pentane-1,2,3,4,5-pentol C ₅ H ₁₂ O ₅ (adonitol; ribitol) [488-81-3] HEBKCHPVOIAQTA-ZXFHETKHSAN	4.6 × 10 ¹¹	18000	Compernelle and Müller (2014b)	V	

Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(2R,4R)-pentane-1,2,3,4,5-pentol C ₅ H ₁₂ O ₅ (arabitol; arabinitol) [2152-56-9] HEBKCHPVOIAQTA-QWWZWVQMSA-N	9.9 × 10 ⁹ 6.7 × 10 ¹¹ 6.6 × 10 ⁵ 7.3 × 10 ¹¹	18000	Qin et al. (2021) Compernelle and Müller (2014b) Qin et al. (2021) Qin et al. (2021)	M V Q Q	436 437 438
levoglucosan C ₆ H ₁₀ O ₅ [498-07-7] TWNIBLMWSKIRAT-VFUOTHLCSA-N	4.9 × 10 ¹⁰ 6.9 × 10 ⁷ 4.3 × 10 ¹⁰		Qin et al. (2021) Qin et al. (2021) Qin et al. (2021)	M Q Q	436 437 438
fructose C ₆ H ₁₂ O ₆ [30237-26-4] BJHIKXHVCFQLS-UYFOZJQFSA-N	1.2 × 10 ⁹ 1.0 × 10 ⁹ 1.6 × 10 ¹⁴		Qin et al. (2021) Qin et al. (2021) Qin et al. (2021)	M Q Q	436 437 438
mannose C ₆ H ₁₂ O ₆ [3458-28-4] GZCGUPFRVQAUEE-KVTDHHQDSA-N	1.2 × 10 ⁹ 1.7 × 10 ⁵ 1.4 × 10 ¹³		Qin et al. (2021) Qin et al. (2021) Qin et al. (2021)	M Q Q	436 437 438
glucose C ₆ H ₁₂ O ₆ [50-99-7] GZCGUPFRVQAUEE-SLPGGIOYSA-N	7.8 × 10 ⁸ 1.0 × 10 ⁹ 1.8 × 10 ¹⁵		Qin et al. (2021) Qin et al. (2021) Qin et al. (2021)	M Q Q	436 437 438
1,2-hexanediol C ₆ H ₁₄ O ₂ [6920-22-5] FHKSXSQHXQEMOK-UHFFFAOYSA-N	1.7 × 10 ³ 1.9 × 10 ² 4.4 × 10 ² 4.2 × 10 ²		Compernelle and Müller (2014b) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	V Q Q Q	 81, 239 81, 240 81, 241
1,4-hexanediol C ₆ H ₁₄ O ₂ [16432-53-4] QVTWBMUAJHVAIJ-UHFFFAOYSA-N	4.5 × 10 ² 3.3 × 10 ³ 1.6 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
1,6-hexanediol C ₆ H ₁₄ O ₂ [629-11-8] XXMIOPMDWAUFGU-UHFFFAOYSA-N	4.5 × 10 ⁴ 3.0 × 10 ⁴		HSDB (2015) Saxena and Hildemann (1996)	Q E	100 403
2,3-hexanediol C ₆ H ₁₄ O ₂ [617-30-1] QCIYAEYRVFUFAP-UHFFFAOYSA-N	2.1 × 10 ² 8.7 × 10 ² 1.3 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,5-hexanediol $\text{C}_6\text{H}_{14}\text{O}_2$ [2935-44-6] OHMBHFSEKCCBW-UHFFFAOYSA-N	1.4×10^4 5.1×10^2 5.9×10^3 2.0×10^3 2.0×10^4		Compernelle and Müller (2014b) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	V Q Q Q	 81, 239 81, 240 81, 241
1,2-cyclohexanediol $\text{C}_6\text{H}_{12}\text{O}_2$ [931-17-9] PFURGBBHAOXLIO-UHFFFAOYSA-N	6.6×10^2 1.4×10^4 1.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2-methyl-1,3-pentanediol $\text{C}_6\text{H}_{14}\text{O}_2$ [149-31-5] SPXWGAHNKXLXAP-UHFFFAOYSA-N	3.0×10^4		Saxena and Hildemann (1996)	E	403
2-methyl-1,4-pentanediol $\text{C}_6\text{H}_{14}\text{O}_2$ [6287-17-8] PNJNLCHNHSWUPT-UHFFFAOYSA-N	5.1×10^2 4.0×10^3 4.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2-methyl-2,4-pentanediol $\text{C}_6\text{H}_{14}\text{O}_2$ [107-41-5] SVTBMSDMJJWYQN-UHFFFAOYSA-N	2.5×10^1 2.0×10^4		HSDB (2015) Saxena and Hildemann (1996)	Q E	100 403
3-methyl-1,3-pentanediol $\text{C}_6\text{H}_{14}\text{O}_2$ [33879-72-0] HIYKOZFIIVZIBFO-UHFFFAOYSA-N	3.1×10^2 2.3×10^3 8.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
3-methyl-1,4-pentanediol $\text{C}_6\text{H}_{14}\text{O}_2$ [26787-63-3] WOHXXIWTEHLCQK-UHFFFAOYSA-N	5.1×10^2 5.8×10^3 2.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
4-methyl-1,4-pentanediol $\text{C}_6\text{H}_{14}\text{O}_2$ [1462-10-8] HAIWVDGLCRYQMC-UHFFFAOYSA-N	3.1×10^2 2.9×10^3 2.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2,3-dimethyl-2,3-butanediol $\text{C}_6\text{H}_{14}\text{O}_2$ [76-09-5] IVDFJHOHABJVEH-UHFFFAOYSA-N	1.0×10^2 8.7×10^2 6.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2,3-dimethyl-1,4-butanediol $\text{C}_6\text{H}_{14}\text{O}_2$ [57716-80-0] SKQUTIPQJKQFRA-UHFFFAOYSA-N	5.1×10^2 8.1×10^3 2.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2-dimethyl-1,4-butanediol $\text{C}_6\text{H}_{14}\text{O}_2$ [32812-23-0] GQSZUUPRBBBHRI-UHFFFAOYSA-N	3.1×10^2 4.5×10^3 2.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
1,2,6-hexanetriol $\text{C}_6\text{H}_{14}\text{O}_3$ [106-69-4] ZWVMLYRJJXORSEP-UHFFFAOYSA-N	2.0×10^9		Saxena and Hildemann (1996)	E	403
MCM:H134M3C5 $\text{C}_6\text{H}_{14}\text{O}_3$ XPUHQFLUQJINS-UHFFFAOYSA-N	3.6×10^5 2.4×10^6 8.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
1,2,3,4,5,6-hexahydroxy hexane $\text{C}_6\text{H}_{14}\text{O}_6$ [45007-61-2] FBPFZTCFMRRESA-UHFFFAOYSA-N	3.9×10^{23}		Saxena and Hildemann (1996)	E	403
(2S,3R,4R,5R)-hexane-1,2,3,4,5,6- hexol $\text{C}_6\text{H}_{14}\text{O}_6$ (sorbitol) [50-70-4] FBPFZTCFMRRESA-JGWLITMVSA-N	6.6×10^{14} 1.4×10^7	22000	Compernelle and Müller (2014b) HSDB (2015)	V Q	 100
(2R,3R,4R,5R)-hexane-1,2,3,4,5,6- hexol $\text{C}_6\text{H}_{14}\text{O}_6$ (mannitol) [69-65-8] FBPFZTCFMRRESA-KVTDHHQDSA-N	3.1×10^9 1.8×10^{15} 1.4×10^7 1.0×10^{15} 1.4×10^7	22000	Qin et al. (2021) Compernelle and Müller (2014b) Qin et al. (2021) Qin et al. (2021) HSDB (2015)	M V Q Q Q	436 437 438 100
(2R,3S,4R,5S)-hexane-1,2,3,4,5,6- hexol $\text{C}_6\text{H}_{14}\text{O}_6$ (dulcitol; galactitol) [608-66-2] FBPFZTCFMRRESA-GUCUJZUSA-N	9.0×10^{14}	22000	Compernelle and Müller (2014b)	V	
1,2,4,5-cyclohexanetetrol $\text{C}_6\text{H}_{12}\text{O}_4$ (1,2,4,5-tetrahydroxycyclohexane) [35652-37-0] RDIDGZFAQSQXBU-UHFFFAOYSA-N	3.9×10^{14}		Saxena and Hildemann (1996)	E	403

Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,4,5,6- hexahydroxycyclohexane C ₆ H ₁₂ O ₆ [87-89-8] CDAISMWEOUEBRE-UHFFFAOYSA-N	9.9×10^{23}		Saxena and Hildemann (1996)	E	403
1,7-heptanediol C ₇ H ₁₆ O ₂ [629-30-1] SXCBDZAEHILGLM-UHFFFAOYSA-N	2.0×10^4		Compernelle and Müller (2014b) Saxena and Hildemann (1996)	V E	445 403
2,4-heptanediol C ₇ H ₁₆ O ₂ [20748-86-1] XVEOUOTUJBYHNL-UHFFFAOYSA-N	2.0×10^4		Saxena and Hildemann (1996)	E	403
2,5-heptanediol C ₇ H ₁₆ O ₂ [70444-25-6] XTVHTJKKQKUEQA-UHFFFAOYSA-N	4.2×10^2 4.7×10^3 7.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
4-methyl-1,4-hexanediol C ₇ H ₁₆ O ₂ [40646-08-0] ZRCYHJNCCBSTSZ-UHFFFAOYSA-N	2.5×10^2 2.6×10^3 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2-methyl-2,5-hexanediol C ₇ H ₁₆ O ₂ [29044-06-2] KZWQVDXGMOSSNY-UHFFFAOYSA-N	2.9×10^2 4.1×10^3 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
3-methyl-2,5-hexanediol C ₇ H ₁₆ O ₂ PMORVUNYTOZCSE-UHFFFAOYSA-N	4.8×10^2 7.6×10^3 2.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2,2-diethyl-1,3-propanediol C ₇ H ₁₆ O ₂ [115-76-4] XRVCFPZPAHWYTB-UHFFFAOYSA-N	2.0×10^4		Saxena and Hildemann (1996)	E	403
1,2,3,4,5-pentahydroxyheptane C ₇ H ₁₆ O ₅ HUYORHVLGRMTGF-UHFFFAOYSA-N	4.9×10^{18}		Saxena and Hildemann (1996)	E	403
1,2,3,4,6-pentahydroxyheptane C ₇ H ₁₆ O ₅ HBKKLPCMKBGRJH-UHFFFAOYSA-N	3.9×10^{18}		Saxena and Hildemann (1996)	E	403
1,2,3,5,7-pentahydroxyheptane C ₇ H ₁₆ O ₅ NSOOVWLSFZLKQX-UHFFFAOYSA-N	4.9×10^{18}		Saxena and Hildemann (1996)	E	403

Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,4,5,6-hexahydroxyheptane C ₇ H ₁₆ O ₆ (1-deoxy-heptitol) [688007-16-1] YMEXGEAJNZRQEH-VIFPVBQESA-N	3.0×10^{23}		Saxena and Hildemann (1996)	E	403
3,6-octanediol C ₈ H ₁₈ O ₂ [24434-09-1] BCKOQWWRTBBSGR-UHFFFAOYSA-N	3.7×10^2 4.1×10^3 2.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
1,4-cyclohexanedimethanol C ₈ H ₁₆ O ₂ [105-08-8] YIMQCDZDWXUDCA-UHFFFAOYSA-N	1.5×10^5		HSDB (2015)	V	
2-ethyl-1,3-hexanediol C ₈ H ₁₈ O ₂ [94-96-2] RWLALWYNXFYRGW-UHFFFAOYSA-N	7.2×10^2 5.4×10^2 7.8×10^2 7.8×10^2 1.6×10^1 1.1×10^2 7.5×10^2 2.0×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Saxena and Hildemann (1996)	V Q Q Q Q Q Q E	187 243, 244 245 246 68 403
2,2,4-trimethyl-1,3-pentanediol C ₈ H ₁₈ O ₂ [144-19-4] JCTXKRPTIMZBJT-UHFFFAOYSA-N	2.2×10^2 9.2×10^1 1.4×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015)	V Q Q	187 100
2,5-dimethyl-2,5-hexanediol C ₈ H ₁₈ O ₂ [110-03-2] ZWNMRZQYWRLGMM-UHFFFAOYSA-N	1.4×10^1 1.9×10^3 7.9×10^2 4.7×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1,9-nonanediol C ₉ H ₂₀ O ₂ [3937-56-2] ALVZNPYWJMLXKV-UHFFFAOYSA-N			Compernelle and Müller (2014b)	V	446
3,6-nonanediol C ₉ H ₂₀ O ₂ [4469-85-6] YKEWIFGQPMVBEF-UHFFFAOYSA-N	3.0×10^2 3.2×10^3 1.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
1,10-decanediol C ₁₀ H ₂₂ O ₂ [112-47-0] FOTKYAAJKYLFFN-UHFFFAOYSA-N			Compernelle and Müller (2014b)	V	447

Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,6-decanediol $\text{C}_{10}\text{H}_{22}\text{O}_2$ RBFBEALGOYNGK-UHFFFAOYSA-N	2.4×10^2 2.6×10^3 2.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:APINBOH $\text{C}_{10}\text{H}_{18}\text{O}_2$ MOILFCKRQFQVFS-UHFFFAOYSA-N	5.5×10^2 3.2×10^3 6.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:APINCOH $\text{C}_{10}\text{H}_{18}\text{O}_2$ OMDMTHRBGUBUCO-UHFFFAOYSA-N	1.8×10^3 2.0×10^5 3.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BPINAOH $\text{C}_{10}\text{H}_{18}\text{O}_2$ VXXAKGMRLUXFQH-UHFFFAOYSA-N	5.5×10^2 7.4×10^2 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BPINCOH $\text{C}_{10}\text{H}_{18}\text{O}_2$ XYKGEKWHBMLSGS-UHFFFAOYSA-N	1.6×10^3 3.5×10^5 5.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO36C11 $\text{C}_{11}\text{H}_{24}\text{O}_2$ VCLRIEYYOZNUUNU-UHFFFAOYSA-N	2.2×10^2 2.0×10^3 2.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO36C12 $\text{C}_{12}\text{H}_{26}\text{O}_2$ CLQOYXKLYNGAHW-UHFFFAOYSA-N	1.7×10^2 1.6×10^3 1.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2-butene-1,4-diol $\text{C}_4\text{H}_8\text{O}_2$ [110-64-5] ORTVZLZNOYNASJ-UHFFFAOYSA-N	$> 3.4 \times 10^2$ 2.5×10^3 1.2×10^5 3.4×10^4		Altschuh et al. (1999) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	M Q Q Q	 81, 239 81, 240 81, 241
3-butene-1,2-diol $\text{C}_4\text{H}_8\text{O}_2$ [497-06-3] ITMIAZBRRZANGB-UHFFFAOYSA-N	7.8×10^2 8.5×10^2 3.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2-butyne-1,4-diol $\text{C}_4\text{H}_6\text{O}_2$ (1,4-dihydroxy-2-butyne) [110-65-6] DLDJFQGPPSQZKI-UHFFFAOYSA-N	$> 2.0 \times 10^3$ 5.8×10^5		Altschuh et al. (1999) HSDB (2015)	M V	
MCM:C524OH $\text{C}_5\text{H}_{10}\text{O}_3$ PGARYUHLQUORKU-UHFFFAOYSA-N	1.3×10^6 6.5×10^4 6.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ISOPAOH $\text{C}_5\text{H}_{10}\text{O}_2$ FLXLJBCLEUWCG-UHFFFAOYSA-N	1.6×10^3 7.4×10^4 3.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:ISOPBOH $\text{C}_5\text{H}_{10}\text{O}_2$ XZRGYMKUQMPDQH-UHFFFAOYSA-N	4.5×10^2 5.4×10^2 7.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ISOPDOH $\text{C}_5\text{H}_{10}\text{O}_2$ HBHXLSPUXXXICF-UHFFFAOYSA-N	5.3×10^2 7.4×10^2 2.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C622OH $\text{C}_6\text{H}_{12}\text{O}_2$ VCGCHTQYUUAIGQ-UHFFFAOYSA-N	1.0×10^3 4.3×10^3 7.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C624OH $\text{C}_6\text{H}_{12}\text{O}_2$ BZQZWOYZOVQJLT-UHFFFAOYSA-N	1.0×10^3 3.6×10^3 8.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C720OH $\text{C}_7\text{H}_{12}\text{O}_2$ JRLLENLHZCUEBJ-UHFFFAOYSA-N	4.5×10^3 8.7×10^4 7.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LIMAOH $\text{C}_{10}\text{H}_{18}\text{O}_2$ WKZWTZTZWGEWE-UHFFFAOYSA-N	5.1×10^2 5.5×10^3 1.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LIMCOH $\text{C}_{10}\text{H}_{18}\text{O}_2$ ZJALAEQNHJQSTN-UHFFFAOYSA-N	6.9×10^2 4.3×10^3 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
(<i>E,E</i>)-8,10-dodecadien-1-ol $\text{C}_{12}\text{H}_{22}\text{O}$ (codlemone) [33956-49-9] CSWBSLXBXRFNST-MQQKCMAXSA-N	1.7		Ebert et al. (2023)	?	317
MCM:BCAOH $\text{C}_{15}\text{H}_{26}\text{O}_2$ XZTGVVWRBZDBQLP-UHFFFAOYSA-N	5.4×10^2 1.2×10^4 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCCOH $\text{C}_{15}\text{H}_{26}\text{O}_2$ ALNVAIGKARRJOT-UHFFFAOYSA-N	6.8×10^2 1.8×10^4 5.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
1,2-dihydroxybenzene $\text{C}_6\text{H}_4(\text{OH})_2$ (pyrocatechol) [120-80-9] YCIMNLLNPGFGHC-UHFFFAOYSA-N	8.2×10^3 8.2×10^3 1.8×10^3 1.6×10^2 4.5×10^1 2.6×10^3 1.4×10^4 5.4×10^3 4.4×10^3		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Schüürmann (2000) Mackay et al. (1995) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	V V V V V Q Q Q Q	187 81, 239 81, 240 81, 241

Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.8×10^3		Raventos-Duran et al. (2010)	Q	243, 244
	1.6×10^3		Raventos-Duran et al. (2010)	Q	245
	1.6×10^5		Raventos-Duran et al. (2010)	Q	246
	1.2×10^3		Hilal et al. (2008)	Q	
	7.9×10^2		Modarresi et al. (2007)	Q	68
		8300	Kühne et al. (2005)	Q	
		7400	Kühne et al. (2005)	?	
1,3-dihydroxybenzene $C_6H_4(OH)_2$ (resorcinol) [108-46-3] GHMLBKRAJJCXXBS-UHFFFAOYSA-N	1.0×10^5		Duchowicz et al. (2020)	V	187
	1.0×10^5		HSDB (2015)	V	
	8.5×10^4		Mackay et al. (2006c)	V	
	5.0×10^3		Schüürmann (2000)	V	
	6.4×10^4		Goldstein (1982)	X	448
	8.1×10^4	6300	Goldstein (1982)	X	299
	1.4×10^5		Duchowicz et al. (2020)	Q	
	2.4×10^4		Gharagheizi et al. (2012)	Q	
	5.3×10^4		Hilal et al. (2008)	Q	
1,4-dihydroxybenzene $C_6H_4(OH)_2$ (hydroquinone) [123-31-9] QIGBRXMKCJVKVMJ-UHFFFAOYSA-N	2.1×10^5		Duchowicz et al. (2020)	V	187
	2.6×10^5		HSDB (2015)	V	
	2.5×10^5		Mackay et al. (2006c)	V	
	3.2×10^4		Schüürmann (2000)	V	
	2.5×10^5		Mackay et al. (1995)	V	
	2.6×10^5		Meylan and Howard (1991)	V	
	7.6×10^3		Yaws (2003)	X	259
	2.3×10^5		Dupeux et al. (2022)	Q	260
	1.3×10^5		Duchowicz et al. (2020)	Q	
	3.1×10^4		Raventos-Duran et al. (2010)	Q	272, 244
	1.2×10^5		Raventos-Duran et al. (2010)	Q	245
	1.6×10^5		Raventos-Duran et al. (2010)	Q	246
	3.7×10^4		Hilal et al. (2008)	Q	
		8300	Kühne et al. (2005)	Q	
	1.7×10^5		Meylan and Howard (1991)	Q	
		7700	Kühne et al. (2005)	?	
1,2,3-benzenetriol $C_6H_6O_3$ (pyrogalllic acid) [87-66-1] WQGWDDVZFFDIG-UHFFFAOYSA-N	6.3×10^4		HSDB (2015)	V	
	5.1×10^6		Gharagheizi et al. (2012)	Q	
1,2-dihydroxy-3-methylbenzene $C_7H_8O_2$ [488-17-5] PGSWEKYNAOWQDF-UHFFFAOYSA-N	8.1×10^3		Wang et al. (2017)	Q	81, 239
	3.7×10^3		Wang et al. (2017)	Q	81, 240
	7.4×10^2		Wang et al. (2017)	Q	81, 241

Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:ECATECHOL $\text{C}_8\text{H}_{10}\text{O}_2$ UUCQGNWZASKXNN-UHFFFAOYSA-N	7.4×10^3 2.3×10^3 3.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYCATECH $\text{C}_8\text{H}_{10}\text{O}_2$ YGLVLWAMIJMBPF-UHFFFAOYSA-N	4.8×10^3 2.9×10^3 6.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYCATECH $\text{C}_8\text{H}_{10}\text{O}_2$ RYHGQTREREIBC-UHFFFAOYSA-N	4.8×10^3 3.6×10^3 3.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYCATECH $\text{C}_8\text{H}_{10}\text{O}_2$ RGUZWBOJHNWZOK-UHFFFAOYSA-N	4.8×10^3 3.9×10^3 7.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPCATECHOL $\text{C}_9\text{H}_{12}\text{O}_2$ XLZHGKDRKSKCAU-UHFFFAOYSA-N	6.8×10^3 1.1×10^3 2.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:METCATECH $\text{C}_9\text{H}_{12}\text{O}_2$ IFERDVOUSBGAOD-UHFFFAOYSA-N	4.4×10^3 1.9×10^3 3.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OETCATECH $\text{C}_9\text{H}_{12}\text{O}_2$ QTXIMHKRKLXRS-UHFFFAOYSA-N	4.4×10^3 2.2×10^3 3.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PCATECHOL $\text{C}_9\text{H}_{12}\text{O}_2$ GOZVFLWHGAXTPA-UHFFFAOYSA-N	5.9×10^3 1.5×10^3 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PETCATECH $\text{C}_9\text{H}_{12}\text{O}_2$ WVRWBYYUJPWRFQO-UHFFFAOYSA-N	4.4×10^3 2.5×10^3 4.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:T123CATECH $\text{C}_9\text{H}_{12}\text{O}_2$ DEIKGXRMQUHZJD-UHFFFAOYSA-N	2.9×10^3 4.6×10^3 5.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:T124CATECH $\text{C}_9\text{H}_{12}\text{O}_2$ NZEZVPYSAXNTR-UHFFFAOYSA-N	2.9×10^3 4.9×10^3 4.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2,3-dihydroxynaphthalene $\text{C}_{10}\text{H}_8\text{O}_2$ [92-44-4] JRNGUTKWMSBIBF-UHFFFAOYSA-N	2.0×10^5		Ebert et al. (2023)	?	317

Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hexylresorcinol C ₁₂ H ₁₈ O ₂ [136-77-6] WFJIVOKAWHGMBH-UHFFFAOYSA-N	3.8×10^4		HSDB (2015)	Q	100
2,6-bis(1,1-dimethylethyl)phenol C ₁₄ H ₂₂ O [128-39-2] DKCPKDPYUFEZCP-UHFFFAOYSA-N	3.1		HSDB (2015)	Q	100
4-(1-methyl-1-phenylethyl)phenol C ₁₅ H ₁₆ O [599-64-4] QBDSZLJBMIMQRS-UHFFFAOYSA-N	1.1×10^2		HSDB (2015)	Q	449
2,2',3,3'-tetrahydro-3,3,3',3'- tetramethyl-1,1'-spirobi(1H- indene)-6,6'-diol C ₂₁ H ₂₄ O ₂ [1568-80-5] SICLLPHPVFCNTJ-UHFFFAOYSA-N	1.5×10^6 1.0×10^6 2.2×10^6 8.2×10^5		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	288, 289 288, 290 288, 291 288, 292
4,4'-(3,3,5-trimethylcyclohexane- 1,1-diyl)diphenol C ₂₁ H ₂₆ O ₂ [129188-99-4] UMPGNGRIGSEMTC-UHFFFAOYSA-N	4.4×10^5 3.2×10^5 2.7×10^6 7.9×10^5		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
3,3,3',3'-tetramethyl-1,1'- spirobi(indan)-5,5',6,6'-tetrol C ₂₁ H ₂₄ O ₄ [77-08-7] POFMQEVZKZVAPQ-UHFFFAOYSA-N	1.4×10^{14} 1.6×10^{10} 2.0×10^{11} 2.7×10^{10}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
9,9-bis(4-hydroxyphenyl)fluorene C ₂₅ H ₁₈ O ₂ [3236-71-3] YWFPGFJLYRKYJZ-UHFFFAOYSA-N	8.4×10^8 6.2×10^7 2.1×10^8 3.1×10^9		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

A3.4 Peroxides (ROOH) and peroxy radicals (ROO)

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methyl hydroperoxide	3.0	5300	Burkholder et al. (2019)	L	
CH ₃ OOH	3.0	5300	Burkholder et al. (2015)	L	
(methyl peroxide)	3.0	5200	Brockbank (2013)	L	
[3031-73-0]	2.9	5200	Warneck and Williams (2012)	L	
MEUKEBNAABNAEX-UHFFFAOYSA-N	3.0	5300	Sander et al. (2011)	L	
	3.0	5300	Sander et al. (2006)	L	
	3.1	5300	Staudinger and Roberts (2001)	L	
	2.5	4400	Li et al. (2004)	M	
	>6.9		Magi et al. (1997)	M	450
	1.2×10^1		Sauer (1997)	M	451
	3.1	5200	O'Sullivan et al. (1996)	M	
	3.0	5300	Lind and Kok (1994)	M	53
	1.0×10^1		Wang et al. (2017)	Q	81, 239
	1.0×10^1		Wang et al. (2017)	Q	81, 240
	6.2		Wang et al. (2017)	Q	81, 241
	4.9		Raventos-Duran et al. (2010)	Q	272, 244
	1.2		Raventos-Duran et al. (2010)	Q	245
	1.6		Raventos-Duran et al. (2010)	Q	246
	9.0×10^{-1}		Hilal et al. (2008)	Q	
	1.3×10^1		Modarresi et al. (2007)	Q	68
		6200	Kühne et al. (2005)	Q	
		5200	Kühne et al. (2005)	?	
ethyl hydroperoxide	3.3	6000	Burkholder et al. (2019)	L	
C ₂ H ₅ OOH	3.3	6000	Burkholder et al. (2015)	L	
(ethyl peroxide)	3.3	6000	Brockbank (2013)	L	
[3031-74-1]	3.3	6000	Sander et al. (2011)	L	
ILHIHKRJJMKBEE-UHFFFAOYSA-N	1.1×10^1		Sauer (1997)	M	451
	3.3	6000	O'Sullivan et al. (1996)	M	
	5.0		Keshavarz et al. (2022)	Q	
	1.0×10^1		Duchowicz et al. (2020)	Q	185
	8.1		Wang et al. (2017)	Q	81, 239
	8.0		Wang et al. (2017)	Q	81, 240
	5.5		Wang et al. (2017)	Q	81, 241
	3.9		Raventos-Duran et al. (2010)	Q	272, 244
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	5.8×10^{-1}		Hilal et al. (2008)	Q	
		6600	Kühne et al. (2005)	Q	
	3.4		Duchowicz et al. (2020)	?	186, 21
		6000	Kühne et al. (2005)	?	

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
hydroxymethyl hydroperoxide HOCH ₂ OOH (HMHP; HMP) [15932-89-5] NEZWFWIACBUQMN-UHFFFAOYSA-N	1.7×10^4 1.7×10^4 1.7×10^4 1.7×10^4 1.6×10^4 1.6×10^4 1.6×10^4 4.7×10^3 1.6×10^4 1.6×10^2 3.9×10^4	9900 9900 9900 9900 10000 9700 10000 1500 1500 1500 8600 10000	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Sander et al. (2006) Staudinger and Roberts (2001) O'Sullivan et al. (1996) Staffelbach and Kok (1993) Zhou and Lee (1992) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Kühne et al. (2005) Kühne et al. (2005)	L L L L L M M M Q Q Q Q ?	 243, 244 245 246
bis-(hydroxymethyl)-peroxide HOCH ₂ OOCH ₂ OH (BHMP) [17088-73-2] JLJXMZMKMRQOLN-UHFFFAOYSA-N	$>9.9 \times 10^4$ 4.4×10^3	8400 9400 8500	Staffelbach and Kok (1993) Zhou and Lee (1992) Kühne et al. (2005) Kühne et al. (2005)	M M Q ?	
<i>tert</i> -butyl hydroperoxide C ₄ H ₁₀ O ₂ [75-91-2] CIHOLLKRGTVIJN-UHFFFAOYSA-N	4.2 1.4 3.6 6.2×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	Q Q Q Q	81, 239 81, 240 81, 241 100
di- <i>tert</i> -butylperoxide C ₈ H ₁₈ O ₂ [110-05-4] LSXWFXONGKSEMY-UHFFFAOYSA-N	8.2×10^{-4} 1.2×10^{-4} 1.6×10^{-2}		HSDB (2015) Hilal et al. (2008) Modarresi et al. (2007)	Q Q Q	100 68
1-methyl-1-phenylethylhydroperoxide C ₉ H ₁₂ O ₂ [80-15-9] YQHLDYVWEZKEOX-UHFFFAOYSA-N	2.1×10^2 2.1×10^2 2.3×10^1 1.3×10^2 2.3×10^1 2.3×10^1 2.3 7.3×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q Q Q Q	187 81, 239 81, 240 81, 241 68
dicumyl peroxide C ₁₈ H ₂₂ O ₂ [80-43-3] XMNIXWIUMCBBBL-UHFFFAOYSA-N	2.2×10^{-1}		HSDB (2015)	Q	100
methylperoxy radical CH ₃ OO [2143-58-0] WTFNSXYULBQCQV-UHFFFAOYSA-N	1.5×10^{-1} 5.9×10^{-2}	3700 5600	Leriche et al. (2000) Lelieveld and Crutzen (1991) Jacob (1986)	E E E	452 453 454

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hydroxymethylperoxy radical HOCH ₂ OO [27828-51-9] OLHGCLQZCFQBGU-UHFFFAOYSA-N	7.9×10^2	8200	Leriche et al. (2000)	E	452
peroxyacetyl radical CH ₃ C(O)O ₂ [36709-10-1] ZBQKPDHUDKSCRS-UHFFFAOYSA-N	$<9.9 \times 10^{-4}$ $<9.9 \times 10^{-4}$ $<9.9 \times 10^{-4}$ $<9.9 \times 10^{-4}$ $<9.9 \times 10^{-4}$		Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Sander et al. (2006) Villalta et al. (1996)	L L L L M	
MCM:ACO3H C ₃ H ₄ O ₃ AZIQALWHRUQPHV-UHFFFAOYSA-N	2.7×10^2 1.4×10^1 2.0×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IC3H7OOH C ₃ H ₈ O ₂ SGJUFIMCHSLMRJ-UHFFFAOYSA-N	7.6 3.9 4.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC3H7OOH C ₃ H ₈ O ₂ TURGQPDWYFJEDY-UHFFFAOYSA-N	6.8 4.7 3.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PERPROACID C ₃ H ₆ O ₃ CZPZWMPYEINMCF-UHFFFAOYSA-N	9.8×10^1 5.3 6.3×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3DBCO3H C ₄ H ₆ O ₃ TXNBRZBEFMJQMW-UHFFFAOYSA-N	3.2×10^2 1.0×10^1 5.4×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IC4H9OOH C ₄ H ₁₀ O ₂ FUHWWEDRJKHMKK-UHFFFAOYSA-N	6.0 3.6 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MACO3H C ₄ H ₆ O ₃ OELQSSWXRGADDE-UHFFFAOYSA-N	1.8×10^2 8.7 1.6×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
IEPOX1CO3H C ₄ H ₆ O ₅ DJPWYFXNRMHUNU-UHFFFAOYSA-N	9.0×10^2	14000	Wieser et al. (2023)	Q	439
MCM:NC4H9OOH C ₄ H ₁₀ O ₂ AKUNSTOMHUXJOZ-UHFFFAOYSA-N	5.3 3.4 3.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PERBUACID C ₄ H ₈ O ₃ LBAYFEDWGHXMSM-UHFFFAOYSA-N	7.8×10^1 2.8 4.1×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PERIBUACID $\text{C}_4\text{H}_8\text{O}_3$ LVQKOPBJHBWELS-UHFFFAOYSA-N	8.9×10^1 3.2 2.4×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:SC4H9OOH $\text{C}_4\text{H}_{10}\text{O}_2$ SPQMVUPFYWDFCB-UHFFFAOYSA-N	6.0 2.4 2.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BUT2CO3H $\text{C}_5\text{H}_{10}\text{O}_3$ LWBFPIVRZGBOFS-UHFFFAOYSA-N	7.3×10^1 2.0 1.8×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3ME3CO3H $\text{C}_5\text{H}_{10}\text{O}_3$ GTLLKMCVRPVGBK-UHFFFAOYSA-N	7.3×10^1 2.3 2.8×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPEAOOH $\text{C}_5\text{H}_{12}\text{O}_2$ HIHRAMNMOMKJDG-UHFFFAOYSA-N	5.5 2.6 1.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPEBOOH $\text{C}_5\text{H}_{12}\text{O}_2$ VIUWCQFVAFABHL-UHFFFAOYSA-N	5.6 2.1 2.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPECOOH $\text{C}_5\text{H}_{12}\text{O}_2$ XRANEMIFVRKLN-UHFFFAOYSA-N	3.4 9.8×10^{-1} 1.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NEOPOOH $\text{C}_5\text{H}_{12}\text{O}_2$ UEQURRFROJBOLG-UHFFFAOYSA-N	3.4 2.1 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PEAOOH $\text{C}_5\text{H}_{12}\text{O}_2$ KCHNMIKAMRQBHD-UHFFFAOYSA-N	4.7 2.6 2.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PEBOOH $\text{C}_5\text{H}_{12}\text{O}_2$ XRIRVAYMWUMXBR-UHFFFAOYSA-N	5.5 1.8 2.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PECOOH $\text{C}_5\text{H}_{12}\text{O}_2$ RLBQWRSRDVXRTJ-UHFFFAOYSA-N	5.5 1.7 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PERPENACID $\text{C}_5\text{H}_{10}\text{O}_3$ UQGPCEVQKLOLLM-UHFFFAOYSA-N	6.0×10^1 1.9 2.8×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TBUTCO3H $\text{C}_5\text{H}_{10}\text{O}_3$ YVAACGXAZGGQSM-UHFFFAOYSA-N	5.0×10^1 1.8 1.6×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
C520OOH C ₅ H ₁₀ O ₇ GRPDYNZWDDUILX-UHFFFAOYSA-N	5.3×10^{11}	22000	Wieser et al. (2023)	Q	439
C518OOH C ₅ H ₈ O ₄ PQEISBQMLHJHJQ-UHFFFAOYSA-N	4.1×10^4	14000	Wieser et al. (2023)	Q	439
MCM:C54CO3H C ₆ H ₁₂ O ₃ JTSRVXQXWWOTER-UHFFFAOYSA-N	5.6×10^1 1.4 1.4×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5H11CO3H C ₆ H ₁₂ O ₃ NQUPKCJGWCPODR-UHFFFAOYSA-N	5.6×10^1 1.4 2.5×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
ROO6R7OOH C ₆ H ₁₂ O ₄ UPAWKBDHGPWUCG-UHFFFAOYSA-N	3.3×10^7	14000	Wieser et al. (2023)	Q	439
ROO6R6OOH C ₆ H ₁₂ O ₅ QZPUZDFJKAEVLL-UHFFFAOYSA-N	2.6×10^8	14000	Wieser et al. (2023)	Q	439
C624OOH C ₆ H ₁₂ O ₆ FUTSLQULSAKEJA-UHFFFAOYSA-N	1.2×10^{13}	20000	Wieser et al. (2023)	Q	439
MCM:CHEXOOH C ₆ H ₁₂ O ₂ FGGJBCRKSXGDPDPO-UHFFFAOYSA-N	1.2×10^1 1.4×10^1 3.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HEXAOOH C ₆ H ₁₄ O ₂ RZICEOJUAFHYFO-UHFFFAOYSA-N	3.8 2.1 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HEXBOOH C ₆ H ₁₄ O ₂ XWXUHAUZCICPHE-UHFFFAOYSA-N	9.9×10^{-1} 4.4 1.4 1.8	7300	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:HEXCOOH C ₆ H ₁₄ O ₂ NMNOLZYZNVYLRJ-UHFFFAOYSA-N	4.4 1.4 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M22C3CO3H C ₆ H ₁₂ O ₃ RQLGMECUXRQENU-UHFFFAOYSA-N	4.0×10^1 1.5 2.1×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M22C43OOH C ₆ H ₁₄ O ₂ XDWQBMWWYOVNNSC-UHFFFAOYSA-N	3.2 1.4 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:M22C4OOH $\text{C}_6\text{H}_{14}\text{O}_2$ VWOCCXGIWJLCIT-UHFFFAOYSA-N	3.0 2.0 3.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M23C43OOH $\text{C}_6\text{H}_{14}\text{O}_2$ UPTQBPSUWRBZRD-UHFFFAOYSA-N	3.2 1.1 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M23C4OOH $\text{C}_6\text{H}_{14}\text{O}_2$ MCTQHWIBGOKRHO-UHFFFAOYSA-N	5.1 2.6 1.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2C43CO3H $\text{C}_6\text{H}_{12}\text{O}_3$ KGAQRBNLHLEGET-UHFFFAOYSA-N	6.8×10^1 1.8 1.9×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2PEAOOH $\text{C}_6\text{H}_{14}\text{O}_2$ OTKKOLXSCMINFN-UHFFFAOYSA-N	4.4 2.1 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2PEBOOH $\text{C}_6\text{H}_{14}\text{O}_2$ XHHITPKXZQXJIC-UHFFFAOYSA-N	5.1 1.4 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2PECOOH $\text{C}_6\text{H}_{14}\text{O}_2$ JBJSMFBSVBRLAK-UHFFFAOYSA-N	5.1 1.5 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2PEDOOH $\text{C}_6\text{H}_{14}\text{O}_2$ BZGMEGUFFDTCNP-UHFFFAOYSA-N	3.0 8.0×10^{-1} 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M33C3CO3H $\text{C}_6\text{H}_{12}\text{O}_3$ IHLWWYDUPGXTHJ-UHFFFAOYSA-N	4.0×10^1 1.2 8.9×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M33C4OOH $\text{C}_6\text{H}_{14}\text{O}_2$ OUMLJDCULPJYHU-UHFFFAOYSA-N	3.0 1.7 1.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M3C4CO3H $\text{C}_6\text{H}_{12}\text{O}_3$ CHSVHHKRTQKZCN-UHFFFAOYSA-N	5.6×10^1 1.7 2.3×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M3PEAOOH $\text{C}_6\text{H}_{14}\text{O}_2$ AOZFMIRWQXSLHO-UHFFFAOYSA-N	4.4 2.5 1.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M3PEBOOH $\text{C}_6\text{H}_{14}\text{O}_2$ XCSSHOKPSJZJS-UHFFFAOYSA-N	5.1 1.9 1.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:M3PECOOH $\text{C}_6\text{H}_{14}\text{O}_2$ BWMWVYKWKWYNWMF-UHFFFAOYSA-N	3.0 7.8×10^{-1} 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
ROO6R5OOH $\text{C}_7\text{H}_{12}\text{O}_6$ RAASFOSVQCCDRJ-UHFFFAOYSA-N	4.6×10^7	16000	Wieser et al. (2023)	Q	439
MCM:C6H13CO3H $\text{C}_7\text{H}_{14}\text{O}_3$ GLAYRDYINSCSPO-UHFFFAOYSA-N	4.4×10^1 1.1 2.2×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HEPTOOH $\text{C}_7\text{H}_{16}\text{O}_2$ RCPMMXGHMBPBLI-UHFFFAOYSA-N	3.6 1.1 9.3×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2HEXAOOH $\text{C}_7\text{H}_{16}\text{O}_2$ MZRXBNCEXTUOSL-UHFFFAOYSA-N	4.1 1.2 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2HEXBOOH $\text{C}_7\text{H}_{16}\text{O}_2$ VERXWMXNIBWXFV-UHFFFAOYSA-N	2.5 6.6×10^{-1} 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M3HEXAOOH $\text{C}_7\text{H}_{16}\text{O}_2$ SLXXGGKZGKGOKQ-UHFFFAOYSA-N	4.1 1.4 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M3HEXBOOH $\text{C}_7\text{H}_{16}\text{O}_2$ YDBMAIVJCSJSKQ-UHFFFAOYSA-N	2.5 6.8×10^{-1} 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
1-methylhexyl hydroperoxide $\text{C}_7\text{H}_{16}\text{O}_2$ (C7H15O2H) [762-46-9] FWELUXZVATZEMI-UHFFFAOYSA-N	7.7×10^{-1}	7600	Wieser et al. (2023)	Q	439
C7OHOOH $\text{C}_7\text{H}_{16}\text{O}_3$ KHWIBANUCNWWGW-UHFFFAOYSA-N	4.1×10^3	12000	Wieser et al. (2023)	Q	439
MCM:C8BCOOH $\text{C}_8\text{H}_{14}\text{O}_2$ TWXDGALDAWYAQL-UHFFFAOYSA-N	2.7×10^1 7.4 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OCTOOH $\text{C}_8\text{H}_{18}\text{O}_2$ PXUMFRDGLDGL-UHFFFAOYSA-N	2.8 9.8×10^{-1} 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
1-methylheptl hydroperoxide $\text{C}_8\text{H}_{18}\text{O}_2$ (C8H17O2H) NAXZMRYIZGEALQ-UHFFFAOYSA-N	5.8×10^{-1}	8000	Wieser et al. (2023)	Q	439
C8OHOOH $\text{C}_8\text{H}_{18}\text{O}_3$ QQTSMKQYSGCOU-UHFFFAOYSA-N	3.2×10^3	12000	Wieser et al. (2023)	Q	439
MCM:NONOOH $\text{C}_9\text{H}_{20}\text{O}_2$ BXPIMWLPPYUCSQ-UHFFFAOYSA-N	2.6 8.3×10^{-1} 9.6×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DECOOH $\text{C}_{10}\text{H}_{22}\text{O}_2$ MPMVVDJTKHXCAN-UHFFFAOYSA-N	2.0 7.3×10^{-1} 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
C5H112O2H $\text{C}_{10}\text{H}_{22}\text{O}_4$ AXIHYONNAPPFSO-UHFFFAOYSA-N	1.4	7000	Wieser et al. (2023)	Q	439
LIMAB15OOH2 $\text{C}_{10}\text{H}_{20}\text{O}_6$ IRUZCTPAAZATQM-UHFFFAOYSA-N	2.3×10^{12}	20000	Wieser et al. (2023)	Q	439
RO5R1O2H $\text{C}_{10}\text{H}_{18}\text{O}_4$ NSOHXIGSWKLSHV-UHFFFAOYSA-N	9.9×10^5	17000	Wieser et al. (2023)	Q	439
RO5R2O2H $\text{C}_{10}\text{H}_{18}\text{O}_5$ MFXJOKCSTDMZRM-UHFFFAOYSA-N	1.8×10^7	19000	Wieser et al. (2023)	Q	439
ROO6R1OOH $\text{C}_{10}\text{H}_{18}\text{O}_5$ GGBPAXKBVMQHIG-UHFFFAOYSA-N	6.8×10^4	16000	Wieser et al. (2023)	Q	439
RO5R3O2H $\text{C}_{10}\text{H}_{18}\text{O}_6$ IEPFJXDIWPQIRC-UHFFFAOYSA-N	7.7×10^7	22000	Wieser et al. (2023)	Q	439
MCM:UDECOOH $\text{C}_{11}\text{H}_{24}\text{O}_2$ PPEGYVQDERYKNI-UHFFFAOYSA-N	1.6 6.5×10^{-1} 9.6×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DDECOOH $\text{C}_{12}\text{H}_{26}\text{O}_2$ ONWAGJMEBPWHEG-UHFFFAOYSA-N	1.5 5.8×10^{-1} 8.3×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6H5OOH $\text{C}_6\text{H}_6\text{O}_2$ JYINMLPNDRBKKZ-UHFFFAOYSA-N	3.2×10^2 8.9×10^1 3.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C6H5CH2OOH $\text{C}_7\text{H}_8\text{O}_2$ YVJRCWCDFJYONJ-UHFFFAOYSA-N	2.6×10^2 9.1×10^1 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6H5CO3H $\text{C}_7\text{H}_6\text{O}_3$ XCRBXWCUXJNEFX-UHFFFAOYSA-N	3.7×10^3 6.2×10^1 2.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYL1OOH $\text{C}_7\text{H}_8\text{O}_2$ VCTGBWYTEXZDNM-UHFFFAOYSA-N	1.9×10^2 7.8×10^1 3.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYL1OOH $\text{C}_7\text{H}_8\text{O}_2$ OCSKWYCRTWOMLG-UHFFFAOYSA-N	1.9×10^2 1.0×10^2 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYL1OOH $\text{C}_7\text{H}_8\text{O}_2$ ZCUUEQJCOSBJOR-UHFFFAOYSA-N	1.9×10^2 9.1×10^1 2.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6H5C2CO3H $\text{C}_8\text{H}_8\text{O}_3$ BXGXGTXWGGOFSP-UHFFFAOYSA-N	3.1×10^3 6.3×10^1 2.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6H5C2OOH $\text{C}_8\text{H}_{10}\text{O}_2$ VZQOBPXGQJXYGY-UHFFFAOYSA-N	2.3×10^2 6.9×10^1 1.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DM123OOH $\text{C}_8\text{H}_{10}\text{O}_2$ FPXURWFXMHYDGM-UHFFFAOYSA-N	1.1×10^2 1.3×10^2 2.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DM124OOH $\text{C}_8\text{H}_{10}\text{O}_2$ UQJVEYMRRMOLPI-UHFFFAOYSA-N	1.1×10^2 1.0×10^2 3.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMPHOOH $\text{C}_8\text{H}_{10}\text{O}_2$ AGQLZSPEKWKXRP-UHFFFAOYSA-N	1.1×10^2 6.5×10^1 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EBENZOOH $\text{C}_8\text{H}_{10}\text{O}_2$ SULLUHFYVRLICT-UHFFFAOYSA-N	1.7×10^2 6.3×10^1 2.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXY1OOH $\text{C}_8\text{H}_{10}\text{O}_2$ LDNGPDBEDBLXJS-UHFFFAOYSA-N	1.1×10^2 1.1×10^2 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYLCO3H $\text{C}_8\text{H}_8\text{O}_3$ INFFZTZRGNVBOC-UHFFFAOYSA-N	2.2×10^3 5.0×10^1 2.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MXYL00H $\text{C}_8\text{H}_{10}\text{O}_2$ UTKFWOZXPFBPQ-UHFFFAOYSA-N	1.7×10^2 8.3×10^1 7.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYLCO3H $\text{C}_8\text{H}_8\text{O}_3$ DNEXRQSSNZPAJJ-UHFFFAOYSA-N	2.2×10^3 6.2×10^1 2.0×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYLOOH $\text{C}_8\text{H}_{10}\text{O}_2$ JTJQZHCMBBJJM-UHFFFAOYSA-N	1.7×10^2 9.3×10^1 6.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXY10OH $\text{C}_8\text{H}_{10}\text{O}_2$ QBGVYVNGBYXOUAG-UHFFFAOYSA-N	1.1×10^2 1.1×10^2 2.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYLCO3H $\text{C}_8\text{H}_8\text{O}_3$ IFDPVSBDNAQBRQ-UHFFFAOYSA-N	2.2×10^3 5.6×10^1 7.1×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYLOOH $\text{C}_8\text{H}_{10}\text{O}_2$ VCEHMDXCOGIOJJ-UHFFFAOYSA-N	1.7×10^2 9.8×10^1 8.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EMPHOOH $\text{C}_9\text{H}_{12}\text{O}_2$ MKWUSWBHCPKVBI-UHFFFAOYSA-N	1.0×10^2 4.0×10^1 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETOLOOH $\text{C}_9\text{H}_{12}\text{O}_2$ DWPOLKIWKCGPAM-UHFFFAOYSA-N	1.6×10^2 5.0×10^1 4.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPBENZOOH $\text{C}_9\text{H}_{12}\text{O}_2$ CZNIJWCDRJWKLJ-UHFFFAOYSA-N	1.6×10^2 5.0×10^1 1.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MET10OH $\text{C}_9\text{H}_{12}\text{O}_2$ HUAUUZDXRNWOSS-UHFFFAOYSA-N	1.0×10^2 6.5×10^1 1.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OET10OH $\text{C}_9\text{H}_{12}\text{O}_2$ KVZSMDLRNLVTLK-UHFFFAOYSA-N	1.0×10^2 7.4×10^1 1.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBENZOOH $\text{C}_9\text{H}_{12}\text{O}_2$ BFUPNGCSYHWOOH-UHFFFAOYSA-N	1.4×10^2 4.9×10^1 1.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PET10OH $\text{C}_9\text{H}_{12}\text{O}_2$ IKLGQZOVXYBNEV-UHFFFAOYSA-N	1.0×10^2 6.6×10^1 1.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PHC3OOH $\text{C}_9\text{H}_{12}\text{O}_2$ JYLUDNGUBXOJPX-UHFFFAOYSA-N	2.1×10^2 3.6×10^1 5.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM123BCO3H $\text{C}_9\text{H}_{10}\text{O}_3$ NQSDUJYDMWXHMR-UHFFFAOYSA-N	1.4×10^3 7.3×10^1 3.4×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM123BOOH $\text{C}_9\text{H}_{12}\text{O}_2$ HSKYDUVZGAHSEO-UHFFFAOYSA-N	1.0×10^2 1.2×10^2 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM123OOH $\text{C}_9\text{H}_{12}\text{O}_2$ QIIZMGNSXSJCNA-UHFFFAOYSA-N	6.5×10^1 1.6×10^2 5.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124BCO3H $\text{C}_9\text{H}_{10}\text{O}_3$ HPLBJCPAWPQKDU-UHFFFAOYSA-N	1.4×10^3 6.0×10^1 4.8×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124BOOH $\text{C}_9\text{H}_{12}\text{O}_2$ ZUEBLWOBXMLPMV-UHFFFAOYSA-N	1.0×10^2 1.1×10^2 7.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124OOH $\text{C}_9\text{H}_{12}\text{O}_2$ DSGKIBNJTLHQCN-UHFFFAOYSA-N	6.5×10^1 1.3×10^2 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TMBCO3H $\text{C}_9\text{H}_{10}\text{O}_3$ APDYULOMODUXLL-UHFFFAOYSA-N	1.4×10^3 3.9×10^1 2.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TMBOOH $\text{C}_9\text{H}_{12}\text{O}_2$ GOKTXPLVCSLYGI-UHFFFAOYSA-N	1.0×10^2 6.9×10^1 1.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DM35EBOOH $\text{C}_{10}\text{H}_{14}\text{O}_2$ NSJZLSFVHPJVDL-UHFFFAOYSA-N	9.1×10^1 3.6×10^1 4.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EMPHCO3H $\text{C}_{10}\text{H}_{12}\text{O}_3$ GYXFVTDASBFNQD-UHFFFAOYSA-N	1.0×10^3 2.3×10^1 2.4×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DE35TOOH $\text{C}_{11}\text{H}_{16}\text{O}_2$ HPTJZRKCFIXEOP-UHFFFAOYSA-N	7.6×10^1 2.4×10^1 3.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOCH2CO3H $\text{C}_2\text{H}_4\text{O}_4$ IUEZWLCUORJBDZ-UHFFFAOYSA-N	1.6×10^4 1.9×10^2 8.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HYETHO2H $\text{C}_2\text{H}_6\text{O}_3$ FKPAKAOEHCFKLE-UHFFFAOYSA-N	2.8×10^4 2.9×10^3 1.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C2OHOCO2H $\text{C}_3\text{H}_6\text{O}_5$ GTTVGDRVLZEEEW-UHFFFAOYSA-N	1.8×10^7 2.2×10^5 3.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3DIOLOOH $\text{C}_3\text{H}_8\text{O}_4$ XSLBWJPPWWFTQY-UHFFFAOYSA-N	2.8×10^7 1.1×10^6 3.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO1C3OOH $\text{C}_3\text{H}_8\text{O}_3$ LTKFKDLZMYUGKU-UHFFFAOYSA-N	2.0×10^4 2.1×10^3 3.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOC2H4CO3H $\text{C}_3\text{H}_6\text{O}_4$ HPIZQAHLZLDXVRM-UHFFFAOYSA-N	2.6×10^5 8.9×10^4 1.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HYPROPO2H $\text{C}_3\text{H}_8\text{O}_3$ CGHALRGHFEMJB-UHFFFAOYSA-N	2.6×10^4 3.0×10^3 4.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPROPOLO2H $\text{C}_3\text{H}_8\text{O}_3$ LGTUXDWECPSIQO-UHFFFAOYSA-N	2.6×10^4 2.1×10^3 4.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPROPOLPER $\text{C}_3\text{H}_6\text{O}_4$ LLWVBKQQPPRNEX-UHFFFAOYSA-N	1.4×10^4 1.5×10^2 4.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BUT2OLOOH $\text{C}_4\text{H}_{10}\text{O}_3$ VRQPOZSYDWHVQK-UHFFFAOYSA-N	2.5×10^4 1.5×10^3 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BUTDAOOH $\text{C}_4\text{H}_8\text{O}_3$ ATNKTSVDMCPWQK-UHFFFAOYSA-N	6.5×10^4 2.5×10^5 1.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BUTDBOOH $\text{C}_4\text{H}_8\text{O}_3$ VQGAWAMXUJLZCZ-UHFFFAOYSA-N	5.9×10^4 2.3×10^3 2.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BUTDCOOH $\text{C}_4\text{H}_8\text{O}_3$ TVUDLONEIXNOQY-UHFFFAOYSA-N	5.9×10^4 1.9×10^3 3.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HC3CCO3H $\text{C}_4\text{H}_6\text{O}_4$ ZSVMRAYUVFDTKB-UHFFFAOYSA-N	3.3×10^4 2.2×10^2 1.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HC3CO3H $\text{C}_4\text{H}_6\text{O}_4$ AVWVUWGQXKTDKD-UHFFFAOYSA-N	9.6×10^5 1.9×10^5 1.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HMACO3H $\text{C}_4\text{H}_6\text{O}_4$ IZGOVIKWSGSSGB-UHFFFAOYSA-N	4.9×10^5 2.0×10^4 9.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO13C3CO3H $\text{C}_4\text{H}_8\text{O}_5$ SAVJJQFYFVKTL-UHFFFAOYSA-N	3.6×10^7 9.8×10^5 3.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO13C4OOH $\text{C}_4\text{H}_{10}\text{O}_4$ WTIWPVYZJGYFOG-UHFFFAOYSA-N	5.9×10^7 7.3×10^6 1.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO1C4OOH $\text{C}_4\text{H}_{10}\text{O}_3$ RCPPCOTVBKCGX-UHFFFAOYSA-N	1.6×10^4 6.9×10^4 3.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2C3CO3H $\text{C}_4\text{H}_8\text{O}_4$ WSXMRWGM MYXEOT-UHFFFAOYSA-N	2.5×10^5 1.0×10^5 4.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2C4OOH $\text{C}_4\text{H}_{10}\text{O}_3$ VJLLYXNZUMWUFH-UHFFFAOYSA-N	1.9×10^4 9.1×10^2 1.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C3CO3H $\text{C}_4\text{H}_8\text{O}_4$ BPXTXQLLUZFFNC-UHFFFAOYSA-N	1.2×10^4 8.9×10^1 1.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C4OOH $\text{C}_4\text{H}_{10}\text{O}_3$ RMYCTZOJULYKEL-UHFFFAOYSA-N	2.1×10^4 1.4×10^3 1.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOC3H6CO3H $\text{C}_4\text{H}_8\text{O}_4$ CAGKPIQTEWLESW-UHFFFAOYSA-N	2.3×10^5 8.9×10^4 3.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOIPRCO3H $\text{C}_4\text{H}_8\text{O}_4$ XMJMNOOSJCSST-UHFFFAOYSA-N	2.5×10^5 9.8×10^4 6.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IBUTOLBO2H $\text{C}_4\text{H}_{10}\text{O}_3$ NCECNUIKMRTTQ-UHFFFAOYSA-N	1.4×10^4 1.3×10^3 1.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IBUTOLCO2H $\text{C}_4\text{H}_{10}\text{O}_3$ IYIYQILWOLBTBM-UHFFFAOYSA-N	1.9×10^4 1.5×10^3 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:IPRHOCO3H $\text{C}_4\text{H}_8\text{O}_4$ VAHIZEUROSQMC-UHFFFAOYSA-N	8.1×10^3 3.2×10^1 7.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NBTOLAOOH $\text{C}_4\text{H}_{10}\text{O}_3$ KPUCJKMFRKKADT-UHFFFAOYSA-N	2.1×10^4 2.1×10^3 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NBTOLBOOH $\text{C}_4\text{H}_{10}\text{O}_3$ UKXKMFPUVLQYHV-UHFFFAOYSA-N	1.9×10^4 1.4×10^3 2.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TBUTOLOOH $\text{C}_4\text{H}_{10}\text{O}_3$ OLMJQVPVWPTBW-UHFFFAOYSA-N	1.4×10^4 8.0×10^2 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3M3OHCO3H $\text{C}_5\text{H}_{10}\text{O}_4$ OPXDDGDNASPZKO-UHFFFAOYSA-N	1.1×10^4 7.6×10^1 8.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C42CO3H $\text{C}_5\text{H}_{10}\text{O}_5$ ZMIMRJOKAFWNST-UHFFFAOYSA-N	3.3×10^7 1.2×10^6 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C46CO3H $\text{C}_5\text{H}_8\text{O}_4$ WVNMVJVYTYSNQP-UHFFFAOYSA-N	4.5×10^5 1.4×10^5 1.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4OH2CO3H $\text{C}_5\text{H}_{10}\text{O}_5$ WQUIEUQOLAPHC-UHFFFAOYSA-N	9.1×10^6 2.0×10^5 9.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4OHCO3H $\text{C}_5\text{H}_{10}\text{O}_4$ OQVSVCDIVLTQNI-UHFFFAOYSA-N	1.0×10^4 5.5×10^1 6.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C51OH2OOH $\text{C}_5\text{H}_{12}\text{O}_3$ YEVLRKKUVOPQLT-UHFFFAOYSA-N	1.9×10^4 1.7×10^3 1.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C524OOH $\text{C}_5\text{H}_{10}\text{O}_4$ CMYVSBWTXHBCDK-UHFFFAOYSA-N	1.1×10^8 1.2×10^7 8.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C52OH1OOH $\text{C}_5\text{H}_{12}\text{O}_3$ UCQFCLCUMHUGLJ-UHFFFAOYSA-N	1.9×10^4 1.0×10^3 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C52OH3OOH $\text{C}_5\text{H}_{12}\text{O}_3$ HJJMDLGJAJYCSL-UHFFFAOYSA-N	1.9×10^4 1.7×10^3 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C52OOH $\text{C}_5\text{H}_{12}\text{O}_3$ ZPHQYWRKWRKGNS-UHFFFAOYSA-N	1.5×10^4 5.1×10^4 3.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C53OH2OOH $\text{C}_5\text{H}_{12}\text{O}_3$ AJVYEIIIRONFKES-UHFFFAOYSA-N	1.9×10^4 1.0×10^3 8.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C54OOH $\text{C}_5\text{H}_{12}\text{O}_4$ YUSGXJKDHCBGQE-UHFFFAOYSA-N	3.2×10^7 5.9×10^6 6.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C56OOH $\text{C}_5\text{H}_{12}\text{O}_4$ ZJCLGCDNIJGCW-UHFFFAOYSA-N	5.6×10^7 7.6×10^6 7.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H13C43CO3H $\text{C}_5\text{H}_{10}\text{O}_5$ AHAADFOLDXPWKJ-UHFFFAOYSA-N	1.9×10^7 4.1×10^5 1.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2M2C3CO3H $\text{C}_5\text{H}_{10}\text{O}_4$ WNBRWGLXVYJADJ-UHFFFAOYSA-N	1.4×10^5 5.9×10^4 1.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2M3C4OOH $\text{C}_5\text{H}_{12}\text{O}_3$ ZUPZYIDTDVLJQO-UHFFFAOYSA-N	1.7×10^4 8.5×10^2 6.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HC4ACO3H $\text{C}_5\text{H}_8\text{O}_4$ RKJIARBOZVRICG-UHFFFAOYSA-N	6.5×10^5 2.0×10^5 8.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HC4CCO3H $\text{C}_5\text{H}_8\text{O}_4$ BKBSBVFBLOVVGK-UHFFFAOYSA-N	6.5×10^5 1.9×10^5 7.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM22C3OOH $\text{C}_5\text{H}_{12}\text{O}_3$ YTVLHPDOOITGNI-UHFFFAOYSA-N	1.0×10^4 9.8×10^2 2.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM22CO3H $\text{C}_5\text{H}_{10}\text{O}_4$ JLDURWTXWMLEQQ-UHFFFAOYSA-N	1.4×10^5 5.4×10^4 1.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM2C43OOH $\text{C}_5\text{H}_{12}\text{O}_3$ HSLVQIVCJSWUOZ-UHFFFAOYSA-N	1.7×10^4 1.6×10^3 8.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM33C3OOH $\text{C}_5\text{H}_{12}\text{O}_3$ WHBWUNCJQHRHKD-UHFFFAOYSA-N	1.0×10^4 7.3×10^2 1.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HO13C5OOH $\text{C}_5\text{H}_{12}\text{O}_4$ MPQCFHWMIMIVYQV-UHFFFAOYSA-N	5.6×10^7 7.6×10^6 1.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO1C5OOH $\text{C}_5\text{H}_{12}\text{O}_3$ NOIFGIIKGVCIDM-UHFFFAOYSA-N	1.5×10^4 4.8×10^4 2.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO24C4CO3H $\text{C}_5\text{H}_{10}\text{O}_5$ BPXJXZFDALRNCD-UHFFFAOYSA-N	3.3×10^7 7.6×10^5 1.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO24C5OOH $\text{C}_5\text{H}_{12}\text{O}_4$ LXCUFKDAZLTFBK-UHFFFAOYSA-N	5.6×10^7 3.4×10^6 7.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2C43CO3H $\text{C}_5\text{H}_{10}\text{O}_4$ JJSNUFSNLCXQDD-UHFFFAOYSA-N	2.3×10^5 7.3×10^4 3.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2C4CO3H $\text{C}_5\text{H}_{10}\text{O}_4$ WEYKGBTAJHRDZ-UHFFFAOYSA-N	2.2×10^5 6.3×10^4 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2C54OOH $\text{C}_5\text{H}_{12}\text{O}_3$ NQEGDBNDYHCERX-UHFFFAOYSA-N	1.7×10^4 5.4×10^2 6.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2C5OOH $\text{C}_5\text{H}_{12}\text{O}_3$ GSRFGQMXWRCOMF-UHFFFAOYSA-N	7.1×10^3 1.5×10^4 5.4×10^4 1.4×10^3	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:HO2M2C4OOH $\text{C}_5\text{H}_{12}\text{O}_3$ BPHNXEObBWBGO-UHFFFAOYSA-N	1.0×10^4 5.4×10^2 4.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C4CO3H $\text{C}_5\text{H}_{10}\text{O}_4$ OFXAQZFPcOWEPU-UHFFFAOYSA-N	2.2×10^5 5.6×10^4 1.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C5OOH $\text{C}_5\text{H}_{12}\text{O}_3$ AMTQAQGRUCFWLQ-UHFFFAOYSA-N	1.5×10^4 6.9×10^2 5.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOBUT2CO3H $\text{C}_5\text{H}_{10}\text{O}_4$ HHXRGEgWJUDFIW-UHFFFAOYSA-N	2.2×10^5 5.8×10^4 1.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HOIBUTCO3H $\text{C}_5\text{H}_{10}\text{O}_4$ JVGUWDNKGCJEDLO-UHFFFAOYSA-N	2.2×10^5 5.6×10^4 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ISOPAOOH $\text{C}_5\text{H}_{10}\text{O}_3$ PEJQQVDRQFVMLE-UHFFFAOYSA-N	4.4×10^4 1.7×10^5 8.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ISOPBOOH $\text{C}_5\text{H}_{10}\text{O}_3$ QTGGFXPTAQEODO-UHFFFAOYSA-N	1.2×10^3 9.9×10^2 1.3×10^4 3.3×10^4 1.4×10^3 4.2×10^2	9900	Rivera-Rios (2018) Rivera-Rios (2018) Rivera-Rios (2018) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	M Q Q Q Q Q	 455 456 81, 239 81, 240 81, 241
MCM:ISOPCOOH $\text{C}_5\text{H}_{10}\text{O}_3$ FCLDANRCFPUKED-UHFFFAOYSA-N	4.4×10^4 2.0×10^5 1.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ISOPDOOH $\text{C}_5\text{H}_{10}\text{O}_3$ HYHMYONEYJINON-UHFFFAOYSA-N	1.2×10^2 2.6×10^4 1.3×10^4 4.0×10^4 1.8×10^3 8.1×10^2	7500	Rivera-Rios (2018) Rivera-Rios (2018) Rivera-Rios (2018) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	M Q Q Q Q Q	 455 456 81, 239 81, 240 81, 241
MCM:M2BU2OLOOH $\text{C}_5\text{H}_{12}\text{O}_3$ YWZMEYHQKKHRJF-UHFFFAOYSA-N	1.4×10^4 1.1×10^3 2.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2BUOL2OOH $\text{C}_5\text{H}_{12}\text{O}_3$ KLOVYRXVQOACLZ-UHFFFAOYSA-N	1.2×10^4 1.1×10^3 6.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M3BU2OLOOH $\text{C}_5\text{H}_{12}\text{O}_3$ AFEDOYRLNKBWPZ-UHFFFAOYSA-N	1.9×10^4 1.1×10^3 8.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MBOAOOH $\text{C}_5\text{H}_{12}\text{O}_4$ VJEOLZUQMDEVMO-UHFFFAOYSA-N	4.1×10^7 4.5×10^6 6.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MBOBOOH $\text{C}_5\text{H}_{12}\text{O}_4$ GXJWPCHTRDIVHR-UHFFFAOYSA-N	1.4×10^7 6.3×10^5 5.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ME2BUOLOOH $\text{C}_5\text{H}_{12}\text{O}_3$ SAXHQAUHEBEDAO-UHFFFAOYSA-N	1.4×10^4 6.9×10^2 9.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:ME3BUOLOOH $\text{C}_5\text{H}_{12}\text{O}_3$ MUYQYONVNPPJGI-UHFFFAOYSA-N	1.9×10^4 2.3×10^3 9.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PROL11MOOH $\text{C}_5\text{H}_{12}\text{O}_3$ UVDGWSPEOVCOFS-UHFFFAOYSA-N	1.2×10^4 5.6×10^2 1.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PROL1MCO3H $\text{C}_5\text{H}_{10}\text{O}_4$ KTQROZYFUGXCGA-UHFFFAOYSA-N	6.3×10^3 2.1×10^1 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BZBIPER2OH $\text{C}_6\text{H}_8\text{O}_4$ BVNIDXNYDXJAFS-UHFFFAOYSA-N	3.0×10^7 1.9×10^6 8.5×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BZBIPEROOH $\text{C}_6\text{H}_8\text{O}_5$ MXPMOVDECINDPN-UHFFFAOYSA-N	7.1×10^8 9.3×10^6 2.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4ME2OHOOH $\text{C}_6\text{H}_{14}\text{O}_3$ HOGFDWYRBLIMGU-UHFFFAOYSA-N	7.6×10^3 3.8×10^2 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C518CO3H $\text{C}_6\text{H}_{10}\text{O}_4$ HLKDNTMYLJJNIF-UHFFFAOYSA-N	4.3×10^5 5.6×10^4 5.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C622OOH $\text{C}_6\text{H}_{12}\text{O}_3$ GWTGWFHICNOSTQ-UHFFFAOYSA-N	1.3×10^4 2.9×10^4 1.3×10^3 1.6×10^3	12000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C624OOH $\text{C}_6\text{H}_{12}\text{O}_3$ DDEGWJHJCSBWJSM-UHFFFAOYSA-N	2.9×10^4 1.3×10^3 8.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C64OH5OOH $\text{C}_6\text{H}_{14}\text{O}_3$ ZEOCDIHFKNFYIT-UHFFFAOYSA-N	1.8×10^4 7.8×10^2 6.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C65OH4OOH $\text{C}_6\text{H}_{14}\text{O}_3$ PVVIDEIOKNUTFV-UHFFFAOYSA-N	1.8×10^4 1.4×10^3 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6OH5OOH $\text{C}_6\text{H}_{14}\text{O}_3$ HRDCBAWVKIWIOZ-UHFFFAOYSA-N	1.5×10^4 1.3×10^3 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CYHXOLAOOH $\text{C}_6\text{H}_{12}\text{O}_3$ UBIBQRDHLFTCKX-UHFFFAOYSA-N	5.0×10^4 8.5×10^4 6.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H13M3C5OOH $\text{C}_6\text{H}_{14}\text{O}_4$ KEIPMCKLLYLETP-UHFFFAOYSA-N	3.0×10^7 7.3×10^6 1.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H1MC5OOH $\text{C}_6\text{H}_{14}\text{O}_3$ NRUVZELSEXXOEO-UHFFFAOYSA-N	1.4×10^4 5.5×10^4 2.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2M2C4CO3H $\text{C}_6\text{H}_{12}\text{O}_4$ NRXKHRBCIJLLIW-UHFFFAOYSA-N	1.3×10^5 4.6×10^4 1.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2M3C4CO3H $\text{C}_6\text{H}_{12}\text{O}_4$ BSSSRXSGDLZQTD-UHFFFAOYSA-N	2.0×10^5 5.0×10^4 6.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2MC5OOH $\text{C}_6\text{H}_{14}\text{O}_3$ VFABJBQUVDJTMS-UHFFFAOYSA-N	1.4×10^4 4.9×10^4 1.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H3M2C4CO3H $\text{C}_6\text{H}_{12}\text{O}_4$ BXUACBWFNFVFRM-UHFFFAOYSA-N	2.0×10^5 4.6×10^4 8.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H3M3C4CO3H $\text{C}_6\text{H}_{12}\text{O}_4$ QREFYDOYYWEEBY-UHFFFAOYSA-N	1.3×10^5 4.1×10^4 5.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H3M3C5OOH $\text{C}_6\text{H}_{14}\text{O}_3$ SFWIETIRFCEPBV-UHFFFAOYSA-N	8.1×10^3 4.6×10^2 2.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM22C3CO3H $\text{C}_6\text{H}_{12}\text{O}_4$ CFTUKLJUHGJIMT-UHFFFAOYSA-N	1.3×10^5 3.5×10^4 2.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM22C4OOH $\text{C}_6\text{H}_{14}\text{O}_3$ RBKQZGUZSABUAQ-UHFFFAOYSA-N	8.1×10^3 3.2×10^4 1.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM23C4OOH $\text{C}_6\text{H}_{14}\text{O}_3$ OEDZXCCMDSIVQE-UHFFFAOYSA-N	1.4×10^4 6.9×10^4 1.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM2C43CO3H $\text{C}_6\text{H}_{12}\text{O}_4$ AAGQWOGOWVBCOC-UHFFFAOYSA-N	2.0×10^5 5.5×10^4 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HM33C3CO3H $\text{C}_6\text{H}_{12}\text{O}_4$ CJLFHOYFCBYSAF-UHFFFAOYSA-N	1.3×10^5 3.8×10^4 1.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM33C4OOH $\text{C}_6\text{H}_{14}\text{O}_3$ IRDKGYBPQHNSI-UHFFFAOYSA-N	8.1×10^3 4.5×10^4 6.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO1C6OOH $\text{C}_6\text{H}_{14}\text{O}_3$ AODLLEVTDATZKZ-UHFFFAOYSA-N	1.2×10^4 3.7×10^4 1.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO1MC5OOH $\text{C}_6\text{H}_{14}\text{O}_3$ XFJAYUAZOYAZNW-UHFFFAOYSA-N	1.4×10^4 2.5×10^4 2.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2C54CO3H $\text{C}_6\text{H}_{12}\text{O}_4$ HFXNQHIGYFOTHL-UHFFFAOYSA-N	2.0×10^5 4.3×10^4 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2C6OOH $\text{C}_6\text{H}_{14}\text{O}_3$ BVOYWPYSMMRYPX-UHFFFAOYSA-N	5.4×10^3 1.4×10^4 2.4×10^4 1.8×10^3	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:HO2M2C5OOH $\text{C}_6\text{H}_{14}\text{O}_3$ XDJWSJNLVSIJHD-UHFFFAOYSA-N	8.1×10^3 4.1×10^4 5.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2MC5OOH $\text{C}_6\text{H}_{14}\text{O}_3$ AGNBGPUCVJMPGZ-UHFFFAOYSA-N	1.4×10^4 4.8×10^4 4.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C5CO3H $\text{C}_6\text{H}_{12}\text{O}_4$ NIDIDJCFEJYKBD-UHFFFAOYSA-N	1.8×10^5 4.5×10^4 4.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C6OOH $\text{C}_6\text{H}_{14}\text{O}_3$ WSWZWPBQPMRENX-UHFFFAOYSA-N	1.2×10^4 4.0×10^4 8.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO4C5CO3H $\text{C}_6\text{H}_{12}\text{O}_4$ YRMQNGAQYQCFBS-UHFFFAOYSA-N	1.8×10^5 4.2×10^4 1.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO5C5CO3H $\text{C}_6\text{H}_{12}\text{O}_4$ ZOLITBGWKBFVQG-UHFFFAOYSA-N	8.5×10^3 4.0×10^1 5.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HO5C6OOH $\text{C}_6\text{H}_{14}\text{O}_3$ VKWHJFIUJUDAG-UHFFFAOYSA-N	1.5×10^4 7.6×10^2 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PHENOH $\text{C}_6\text{H}_8\text{O}_5$ JRROYJLQPIXCRD-UHFFFAOYSA-N	5.5×10^{10} 4.5×10^8 1.2×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PHENOOH $\text{C}_6\text{H}_8\text{O}_6$ WQYYMQZFKHHO-UHFFFAOYSA-N	1.4×10^{12} 2.0×10^8 1.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C622CO3H $\text{C}_7\text{H}_{12}\text{O}_4$ JSEAPEOJJJOJEL-UHFFFAOYSA-N	3.3×10^5 3.5×10^4 9.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C624CO3H $\text{C}_7\text{H}_{12}\text{O}_4$ VELNAHZLHYPPPOS-UHFFFAOYSA-N	3.3×10^5 3.9×10^4 2.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C720OOH $\text{C}_7\text{H}_{12}\text{O}_3$ LPMHECUIYQWFTDP-UHFFFAOYSA-N	1.2×10^5 2.9×10^5 2.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CRESOH $\text{C}_7\text{H}_{10}\text{O}_5$ UMHUAUCNJQCRC-UHFFFAOYSA-N	3.0×10^{10} 1.7×10^8 1.6×10^9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CRESOOH $\text{C}_7\text{H}_{10}\text{O}_6$ POYQJFWARUGMBT-UHFFFAOYSA-N	7.8×10^{11} 7.6×10^7 2.5×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2M2C65OOH $\text{C}_7\text{H}_{16}\text{O}_3$ MDRLNEUVCFZYIZ-UHFFFAOYSA-N	7.6×10^3 2.9×10^4 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2M4C65OOH $\text{C}_7\text{H}_{16}\text{O}_3$ HGFYTCXFDJYCQF-UHFFFAOYSA-N	1.3×10^4 3.9×10^4 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2M5C65OOH $\text{C}_7\text{H}_{16}\text{O}_3$ NIKXNAUPHRWTEG-UHFFFAOYSA-N	7.6×10^3 1.0×10^4 2.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H3M3C5CO3H $\text{C}_7\text{H}_{14}\text{O}_4$ DTTYTHTMWEWDN-UHFFFAOYSA-N	9.8×10^4 3.8×10^4 4.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H3M3C6OOH $\text{C}_7\text{H}_{16}\text{O}_3$ IWLJNMJTDMLQI-UHFFFAOYSA-N	6.6×10^3 3.3×10^4 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HO3C76OOH $\text{C}_7\text{H}_{16}\text{O}_3$ YDKPOQVDDHNRNK-UHFFFAOYSA-N	1.1×10^4 2.0×10^4 9.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO5C6CO3H $\text{C}_7\text{H}_{14}\text{O}_4$ KSOZMYOJLUVTBJ-UHFFFAOYSA-N	1.4×10^5 3.3×10^4 1.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO6C7OOH $\text{C}_7\text{H}_{16}\text{O}_3$ YGTQIECBHSGCOV-UHFFFAOYSA-N	1.2×10^4 5.9×10^2 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TLBIPER2OH $\text{C}_7\text{H}_{10}\text{O}_4$ CXEVRKZODGVABW-UHFFFAOYSA-N	1.7×10^7 9.6×10^5 2.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TLBIPEROOH $\text{C}_7\text{H}_{10}\text{O}_5$ JAKOWCUSWIMTAF-UHFFFAOYSA-N	3.9×10^8 3.8×10^6 9.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EBENZOLOH $\text{C}_8\text{H}_{12}\text{O}_5$ BUWSXDLGJSAPF-UHFFFAOYSA-N	2.5×10^{10} 1.0×10^8 6.0×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EBENZOLOOH $\text{C}_8\text{H}_{12}\text{O}_6$ RHHRXSIXEXUGSZ-UHFFFAOYSA-N	6.3×10^{11} 4.8×10^7 3.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EBZBPER2OH $\text{C}_8\text{H}_{12}\text{O}_4$ AUMASFBINMOAH-UHFFFAOYSA-N	1.4×10^7 6.3×10^5 3.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EBZBPEROOH $\text{C}_8\text{H}_{12}\text{O}_5$ SCDRKAWXSVOIOT-UHFFFAOYSA-N	3.2×10^8 2.5×10^6 1.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C86OOH $\text{C}_8\text{H}_{18}\text{O}_3$ SPJZDLLIJATZHB-UHFFFAOYSA-N	1.0×10^4 1.4×10^4 2.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO6C7CO3H $\text{C}_8\text{H}_{16}\text{O}_4$ UKHVIIUJOBBSNIJ-UHFFFAOYSA-N	1.3×10^5 2.9×10^4 9.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO7C8OOH $\text{C}_8\text{H}_{18}\text{O}_3$ NDXYTTLTSMWWGD-UHFFFAOYSA-N	1.1×10^4 4.7×10^2 7.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYPBPER2OH $\text{C}_8\text{H}_{12}\text{O}_4$ HJWPGRMMUKJUOW-UHFFFAOYSA-N	9.3×10^6 4.0×10^5 1.5×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MXYPEROOH $\text{C}_8\text{H}_{12}\text{O}_5$ JLBHNTWNBASURB-UHFFFAOYSA-N	2.2×10^8 1.5×10^6 1.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYOLOH $\text{C}_8\text{H}_{12}\text{O}_5$ HYWULKMMJLAVGS-UHFFFAOYSA-N	1.7×10^{10} 7.4×10^7 1.5×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYOLOOH $\text{C}_8\text{H}_{12}\text{O}_6$ GRFXDNYNQVBVKX-UHFFFAOYSA-N	4.4×10^{11} 3.2×10^7 3.2×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYBPER2OH $\text{C}_8\text{H}_{12}\text{O}_4$ VCLGCGXZSIRZEA-UHFFFAOYSA-N	9.3×10^6 5.0×10^5 4.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYBPEROOH $\text{C}_8\text{H}_{12}\text{O}_5$ AMPOFIBYJNSOH-UHFFFAOYSA-N	2.2×10^8 1.5×10^6 2.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYOLOH $\text{C}_8\text{H}_{12}\text{O}_5$ CAIZPBLFMULAI-UHFFFAOYSA-N	2.0×10^{10} 1.2×10^8 4.0×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYOLOOH $\text{C}_8\text{H}_{12}\text{O}_6$ QYYRJAPHRBSJOE-UHFFFAOYSA-N	5.3×10^{11} 5.5×10^7 8.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYBPER2OH $\text{C}_8\text{H}_{12}\text{O}_4$ IOEDFCIBQPWSMP-UHFFFAOYSA-N	9.3×10^6 5.0×10^5 4.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYBPEROOH $\text{C}_8\text{H}_{12}\text{O}_5$ LZVOCZWDZPUJRQ-UHFFFAOYSA-N	2.2×10^8 1.6×10^6 5.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYOLOH $\text{C}_8\text{H}_{12}\text{O}_5$ YSBIHFSZRPVTOU-UHFFFAOYSA-N	2.0×10^{10} 1.6×10^8 9.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYOLOOH $\text{C}_8\text{H}_{12}\text{O}_6$ ROOFTVJQSDLVOJ-UHFFFAOYSA-N	5.3×10^{11} 6.8×10^7 4.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C96OOH $\text{C}_9\text{H}_{20}\text{O}_3$ GGTTUTGCXALAOI-UHFFFAOYSA-N	8.0×10^3 1.9×10^4 8.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO7C8CO3H $\text{C}_9\text{H}_{18}\text{O}_4$ LZPDGAGYXQEGIA-UHFFFAOYSA-N	1.0×10^5 2.6×10^4 9.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HO8C9OOH $\text{C}_9\text{H}_{20}\text{O}_3$ DDKPTZKAQLYQQK-UHFFFAOYSA-N	8.9×10^3 3.8×10^2 6.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPBENZOLOH $\text{C}_9\text{H}_{14}\text{O}_5$ MXOPSFWTSRHQGT-UHFFFAOYSA-N	2.6×10^{10} 1.0×10^8 1.5×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPBZBPR2OH $\text{C}_9\text{H}_{14}\text{O}_4$ ZYFWWFFTFWUTQU-UHFFFAOYSA-N	1.3×10^7 6.8×10^5 8.9×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPBZBPROOH $\text{C}_9\text{H}_{14}\text{O}_5$ PFZQQVVUSVRBJH-UHFFFAOYSA-N	2.8×10^8 2.6×10^6 2.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPBZOLOOH $\text{C}_9\text{H}_{14}\text{O}_6$ CHCZSTHNGRHXBM-UHFFFAOYSA-N	5.9×10^{11} 4.9×10^7 3.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:METLBPR2OH $\text{C}_9\text{H}_{14}\text{O}_4$ WBMKIPDFTCRXQQ-UHFFFAOYSA-N	7.4×10^6 2.8×10^5 5.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:METLBPROOH $\text{C}_9\text{H}_{14}\text{O}_5$ JDOROKVPYHJTEM-UHFFFAOYSA-N	1.7×10^8 1.0×10^6 4.9×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:METOLOH $\text{C}_9\text{H}_{14}\text{O}_5$ JGSZPUTWQXTPGZ-UHFFFAOYSA-N	1.3×10^{10} 5.0×10^7 5.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:METOLOOH $\text{C}_9\text{H}_{14}\text{O}_6$ WHWNZVSDBMWGPT-UHFFFAOYSA-N	3.5×10^{11} 2.3×10^7 2.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OETLBPR2OH $\text{C}_9\text{H}_{14}\text{O}_4$ HUTNYAIOWRBWAA-UHFFFAOYSA-N	7.4×10^6 3.6×10^5 7.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OETLBPROOH $\text{C}_9\text{H}_{14}\text{O}_5$ JWHYGBDQJAPXFD-UHFFFAOYSA-N	1.7×10^8 1.1×10^6 1.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OETOLOH $\text{C}_9\text{H}_{14}\text{O}_5$ RKSMHAQFVDQZCV-UHFFFAOYSA-N	1.7×10^{10} 7.6×10^7 5.1×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OETOLOOH $\text{C}_9\text{H}_{14}\text{O}_6$ HMIPFAAVJMIHR-UHFFFAOYSA-N	4.4×10^{11} 3.1×10^7 4.5×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PBENZOLOH $\text{C}_9\text{H}_{14}\text{O}_5$ PPOCUJCGHLIXAB-UHFFFAOYSA-N	2.1×10^{10} 7.8×10^7 2.8×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBENZOLOOH $\text{C}_9\text{H}_{14}\text{O}_6$ YYEAFIOCCPRRFC-UHFFFAOYSA-N	5.6×10^{11} 3.7×10^7 9.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBZBPER2OH $\text{C}_9\text{H}_{14}\text{O}_4$ NXHGWQBANLWNAY-UHFFFAOYSA-N	1.1×10^7 5.0×10^5 1.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBZBPEROOH $\text{C}_9\text{H}_{14}\text{O}_5$ BDTBPCZZIFVKES-UHFFFAOYSA-N	2.8×10^8 2.0×10^6 2.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PETLBPR2OH $\text{C}_9\text{H}_{14}\text{O}_4$ ZJSMOJBPUXMKGO-UHFFFAOYSA-N	7.4×10^6 3.6×10^5 2.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PETLBPROOH $\text{C}_9\text{H}_{14}\text{O}_5$ HYHORQQVDRWXSH-UHFFFAOYSA-N	1.7×10^8 1.1×10^6 8.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PETOLOH $\text{C}_9\text{H}_{14}\text{O}_5$ WWWQWQMHOYSCT-UHFFFAOYSA-N	1.7×10^{10} 8.5×10^7 1.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PETOLOOH $\text{C}_9\text{H}_{14}\text{O}_6$ NWKQTACFFZGFMV-UHFFFAOYSA-N	4.4×10^{11} 3.6×10^7 6.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM123BP2OH $\text{C}_9\text{H}_{14}\text{O}_4$ XELNTWYHIBVYRB-UHFFFAOYSA-N	4.6×10^6 2.3×10^5 1.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM123BPOOH $\text{C}_9\text{H}_{14}\text{O}_5$ VYRKWTIFXGFOKI-UHFFFAOYSA-N	1.2×10^8 8.7×10^5 1.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM123OLOH $\text{C}_9\text{H}_{14}\text{O}_5$ CUPCKHHMKYENPF-UHFFFAOYSA-N	1.4×10^{10} 8.5×10^7 7.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM123OLOOH $\text{C}_9\text{H}_{14}\text{O}_6$ QKUAZMPWBBDUFL-UHFFFAOYSA-N	3.6×10^{11} 3.8×10^7 3.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124BP2OH $\text{C}_9\text{H}_{14}\text{O}_4$ ALTMQDHYGSUKTA-UHFFFAOYSA-N	4.6×10^6 2.3×10^5 1.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:TM124BPOOH $\text{C}_9\text{H}_{14}\text{O}_5$ WAGRVRZIKOHUQN-UHFFFAOYSA-N	1.2×10^8 7.1×10^5 2.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124OLOH $\text{C}_9\text{H}_{14}\text{O}_5$ BDZMwxRIFUJLAS-UHFFFAOYSA-N	1.4×10^{10} 1.2×10^8 1.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124OLOOH $\text{C}_9\text{H}_{14}\text{O}_6$ BWEFFYCDYKvJMY-UHFFFAOYSA-N	3.6×10^{11} 5.4×10^7 2.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM135BP2OH $\text{C}_9\text{H}_{14}\text{O}_4$ UOFFRVMQLZQAS-UHFFFAOYSA-N	5.6×10^6 2.8×10^5 1.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM135BPOOH $\text{C}_9\text{H}_{14}\text{O}_5$ JMJJTOHEWPZJQK-UHFFFAOYSA-N	1.4×10^8 7.3×10^5 1.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM135OLOH $\text{C}_9\text{H}_{14}\text{O}_5$ QLKJHZCZIQIKHZ-UHFFFAOYSA-N	1.1×10^{10} 5.4×10^7 2.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM135OLOOH $\text{C}_9\text{H}_{14}\text{O}_6$ BLJZZVPECPSDH-UHFFFAOYSA-N	2.9×10^{11} 2.1×10^7 6.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:APINAOOH $\text{C}_{10}\text{H}_{18}\text{O}_3$ RYIWEMFTAFVTLU-UHFFFAOYSA-N	4.7×10^4 1.5×10^4 1.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:APINBOOH $\text{C}_{10}\text{H}_{18}\text{O}_3$ USRGRUOHOFDFID-UHFFFAOYSA-N	4.7×10^4 1.8×10^4 1.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:APINCOOH $\text{C}_{10}\text{H}_{18}\text{O}_3$ PONCTWLYBMTTOF-UHFFFAOYSA-N	4.9×10^4 1.6×10^5 3.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BPINAOOH $\text{C}_{10}\text{H}_{18}\text{O}_3$ YIWAKBLZYMRLPO-UHFFFAOYSA-N	4.1×10^4 1.6×10^3 4.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BPINBOOH $\text{C}_{10}\text{H}_{18}\text{O}_3$ LNOABRBKZGHYLB-UHFFFAOYSA-N	4.1×10^4 1.2×10^3 5.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BPINCOOH $\text{C}_{10}\text{H}_{18}\text{O}_3$ ONJNLKNHLLSXIR-UHFFFAOYSA-N	4.6×10^4 2.7×10^5 3.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C918CO3H $\text{C}_{10}\text{H}_{16}\text{O}_4$ NCSYYALRPIRWRM-UHFFFAOYSA-N	2.2×10^4 5.9×10^1 4.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMEBPR2OH $\text{C}_{10}\text{H}_{16}\text{O}_4$ JNPNKLHEXQFLDW-UHFFFAOYSA-N	5.0×10^6 2.0×10^5 4.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMEBPROOH $\text{C}_{10}\text{H}_{16}\text{O}_5$ FGEXZPMCUOXGAY-UHFFFAOYSA-N	1.2×10^8 7.4×10^5 3.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMEPHOLOH $\text{C}_{10}\text{H}_{16}\text{O}_5$ KIALIUUKUKYONFN-UHFFFAOYSA-N	8.9×10^9 3.7×10^7 4.9×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMEPHOLOOH $\text{C}_{10}\text{H}_{16}\text{O}_6$ NQWKUASPEMANIL-UHFFFAOYSA-N	2.3×10^{11} 1.4×10^7 3.2×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C106OOH $\text{C}_{10}\text{H}_{22}\text{O}_3$ FUGKCLXVXWNPDC-UHFFFAOYSA-N	6.5×10^3 1.6×10^4 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO8C9CO3H $\text{C}_{10}\text{H}_{20}\text{O}_4$ UIPJRQQFQSAZPI-UHFFFAOYSA-N	8.1×10^4 2.5×10^4 7.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LIMAOOH $\text{C}_{10}\text{H}_{18}\text{O}_3$ FPMDSGWWEURSNO-UHFFFAOYSA-N	3.6×10^4 4.4×10^4 2.7×10^4 7.1×10^3	13000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:LIMBOOH $\text{C}_{10}\text{H}_{18}\text{O}_3$ KUZZIHAARVNWSI-UHFFFAOYSA-N	4.4×10^4 2.9×10^4 2.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LIMCOOH $\text{C}_{10}\text{H}_{18}\text{O}_3$ VHMRXSQYYKNLC-UHFFFAOYSA-N	3.6×10^4 5.3×10^4 1.0×10^4 4.5×10^3	13000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:DEMPHOLOH $\text{C}_{11}\text{H}_{18}\text{O}_5$ ZTCJTCVANLKQAR-UHFFFAOYSA-N	8.0×10^9 2.3×10^7 1.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DEMPHOLOOH $\text{C}_{11}\text{H}_{18}\text{O}_6$ MGZZNFCOXGVYJN-UHFFFAOYSA-N	2.1×10^{11} 1.1×10^7 1.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:DETLBPR2OH $\text{C}_{11}\text{H}_{18}\text{O}_4$ DLRWBBGTDDBDY-UHFFFAOYSA-N	4.2×10^6 1.7×10^5 8.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DETLBPROOH $\text{C}_{11}\text{H}_{18}\text{O}_5$ XWTOJCWARUYVPA-UHFFFAOYSA-N	1.0×10^8 4.2×10^5 1.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C116OOH $\text{C}_{11}\text{H}_{24}\text{O}_3$ XCBVDNPGCYSIMS-UHFFFAOYSA-N	5.8×10^3 1.3×10^4 1.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C126OOH $\text{C}_{12}\text{H}_{26}\text{O}_3$ FENUAUYSPLQZDX-UHFFFAOYSA-N	4.8×10^3 1.0×10^4 4.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCAOOH $\text{C}_{15}\text{H}_{26}\text{O}_3$ UHQMVBPMTQRFN-UHFFFAOYSA-N	4.0×10^4 3.6×10^3 1.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCBOOH $\text{C}_{15}\text{H}_{26}\text{O}_3$ LZWWWDZWHHIWFFS-UHFFFAOYSA-N	4.0×10^4 1.0×10^4 6.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCCOOH $\text{C}_{15}\text{H}_{26}\text{O}_3$ LYZHLRDUTRINQK-UHFFFAOYSA-N	5.8×10^4 3.7×10^4 2.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CATEC1OOH $\text{C}_6\text{H}_6\text{O}_3$ GQLFYNLVDCYDKN-UHFFFAOYSA-N	7.4×10^4 1.4×10^3 2.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MCATEC1OOH $\text{C}_7\text{H}_8\text{O}_3$ XVDDPRZRYAGIKB-UHFFFAOYSA-N	4.6×10^4 1.6×10^3 2.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ECATEC1OOH $\text{C}_8\text{H}_{10}\text{O}_3$ WXEIAPGLSOOSMJ-UHFFFAOYSA-N	4.0×10^4 8.3×10^2 5.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXCTEC1OOH $\text{C}_8\text{H}_{10}\text{O}_3$ OTSRNDWSIFNBXP-UHFFFAOYSA-N	3.0×10^4 1.6×10^3 8.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OCATEC1OOH $\text{C}_8\text{H}_{10}\text{O}_3$ FFFSTPMSYAWLR-UHFFFAOYSA-N	3.0×10^4 1.7×10^3 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PCATEC1OOH $\text{C}_8\text{H}_{10}\text{O}_3$ XEPXMQBYFZNYBF-UHFFFAOYSA-N	3.0×10^4 3.1×10^3 5.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:STYRENOOH $\text{C}_8\text{H}_{10}\text{O}_3$ PRSNAZGJNCSLPW-UHFFFAOYSA-N	3.2×10^6 2.1×10^4 4.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPCATC1OOH $\text{C}_9\text{H}_{12}\text{O}_3$ LUGXJULPVOELPW-UHFFFAOYSA-N	3.8×10^4 6.0×10^2 5.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTCTEC1OOH $\text{C}_9\text{H}_{12}\text{O}_3$ RXVYKZMASOKYNNM-UHFFFAOYSA-N	2.3×10^4 7.6×10^2 6.5×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OTCTEC1OOH $\text{C}_9\text{H}_{12}\text{O}_3$ BNYRTZAXTAHDLR-UHFFFAOYSA-N	2.3×10^4 8.9×10^2 8.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PRCATC1OOH $\text{C}_9\text{H}_{12}\text{O}_3$ WDHGVTVSFNORIO-UHFFFAOYSA-N	3.2×10^4 5.9×10^2 6.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PTCTEC1OOH $\text{C}_9\text{H}_{12}\text{O}_3$ SXYSFXQBZYKPP-UHFFFAOYSA-N	2.3×10^4 1.6×10^3 4.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:T123CT1OOH $\text{C}_9\text{H}_{12}\text{O}_3$ XFULZEJTRUOVEV-UHFFFAOYSA-N	1.7×10^4 2.0×10^3 7.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:T124CT1OOH $\text{C}_9\text{H}_{12}\text{O}_3$ XVSFIBYJDMNABQ-UHFFFAOYSA-N	1.7×10^4 3.2×10^3 2.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HCOCH2OOH $\text{C}_2\text{H}_4\text{O}_3$ TUJPFSEFVDYHSJJ-UHFFFAOYSA-N	7.4×10^3 1.4×10^2 4.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HCOCO3H $\text{C}_2\text{H}_2\text{O}_4$ JOALXJIWVKUVBR-UHFFFAOYSA-N	9.8×10^4 3.9×10^2 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3DIALOOH $\text{C}_3\text{H}_4\text{O}_4$ VUPDPJIDXKCVGY-UHFFFAOYSA-N	5.6×10^6 1.7×10^4 4.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHOC2H4OOH $\text{C}_3\text{H}_6\text{O}_3$ XSASRUDTFFBDDK-UHFFFAOYSA-N	5.8×10^3 5.3×10^3 1.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

A3.5 Aldehydes (RCHO)

Table A3.5: Aldehydes (RCHO)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methanal	3.2×10^1	7100	Burkholder et al. (2019)	L	457
HCHO	3.2×10^1	7100	Burkholder et al. (2015)	L	457
(formaldehyde)	3.2×10^1	6800	Warneck and Williams (2012)	L	457
[50-00-0]	3.2×10^1	7100	Sander et al. (2011)	L	457
WSFSSNUMVMOOMR-UHFFFAOYSA-N	3.2×10^1	7100	Sander et al. (2006)	L	457
	3.2×10^1	6800	Staudinger and Roberts (2001)	L	457
	3.2×10^1	6800	Staudinger and Roberts (1996)	L	457
	3.5×10^1	5700	Liu et al. (2015)	M	457
	3.4×10^1	6400	Allou et al. (2011)	M	457
	5.3×10^1	1600	Seyfioglu and Odabasi (2007)	M	457
	9.9×10^1		Kim et al. (2000)	M	88, 457
	3.1×10^1	6500	Zhou and Mopper (1990)	M	458, 457
	3.1×10^1	7200	Betterton and Hoffmann (1988)	M	457
			Dong and Dasgupta (1986)	M	459
			Ledbury and Blair (1925)	M	460
			Blair and Ledbury (1925)	M	460
	3.0×10^1		Lide and Frederikse (1995)	V	457
	2.3		Hwang et al. (1992)	V	457
	6.9×10^1	6400	Chameides (1984)	T	457
	2.9×10^1	7200	Bell (1966)	X	461, 457
	5.9×10^1		Gaffney and Senum (1984)	X	457, 391
	4.5×10^1		Lee and Zhou (1993)	C	88, 457
			Hough (1991)	C	460
	1.4×10^2		Warneck (1988)	C	457
	7.8×10^{-2}		Wang et al. (2017)	Q	81, 239
	4.9×10^{-2}		Wang et al. (2017)	Q	81, 240
	1.0×10^{-2}		Wang et al. (2017)	Q	81, 241
	2.8×10^{-2}		Hilal et al. (2008)	Q	
	7.5×10^{-2}		Modarresi et al. (2007)	Q	68
	4.3×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	9.0×10^{-2}		English and Carroll (2001)	Q	231, 232
	6.2×10^{-2}		Katritzky et al. (1998)	Q	
	1.8×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.0×10^2		Meylan and Howard (1991)	Q	457
	4.2×10^{-2}		Abraham et al. (1990)	?	
	6.2×10^1		Seinfeld (1986)	?	21, 457
			Lelieveld and Crutzen (1991)	W	460
			Pandis and Seinfeld (1989)	W	460

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethanal	1.3×10^{-1}	5900	Burkholder et al. (2019)	L	462
CH ₃ CHO	1.3×10^{-1}	5900	Burkholder et al. (2015)	L	462
(acetaldehyde)	1.5×10^{-1}	5600	Brockbank (2013)	L	
[75-07-0]	1.3×10^{-1}	5900	Sander et al. (2011)	L	
IKHGUXGNUITLKF-UHFFFAOYSA-N	1.3×10^{-1}	5900	Sander et al. (2006)	L	
	1.3×10^{-1}	5700	Staudinger and Roberts (2001)	L	
	1.4×10^{-1}	5600	Staudinger and Roberts (1996)	L	
	1.7×10^{-1}	5600	Wieland et al. (2015)	M	463
	1.5×10^{-1}	6400	Ji and Evans (2007)	M	
	1.1×10^{-1}		Straver and de Loos (2005)	M	
	1.5×10^{-1}		Marin et al. (1999)	M	
	1.3×10^{-1}	5700	Benkelberg et al. (1995)	M	
	1.7×10^{-1}	5000	Zhou and Mopper (1990)	M	458
	7.1×10^{-2}		Guitart et al. (1989)	M	14
	1.2×10^{-1}	6300	Betterton and Hoffmann (1988)	M	462
	1.2×10^{-1}	5800	Snider and Dawson (1985)	M	
	8.3×10^{-2}		Richon et al. (1985)	M	38
	1.6×10^{-1}		Mazza (1980)	M	
	2.5×10^{-1}		Vitenberg et al. (1974)	M	375
	1.5×10^{-1}		Buttery et al. (1969)	M	
	1.2×10^{-1}		Marin et al. (1999)	V	
	1.2×10^{-1}		Hwang et al. (1992)	V	
	7.8×10^{-2}		Yaws (2003)	X	259
	1.7×10^{-2}	4500	Janini and Quaddora (1986)	X	299
	1.7×10^{-1}	4700	Goldstein (1982)	X	299
	1.5×10^{-1}		Gaffney and Senum (1984)	X	391
	1.5×10^{-1}		Pierotti et al. (1959)	X	464
	1.8×10^{-1}		Dupeux et al. (2022)	Q	260
	9.0×10^{-2}		Keshavarz et al. (2022)	Q	
	9.8×10^{-2}		Duchowicz et al. (2020)	Q	
	9.8×10^{-2}		Wang et al. (2017)	Q	81, 239
	3.4×10^{-1}		Wang et al. (2017)	Q	81, 240
	1.3×10^{-1}		Wang et al. (2017)	Q	81, 241
	1.5×10^{-1}		Li et al. (2014)	Q	242
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	1.1×10^{-1}		Hilal et al. (2008)	Q	
	1.0×10^{-1}		Modarresi et al. (2007)	Q	68
		5200	Kühne et al. (2005)	Q	
	1.5×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	6.6×10^{-2}		Yao et al. (2002)	Q	230
	1.4×10^{-1}		English and Carroll (2001)	Q	231, 232
	1.4×10^{-1}		Marin et al. (1999)	Q	
	7.7×10^{-2}		Katritzky et al. (1998)	Q	
	1.5×10^{-1}		Nirmalakhandan et al. (1997)	Q	

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.3×10^{-1}		Suzuki et al. (1992)	Q	233
	1.5×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	1.5×10^{-1}	5800	Mackay et al. (2006c)	?	21
			Kühne et al. (2005)	?	
	1.0×10^{-1}		Yaws (1999)	?	21
	9.8×10^{-2}		Yaws and Yang (1992)	?	21
	1.5×10^{-1}		Abraham et al. (1990)	?	
ethanedial	4.1×10^3	7500	Burkholder et al. (2019)	L	462
OHCCHO	4.1×10^3	7500	Burkholder et al. (2015)	L	462
(glyoxal)	4.1×10^3	7500	Sander et al. (2011)	L	462
[107-22-2]	4.9×10^5		Kampf et al. (2013)	M	462, 465
LEQAOMBKQFMDFZ-UHFFFAOYSA-N	4.1×10^3	7500	Ip et al. (2009)	M	462
			Volkamer et al. (2009)	M	466
	2.6×10^5		Kroll et al. (2005)	M	462, 467
	3.6×10^3		Zhou and Mopper (1990)	M	462, 71
	$>3.0 \times 10^3$		Betterton and Hoffmann (1988)	M	462
	1.4×10^4		Lee and Zhou (1993)	C	88, 462
	2.0×10^2		Keshavarz et al. (2022)	Q	
	1.6×10^1		Duchowicz et al. (2020)	Q	300
	8.9×10^1		Wang et al. (2017)	Q	81, 239
	9.6		Wang et al. (2017)	Q	81, 240
	1.2×10^{-2}		Wang et al. (2017)	Q	81, 241
	3.1×10^4		Raventos-Duran et al. (2010)	Q	243, 244
	2.0×10^3		Raventos-Duran et al. (2010)	Q	245
	2.5×10^1		Raventos-Duran et al. (2010)	Q	246
	3.0×10^3		Duchowicz et al. (2020)	?	186, 21
	2.7×10^5		Woo and McNeill (2015)	?	468
propanal	9.9×10^{-2}	4300	Burkholder et al. (2019)	L	
$\text{C}_2\text{H}_5\text{CHO}$	9.9×10^{-2}	4300	Burkholder et al. (2015)	L	
(propionaldehyde)	1.3×10^{-1}	5500	Brockbank (2013)	L	1
[123-38-6]	9.9×10^{-2}	4300	Sander et al. (2011)	L	
NBBJYMSMWIIQGU-UHFFFAOYSA-N	9.9×10^{-2}	4300	Sander et al. (2006)	L	
	1.3×10^{-1}		Liu et al. (2015)	M	73
	9.1×10^{-2}		Kim and Kim (2014)	M	
	1.3×10^{-1}	5800	Ji and Evans (2007)	M	
	1.3×10^{-1}	5700	Zhou and Mopper (1990)	M	458
	6.1×10^{-2}		Richon et al. (1985)	M	38
	1.2×10^{-1}		Mazza (1980)	M	
	1.3×10^{-1}		Buttery et al. (1969)	M	
	7.5×10^{-2}		Buttery et al. (1965)	M	
	1.3×10^{-1}		Mackay et al. (2006c)	V	
	1.3×10^{-2}		Mackay et al. (1995)	V	
	3.2×10^{-2}	3200	Djerki and Laub (1988)	V	
	1.6×10^{-1}		Amoore and Buttery (1978)	V	
	4.3×10^{-2}		Yaws (2003)	X	259

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.2×10^{-2}	5600	Schaffer and Daubert (1969)	X	299
	2.7×10^{-2}	2400	Janini and Quaddora (1986)	X	299
	9.8×10^{-2}		Dupeux et al. (2022)	Q	260
	1.2×10^{-1}		Keshavarz et al. (2022)	Q	
	9.9×10^{-2}		Duchowicz et al. (2020)	Q	185
	8.0×10^{-2}		Wang et al. (2017)	Q	81, 239
	2.4×10^{-1}		Wang et al. (2017)	Q	81, 240
	8.0×10^{-2}		Wang et al. (2017)	Q	81, 241
	1.2×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	2.5×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	1.2×10^{-1}		Hilal et al. (2008)	Q	
	1.4×10^{-1}		Modarresi et al. (2007)	Q	68
		5500	Kühne et al. (2005)	Q	
	1.4×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	1.1×10^{-1}		English and Carroll (2001)	Q	231, 232
	5.8×10^{-2}		Katritzky et al. (1998)	Q	
	1.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	7.3×10^{-2}		Russell et al. (1992)	Q	280
	1.0×10^{-1}		Suzuki et al. (1992)	Q	233
	1.3×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	1.3×10^{-1}		Mackay et al. (2006c)	?	21
		5000	Kühne et al. (2005)	?	
	2.3×10^{-1}		Yaws (1999)	?	21
	1.3×10^{-1}		Abraham et al. (1990)	?	
propanedial $\text{C}_3\text{H}_4\text{O}_2$ (malonaldehyde) [542-78-9] WSMYVTOQOOLQHP-UHFFFAOYSA-N	7.3×10^1		Wang et al. (2017)	Q	81, 239
	6.0×10^1		Wang et al. (2017)	Q	81, 240
	4.1		Wang et al. (2017)	Q	81, 241
MCM:C32OH13CO $\text{C}_3\text{H}_4\text{O}_3$ NVXLIZQNSVLKPO-UHFFFAOYSA-N	2.3×10^3		Wang et al. (2017)	Q	81, 239
	5.5×10^3		Wang et al. (2017)	Q	81, 240
	8.7		Wang et al. (2017)	Q	81, 241
MCM:CH3CHOHCHO $\text{C}_3\text{H}_6\text{O}_2$ BSABBBMNWQWLLU-UHFFFAOYSA-N	1.1×10^1		Wang et al. (2017)	Q	81, 239
	1.1×10^2		Wang et al. (2017)	Q	81, 240
	3.1		Wang et al. (2017)	Q	81, 241
MCM:HOC2H4CHO $\text{C}_3\text{H}_6\text{O}_2$ AKXKFZDCRYJKTF-UHFFFAOYSA-N	3.6×10^1	9900	Wieser et al. (2023)	Q	439
	2.2×10^2		Wang et al. (2017)	Q	81, 239
	8.3×10^2		Wang et al. (2017)	Q	81, 240
	6.6×10^1		Wang et al. (2017)	Q	81, 241

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
butanal	9.5×10^{-2}	6200	Burkholder et al. (2019)	L	
C ₃ H ₇ CHO	9.5×10^{-2}	6200	Burkholder et al. (2015)	L	
(butyraldehyde)	9.1×10^{-2}	6000	Brockbank (2013)	L	
[123-72-8]	9.5×10^{-2}	6200	Sander et al. (2011)	L	
ZTQSAGDEMFDKMZ-UHFFFAOYSA-N	9.5×10^{-2}	6200	Sander et al. (2006)	L	
	6.1×10^{-2}		Kim and Kim (2014)	M	
	8.9×10^{-2}	6200	Ji and Evans (2007)	M	
	9.5×10^{-2}	6200	Zhou and Mopper (1990)	M	458
	8.6×10^{-2}		Buttery et al. (1969)	M	
	6.4×10^{-2}		Buttery et al. (1965)	M	
	6.5×10^{-2}		Mackay et al. (2006c)	V	
	6.5×10^{-2}		Mackay et al. (1995)	V	
	1.0×10^{-1}		Hwang et al. (1992)	V	
	8.7×10^{-2}	3500	Djerki and Laub (1988)	V	
	6.7×10^{-2}		Amoore and Buttery (1978)	V	
	8.4×10^{-2}		Yaws (2003)	X	259
	8.3×10^{-2}		Yaws (2003)	X	238
	5.4×10^{-2}	4000	Janini and Quaddora (1986)	X	299
	6.8×10^{-2}		Dupeux et al. (2022)	Q	260
	1.6×10^{-1}		Keshavarz et al. (2022)	Q	
	9.9×10^{-2}		Duchowicz et al. (2020)	Q	
	6.3×10^{-2}		Wang et al. (2017)	Q	81, 239
	1.4×10^{-1}		Wang et al. (2017)	Q	81, 240
	6.3×10^{-2}		Wang et al. (2017)	Q	81, 241
	9.9×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	5.8×10^{-2}		Gharagheizi et al. (2010)	Q	247
	9.0×10^{-2}		Hilal et al. (2008)	Q	
	1.1×10^{-1}		Modarresi et al. (2007)	Q	68
		5900	Kühne et al. (2005)	Q	
	6.7×10^{-2}		Yaffe et al. (2003)	Q	249, 273
	5.3×10^{-2}		Yao et al. (2002)	Q	230
	8.6×10^{-2}		English and Carroll (2001)	Q	231, 232
	5.4×10^{-2}		Katritzky et al. (1998)	Q	
	9.5×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	8.6×10^{-2}		Russell et al. (1992)	Q	280
	7.9×10^{-2}		Suzuki et al. (1992)	Q	233
	8.6×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	8.6×10^{-2}		Mackay et al. (2006c)	?	21
		6400	Kühne et al. (2005)	?	
	8.4×10^{-2}		Yaws (1999)	?	21
	8.6×10^{-2}		Abraham et al. (1990)	?	

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methylpropanal $\text{C}_4\text{H}_8\text{O}$ (isobutyraldehyde) [78-84-2] AMIMRNSIRUDHCM-UHFFFAOYSA-N	5.1×10^{-2}		Burkholder et al. (2019)	L	
	5.1×10^{-2}		Brockbank (2013)	L	
	3.2×10^{-2}	7600	Bruneel et al. (2016)	M	
	5.9×10^{-3}	4500	Strekowski and George (2005)	M	
	3.3×10^{-2}		Karl et al. (2003)	M	
	3.4×10^{-2}		Pollien et al. (2003)	M	
	5.0×10^{-2}		Amoore and Buttery (1978)	M	
	5.5×10^{-2}		Duchowicz et al. (2020)	V	187
	5.5×10^{-2}		HSDB (2015)	V	
	6.7×10^{-2}		Amoore and Buttery (1978)	V	
	5.8×10^{-2}		Yaws (2003)	X	259
	4.5×10^{-2}		Dupeux et al. (2022)	Q	260
	3.8×10^{-2}		Duchowicz et al. (2020)	Q	
	7.4×10^{-2}		Wang et al. (2017)	Q	81, 239
	1.1×10^{-1}		Wang et al. (2017)	Q	81, 240
	4.3×10^{-2}		Wang et al. (2017)	Q	81, 241
	7.0×10^{-2}		Hilal et al. (2008)	Q	
		5000	Kühne et al. (2005)	Q	
		5.2×10^{-2}	Yaffe et al. (2003)	Q	249, 250
		3.7×10^{-2}	Yao et al. (2002)	Q	230, 268
	5.2×10^{-2}	English and Carroll (2001)	Q	231, 275	
	5.4×10^{-2}	Katritzky et al. (1998)	Q		
	8.2×10^{-2}	Nirmalakhandan et al. (1997)	Q		
		5100	Kühne et al. (2005)	?	
	5.7×10^{-2}	Yaws (1999)	?	21	
	5.1×10^{-2}	Abraham et al. (1990)	?		
2-methylpropanedial $\text{C}_4\text{H}_6\text{O}_2$ [16002-19-0] VXYSFSCCSQAYJV-UHFFFAOYSA-N	6.5×10^1		Wang et al. (2017)	Q	81, 239
	1.2×10^1		Wang et al. (2017)	Q	81, 240
	1.9		Wang et al. (2017)	Q	81, 241
MCM:MALDIAL $\text{C}_4\text{H}_4\text{O}_2$ JGEMYUOFGVHXKV-UHFFFAOYSA-N	2.3×10^2		Wang et al. (2017)	Q	81, 239
	4.6×10^2		Wang et al. (2017)	Q	81, 240
	6.5		Wang et al. (2017)	Q	81, 241
MCM:C3MDIALOH $\text{C}_4\text{H}_6\text{O}_3$ SQHUBVCIVAIUAB-UHFFFAOYSA-N	1.4×10^3		Wang et al. (2017)	Q	81, 239
	2.0×10^3		Wang et al. (2017)	Q	81, 240
	2.0		Wang et al. (2017)	Q	81, 241
MCM:C41OH $\text{C}_4\text{H}_8\text{O}_4$ YTBSYETUWUMLBZ-UHFFFAOYSA-N	2.5×10^7		Wang et al. (2017)	Q	81, 239
	3.7×10^7		Wang et al. (2017)	Q	81, 240
	1.2×10^4		Wang et al. (2017)	Q	81, 241
MCM:C41OOH $\text{C}_4\text{H}_8\text{O}_5$ ROHPNOOUQDXFHZ-UHFFFAOYSA-N	3.3×10^9		Wang et al. (2017)	Q	81, 239
	3.6×10^8		Wang et al. (2017)	Q	81, 240
	1.4×10^6		Wang et al. (2017)	Q	81, 241

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C4OCCOHC0H $\text{C}_4\text{H}_8\text{O}_3$ DFFAMJFPVBTTBX-UHFFFAOYSA-N	1.4×10^4 5.0×10^4 3.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHOC3DIOL $\text{C}_4\text{H}_8\text{O}_3$ CQSYGAZTCJHVFE-UHFFFAOYSA-N	2.6×10^5 2.2×10^5 3.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HC3CCHO $\text{C}_4\text{H}_6\text{O}_2$ PPNVQCFSKPIRKK-UHFFFAOYSA-N	3.0×10^1 8.7×10^1 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HC3CHO $\text{C}_4\text{H}_6\text{O}_2$ FXCMZPXXCRHRNK-UHFFFAOYSA-N	7.1×10^2 3.7×10^3 2.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HMACROH $\text{C}_4\text{H}_8\text{O}_4$ OUEKYUKJSLEOIU-UHFFFAOYSA-N	1.5×10^7 8.5×10^7 1.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HMACR $\text{C}_4\text{H}_6\text{O}_2$ QVBICLJGAQXLSA-UHFFFAOYSA-N	4.1×10^2 2.0×10^2 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO13C3CHO $\text{C}_4\text{H}_8\text{O}_3$ NKVLMFFGFYHDNE-UHFFFAOYSA-N	2.6×10^4 2.3×10^5 3.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2C3CHO $\text{C}_4\text{H}_8\text{O}_2$ HSJKGGMUJITCBW-UHFFFAOYSA-N	2.1×10^2 1.4×10^3 3.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C3CHO $\text{C}_4\text{H}_8\text{O}_2$ UIKQNMXWCYQNCS-UHFFFAOYSA-N	1.1×10^1 8.9×10^1 1.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOC3H6CHO $\text{C}_4\text{H}_8\text{O}_2$ PIAOXUVIBAKVSP-UHFFFAOYSA-N	1.7×10^2 2.8×10^3 6.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOHOC4DIAL $\text{C}_4\text{H}_6\text{O}_4$ UUWVJXZLAWXQBU-UHFFFAOYSA-N	6.3×10^5 3.0×10^6 2.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOIPRCHO $\text{C}_4\text{H}_8\text{O}_2$ JTMCAHGCWBGWRV-UHFFFAOYSA-N	2.1×10^2 6.8×10^2 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IBUTALOH $\text{C}_4\text{H}_8\text{O}_2$ HNVAGBIANFAIL-UHFFFAOYSA-N	6.6 4.4×10^1 1.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MACROH	8.0×10^3		Wang et al. (2017)	Q	81, 239
$\text{C}_4\text{H}_8\text{O}_3$	3.6×10^4		Wang et al. (2017)	Q	81, 240
JBCPUXACCOWZEB-UHFFFAOYSA-N	1.7×10^2		Wang et al. (2017)	Q	81, 241
pentanal	6.6×10^{-2}	6500	Brockbank (2013)	L	
$\text{C}_4\text{H}_9\text{CHO}$	6.8×10^{-2}		Liu et al. (2015)	M	73
(valeraldehyde)	3.9×10^{-2}		Kim and Kim (2014)	M	
[110-62-3]	7.1×10^{-2}	6100	Ji and Evans (2007)	M	
HGBOYTHUEUWSSQ-UHFFFAOYSA-N	6.3×10^{-2}	6300	Zhou and Mopper (1990)	M	458
	6.7×10^{-2}		Buttery et al. (1969)	M	
	5.8×10^{-2}		Buttery et al. (1965)	M	
	2.4×10^{-1}	3800	Djerki and Laub (1988)	V	
	6.4×10^{-2}		Amoore and Buttery (1978)	V	
	3.0×10^{-2}		Yaws (2003)	X	259
	3.0×10^{-2}		Yaws (2003)	X	238
	6.1×10^{-2}		Dupeux et al. (2022)	Q	260
	2.2×10^{-1}		Keshavarz et al. (2022)	Q	
	9.8×10^{-2}		Duchowicz et al. (2020)	Q	300
	5.8×10^{-2}		Wang et al. (2017)	Q	81, 239
	8.9×10^{-2}		Wang et al. (2017)	Q	81, 240
	3.2×10^{-2}		Wang et al. (2017)	Q	81, 241
	5.8×10^{-3}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	4.1×10^{-2}		Gharagheizi et al. (2010)	Q	247
	7.2×10^{-2}		Hilal et al. (2008)	Q	
	1.2×10^{-1}		Modarresi et al. (2007)	Q	68
		6200	Kühne et al. (2005)	Q	
	6.7×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	2.9×10^{-2}		Yao et al. (2002)	Q	230, 268
	6.7×10^{-2}		English and Carroll (2001)	Q	231, 232
	7.3×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	6.1×10^{-2}		Suzuki et al. (1992)	Q	233
	6.2×10^{-2}		Meylan and Howard (1991)	Q	
	6.7×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	6.7×10^{-2}		Mackay et al. (2006c)	?	21
		5500	Kühne et al. (2005)	?	
	3.0×10^{-2}		Yaws (1999)	?	21
	4.4×10^{-2}		Yaws and Yang (1992)	?	21, 38
	6.7×10^{-2}		Abraham et al. (1990)	?	

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methylbutanal $\text{C}_5\text{H}_{10}\text{O}$ [96-17-3] BYGQBDHUGHGMD-UHFFFAOYSA-N	2.5×10^{-2} 2.3×10^{-2} 5.9×10^{-2} 8.7×10^{-2} 3.9×10^{-2} 9.5×10^{-3}	5600	Brockbank (2013) Pollien et al. (2003) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Hertel et al. (2007)	L M Q Q Q Q	 81, 239 81, 240 81, 241 469
3-methylbutanal $\text{C}_5\text{H}_{10}\text{O}$ (isovaleraldehyde) [590-86-3] YGHRJJRRZDOVPD-UHFFFAOYSA-N	1.1×10^{-2} 2.4×10^{-2} 2.1×10^{-2} 2.6×10^{-2} 2.0×10^{-2} 2.4×10^{-2} 2.5×10^{-2} 5.2×10^{-2} 3.8×10^{-2} 5.9×10^{-2} 1.1×10^{-1} 4.5×10^{-2} 5.5×10^{-2} 7.3×10^{-2} 9.1×10^{-2} 9.8×10^{-3}	10000 6100	Bruneel et al. (2016) Wieland et al. (2015) Kim and Kim (2014) Pollien et al. (2003) Nelson and Hoff (1968) Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Hertel et al. (2007)	M M M M M V V X Q Q Q Q Q Q Q Q	33 470 298 187 238 81, 239 81, 240 81, 241 247 68 469
MCM:C4MDIAL $\text{C}_5\text{H}_6\text{O}_2$ USBJWIKCHJDWPF-UHFFFAOYSA-N	1.6×10^2 6.5×10^2 2.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO1M22CHO $\text{C}_5\text{H}_8\text{O}_2$ WNBFTLCNQKKVHC-UHFFFAOYSA-N	3.7×10^1 8.9 3.4×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2,2-dimethylpropanal $\text{C}_5\text{H}_{10}\text{O}$ (pivaldehyde) [630-19-3] FJJYHTVHBVXEEQ-UHFFFAOYSA-N	4.1×10^{-2} 5.6×10^{-2} 2.8×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3EDIALOH $\text{C}_5\text{H}_8\text{O}_3$ QTDYRJFEJDMBDI-UHFFFAOYSA-N	1.0×10^3 2.6×10^3 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3M3OH2CHO $\text{C}_5\text{H}_{10}\text{O}_2$ VKYKDJZVZBURQF-UHFFFAOYSA-N	1.0×10^1 6.5×10^1 6.8×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C42CHO $\text{C}_5\text{H}_{10}\text{O}_3$ NGVSSTUGOBBIBC-UHFFFAOYSA-N	2.5×10^4 3.2×10^5 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C4M2AL2OH $\text{C}_5\text{H}_8\text{O}_4$ NUHRTSFMSDZSTE-UHFFFAOYSA-N	3.5×10^5 5.0×10^6 1.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4OHCHO $\text{C}_5\text{H}_{10}\text{O}_2$ SUTLBTHMXYSMSZ-UHFFFAOYSA-N	8.3 5.6×10^1 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C514OH $\text{C}_5\text{H}_8\text{O}_3$ UIVALZXFWRKKE-UHFFFAOYSA-N	1.5×10^5 8.7×10^5 1.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C57OH $\text{C}_5\text{H}_{10}\text{O}_4$ ZKDSJDSEVDWBAC-UHFFFAOYSA-N	1.4×10^7 6.8×10^7 1.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C58OH $\text{C}_5\text{H}_{10}\text{O}_4$ HTPZSALIZDTBIL-UHFFFAOYSA-N	1.4×10^7 1.4×10^8 2.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5DIALOH $\text{C}_5\text{H}_6\text{O}_3$ KBKQEUDBRUGUIQ-UHFFFAOYSA-N	3.1×10^4 5.8×10^4 3.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H13C43CHO $\text{C}_5\text{H}_{10}\text{O}_3$ KJLUILOCNALPNM-UHFFFAOYSA-N	1.4×10^4 1.7×10^5 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2M2C3CHO $\text{C}_5\text{H}_{10}\text{O}_2$ FXFBPKDQLDOIRG-UHFFFAOYSA-N	1.1×10^2 6.2×10^2 2.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HC4ACHO $\text{C}_5\text{H}_8\text{O}_2$ BSHDRMLUCYMQOP-UHFFFAOYSA-N	4.8×10^2 4.6×10^3 1.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HC4CCHO $\text{C}_5\text{H}_8\text{O}_2$ GCHJBJOOADXJFT-UHFFFAOYSA-N	1.2×10^3 4.8×10^2 4.1×10^3 5.6×10^3	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:HM22CHO $\text{C}_5\text{H}_{10}\text{O}_2$ JMMOMMLADQPZNY-UHFFFAOYSA-N	1.1×10^2 3.7×10^2 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO24C4CHO $\text{C}_5\text{H}_{10}\text{O}_3$ WDKLBWBHKQJYSU-UHFFFAOYSA-N	2.5×10^4 3.6×10^5 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HO2C43CHO $\text{C}_5\text{H}_{10}\text{O}_2$ ZURZPPULRFVLF-UHFFFAOYSA-N	2.0×10^2 6.9×10^2 3.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2C4CHO $\text{C}_5\text{H}_{10}\text{O}_2$ HFZMJAMTNAAZQE-UHFFFAOYSA-N	1.6×10^2 2.1×10^3 4.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C4CHO $\text{C}_5\text{H}_{10}\text{O}_2$ WRWLNLBWBUEPI-UHFFFAOYSA-N	1.6×10^2 7.8×10^2 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOBUT2CHO $\text{C}_5\text{H}_{10}\text{O}_2$ PLBZJQQQFIOXRU-UHFFFAOYSA-N	1.6×10^2 1.6×10^3 2.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOIBUTCHO $\text{C}_5\text{H}_{10}\text{O}_2$ RWXBAXNFTXQJAY-UHFFFAOYSA-N	1.6×10^2 2.0×10^3 4.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MBOBCO $\text{C}_5\text{H}_{10}\text{O}_3$ YDXYBJRCIQQSF-UHFFFAOYSA-N	7.4×10^3 4.4×10^4 1.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PROLIMCHO $\text{C}_5\text{H}_{10}\text{O}_2$ MEHIGMLPKIJWEA-UHFFFAOYSA-N	5.8 4.2×10^1 7.4×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
hexanal $\text{C}_5\text{H}_{11}\text{CHO}$ [66-25-1] JARKCYVAAOWBJS-UHFFFAOYSA-N	4.5×10^{-2} 2.3×10^{-2} 2.9×10^{-2} 4.7×10^{-2} 3.2×10^{-2} 1.6×10^{-1} 2.7×10^{-2} 2.2×10^{-2} 1.6×10^{-2} 4.9×10^{-2} 4.6×10^{-2} 5.8×10^{-2} 3.5×10^{-2} 2.8×10^{-2} 2.8×10^{-2} 4.8×10^{-2} 4.6×10^{-2} 3.1×10^{-2} 4.2×10^{-2} 3.0×10^{-1} 9.8×10^{-2}	6400 5200 8900 4900 6500	Brockbank (2013) Kutsuna and Kaneyasu (2021) Bruneel et al. (2016) Souchon et al. (2004) Karl et al. (2003) Meynier et al. (2003) van Ruth et al. (2002) van Ruth and Villeneuve (2002) van Ruth et al. (2001) Zhou and Mopper (1990) Buttery et al. (1969) Buttery et al. (1965) Amoore and Buttery (1978) Yaws (2003) Yaws (2003) Sieg et al. (2008) Meynier et al. (2003) Nahon et al. (2000) Dupeux et al. (2022) Keshavarz et al. (2022) Duchowicz et al. (2020)	L M M M M M M M M M M M V X X C C C Q Q Q	38 14 14, 363 14 458 259 238, 38 14 260 300

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.6×10^{-2}		Wang et al. (2017)	Q	81, 239
	5.8×10^{-2}		Wang et al. (2017)	Q	81, 240
	5.5×10^{-2}		Wang et al. (2017)	Q	81, 241
	4.6×10^{-2}		Li et al. (2014)	Q	242
	4.3×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	2.9×10^{-2}		Gharagheizi et al. (2010)	Q	247
	5.8×10^{-2}		Hilal et al. (2008)	Q	
	9.8×10^{-2}		Modarresi et al. (2007)	Q	68
	1.1×10^{-2}		Hertel et al. (2007)	Q	469
		6600	Kühne et al. (2005)	Q	
	4.6×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	2.6×10^{-2}		Yao et al. (2002)	Q	230
	5.2×10^{-2}		English and Carroll (2001)	Q	231, 261
	4.8×10^{-2}		Katritzky et al. (1998)	Q	
	5.8×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	4.6×10^{-2}		Suzuki et al. (1992)	Q	233
	4.6×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	4.6×10^{-2}		Mackay et al. (2006c)	?	21
		6900	Kühne et al. (2005)	?	
	3.8×10^{-2}		Yaws (1999)	?	21, 38
	1.9×10^{-2}		Yaws and Yang (1992)	?	21, 38
	4.6×10^{-2}		Abraham et al. (1990)	?	
pentanedial OHC(CH ₂) ₃ CHO (glutaraldehyde) [111-30-8] SXRSQZLOMIGNAQ-UHFFFAOYSA-N	3.0×10^2	9200	Olson (1998)	M	
	4.1×10^2		HSDB (2015)	Q	100
		8800	Kühne et al. (2005)	Q	
		9100	Kühne et al. (2005)	?	
2-methylpentanal C ₆ H ₁₂ O (2-methylvaleraldehyde) [123-15-9] FTZILAQGHINQQR-UHFFFAOYSA-N	5.3×10^{-2}		Wang et al. (2017)	Q	81, 239
	5.6×10^{-2}		Wang et al. (2017)	Q	81, 240
	3.5×10^{-2}		Wang et al. (2017)	Q	81, 241
	2.7×10^{-2}		HSDB (2015)	Q	100
		5700	Kühne et al. (2005)	Q	
		5300	Kühne et al. (2005)	?	
hexanedial C ₆ H ₁₀ O ₂ (adipaldehyde) [1072-21-5] UMHJEEQLYBKSAN-UHFFFAOYSA-N	4.2×10^1		Wang et al. (2017)	Q	81, 239
	1.7×10^2		Wang et al. (2017)	Q	81, 240
	3.2×10^1		Wang et al. (2017)	Q	81, 241

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:M22C3CHO C ₆ H ₁₂ O LTNUSYNQZJZUSY-UHFFFAOYSA-N	3.2×10^{-2} 6.5×10^{-2} 3.1×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2C43CHO C ₆ H ₁₂ O AKUUEDVRXOZTBF-UHFFFAOYSA-N	6.2×10^{-2} 6.0×10^{-2} 3.7×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M33C3CHO C ₆ H ₁₂ O QYPLKDUOPJZROX-UHFFFAOYSA-N	3.2×10^{-2} 5.0×10^{-2} 2.6×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
3-methylpentanal C ₆ H ₁₂ O [15877-57-3] YJWJGLQYQJGEEP-UHFFFAOYSA-N	3.8×10^{-2} 5.3×10^{-2} 7.8×10^{-2} 4.5×10^{-2} 3.8×10^{-2}		Yaws (2003) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Gharagheizi et al. (2010)	X Q Q Q Q	238 81, 239 81, 240 81, 241 247
4-methylpentanal C ₆ H ₁₂ O [1119-16-0] JGEGJYXHCUMJF-UHFFFAOYSA-N	3.8×10^{-2} 3.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
2-ethylbutanal C ₆ H ₁₂ O [97-96-1] UNNGUFMVYQJGTD-UHFFFAOYSA-N	4.0×10^{-2} 3.7×10^{-2}		Yaws (2003) Dupeux et al. (2022)	X Q	259 260
MCM:C518CHO C ₆ H ₁₀ O ₂ XEAYIEUKFACAKS-UHFFFAOYSA-N	3.2×10^2 5.3×10^2 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C615OH C ₆ H ₁₀ O ₃ LOUHJSYYTNSRBN-UHFFFAOYSA-N	4.9×10^3 4.4×10^4 3.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C623OH C ₆ H ₁₂ O ₄ ASGSKBSLHTVURJ-UHFFFAOYSA-N	3.2×10^8 6.2×10^8 1.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C67OH C ₆ H ₁₂ O ₃ SIBVVDHXFPINCX-UHFFFAOYSA-N	1.3×10^5 3.5×10^5 4.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C68OH C ₆ H ₁₂ O ₃ RJKLRJTWLKQSE-UHFFFAOYSA-N	1.3×10^5 3.6×10^5 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6DIALOH C ₆ H ₁₀ O ₃ GATFIJYWERJMGU-UHFFFAOYSA-N	1.2×10^5 4.7×10^5 2.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CO1C6OH $\text{C}_6\text{H}_{12}\text{O}_2$ FPFTWHJPEMPAGE-UHFFFAOYSA-N	1.3×10^2 1.9×10^3 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO1H63OH $\text{C}_6\text{H}_{12}\text{O}_3$ TWSXDPXQZVBPJU-UHFFFAOYSA-N	4.1×10^5 2.5×10^6 2.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2M2C4CHO $\text{C}_6\text{H}_{12}\text{O}_2$ NEJZWIVQOAKZHY-UHFFFAOYSA-N	9.3×10^1 1.3×10^3 2.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2M3C4CHO $\text{C}_6\text{H}_{12}\text{O}_2$ GUXDGBBNSMURMG-UHFFFAOYSA-N	1.5×10^2 1.8×10^3 1.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H3M3C4CHO $\text{C}_6\text{H}_{12}\text{O}_2$ HXXRCBUXVFAKDA-UHFFFAOYSA-N	9.3×10^1 5.5×10^2 1.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM22C3CHO $\text{C}_6\text{H}_{12}\text{O}_2$ VOISQCUJWIZDHK-UHFFFAOYSA-N	9.3×10^1 1.1×10^3 5.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM2C43CHO $\text{C}_6\text{H}_{12}\text{O}_2$ QQZFDCJFBSAIBQ-UHFFFAOYSA-N	1.5×10^2 1.7×10^3 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM33C3CHO $\text{C}_6\text{H}_{12}\text{O}_2$ YHMMFPKTSXQULG-UHFFFAOYSA-N	9.3×10^1 1.0×10^3 2.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2C54CHO $\text{C}_6\text{H}_{12}\text{O}_2$ ZHOUKIXPREHLS-UHFFFAOYSA-N	1.5×10^2 1.3×10^3 1.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C5CHO $\text{C}_6\text{H}_{12}\text{O}_2$ HAPLZPWSLJPZBM-UHFFFAOYSA-N	1.4×10^2 1.5×10^3 1.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO5C5CHO $\text{C}_6\text{H}_{12}\text{O}_2$ BRZMRZVKWQWYPJ-UHFFFAOYSA-N	6.9 4.0×10^1 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
heptanal $\text{C}_6\text{H}_{13}\text{CHO}$ [111-71-7] FXHGMKSSBGDXIY-UHFFFAOYSA-N	3.4×10^{-2} 3.5×10^{-2} 2.0×10^{-2} 1.9×10^{-2} 1.1×10^{-2} 3.3×10^{-2} 3.7×10^{-2}	7500	Brockbank (2013) Souchon et al. (2004) van Ruth et al. (2002) van Ruth and Villeneuve (2002) van Ruth et al. (2001) Zhou and Mopper (1990) Buttery et al. (1969)	L M M M M M M	14 14, 363 14 458

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.0×10^{-2}		Buttery et al. (1965)	M	
	5.4×10^{-2}		Amoore and Buttery (1978)	V	
	2.1×10^{-2}		Yaws (2003)	X	259
	2.0×10^{-2}		Yaws (2003)	X	238, 38
	3.7×10^{-2}		Sieg et al. (2008)	C	
	3.0×10^{-2}		Dupeux et al. (2022)	Q	260
	5.3×10^{-2}		Keshavarz et al. (2022)	Q	
	9.8×10^{-2}		Duchowicz et al. (2020)	Q	185
	3.6×10^{-2}		Wang et al. (2017)	Q	81, 239
	4.3×10^{-2}		Wang et al. (2017)	Q	81, 240
	2.5×10^{-2}		Wang et al. (2017)	Q	81, 241
	3.7×10^{-2}		Li et al. (2014)	Q	242
	3.3×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	2.1×10^{-2}		Gharagheizi et al. (2010)	Q	247
	3.7×10^{-2}		Hilal et al. (2008)	Q	
	8.1×10^{-2}		Modarresi et al. (2007)	Q	68
		6900	Kühne et al. (2005)	Q	
	3.7×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	2.2×10^{-2}		Yao et al. (2002)	Q	230
	3.9×10^{-2}		English and Carroll (2001)	Q	231, 275
	4.7×10^{-2}		Katritzky et al. (1998)	Q	
	4.5×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	3.6×10^{-2}		Suzuki et al. (1992)	Q	233
	3.7×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		7100	Kühne et al. (2005)	?	
	2.8×10^{-2}		Yaws (1999)	?	21, 38
	2.3×10^{-2}		Yaws and Yang (1992)	?	21, 38
	3.7×10^{-2}		Abraham et al. (1990)	?	
MCM:C622CHO C ₇ H ₁₂ O ₂ JWVBPJJNIHELFFZ-UHFFFAOYSA-N	5.8×10^3 2.5×10^2 1.6×10^3 7.6×10^1	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C624CHO C ₇ H ₁₂ O ₂ AIMYSSDKEKDSEU-UHFFFAOYSA-N	5.8×10^3 2.5×10^2 1.2×10^3 2.7×10^2	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C728OH C ₇ H ₁₄ O ₄ RQDWEXZQVBWBC-UHFFFAOYSA-N	2.9×10^8 1.2×10^9 2.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C730OH	2.9×10^8		Wang et al. (2017)	Q	81, 239
$\text{C}_7\text{H}_{14}\text{O}_4$	3.4×10^9		Wang et al. (2017)	Q	81, 240
ROYLBPWMPALPRM-UHFFFAOYSA-N	1.3×10^6		Wang et al. (2017)	Q	81, 241
MCM:H3M3C5CHO	7.3×10^1		Wang et al. (2017)	Q	81, 239
$\text{C}_7\text{H}_{14}\text{O}_2$	1.1×10^3		Wang et al. (2017)	Q	81, 240
PUMVOOYIPAYIQQ-UHFFFAOYSA-N	5.6×10^1		Wang et al. (2017)	Q	81, 241
octanal	2.0×10^{-2}	7300	Brockbank (2013)	L	
$\text{C}_7\text{H}_{15}\text{CHO}$	2.1×10^{-2}		van Ruth et al. (2002)	M	14
[124-13-0]	1.9×10^{-2}		van Ruth and Villeneuve (2002)	M	14, 363
NUJGJRNETHVAIRJ-UHFFFAOYSA-N	8.8×10^{-3}		van Ruth et al. (2001)	M	14
	2.1×10^{-2}		Li and Carr (1993)	M	
	2.1×10^{-2}	7400	Zhou and Mopper (1990)	M	458
	1.9×10^{-2}		Buttery et al. (1969)	M	
	7.5×10^{-2}		Buttery et al. (1965)	M	
	2.9×10^{-2}		Amoore and Buttery (1978)	V	
	1.3×10^{-2}		Yaws (2003)	X	259
	1.3×10^{-2}		Yaws (2003)	X	238, 38
	1.9×10^{-2}		Sieg et al. (2008)	C	
	1.9×10^{-2}		Nahon et al. (2000)	C	14
	2.8×10^{-2}		Dupeux et al. (2022)	Q	260
	7.1×10^{-2}		Keshavarz et al. (2022)	Q	
	9.7×10^{-2}		Duchowicz et al. (2020)	Q	
	2.4×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	1.5×10^{-2}		Gharagheizi et al. (2010)	Q	247
	3.9×10^{-2}		Hilal et al. (2008)	Q	
	7.0×10^{-2}		Modarresi et al. (2007)	Q	68
		7300	Kühne et al. (2005)	Q	
	5.2×10^{-2}		Yaffe et al. (2003)	Q	249, 273
	2.0×10^{-2}		Yao et al. (2002)	Q	230
	3.1×10^{-2}		English and Carroll (2001)	Q	231, 232
	4.5×10^{-2}		Katritzky et al. (1998)	Q	
	3.6×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	2.8×10^{-2}		Suzuki et al. (1992)	Q	233
	1.9×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		6200	Kühne et al. (2005)	?	
	1.8×10^{-2}		Yaws (1999)	?	21, 38
	2.0		Yaws and Yang (1992)	?	21, 38
	1.9×10^{-2}		Abraham et al. (1990)	?	

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-ethylhexanal $\text{C}_8\text{H}_{16}\text{O}$ [123-05-7] LGYNIFWIKSEESD-UHFFFAOYSA-N	1.2×10^{-2} 1.3×10^{-2} 1.2×10^{-2} 2.4×10^{-2} 2.4×10^{-2} 2.1×10^{-2} 3.8×10^{-2} 3.1×10^{-2} 2.0×10^{-2} 2.5×10^{-2} 2.1×10^{-2} 2.7×10^{-2} 2.4×10^{-2}	5400	Brockbank (2013) Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Yaws (2003) Dupeux et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	L V V X X Q Q Q Q Q Q Q Q	187 259 238 260 243, 244 245 246 247 68
MCM:C729CHO $\text{C}_8\text{H}_{12}\text{O}_2$ MEGRLTONSLAOOM-UHFFFAOYSA-N	8.0×10^2 7.1×10^1 1.0×10^2 6.2×10^1	10000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C810OH $\text{C}_8\text{H}_{14}\text{O}_3$ WBGXLUPQADVOIR-UHFFFAOYSA-N	6.2×10^4 1.7×10^5 2.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C822OH $\text{C}_8\text{H}_{14}\text{O}_2$ CCTLWIOCAVSPLW-UHFFFAOYSA-N	2.3×10^2 1.8×10^3 2.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C824OH $\text{C}_8\text{H}_{14}\text{O}_3$ RBBQERVBTKJTLF-UHFFFAOYSA-N	3.3×10^4 1.9×10^5 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C826OH $\text{C}_8\text{H}_{14}\text{O}_4$ LLAUXDLXTPQIPI-UHFFFAOYSA-N	7.4×10^7 3.0×10^8 2.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C830OH $\text{C}_8\text{H}_{14}\text{O}_2$ KODLEZWYEGWLGP-UHFFFAOYSA-N	2.5×10^2 1.6×10^3 6.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C831OH $\text{C}_8\text{H}_{14}\text{O}_3$ YTDFRLZFCPFBH-UHFFFAOYSA-N	6.2×10^4 2.1×10^5 2.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C89OH $\text{C}_8\text{H}_{14}\text{O}_2$ KMZPPEYMMZMCIQ-UHFFFAOYSA-N	2.5×10^2 2.3×10^3 2.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
nonanal $\text{C}_8\text{H}_{17}\text{CHO}$ [124-19-6] GYHFUZHODSMOHU-UHFFFAOYSA-N	1.1×10^{-2}	6800	Brockbank (2013)	L	
	1.0×10^{-2}	6700	Zhou and Mopper (1990)	M	458
	1.3×10^{-2}		Buttery et al. (1969)	M	
	7.1×10^{-2}		Buttery et al. (1965)	M	
	1.3×10^{-2}		Amoore and Buttery (1978)	V	
	1.0×10^{-2}		Yaws (2003)	X	259
	1.0×10^{-2}		Yaws (2003)	X	238, 38
	1.4×10^{-2}		Sieg et al. (2008)	C	
	1.8×10^{-2}		Dupeux et al. (2022)	Q	260
	9.6×10^{-2}		Keshavarz et al. (2022)	Q	
	9.7×10^{-2}		Duchowicz et al. (2020)	Q	185
	1.8×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	1.1×10^{-2}		Gharagheizi et al. (2010)	Q	247
	2.4×10^{-2}		Hilal et al. (2008)	Q	
	5.9×10^{-2}		Modarresi et al. (2007)	Q	68
	1.3×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	1.8×10^{-2}		Yao et al. (2002)	Q	230
	2.3×10^{-2}		English and Carroll (2001)	Q	231, 232
	2.8×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	2.1×10^{-2}		Suzuki et al. (1992)	Q	233
	2.0×10^{-2}		Meylan and Howard (1991)	Q	
	1.3×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	1.5×10^{-2}		Yaws (1999)	?	21, 38
	6.9×10^{-3}		Yaws and Yang (1992)	?	21, 38
	1.3×10^{-2}		Abraham et al. (1990)	?	
3,5,5-trimethylhexanal $\text{C}_9\text{H}_{18}\text{O}$ [5435-64-3] WTPYRCJDOZVZON-UHFFFAOYSA-N	2.0×10^{-2}		HSDB (2015)	Q	100
decanal $\text{C}_9\text{H}_{19}\text{CHO}$ [112-31-2] KSMVZQYAVGKIV-UHFFFAOYSA-N	6.3×10^{-3}	8900	Brockbank (2013)	L	
	4.3×10^{-3}		Helburn et al. (2008)	M	
	6.0×10^{-3}	8700	Zhou and Mopper (1990)	M	458
	1.7×10^{-1}		Buttery et al. (1965)	M	
	1.3×10^{-2}		Yaws (2003)	X	259
	1.3×10^{-2}		Yaws (2003)	X	238
	5.5×10^{-3}		Sieg et al. (2008)	C	
	1.9×10^{-2}		Dupeux et al. (2022)	Q	260
	1.8×10^{-1}		Keshavarz et al. (2022)	Q	
	9.7×10^{-2}		Duchowicz et al. (2020)	Q	300
	2.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	272, 244
	9.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	8.5×10^{-3}		Gharagheizi et al. (2010)	Q	247
	2.6×10^{-2}		Hilal et al. (2008)	Q	
	5.1×10^{-2}		Modarresi et al. (2007)	Q	68
		7900	Kühne et al. (2005)	Q	
	5.6×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	3.8×10^{-2}		Katritzky et al. (1998)	Q	
	5.5×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		8500	Kühne et al. (2005)	?	
MCM:C918CHO	1.8×10^1		Wang et al. (2017)	Q	81, 239
$\text{C}_{10}\text{H}_{16}\text{O}_2$	1.1×10^2		Wang et al. (2017)	Q	81, 240
GWMMOZICECYZLL-UHFFFAOYSA-N	1.5×10^1		Wang et al. (2017)	Q	81, 241
hydroxycitronellal $\text{C}_{10}\text{H}_{20}\text{O}_2$ [107-75-5] WPFVBOQKRVRMB-UHFFFAOYSA-N	9.4×10^2		Dupeux et al. (2022)	Q	260
undecanal $\text{C}_{11}\text{H}_{22}\text{O}$ [112-44-7] KMPQYAYAQWNLME-UHFFFAOYSA-N	7.0×10^{-3}		Yaws (2003)	X	259
	6.9×10^{-3}		Yaws (2003)	X	238
	1.5×10^{-2}		Dupeux et al. (2022)	Q	260
	2.2×10^{-3}		Gharagheizi et al. (2012)	Q	
	6.9×10^{-3}		Gharagheizi et al. (2010)	Q	247
		8300	Kühne et al. (2005)	Q	
		8300	Kühne et al. (2005)	?	
dodecanal $\text{C}_{12}\text{H}_{24}\text{O}$ [112-54-9] HFJRKMMYBMWEAD-UHFFFAOYSA-N	5.2×10^{-3}		Yaws (2003)	X	259
	5.2×10^{-3}		Yaws (2003)	X	238
	1.2×10^{-2}		Dupeux et al. (2022)	Q	260
	2.3×10^{-3}		Gharagheizi et al. (2012)	Q	
	6.1×10^{-3}		Gharagheizi et al. (2010)	Q	247
1-tridecanal $\text{C}_{13}\text{H}_{26}\text{O}$ [10486-19-8] BGEHHAVMRVXCGR-UHFFFAOYSA-N	5.8×10^{-3}		Yaws (2003)	X	259
	5.8×10^{-3}		Yaws (2003)	X	238
	9.6×10^{-3}		Dupeux et al. (2022)	Q	260
	2.4×10^{-3}		Gharagheizi et al. (2012)	Q	
	5.9×10^{-3}		Gharagheizi et al. (2010)	Q	247
1-tetradecanal $\text{C}_{14}\text{H}_{28}\text{O}$ [124-25-4] UHUFTBALEZWWIH-UHFFFAOYSA-N	8.0×10^{-4}		Yaws (2003)	X	259
	6.2×10^{-3}		Dupeux et al. (2022)	Q	260
	2.6×10^{-3}		Gharagheizi et al. (2012)	Q	
aquaflora $\text{C}_{12}\text{H}_{18}\text{O}$ [1339119-15-1] BFTAXJRKNXWMMX-UHFFFAOYSA-N	5.2×10^{-1}		Dupeux et al. (2022)	Q	260

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
starfleur $\text{C}_{13}\text{H}_{24}\text{O}$ (3-(4-isobutylcyclohexyl)propanal) [1254940-85-6] XUTZHJNXAOHUTM-UHFFFAOYSA-N	1.4×10^{-1}		Dupeux et al. (2022)	Q	260
MCM:C126CO $\text{C}_{12}\text{H}_{18}\text{O}_2$ IWMJDJFLMSAAES-UHFFFAOYSA-N	8.5×10^1		Wang et al. (2017)	Q	81, 239
	1.7×10^2		Wang et al. (2017)	Q	81, 240
	1.7×10^2		Wang et al. (2017)	Q	81, 241
MCM:C126OH $\text{C}_{12}\text{H}_{20}\text{O}_2$ PQYIYBUHROKIY-UHFFFAOYSA-N	2.7×10^2		Wang et al. (2017)	Q	81, 239
	2.1×10^3		Wang et al. (2017)	Q	81, 240
	4.4×10^2		Wang et al. (2017)	Q	81, 241
MCM:C127OH $\text{C}_{12}\text{H}_{20}\text{O}_3$ QHXYVNBHFONML-UHFFFAOYSA-N	5.0×10^5		Wang et al. (2017)	Q	81, 239
	7.1×10^6		Wang et al. (2017)	Q	81, 240
	3.4×10^2		Wang et al. (2017)	Q	81, 241
MCM:C126CHO $\text{C}_{13}\text{H}_{20}\text{O}_2$ ZDIXDRBTLRZYNM-UHFFFAOYSA-N	6.9×10^1		Wang et al. (2017)	Q	81, 239
	1.1×10^2		Wang et al. (2017)	Q	81, 240
	4.9×10^2		Wang et al. (2017)	Q	81, 241
MCM:C1311OH $\text{C}_{13}\text{H}_{22}\text{O}_3$ CBUCUSJJCJUTML-UHFFFAOYSA-N	4.0×10^5		Wang et al. (2017)	Q	81, 239
	8.3×10^6		Wang et al. (2017)	Q	81, 240
	6.5×10^3		Wang et al. (2017)	Q	81, 241
MCM:C1313OH $\text{C}_{13}\text{H}_{22}\text{O}_4$ XIWFBNXBOAYHAJ-UHFFFAOYSA-N	7.3×10^7		Wang et al. (2017)	Q	81, 239
	4.3×10^8		Wang et al. (2017)	Q	81, 240
	8.3×10^4		Wang et al. (2017)	Q	81, 241
MCM:C136OH $\text{C}_{13}\text{H}_{22}\text{O}_2$ GEHGNVSPJQGFQG-UHFFFAOYSA-N	2.1×10^2		Wang et al. (2017)	Q	81, 239
	2.0×10^3		Wang et al. (2017)	Q	81, 240
	1.0×10^3		Wang et al. (2017)	Q	81, 241
propenal CH_2CHCHO (acrolein) [107-02-8] HGINCLSRVDWNT-UHFFFAOYSA-N	1.3×10^{-1}	5500	Burkholder et al. (2019)	L	471
	7.2×10^{-2}	5100	Brockbank (2013)	L	
	7.2×10^{-2}	5100	Snider and Dawson (1985)	M	
	1.0×10^{-1}		Mackay et al. (2006c)	V	
	2.3		Lide and Frederikse (1995)	V	
	1.0×10^{-2}		Mackay et al. (1995)	V	
	7.0×10^{-2}		Hwang et al. (1992)	V	
	1.3×10^{-1}		Suntio et al. (1988)	V	12
	1.0×10^{-1}	3800	Goldstein (1982)	X	299
	2.2		Howard (1989)	X	414
	8.1×10^{-2}		Gaffney and Senum (1984)	X	391
	1.8×10^{-1}		Suntio et al. (1988)	C	12
	1.4×10^{-1}		Ryan et al. (1988)	C	
	1.2×10^{-1}		Keshavarz et al. (2022)	Q	
	3.5×10^{-1}		Duchowicz et al. (2020)	Q	
	2.2×10^{-1}		Wang et al. (2017)	Q	81, 239

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.9×10^{-1}		Wang et al. (2017)	Q	81, 240
	2.1×10^{-1}		Wang et al. (2017)	Q	81, 241
	5.2×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	9.5×10^{-2}		Hilal et al. (2008)	Q	
	6.3×10^{-1}		Modarresi et al. (2007)	Q	68
		4600	Kühne et al. (2005)	Q	
	8.1×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	7.5×10^{-2}		Mackay et al. (2006c)	?	21
		3800	Kühne et al. (2005)	?	
	1.2×10^{-1}		Yaws (1999)	?	21, 12
2-methylpropenal $\text{C}_4\text{H}_6\text{O}$ (methacrolein) [78-85-3] STNJBCKSHOAVAJ-UHFFFAOYSA-N	4.5×10^{-2}	4600	Burkholder et al. (2019)	L	
	6.4×10^{-2}		Burkholder et al. (2015)	L	
	4.5×10^{-2}	4600	Brockbank (2013)	L	
	4.8×10^{-2}	4300	Ji and Evans (2007)	M	
	6.4×10^{-2}		Iraci et al. (1999)	M	
	4.2×10^{-2}	5300	Allen et al. (1998)	M	
	5.2×10^{-2}		HSDB (2015)	V	
	4.7×10^{-2}		Yaws (2003)	X	259
	4.7×10^{-2}		Yaws (2003)	X	238
	7.3×10^{-2}		Dupeux et al. (2022)	Q	260
	1.6×10^{-1}		Keshavarz et al. (2022)	Q	
	1.1×10^{-1}		Duchowicz et al. (2020)	Q	185
	1.5×10^{-1}		Wang et al. (2017)	Q	81, 239
	1.4×10^{-1}		Wang et al. (2017)	Q	81, 240
	8.3×10^{-2}		Wang et al. (2017)	Q	81, 241
	1.6×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	9.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	4.7×10^{-2}		Gharagheizi et al. (2010)	Q	247
	9.5×10^{-2}		Hilal et al. (2008)	Q	
	1.1×10^{-1}		Modarresi et al. (2007)	Q	68
		4000	Kühne et al. (2005)	Q	
	4.3×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		4800	Kühne et al. (2005)	?	
	4.8×10^{-2}		Yaws (1999)	?	21

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-butenal CH ₃ CHCHCHO (crotonaldehyde) [4170-30-3] MLUCVPSAIODCQM-UHFFFAOYSA-N	5.9×10^{-1} 5.0×10^{-1} 2.9×10^{-1} 1.6×10^{-1} 1.6	3600	Goldstein (1982) Gaffney and Senum (1984) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	X X Q Q Q	299 391 81, 239 81, 240 81, 241
	9.7×10^{-2} 3.9×10^{-1}		Hilal et al. (2008) Modarresi et al. (2007) Burkholder et al. (2019)	Q Q W	 68 472
(<i>E</i>)-2-butenal CH ₃ CHCHCHO (<i>trans</i> -crotonaldehyde) [123-73-9] MLUCVPSAIODCQM-NSCUHMNNSA-N	5.4×10^{-1} 5.0×10^{-1} 4.4×10^{-2} 4.4×10^{-2} 7.6×10^{-1} 1.5 1.6×10^{-1} 1.2×10^{-1} 3.9×10^{-1}	5300	Brockbank (2013) Buttery et al. (1971) Mackay et al. (2006c) Mackay et al. (1995) Yaws (2003) Dupeux et al. (2022) Keshavarz et al. (2022) Duchowicz et al. (2020) Modarresi et al. (2007)	L M V V X Q Q Q Q	1 259 260 300 68
	5.2×10^{-1} 2.7×10^{-1} 3.1×10^{-1} 5.1×10^{-1}	5000	Kühne et al. (2005) Yaffe et al. (2003) Nirmalakhandan et al. (1997) Suzuki et al. (1992) Duchowicz et al. (2020)	Q Q Q Q ?	249, 250 233 186, 21
	5.9×10^{-1} 5.1×10^{-1}	4300	Kühne et al. (2005) Yaws (1999) Abraham et al. (1990)	? ? ?	21, 12
2-hexenal C ₃ H ₇ CHCHCHO [505-57-7] MBDOYVRWFFCFHM-UHFFFAOYSA-N	3.0×10^{-1} 1.2×10^{-1} 6.2×10^{-2} 2.5×10^{-1} 8.6×10^{-2} 2.0×10^{-1}		Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Duchowicz et al. (2020)	Q Q Q Q Q ?	 68 231, 261 186, 21
(<i>E</i>)-2-hexenal C ₃ H ₇ CHCHCHO (<i>trans</i> -2-hexenal) [6728-26-3] MBDOYVRWFFCFHM-SNAWJCMRSA-N	1.4×10^{-1} 9.0×10^{-1} 2.0×10^{-1} 2.0×10^{-1} 2.1×10^{-1} 1.7×10^{-1} 1.8×10^{-1}	5700	Karl et al. (2003) Meynier et al. (2003) Buttery et al. (1971) Meynier et al. (2003) Yaffe et al. (2003) Nirmalakhandan et al. (1997) Suzuki et al. (1992)	M M M C Q Q Q	 38 249, 250 233

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(<i>E,E</i>)-2,4-hexadienal CH ₃ CHCHCHCHO	1.0 3.0 × 10 ⁻¹		Buttery et al. (1971) Keshavarz et al. (2022)	M Q	
(<i>trans-trans</i> -2,4-hexadienal) [142-83-6]	1.4 × 10 ⁻¹ 3.9 × 10 ⁻¹		Duchowicz et al. (2020) Hilal et al. (2008)	Q Q	185
BATOPA ZDIZEVQF-MQQKCMAXSA-N	4.7 × 10 ⁻¹		Modarresi et al. (2007)	Q	68
	1.5		Suzuki et al. (1992)	Q	233
	1.0		Duchowicz et al. (2020)	?	186, 21
2-heptenal C ₇ H ₁₂ O [2463-63-0] NDFKTBCGKNOHPJ-UHFFFAOYSA-N	5.0 × 10 ⁻²		Hilal et al. (2008)	Q	
(<i>E</i>)-2-heptenal C ₇ H ₁₂ O (<i>trans</i> -2-heptenal) [18829-55-5] NDFKTBCGKNOHPJ-AATRIKPKSA-N	1.3		Abney (2021)	Q	401
(<i>Z</i>)-4-heptenal C ₇ H ₁₂ O (<i>cis</i> -4-heptenal) [6728-31-0] VVGOCOMZRGWHPI-ARJAWSKDSA-N	8.8 × 10 ⁻²		Straver and de Loos (2005)	M	
2-octenal C ₈ H ₁₄ O [2363-89-5] LVBXEMGDVWVTGY-UHFFFAOYSA-N	7.1 × 10 ⁻² 1.2 × 10 ⁻¹ 4.1 × 10 ⁻² 1.9 × 10 ⁻¹		Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	Q Q Q Q	300 68
	5.2 × 10 ⁻² 1.3 × 10 ⁻¹		English and Carroll (2001) Duchowicz et al. (2020)	Q ?	231, 232 186, 21
(<i>E</i>)-2-octenal C ₈ H ₁₄ O (<i>trans</i> -2-octenal) [2548-87-0] LVBXEMGDVWVTGY-VOTSOKGWSA-N	1.3 × 10 ⁻¹ 1.4 × 10 ⁻¹ 1.0 × 10 ⁻¹ 1.1 × 10 ⁻¹		Buttery et al. (1971) Yaffe et al. (2003) Nirmalakhandan et al. (1997) Suzuki et al. (1992)	M Q Q Q	249, 250 233
			Betterton (1992)	W	473
2-ethyl-2-hexenal C ₈ H ₁₄ O [645-62-5] PYLMCYQHBRSDND-UHFFFAOYSA-N	5.2 × 10 ⁻²	5800	Brockbank (2013)	L	
(<i>E</i>)-2-nonenal C ₉ H ₁₆ O (<i>trans</i> -2-nonenal) [18829-56-6] BSAIUMLZVGUGKX-BQYQJAHWSA-N	5.8 × 10 ⁻²		Roberts and Pollien (1997)	M	

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>trans</i> -2, <i>cis</i> -6-nonadienal C ₉ H ₁₄ O [557-48-2] HZYHMHBBBSGHB-ODYTWBPASA-N	8.2×10^{-2}	7100	Ömür-Özbek and Dietrich (2005)	M	
3,7-dimethyl-6-octenal C ₁₀ H ₁₈ O (citronellal) [106-23-0] NEHNMFOYXAPHSD-UHFFFAOYSA-N	2.5×10^{-2} 3.8×10^{-2}	4500	van Roon et al. (2005) HSDB (2015)	V Q	100
3,7-dimethyl-2,6-octadienal C ₁₀ H ₁₆ O (citral) [5392-40-5] WTEVQBCEXWBHNA-UHFFFAOYSA-N	2.9×10^{-1} 5.2 2.3×10^{-1}	6700	Wu et al. (2022b) Dupeux et al. (2022) HSDB (2015)	M Q Q	260 100
tillenal C ₁₁ H ₁₈ O (3-(4,4-dimethyl-1-cyclohexen-1-yl)propanal) [850997-10-3] IHMKBWBJKOWYASH-UHFFFAOYSA-N	3.4×10^{-1}		Dupeux et al. (2022)	Q	260
lilybelle C ₁₂ H ₂₀ O [1378867-81-2] VZZSYXAVGYODQG-UHFFFAOYSA-N	4.5×10^{-1}		Dupeux et al. (2022)	Q	260
mugoxal C ₁₃ H ₂₂ O (3-(4- <i>tert</i> -butylcyclohexen-1-yl)propanal) WGWWNPFPQPHLSIM-UHFFFAOYSA-N	6.7×10^{-1}		Dupeux et al. (2022)	Q	260
orange oil C ₁₅ H ₂₂ O [8028-48-6] NOPLRNKXHZRXHT-UHFFFAOYSA-N	6.3×10^{-4}		Maniere et al. (2011)	?	242, 166
benzaldehyde C ₆ H ₅ CHO [100-52-7] HUMNYLRZRPJDN-UHFFFAOYSA-N	4.0×10^{-1} 3.8×10^{-1} 3.9×10^{-1} 3.2×10^{-1} 3.4×10^{-1} 3.5×10^{-1} 4.2×10^{-1} 3.7×10^{-1} 1.6×10^{-1} 1.6×10^{-1}	5200 5500 4800 6300	Brockbank (2013) Staudinger and Roberts (2001) Staudinger and Roberts (1996) Allou et al. (2011) Souchon et al. (2004) Allen et al. (1998) Zhou and Mopper (1990) Betterton and Hoffmann (1988) Mackay et al. (2006c) Mackay et al. (1995)	L L L M M M M M V V	1, 474 458 462

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.6×10^{-1}		Hine and Mookerjee (1975)	V	
	3.5×10^{-1}	5400	Bagno et al. (1991)	T	475
	3.9×10^{-1}		Yaws (2003)	X	259
	3.6×10^{-1}		Gaffney and Senum (1984)	X	391
	3.7×10^{-1}		Schüürmann (2000)	C	21
	8.4×10^{-1}		Dupeux et al. (2022)	Q	260
	5.3×10^{-2}		Keshavarz et al. (2022)	Q	
	6.6×10^{-1}		Duchowicz et al. (2020)	Q	185
	3.0		Wang et al. (2017)	Q	81, 239
	1.3		Wang et al. (2017)	Q	81, 240
	1.6		Wang et al. (2017)	Q	81, 241
	3.6×10^{-1}		Li et al. (2014)	Q	242
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	272, 244
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	7.7×10^{-1}		Hilal et al. (2008)	Q	
	1.2		Modarresi et al. (2007)	Q	68
	2.6×10^{-2}		Emel'yanenko et al. (2007)	Q	417
	2.6×10^{-2}	5800	Hertel and Sommer (2006)	Q	417
			Kühne et al. (2005)	Q	
	3.7×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	5.4×10^{-1}		English and Carroll (2001)	Q	231, 275
	2.4×10^{-1}		Katritzky et al. (1998)	Q	
	7.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	3.6×10^{-1}		Suzuki et al. (1992)	Q	233
	3.7×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	4.4×10^{-1}	5400	Mackay et al. (2006c)	?	21
			Kühne et al. (2005)	?	
	4.0×10^{-1}		Yaws (1999)	?	21
	3.6×10^{-1}		Abraham et al. (1990)	?	
phenylacetaldehyde $\text{C}_6\text{H}_5\text{CH}_2\text{CHO}$ [122-78-1] DTUQWGWMMVIHBKE-UHFFFAOYSA-N	1.6		Dupeux et al. (2022)	Q	260
	2.8		Wang et al. (2017)	Q	81, 239
	3.6		Wang et al. (2017)	Q	81, 240
	3.6		Wang et al. (2017)	Q	81, 241
	1.0×10^{-1}		Emel'yanenko et al. (2007)	Q	417
	1.0×10^{-1}		Hertel and Sommer (2005)	Q	417
2-methylbenzaldehyde $\text{C}_8\text{H}_8\text{O}$ (<i>o</i> -tolualdehyde) [529-20-4] BTFQKIATRPGRBS-UHFFFAOYSA-N	3.1×10^{-1}	6900	Ji et al. (2008)	M	
	1.9		Wang et al. (2017)	Q	81, 239
	1.7		Wang et al. (2017)	Q	81, 240
	8.7×10^{-1}		Wang et al. (2017)	Q	81, 241
	3.3×10^{-1}		HSDB (2015)	Q	100

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methylbenzaldehyde $\text{C}_8\text{H}_8\text{O}$ (<i>m</i> -tolualdehyde) [620-23-5] OVWYEQOVUDKZNU-UHFFFAOYSA-N	3.5×10^{-1} 3.0×10^{-1} 3.5×10^{-1} 1.9 1.1 1.7 3.3×10^{-1}	7200 5800 7200	Brockbank (2013) Wu et al. (2022b) Ji et al. (2008) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	L M M Q Q Q Q	 81, 239 81, 240 81, 241 100
4-methylbenzaldehyde $\text{C}_8\text{H}_8\text{O}$ (<i>p</i> -tolualdehyde) [104-87-0] FXLOVSHXALFLKQ-UHFFFAOYSA-N	5.3×10^{-1} 4.6×10^{-1} 5.3×10^{-1} 5.7×10^{-1} 5.8×10^{-1} 5.4×10^{-1} 3.3×10^{-1} 1.9 1.3 3.0 7.9×10^{-1} 5.3×10^{-1} 4.8×10^{-1} 6.5×10^{-1} 5.2×10^{-1} 5.6×10^{-1}	7200 6400 7200	Brockbank (2013) Wu et al. (2022b) Ji et al. (2008) Duchowicz et al. (2020) HSDB (2015) Abraham et al. (1994a) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Yaws (1999)	L M M V V R Q Q Q Q Q Q Q Q Q Q ?	 187 81, 239 81, 240 81, 241 68 231, 232 21
terephthaldialdehyde $\text{C}_8\text{H}_6\text{O}_2$ [623-27-8] KUCOHFSKRZZVRO-UHFFFAOYSA-N	1.6×10^1		Abraham et al. (2019)	Q	
2-hydroxybenzaldehyde $\text{C}_6\text{H}_4(\text{OH})\text{CHO}$ (2-formylphenol; salicylaldehyde) [90-02-8] SMQUZDBALVYZAC-UHFFFAOYSA-N	1.1 1.8 4.6 4.0×10^3 6.2 9.9 6.2 1.6×10^1 1.8	6200	Ji et al. (2008) Duchowicz et al. (2020) Duchowicz et al. (2020) McFall et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Yaws (1999)	M V Q Q Q Q Q Q ?	 187 476 272, 244 245 246 21, 477
3-hydroxybenzaldehyde $\text{C}_6\text{H}_4(\text{OH})\text{CHO}$ (3-formylphenol) [100-83-4] IAVREABSGIHHMO-UHFFFAOYSA-N	3.9×10^3 9.6×10^3 1.8×10^4 1.2×10^3 1.6×10^4 6.2×10^3 5.3×10^3 7.9×10^2		Gaffney and Senum (1984) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	X Q Q Q Q Q Q Q	391 300 243, 244 245 246 68

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^3		Katritzky et al. (1998)	Q	
	3.0×10^4		Nirmalakhandan et al. (1997)	Q	
	3.9×10^3		Duchowicz et al. (2020)	?	186, 21
	3.8×10^3		Abraham et al. (1990)	?	
4-hydroxybenzaldehyde $\text{C}_6\text{H}_4(\text{OH})\text{CHO}$ (4-formylphenol) [123-08-0] RGHHSNMVTDWUBI-UHFFFAOYSA-N	1.9×10^4	8600	Parsons et al. (1971)	T	419
	9.6×10^3		Keshavarz et al. (2022)	Q	
	2.1×10^4		Duchowicz et al. (2020)	Q	
	1.2×10^3		Gharagheizi et al. (2012)	Q	
	1.2×10^3		Raventos-Duran et al. (2010)	Q	243, 244
	2.5×10^3		Raventos-Duran et al. (2010)	Q	245
	6.2×10^3		Raventos-Duran et al. (2010)	Q	246
	8.8×10^2		Hilal et al. (2008)	Q	
	1.6×10^3		Modarresi et al. (2007)	Q	68
	3.0×10^4		Nirmalakhandan et al. (1997)	Q	
	1.9×10^4		Duchowicz et al. (2020)	?	186, 21
	1.9×10^4		Abraham et al. (1990)	?	
2-methoxybenzaldehyde $\text{C}_8\text{H}_8\text{O}_2$ [135-02-4] PKZJLOCLABXVMC-UHFFFAOYSA-N	1.0×10^1	8900	Ji et al. (2008)	M	
3-methoxybenzaldehyde $\text{C}_8\text{H}_8\text{O}_2$ [591-31-1] WMPDAIZRQDCGFH-UHFFFAOYSA-N	5.1	8800	Ji et al. (2008)	M	
4-methoxybenzaldehyde $\text{C}_8\text{H}_8\text{O}_2$ [123-11-5] ZRSNZINYAWTAHE-UHFFFAOYSA-N	2.4×10^1	8700	Ji et al. (2008)	M	
3-phenyl-2-propenal $\text{C}_9\text{H}_8\text{O}$ (cinnamaldehyde) [104-55-2] KJPRLNWUNMBNBZ-QPJXVBHSA-N	2.8 1.4	6300	HSDB (2015) van Roon et al. (2005)	V V	
2,3-dimethylbenzaldehyde $\text{C}_9\text{H}_{10}\text{O}$ [5779-93-1] UIFVCPMLQXKEEU-UHFFFAOYSA-N	1.2 2.1 7.6×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
3,4-dimethylbenzaldehyde $\text{C}_9\text{H}_{10}\text{O}$ [5973-71-7] POQJHLBMLVTHAU-UHFFFAOYSA-N	1.2 1.5 3.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,5-dimethylbenzaldehyde $\text{C}_9\text{H}_{10}\text{O}$ [5779-95-3] NBEFMISJJNGCIZ-UHFFFAOYSA-N	1.2 9.6×10^{-1} 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2-naphthaldehyde $\text{C}_{11}\text{H}_8\text{O}$ [66-99-9] PJKVFARRVXDAD-UHFFFAOYSA-N	6.0×10^1		Abraham et al. (2019)	Q	
cyclemax $\text{C}_{12}\text{H}_{16}\text{O}$ (4-(1-methylethyl)- benzenepropanal) [7775-00-0] RLEFOSDUWZYGOS-UHFFFAOYSA-N	7.8×10^{-1}		Dupeux et al. (2022)	Q	260
bourgeonal $\text{C}_{13}\text{H}_{18}\text{O}$ [18127-01-0] FZJUFJKVIYFBSY-UHFFFAOYSA-N	1.1		Dupeux et al. (2022)	Q	260
florhydal $\text{C}_{13}\text{H}_{18}\text{O}$ [125109-85-5] OHRBQTOZYGEWCJ-UHFFFAOYSA-N	4.9×10^{-1}		Dupeux et al. (2022)	Q	260
cyclamen aldehyde $\text{C}_{13}\text{H}_{18}\text{O}$ [103-95-7] ZFNVDHOSLNRHNN-UHFFFAOYSA-N	2.3×10^{-1}		Dupeux et al. (2022)	Q	260
mimosal $\text{C}_{13}\text{H}_{16}\text{O}$ (4-methyl-5-(4-methylphenyl)pent- 4-enal) [1226911-69-8] LBKHGAIELUNYML-ZRDIBKRKSA-N	4.9		Dupeux et al. (2022)	Q	260
lilial $\text{C}_{14}\text{H}_{20}\text{O}$ [80-54-6] SDQFDHOLCGWZPU-UHFFFAOYSA-N	5.7×10^{-1}		Dupeux et al. (2022)	Q	260
hivernal $\text{C}_{14}\text{H}_{18}\text{O}$ [300371-33-9] GEPCDOWRWODJEY-UHFFFAOYSA-N	2.2		Dupeux et al. (2022)	Q	260

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
silvial $\text{C}_{14}\text{H}_{20}\text{O}$ [6658-48-6] YLIXVKUWWOQREC-UHFFFAOYSA-N	2.9×10^{-1}		Dupeux et al. (2022)	Q	260
mefloral $\text{C}_{14}\text{H}_{20}\text{O}$ [62518-65-4] GLZRHVTZLDNUQP-UHFFFAOYSA-N	3.2×10^{-1}		Dupeux et al. (2022)	Q	260
nymphéal $\text{C}_{14}\text{H}_{20}\text{O}$ (3-(4-isobutyl-2-methylphenyl)propanal) [1637294-12-2] UKZXPOJABTXLMK-UHFFFAOYSA-N	8.2×10^{-1}		Dupeux et al. (2022)	Q	260
hexyl cinnamic aldehyde $\text{C}_{15}\text{H}_{20}\text{O}$ [101-86-0] GUUHFMWKLQMM-UHFFFAOYSA-N	1.0		Dupeux et al. (2022)	Q	260
α -amyl cinnamaldehyde $\text{C}_{14}\text{H}_{18}\text{O}$ [122-40-7] HMKKIXGYKWDQSV-KAMYIIOQSA-N	1.3		HSDB (2015)	Q	449
MCM:HCOCH ₂ CO ₃ H $\text{C}_3\text{H}_4\text{O}_4$ CFPRXLWZTODTLN-UHFFFAOYSA-N	8.0×10^4 3.6×10^3 3.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PROPALOOH $\text{C}_3\text{H}_6\text{O}_3$ UTLVMFCPERHVKU-UHFFFAOYSA-N	6.9×10^3 8.7×10^1 3.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BUTALAOOH $\text{C}_4\text{H}_8\text{O}_3$ UBMPIYSSVMXGT-UHFFFAOYSA-N	5.5×10^3 4.6×10^1 1.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BUTALO ₂ H $\text{C}_4\text{H}_8\text{O}_3$ HFNSAVKBHMZYBR-UHFFFAOYSA-N	5.5×10^3 2.7×10^3 8.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C ₃ MDIALOOH $\text{C}_4\text{H}_6\text{O}_4$ WJWKLOFSCXWKQD-UHFFFAOYSA-N	3.0×10^6 4.7×10^3 7.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHOC ₂ CO ₃ H $\text{C}_4\text{H}_6\text{O}_4$ ZCKJJZIUUFVHIST-UHFFFAOYSA-N	7.1×10^4 1.1×10^4 1.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:IBUTALBO2H $\text{C}_4\text{H}_8\text{O}_3$ OSYMKIVGDGNGKG-UHFFFAOYSA-N	5.5×10^3 3.6×10^3 5.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IBUTALO2H $\text{C}_4\text{H}_8\text{O}_3$ UINKREZTGVLFU-UHFFFAOYSA-N	3.8×10^3 1.8×10^1 2.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MALDALCO3H $\text{C}_4\text{H}_4\text{O}_4$ QFBRACYMKXGFRM-UHFFFAOYSA-N	2.9×10^5 3.5×10^4 3.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PRPAL2CO3H $\text{C}_4\text{H}_6\text{O}_4$ IGHWWWGZEWXWCB-UHFFFAOYSA-N	7.1×10^4 2.3×10^3 8.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3EDIALOOH $\text{C}_5\text{H}_8\text{O}_4$ IOKXWRCVKGGMQG-UHFFFAOYSA-N	2.7×10^6 2.1×10^3 4.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3M3CHOOOH $\text{C}_5\text{H}_{10}\text{O}_3$ FJYKIGXUSFRBER-UHFFFAOYSA-N	3.1×10^3 8.7×10^2 3.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4CHOA00H $\text{C}_5\text{H}_{10}\text{O}_3$ ZCMMOPXACREGKB-UHFFFAOYSA-N	4.5×10^3 3.0×10^1 6.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4CHOBOOH $\text{C}_5\text{H}_{10}\text{O}_3$ JELNOURJPXUYRE-UHFFFAOYSA-N	4.5×10^3 1.5×10^3 3.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4CODBCO3H $\text{C}_5\text{H}_6\text{O}_4$ JLZDPUBRQDSTHL-UHFFFAOYSA-N	2.0×10^5 4.2×10^4 6.9×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C514OOH $\text{C}_5\text{H}_8\text{O}_4$ PUFIIBDSTKVRQR-UHFFFAOYSA-N	4.1×10^6 2.0×10^6 6.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5DIALOOH $\text{C}_5\text{H}_6\text{O}_4$ MJFLAVCETRHPDB-UHFFFAOYSA-N	1.6×10^7 7.3×10^4 3.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHOC4OOH $\text{C}_5\text{H}_{10}\text{O}_3$ CTZAXNMAMSERLK-UHFFFAOYSA-N	4.3×10^3 5.3×10^3 2.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO1M22CO3H $\text{C}_5\text{H}_8\text{O}_4$ HHOOHNHNSGMLRV-UHFFFAOYSA-N	4.1×10^4 8.0×10^2 8.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:IC4CHOA00H $\text{C}_5\text{H}_{10}\text{O}_3$ MEJCTHPUJKQILI-UHFFFAOYSA-N	5.1×10^3 3.8×10^1 8.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MC3ODBCO3H $\text{C}_5\text{H}_6\text{O}_4$ UTZOYJZISPOIDM-UHFFFAOYSA-N	2.0×10^5 3.9×10^4 3.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C522CO3H $\text{C}_6\text{H}_8\text{O}_4$ NCACXMVSAKPDND-UHFFFAOYSA-N	1.1×10^5 8.0×10^3 1.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C615OOH $\text{C}_6\text{H}_{10}\text{O}_4$ XHCYBISQWAKVQU-UHFFFAOYSA-N	2.5×10^6 2.2×10^4 3.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6DIALOOH $\text{C}_6\text{H}_{10}\text{O}_4$ UGGYJIUZOSPDSO-UHFFFAOYSA-N	3.2×10^6 1.5×10^6 5.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHOC4CO3H $\text{C}_6\text{H}_{10}\text{O}_4$ RHHSYYPMFOTTRH-UHFFFAOYSA-N	4.6×10^4 3.7×10^3 6.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO1C6OOH $\text{C}_6\text{H}_{12}\text{O}_3$ HEPNQRDDKATRCQ-UHFFFAOYSA-N	3.5×10^3 3.4×10^3 8.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C615CO3H $\text{C}_7\text{H}_{10}\text{O}_5$ DXQJLRIPGQOCBO-UHFFFAOYSA-N	3.0×10^7 3.4×10^5 1.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C729OOH $\text{C}_7\text{H}_{12}\text{O}_3$ PQESPNYRBXTFKD-UHFFFAOYSA-N	7.6×10^3 2.6×10^3 4.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C729CO3H $\text{C}_8\text{H}_{12}\text{O}_4$ MXXLYBJUYDBXAC-UHFFFAOYSA-N	7.8×10^4 1.6×10^3 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C810OOH $\text{C}_8\text{H}_{14}\text{O}_4$ YJCLQCSGAKCWEJ-UHFFFAOYSA-N	1.6×10^6 5.5×10^5 1.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C822OOH $\text{C}_8\text{H}_{14}\text{O}_3$ XWYULULFGKWPMU-UHFFFAOYSA-N	8.8×10^3 6.0×10^3 2.8×10^3 1.1×10^2	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C830OOH $\text{C}_8\text{H}_{14}\text{O}_3$ QPQAMUJVCDDVQB-UHFFFAOYSA-N	6.5×10^3 4.4×10^3 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C831OOH $\text{C}_8\text{H}_{14}\text{O}_4$ IGXVNESWPQHYEP-UHFFFAOYSA-N	1.6×10^6 3.0×10^5 3.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C89OOH $\text{C}_8\text{H}_{14}\text{O}_3$ TYPKFPBYWMWINI-UHFFFAOYSA-N	6.5×10^3 4.4×10^3 8.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C822CO3H $\text{C}_9\text{H}_{14}\text{O}_4$ DRDXOQWGGPPQFG-UHFFFAOYSA-N	1.7×10^4 7.3×10^4 1.1×10^3 3.8×10^1	14000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C830CO3H $\text{C}_9\text{H}_{14}\text{O}_4$ YIGLTTQERBPNX-UHFFFAOYSA-N	7.8×10^4 2.8×10^3 3.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C89CO3H $\text{C}_9\text{H}_{14}\text{O}_4$ QJRQWHYQDGSSTJ-UHFFFAOYSA-N	7.8×10^4 2.9×10^3 1.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C126OOH $\text{C}_{12}\text{H}_{20}\text{O}_3$ KEVCPNVRIXMZTI-UHFFFAOYSA-N	7.1×10^3 4.9×10^3 1.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C126CO3H $\text{C}_{13}\text{H}_{20}\text{O}_4$ OZAZBNTYEOZXRC-UHFFFAOYSA-N	8.5×10^4 1.9×10^3 2.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C136OOH $\text{C}_{13}\text{H}_{22}\text{O}_3$ MAMVWZJYPZZMSJ-UHFFFAOYSA-N	5.8×10^3 4.3×10^3 4.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C136CO3H $\text{C}_{14}\text{H}_{22}\text{O}_4$ JKRMUSIUVDAPW-UHFFFAOYSA-N	6.8×10^4 1.4×10^3 7.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HCOCOHCO3H $\text{C}_3\text{H}_4\text{O}_5$ DIZMPJJIJIVKAJT-UHFFFAOYSA-N	2.9×10^6 1.3×10^4 6.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOCHOCOOH $\text{C}_3\text{H}_6\text{O}_4$ GWWSSJVARZQKFN-UHFFFAOYSA-N	2.4×10^7 1.3×10^5 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:OCCOHCOOH $\text{C}_3\text{H}_6\text{O}_4$ UFAXCNDNIIDPQE-UHFFFAOYSA-N	1.2×10^6 5.9×10^4 2.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4OCCOHOOH $\text{C}_4\text{H}_8\text{O}_4$ JIHBDXOHFOUDV-UHFFFAOYSA-N	1.1×10^6 1.2×10^5 7.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:COCCOHCOOH $\text{C}_4\text{H}_8\text{O}_4$ XTEYRSCVGRLOG-UHFFFAOYSA-N	2.2×10^7 2.0×10^5 8.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:COHM2CO3H $\text{C}_4\text{H}_6\text{O}_5$ AEAZUHMXXWJBPCW-UHFFFAOYSA-N	1.7×10^6 4.6×10^3 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HMACROOH $\text{C}_4\text{H}_8\text{O}_5$ AWITZWJPGUOCMB-UHFFFAOYSA-N	3.9×10^{10} 2.4×10^8 4.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MACROHOOH $\text{C}_4\text{H}_8\text{O}_4$ HWQXXVDRNBYQB-UHFFFAOYSA-N	6.6×10^5 7.1×10^4 6.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MACROOH $\text{C}_4\text{H}_8\text{O}_4$ MOSGWPXPTZVSII-UHFFFAOYSA-N	1.3×10^7 7.6×10^4 5.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MALDIALOOH $\text{C}_4\text{H}_6\text{O}_5$ MNYHDFHIZDELP-UHFFFAOYSA-N	1.0×10^9 6.2×10^6 3.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ALC4DOLOOH $\text{C}_5\text{H}_{10}\text{O}_5$ BTJWWKUWEVGVGA-UHFFFAOYSA-N	1.6×10^{10} 3.8×10^8 5.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4MALOHOOH $\text{C}_5\text{H}_8\text{O}_5$ NUMKFLHNNBFYIH-UHFFFAOYSA-N	5.6×10^8 6.6×10^6 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C57OOH $\text{C}_5\text{H}_{10}\text{O}_5$ VJGRRPOTERGJKF-UHFFFAOYSA-N	1.3×10^{10} 8.5×10^7 1.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C58OOH $\text{C}_5\text{H}_{10}\text{O}_5$ MTCQYLXAFMKVMT-UHFFFAOYSA-N	1.9×10^9 3.7×10^8 3.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHOC4OHOOH $\text{C}_5\text{H}_{10}\text{O}_4$ LTZYUHWVRSINRM-UHFFFAOYSA-N	1.5×10^7 1.4×10^6 1.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HIEB1OOH $\text{C}_5\text{H}_{10}\text{O}_6$ COFCBVJXHDFSHS-UHFFFAOYSA-N	3.7×10^{13} 1.6×10^{11} 6.5×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HIEB2OOH $\text{C}_5\text{H}_{10}\text{O}_6$ PKIUCWJPHHVKPZ-UHFFFAOYSA-N	2.4×10^{13} 1.0×10^{11} 1.2×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOC4CHOOH $\text{C}_5\text{H}_{10}\text{O}_4$ LRYOXTYJCGGVIC-UHFFFAOYSA-N	1.4×10^7 6.9×10^5 1.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IEB2OOH $\text{C}_5\text{H}_{10}\text{O}_5$ MCOKLECUPTXNOW-UHFFFAOYSA-N	1.3×10^{10} 3.7×10^8 2.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1H4C5CO3H $\text{C}_6\text{H}_{10}\text{O}_5$ DOEHHISPDHWTCR-UHFFFAOYSA-N	1.6×10^8 5.9×10^7 2.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C623OOH $\text{C}_6\text{H}_{12}\text{O}_5$ OGBKQQRAMSXTF-UHFFFAOYSA-N	2.8×10^{10} 7.4×10^8 1.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C67OOH $\text{C}_6\text{H}_{12}\text{O}_4$ ONTGLCVTLGTTQS-UHFFFAOYSA-N	1.0×10^7 4.2×10^5 9.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C68OOH $\text{C}_6\text{H}_{12}\text{O}_4$ ITDKDNQPTMKBIM-UHFFFAOYSA-N	1.0×10^7 4.6×10^5 3.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO1H63OOH $\text{C}_6\text{H}_{12}\text{O}_4$ KJWILEAANBSBHN-UHFFFAOYSA-N	1.1×10^7 1.8×10^7 3.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C728OOH $\text{C}_7\text{H}_{14}\text{O}_5$ WJYXJQPIZCIBJO-UHFFFAOYSA-N	5.3×10^{10} 2.1×10^{10} 1.7×10^9 1.4×10^7	18000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C730OOH $\text{C}_7\text{H}_{14}\text{O}_5$ YXKHJQXHKYJCPI-UHFFFAOYSA-N	6.1×10^{10} 2.1×10^{10} 1.1×10^{10} 2.6×10^6	18000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C824OOH $\text{C}_8\text{H}_{14}\text{O}_4$ FGEKWAMEWUMQIL-UHFFFAOYSA-N	8.4×10^6 1.9×10^7 6.3×10^5 6.3×10^3	15000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241

Table A3.5: Aldehydes (RCHO) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C826OOH $\text{C}_8\text{H}_{14}\text{O}_5$ MATCTRFTDTXPPO-UHFFFAOYSA-N	6.3×10^9 5.1×10^8 1.7×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C127OOH $\text{C}_{12}\text{H}_{20}\text{O}_4$ CZSOPCQUOGQYQQ-UHFFFAOYSA-N	1.3×10^7 1.9×10^7 2.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1311OOH $\text{C}_{13}\text{H}_{22}\text{O}_4$ GNGYVQPBCXXTM-UHFFFAOYSA-N	1.2×10^7 1.6×10^7 1.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1313OOH $\text{C}_{13}\text{H}_{22}\text{O}_5$ ALNYAIDMJTUDIF-UHFFFAOYSA-N	6.0×10^9 9.1×10^8 1.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

A3.6 Ketones (RCOR)

Table A3.6: Ketones (RCOR)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
propanone	2.7×10^{-1}	5500	Burkholder et al. (2019)	L	
CH ₃ COCH ₃	2.7×10^{-1}	5500	Burkholder et al. (2015)	L	
(acetone)	2.9×10^{-1}	5300	Brockbank (2013)	L	1, 478
[67-64-1]	2.7×10^{-1}	5500	Sander et al. (2011)	L	
CSCPPACGZOO CGX-UHFFFAOYSA-N	3.3×10^{-1}	5300	Poulain et al. (2010)	L	
	2.8×10^{-1}	5100	Sander et al. (2006)	L	
	2.6×10^{-1}	5700	Fogg and Sangster (2003)	L	
	2.8×10^{-1}	4800	Staudinger and Roberts (2001)	L	
	2.7×10^{-1}	5000	Plyasunov and Shock (2001)	L	
	3.0×10^{-1}	4600	Staudinger and Roberts (1996)	L	
	2.9×10^{-1}	5100	Poulain et al. (2010)	M	
	3.3×10^{-1}	4500	O'Farrell and Waghorne (2010)	M	
	2.6×10^{-1}	5400	Ji and Evans (2007)	M	
	2.4×10^{-1}	4200	Falabella et al. (2006)	M	11, 340
	2.6×10^{-1}	6400	Strekowski and George (2005)	M	
	2.4×10^{-1}		Straver and de Loos (2005)	M	
	2.4×10^{-1}	4300	Chai et al. (2005)	M	11
	2.7×10^{-1}		Nozière and Riemer (2003)	M	80
	1.0×10^{-1}		Ayuttaya et al. (2001)	M	342
	9.4×10^{-4}		Ayuttaya et al. (2001)	M	343
	5.3×10^{-1}		Ayuttaya et al. (2001)	M	344
	9.6×10^{-2}		Welke et al. (1998)	M	
	2.7×10^{-1}	5300	Benkelberg et al. (1995)	M	
	2.7×10^{-1}		Hoff et al. (1993)	M	
	1.7×10^{-1}		Yu (1992)	M	12
	3.2×10^{-1}	5800	Betterton (1991)	M	
	3.5×10^{-1}	3800	Zhou and Mopper (1990)	M	458
	1.2×10^{-1}		Guitart et al. (1989)	M	14
	1.4×10^{-1}		Hellmann (1987)	M	88
	2.5×10^{-1}	4800	Snider and Dawson (1985)	M	
	3.2×10^{-1}	5400	Schoene and Steinhanes (1985)	M	
	1.9×10^{-1}		Richon et al. (1985)	M	38
	2.6×10^{-1}	5100	Lichtenbelt and Schram (1985)	M	479
	2.0×10^{-1}	7800	Ioffe et al. (1984)	M	
	1.5×10^{-1}		Sato and Nakajima (1979a)	M	14
	2.5×10^{-1}		Vitenberg et al. (1975)	M	
	2.5×10^{-1}		Vitenberg et al. (1974)	M	
	3.2×10^{-1}		Vitenberg et al. (1974)	M	
	2.5×10^{-1}		Buttery et al. (1969)	M	
	3.1×10^{-1}		Nelson and Hoff (1968)	M	298
	2.8×10^{-1}		Burnett (1963)	M	
	1.8×10^{-2}		Abraham and Acree (2007)	V	
	2.6×10^{-1}		Hwang et al. (1992)	V	

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.1×10^{-2}	3100	Djerki and Laub (1988)	V	
	2.4×10^{-1}		Rathbun and Tai (1982)	V	
	3.1×10^{-2}		Hine and Weimar (1965)	R	
	3.0×10^{-1}		Butler and Ramchandani (1935)	R	
	2.5×10^{-1}	4900	Bagno et al. (1991)	T	475
	2.1×10^{-1}		Yaws (2003)	X	259
	2.2×10^{-1}	5000	Schaffer and Daubert (1969)	X	299
	3.0×10^{-2}	3300	Janini and Quaddora (1986)	X	299
	3.0×10^{-1}		Gaffney and Senum (1984)	X	391
	2.7×10^{-1}		Cabani et al. (1981)	C	
	6.1×10^{-1}		Dupeux et al. (2022)	Q	260
	2.6×10^{-1}		Hayer et al. (2022)	Q	20
	1.2×10^{-1}		Keshavarz et al. (2022)	Q	
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	
	6.6×10^{-2}		Wang et al. (2017)	Q	81, 239
	4.3×10^{-1}		Wang et al. (2017)	Q	81, 240
	7.1×10^{-1}		Wang et al. (2017)	Q	81, 241
	2.5×10^{-1}		Li et al. (2014)	Q	242
	2.5×10^{-1}		Raventos-Duran et al. (2010)	Q	272, 244
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	1.4×10^{-1}		Hilal et al. (2008)	Q	
	4.0×10^{-1}		Modarresi et al. (2007)	Q	68
		5500	Kühne et al. (2005)	Q	
	2.5×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	2.5×10^{-1}		English and Carroll (2001)	Q	231, 232
	2.4×10^{-2}		Katritzky et al. (1998)	Q	
	2.1×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.9×10^{-1}		Suzuki et al. (1992)	Q	233
	2.5×10^{-1}		Taft et al. (1985)	Q	
	2.8×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	2.5×10^{-1}		Mackay et al. (2006c)	?	21
		5100	Kühne et al. (2005)	?	
	1.5×10^{-1}		Yaws (1999)	?	21
	1.8×10^{-1}		Yaws et al. (1998)	?	
	1.6×10^{-1}		Abraham and Weathersby (1994)	?	21
	2.3×10^{-1}		Yaws and Yang (1992)	?	21
	2.5×10^{-1}		Abraham et al. (1990)	?	
propanone-2-13C CH ₃ COCH ₃ (acetone-2-13C) [3881-06-9] CSCPPACGZOO CGX-LBPDFUHNSA-N	3.1×10^{-1}	5300	Hiatt (2013)	M	

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.1×10^{-1}		Buttery et al. (1969)	M	
	1.1×10^{-2}		Abraham and Acree (2007)	V	
	2.8×10^{-1}		Mackay et al. (2006c)	V	
	2.8×10^{-1}		Mackay et al. (1995)	V	
	2.6×10^{-1}		Hwang et al. (1992)	V	
	8.6×10^{-2}	3700	Djerki and Laub (1988)	V	
	1.6×10^{-1}		Rathbun and Tai (1982)	V	
	7.1×10^{-2}		Hine and Weimar (1965)	R	
	2.1×10^{-1}	5500	Bagno et al. (1991)	T	475
		5500	Della Gatta et al. (1981)	T	
	7.6×10^{-2}		Yaws (2003)	X	259
	7.6×10^{-2}		Yaws (2003)	X	238
	7.1×10^{-2}	5800	Janini and Quaddora (1986)	X	299
	2.3×10^{-1}		Mackay et al. (1995)	C	
	4.1×10^{-1}		Harrison et al. (1993)	C	
	1.9×10^{-1}		Cabani et al. (1981)	C	
	2.3×10^{-1}		Dupeux et al. (2022)	Q	260
	1.8×10^{-1}		Hayer et al. (2022)	Q	20
	1.6×10^{-1}		Keshavarz et al. (2022)	Q	
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	
	5.1×10^{-2}		Wang et al. (2017)	Q	81, 239
	2.5×10^{-1}		Wang et al. (2017)	Q	81, 240
	3.6×10^{-1}		Wang et al. (2017)	Q	81, 241
	2.1×10^{-1}		Li et al. (2014)	Q	242
	2.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	8.4×10^{-2}		Gharagheizi et al. (2010)	Q	247
	1.3×10^{-1}		Hilal et al. (2008)	Q	
	3.0×10^{-1}		Modarresi et al. (2007)	Q	68
		5900	Kühne et al. (2005)	Q	
	1.7×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	1.4×10^{-1}		English and Carroll (2001)	Q	231, 232
	3.0×10^{-2}		Katritzky et al. (1998)	Q	
	1.6×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.5×10^{-1}		Suzuki et al. (1992)	Q	233
	1.7×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	1.0×10^{-1}		Mackay et al. (2006c)	?	21
		5300	Kühne et al. (2005)	?	
	3.3×10^{-1}		Yaws (1999)	?	21
	1.5×10^{-1}		Yaws et al. (1998)	?	
	1.0×10^{-1}		Abraham and Weathersby (1994)	?	21
	3.1×10^{-1}		Betterton (1991)	?	
	2.1×10^{-1}		Abraham et al. (1990)	?	

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
butanone-1,1,1,3,3-d5 $\text{C}_2\text{H}_5\text{COCH}_3$ (methyl ethyl ketone-d5; MEK-d5) [24313-50-6] ZWEHNKRNPVOVGH-PDWRLMEDSA-N	3.7×10^{-1}	8200	Hiatt (2013)	M	
2-pentanone $\text{C}_3\text{H}_7\text{COCH}_3$ [107-87-9] XNLICIUVMYPYHGG-UHFFFAOYSA-N	1.3×10^{-1}	6000	Brockbank (2013)	L	1
	1.3×10^{-1}	5900	Plyasunov and Shock (2001)	L	
	1.3×10^{-1}	5900	Hovorka et al. (2019)	M	
	1.6×10^{-1}	5700	Ji and Evans (2007)	M	
	1.0×10^{-1}	4600	Falabella et al. (2006)	M	11, 340
	8.6×10^{-2}		Straver and de Loos (2005)	M	
	1.0×10^{-1}	4800	Chai et al. (2005)	M	11
	1.1×10^{-1}		Kim et al. (2000)	M	
	1.2×10^{-1}		Shiu and Mackay (1997)	M	
	9.0×10^{-2}		Hawthorne et al. (1985)	M	
	6.4×10^{-2}		Sato and Nakajima (1979a)	M	14
	1.7×10^{-1}		Vitenberg et al. (1974)	M	
	1.1×10^{-1}		Vitenberg et al. (1974)	M	480
	1.6×10^{-1}		Buttery et al. (1969)	M	
	9.2×10^{-2}		Nelson and Hoff (1968)	M	298
	1.5×10^{-1}		Mackay et al. (2006c)	V	
	5.9×10^{-2}		Philippe et al. (2003)	V	14
	1.5×10^{-1}		Shiu and Mackay (1997)	V	
	1.5×10^{-1}		Mackay et al. (1995)	V	
	2.4×10^{-1}	4300	Djerki and Laub (1988)	V	
	2.6×10^{-1}		Rathbun and Tai (1982)	V	
	3.1×10^{-1}		Amoore and Buttery (1978)	V	
		5900	Della Gatta et al. (1981)	T	
	1.4×10^{-1}		Yaws (2003)	X	259
	9.1×10^{-2}	4600	Janini and Quaddora (1986)	X	299
	1.7×10^{-1}		Mackay et al. (1995)	C	
	2.5×10^{-1}		Dupeux et al. (2022)	Q	260
	8.7×10^{-2}		Hayer et al. (2022)	Q	20
	2.2×10^{-1}		Keshavarz et al. (2022)	Q	
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	300
	4.3×10^{-2}		Wang et al. (2017)	Q	81, 239
	1.6×10^{-1}		Wang et al. (2017)	Q	81, 240
	1.8×10^{-1}		Wang et al. (2017)	Q	81, 241
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	1.0×10^{-1}		Hilal et al. (2008)	Q	
	1.7×10^{-1}		Modarresi et al. (2007)	Q	68
		6200	Kühne et al. (2005)	Q	
	1.4×10^{-1}		Yaffe et al. (2003)	Q	249, 273

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.9×10^{-2}		Katritzky et al. (1998)	Q	
	1.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.2×10^{-1}		Russell et al. (1992)	Q	280
	1.2×10^{-1}		Suzuki et al. (1992)	Q	233
	1.2×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	1.6×10^{-1}		Mackay et al. (2006c)	?	21
		6500	Kühne et al. (2005)	?	
	1.4×10^{-1}		Yaws (1999)	?	21
	1.3×10^{-1}		Yaws et al. (1998)	?	
	6.7×10^{-2}		Abraham and Weathersby (1994)	?	21
	1.5×10^{-1}		Abraham et al. (1990)	?	
	3.1×10^{-1}		Mackay and Yeun (1983)	?	
3-pentanone $\text{C}_2\text{H}_5\text{COC}_2\text{H}_5$ (diethyl ketone) [96-22-0] FDPIMTJIUBPUKL-UHFFFAOYSA-N	8.9×10^{-2}	5800	Brockbank (2013)	L	1, 481
	1.1×10^{-1}	6000	Plyasunov and Shock (2001)	L	
	1.1×10^{-1}	5900	Hovorka et al. (2019)	M	
	2.1×10^{-1}		O'Farrell and Waghorne (2010)	M	
	1.6×10^{-1}	5600	Ji and Evans (2007)	M	
	7.0×10^{-2}		Sato and Nakajima (1979a)	M	14
	9.7×10^{-5}		Saylor et al. (1938)	M	38
	8.4×10^{-2}		Mackay et al. (2006c)	V	
	1.2×10^{-1}		Mackay et al. (1995)	V	
	8.4×10^{-2}		Mackay et al. (1995)	V	
	2.8×10^{-1}		Rathbun and Tai (1982)	V	
	1.3×10^{-1}	6000	Bagno et al. (1991)	T	475
		6000	Della Gatta et al. (1981)	T	
	8.2×10^{-2}		Yaws (2003)	X	259
	8.2×10^{-2}		Yaws (2003)	X	238
	2.0×10^{-1}	9200	Janini and Quaddora (1986)	X	299
	1.1×10^{-1}		Howard (1993)	X	414
	1.3×10^{-1}		Cabani et al. (1981)	C	
	8.6×10^{-2}		Dupeux et al. (2022)	Q	260
	2.2×10^{-1}		Keshavarz et al. (2022)	Q	
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	
	4.3×10^{-2}		Wang et al. (2017)	Q	81, 239
	1.3×10^{-1}		Wang et al. (2017)	Q	81, 240
	6.6×10^{-2}		Wang et al. (2017)	Q	81, 241
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	7.5×10^{-2}		Gharagheizi et al. (2010)	Q	247
	9.2×10^{-2}		Hilal et al. (2008)	Q	
	1.9×10^{-1}		Modarresi et al. (2007)	Q	68
		6200	Kühne et al. (2005)	Q	
	1.4×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	4.3×10^{-2}		Yao et al. (2002)	Q	230

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1×10^{-1}		English and Carroll (2001)	Q	231, 275
	2.7×10^{-2}		Katritzky et al. (1998)	Q	
	1.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	2.0×10^{-1}	6800	Duchowicz et al. (2020)	?	186, 21
			Kühne et al. (2005)	?	
	8.2×10^{-2}		Yaws (1999)	?	21
	1.2×10^{-1}		Yaws et al. (1998)	?	
	7.3×10^{-2}		Abraham and Weathersby (1994)	?	21
	1.3×10^{-1}		Abraham et al. (1990)	?	
1-cyclopropyl-ethanone C_5H_8O (cyclopropyl methyl ketone) [765-43-5] HVCFCNAITDHQFX-UHFFFAOYSA-N	9.5×10^{-1}	5900	Bagno et al. (1991)	T	475
		5900	Della Gatta et al. (1981)	T	
	2.2×10^{-1}		Keshavarz et al. (2022)	Q	
	9.9×10^{-2}		Duchowicz et al. (2020)	Q	300
	4.8×10^{-1}		Hilal et al. (2008)	Q	
	5.2×10^{-1}		Modarresi et al. (2007)	Q	68
	3.1×10^{-1}		English and Carroll (2001)	Q	231, 275
	6.4×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	9.7×10^{-1}		Duchowicz et al. (2020)	?	186, 21
3-methyl-2-butanone $C_5H_{10}O$ (isopropyl methyl ketone) [563-80-4] SYBYTAAJFKOIEJ-UHFFFAOYSA-N	1.1×10^{-1}	5800	Brockbank (2013)	L	1
	9.1×10^{-2}	5700	Plyasunov and Shock (2001)	L	
	9.3×10^{-2}	5600	Hovorka et al. (2019)	M	
	1.0×10^{-1}		Duchowicz et al. (2020)	V	187
	8.7×10^{-2}		HSDB (2015)	V	
	9.6×10^{-2}		Cabani et al. (1981)	V	
	9.0×10^{-2}	5700	Bagno et al. (1991)	T	475
		5700	Della Gatta et al. (1981)	T	
	1.3×10^{-2}		Duchowicz et al. (2020)	Q	
	4.9×10^{-2}		Wang et al. (2017)	Q	81, 239
	1.3×10^{-1}		Wang et al. (2017)	Q	81, 240
	2.5×10^{-1}		Wang et al. (2017)	Q	81, 241
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	272, 244
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	8.4×10^{-2}		Hilal et al. (2008)	Q	
	2.1×10^{-1}		Modarresi et al. (2007)	Q	68
		5300	Kühne et al. (2005)	Q	
	9.7×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	6.4×10^{-2}		English and Carroll (2001)	Q	231, 232
	2.5×10^{-2}		Katritzky et al. (1998)	Q	
	1.0×10^{-1}		Nirmalakhandan et al. (1997)	Q	
		7200	Kühne et al. (2005)	?	
	1.1×10^{-1}		Yaws (1999)	?	21
	1.1×10^{-1}		Yaws et al. (1998)	?	
	9.7×10^{-2}		Abraham et al. (1990)	?	

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cyclopentanone $\text{C}_5\text{H}_8\text{O}$ [120-92-3] BGTOWKSIORTVQH-UHFFFAOYSA-N	1.2	5800	Brockbank (2013)	L	
	2.8		O'Farrell and Waghorne (2010)	M	
	8.2×10^{-1}	4900	Hovorka et al. (2002)	M	11
	8.2×10^{-1}		Hawthorne et al. (1985)	M	
	7.4×10^{-1}		Keshavarz et al. (2022)	Q	
	2.5×10^{-1}		Duchowicz et al. (2020)	Q	300
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	1.1		Hilal et al. (2008)	Q	
	4.7×10^{-1}		Modarresi et al. (2007)	Q	68
		5800	Kühne et al. (2005)	Q	
	1.0		Yaffe et al. (2003)	Q	249, 250
	7.5×10^{-1}		English and Carroll (2001)	Q	231, 261
	6.9×10^{-2}		Katritzky et al. (1998)	Q	
	7.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	9.9×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	5600	Kühne et al. (2005)	?		
	1.1	Abraham et al. (1990)	?		
2-hexanone $\text{C}_6\text{H}_{12}\text{O}$ [591-78-6] QQZOPKMRPOGIEB-UHFFFAOYSA-N	1.1×10^{-1}	6500	Brockbank (2013)	L	1
	9.8×10^{-2}	6300	Plyasunov and Shock (2001)	L	
	9.9×10^{-2}	6300	Hovorka et al. (2019)	M	
	1.5×10^{-1}	8600	Hiatt (2013)	M	
	7.9×10^{-2}	4800	Falabella et al. (2006)	M	11, 340
	1.1×10^{-1}		Straver and de Loos (2005)	M	
	8.6×10^{-2}	5100	Chai et al. (2005)	M	11
	4.3×10^{-2}		Sato and Nakajima (1979a)	M	14
	1.1×10^{-1}		Duchowicz et al. (2020)	V	187
	1.1×10^{-1}		HSDB (2015)	V	
	1.1×10^{-1}		Mackay et al. (2006c)	V	
	1.1×10^{-1}		Mackay et al. (1995)	V	
	1.0×10^{-1}		Meylan and Howard (1991)	V	
	6.5×10^{-1}	4900	Djerki and Laub (1988)	V	
	1.0×10^{-1}		Cabani et al. (1981)	V	
		6200	Della Gatta et al. (1981)	T	
	1.2×10^{-1}		Yaws (2003)	X	259
	1.0×10^{-1}		Howard (1993)	X	414
	1.7×10^{-1}		Dupeux et al. (2022)	Q	260
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	
3.8×10^{-2}		Wang et al. (2017)	Q	81, 239	
1.1×10^{-1}		Wang et al. (2017)	Q	81, 240	
1.7×10^{-1}		Wang et al. (2017)	Q	81, 241	
8.2×10^{-2}		Hilal et al. (2008)	Q		
1.5×10^{-1}		Modarresi et al. (2007)	Q	68	
	6600	Kühne et al. (2005)	Q		
7.9×10^{-2}		Yaffe et al. (2003)	Q	249, 273	

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
	8.4×10^{-2}	6200	English and Carroll (2001)	Q	231, 232	
	2.4×10^{-2}		Katritzky et al. (1998)	Q		
	9.2×10^{-2}		Nirmalakhandan et al. (1997)	Q		
	8.5×10^{-2}		Meylan and Howard (1991)	Q		
			Kühne et al. (2005)	?		
	1.2×10^{-1}		Yaws (1999)	?		21
	1.2×10^{-1}		Yaws et al. (1998)	?		
	4.5×10^{-2}		Abraham and Weathersby (1994)	?		21
	1.0×10^{-1}		Abraham et al. (1990)	?		
2-hexanone-1,1,1,3,3-d5 $\text{C}_6\text{H}_{12}\text{O}$ [4840-82-8] QQZOPKMRPOGIEB-ZTIZGVCASA-N	1.7×10^{-1}	9000	Hiatt (2013)	M		
3-hexanone $\text{C}_6\text{H}_{12}\text{O}$ [589-38-8] PFCFHIRKBAQGU-UHFFFAOYSA-N	7.9×10^{-2}	7100	Brockbank (2013)	L		
	7.5×10^{-2}	6400	Plyasunov and Shock (2001)	L		
	7.6×10^{-2}		Hovorka et al. (2019)	M		
			Dewulf et al. (1999)	M	364	
	7.9×10^{-2}		Duchowicz et al. (2020)	V	187	
	8.0×10^{-2}		Yaws (2003)	X	238	
	3.2×10^{-2}		Duchowicz et al. (2020)	Q		
	3.8×10^{-2}		Wang et al. (2017)	Q	81, 239	
	8.9×10^{-2}		Wang et al. (2017)	Q	81, 240	
	1.5×10^{-1}		Wang et al. (2017)	Q	81, 241	
	6.2×10^{-2}		Gharagheizi et al. (2010)	Q	247	
	6.9×10^{-2}		Hilal et al. (2008)	Q		
	1.6×10^{-1}		Modarresi et al. (2007)	Q	68	
			Kühne et al. (2005)	Q		
	7.9×10^{-2}		Yaffe et al. (2003)	Q	249, 250	
2.1×10^{-2}	Katritzky et al. (1998)		Q			
	Kühne et al. (2005)	?				
8.0×10^{-2}	Yaws (1999)	?	21			
8.0×10^{-2}	Yaws et al. (1998)	?				
3-methyl-2-pentanone $\text{C}_6\text{H}_{12}\text{O}$ [565-61-7] UIHCLUNTQKBZGK-UHFFFAOYSA-N	8.4×10^{-2}	6000	Plyasunov and Shock (2001)	L		
	7.9×10^{-2}		Hovorka et al. (2019)	M		
	1.3×10^{-1}		Duchowicz et al. (2020)	V	187	
	1.3×10^{-2}		Duchowicz et al. (2020)	Q		
	4.0×10^{-2}		Wang et al. (2017)	Q	81, 239	
	1.1×10^{-1}		Wang et al. (2017)	Q	81, 240	
	1.8×10^{-1}		Wang et al. (2017)	Q	81, 241	
	9.9×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244	
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245	
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	246	
7.3×10^{-2}	Hilal et al. (2008)	Q				
2.2×10^{-1}	Modarresi et al. (2007)	Q	68			

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	9.6×10^{-2}		Yaws et al. (1998)	?	
4-methyl-2-pentanone (CH_3) ₂ CHCH ₂ COCH ₃ (methyl isobutyl ketone; MIBK) [108-10-1] NTIZESTWPVYFNL-UHFFFAOYSA-N	6.9×10^{-2}	6200	Brockbank (2013)	L	1
	6.9×10^{-2}	6000	Plyasunov and Shock (2001)	L	
	6.5×10^{-2}	6000	Hovorka et al. (2019)	M	
	3.9×10^{-2}		Kim and Kim (2014)	M	
	1.0×10^{-1}	8700	Hiatt (2013)	M	
	3.9×10^{-2}		Kim et al. (2000)	M	
	4.7×10^{-2}		Welke et al. (1998)	M	
	4.3×10^{-2}	4600	Kolb et al. (1992)	M	278
	2.2×10^{-2}	110	Ashworth et al. (1988)	M	42, 279
	6.5×10^{-2}		Hellmann (1987)	M	88
	3.1×10^{-2}		Sato and Nakajima (1979a)	M	14
	7.2×10^{-2}		Duchowicz et al. (2020)	V	187
	7.0×10^{-2}		HSDB (2015)	V	
	6.5×10^{-2}		Mackay et al. (2006c)	V	
	6.5×10^{-2}		Mackay et al. (1995)	V	
	7.2×10^{-2}		Hwang et al. (1992)	V	
	1.4×10^{-1}		Rathbun and Tai (1982)	V	
	7.1×10^{-2}		Cabani et al. (1981)	V	
	7.3×10^{-2}		Yaws (2003)	X	259
	1.1×10^{-1}		Howard (1990)	X	414
	1.4×10^{-1}		Dupeux et al. (2022)	Q	260
	1.3×10^{-2}		Duchowicz et al. (2020)	Q	
	4.0×10^{-2}		Wang et al. (2017)	Q	81, 239
	1.3×10^{-1}		Wang et al. (2017)	Q	81, 240
	2.1×10^{-1}		Wang et al. (2017)	Q	81, 241
	8.8×10^{-2}		Hilal et al. (2008)	Q	
	1.4×10^{-1}		Modarresi et al. (2007)	Q	68
		6600	Kühne et al. (2005)	Q	
	7.3×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	5.1×10^{-2}		English and Carroll (2001)	Q	231, 261
	1.7×10^{-2}		Katritzky et al. (1998)	Q	
	7.9×10^{-2}		Nirmalakhandan et al. (1997)	Q	
		5700	Kühne et al. (2005)	?	
	7.3×10^{-2}		Yaws (1999)	?	21
	7.2×10^{-2}		Yaws et al. (1998)	?	
	3.2×10^{-2}		Abraham and Weathersby (1994)	?	21
	3.0×10^{-1}		Betterton (1991)	?	
	7.0×10^{-2}		Abraham et al. (1990)	?	

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-3-pentanone $\text{C}_6\text{H}_{12}\text{O}$ [565-69-5] HYTRYEXINDDXJK-UHFFFAOYSA-N	5.3×10^{-2}	6100	Plyasunov and Shock (2001)	L	
	5.2×10^{-2}		Hovorka et al. (2019)	M	
	6.4×10^{-2}		Duchowicz et al. (2020)	V	187
	1.3×10^{-2}		Duchowicz et al. (2020)	Q	
	4.0×10^{-2}		Wang et al. (2017)	Q	81, 239
	9.3×10^{-2}		Wang et al. (2017)	Q	81, 240
	1.1×10^{-1}		Wang et al. (2017)	Q	81, 241
	9.9×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	6.5×10^{-2}		Hilal et al. (2008)	Q	
	1.6×10^{-1}		Modarresi et al. (2007)	Q	68
	9.7×10^{-2}		Yaffe et al. (2003)	Q	249, 273
2.3×10^{-2}	Katritzky et al. (1998)	Q			
6.4×10^{-2}	Yaws et al. (1998)	?			
3,3-dimethyl-2-butanone $\text{C}_6\text{H}_{12}\text{O}$ (<i>tert</i> -butyl methyl ketone) [75-97-8] PJGSXYOJGTZAV-UHFFFAOYSA-N	4.3×10^{-2}	5800	Brockbank (2013)	L	1
	4.5×10^{-2}	5700	Plyasunov and Shock (2001)	L	
	4.3×10^{-2}	5700	Hovorka et al. (2019)	M	
	4.5×10^{-2}	6000 6000 6000 6000 6000 6000 6000 6000 6000 6000 6000 6000 6000 6000 6000 6000 6000 6000 6000	Duchowicz et al. (2020)	V	187
	4.5×10^{-2}		HSDB (2015)	V	
	7.6×10^{-2}		Bagno et al. (1991)	T	475
			Della Gatta et al. (1981)	T	
	5.5×10^{-3}		Duchowicz et al. (2020)	Q	
	2.8×10^{-2}		Wang et al. (2017)	Q	81, 239
	7.1×10^{-2}		Wang et al. (2017)	Q	81, 240
	1.8×10^{-1}		Wang et al. (2017)	Q	81, 241
	9.9×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	4.7×10^{-2}		Hilal et al. (2008)	Q	
	2.8×10^{-1}		Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	
	7.9×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	4.5×10^{-2}		English and Carroll (2001)	Q	231, 232
2.7×10^{-2}	Katritzky et al. (1998)		Q		
7.9×10^{-2}	Nirmalakhandan et al. (1997)		Q		
	Kühne et al. (2005)		?		
6.4×10^{-2}	Yaws et al. (1998)	?			
cyclohexanone $\text{C}_6\text{H}_{10}\text{O}$ [108-94-1] JHIVVAPYMSGYDF-UHFFFAOYSA-N	1.5	6400	Brockbank (2013)	L	
	8.6×10^{-1}	5100	Hovorka et al. (2002)	M	11
	8.2×10^{-1}		Hawthorne et al. (1985)	M	
	1.1		HSDB (2015)	V	
	3.8×10^{-1}		Mackay et al. (2006c)	V	
	3.8×10^{-1}		Mackay et al. (1995)	V	
4.4×10^{-1}		Meylan and Howard (1991)	V		

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.2		Yaws (2003)	X	259
	2.6		Dupeux et al. (2022)	Q	260
	1.0		Keshavarz et al. (2022)	Q	
	2.5×10^{-1}		Duchowicz et al. (2020)	Q	185
	1.0×10^{-1}		Wang et al. (2017)	Q	81, 239
	2.0		Wang et al. (2017)	Q	81, 240
	5.9		Wang et al. (2017)	Q	81, 241
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	1.0		Hilal et al. (2008)	Q	
	1.1		Modarresi et al. (2007)	Q	68
		6200	Kühne et al. (2005)	Q	
	1.2		Yaffe et al. (2003)	Q	249, 250
	9.0×10^{-1}		English and Carroll (2001)	Q	231, 232
	6.2×10^{-2}		Katritzky et al. (1998)	Q	
	5.6×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.9×10^{-1}		Meylan and Howard (1991)	Q	
	1.1		Duchowicz et al. (2020)	?	186, 21
		6300	Kühne et al. (2005)	?	
	1.8		Yaws (1999)	?	21
	1.6		Abraham et al. (1990)	?	
2-heptanone $\text{C}_7\text{H}_{14}\text{O}$ [110-43-0] CATSNJVOTSVZJV-UHFFFAOYSA-N	6.8×10^{-2}	6800	Brockbank (2013)	L	1
	7.2×10^{-2}	6800	Plyasunov and Shock (2001)	L	
	5.9×10^{-2}	5300	Falabella et al. (2006)	M	11, 340
	6.8×10^{-2}	5700	Chai et al. (2005)	M	11
	3.9×10^{-2}		van Ruth et al. (2002)	M	14
	4.1×10^{-2}		van Ruth and Villeneuve (2002)	M	14, 363
	2.5×10^{-2}		van Ruth et al. (2001)	M	14
	6.2×10^{-2}		Kim et al. (2000)	M	
	5.8×10^{-2}		Shiu and Mackay (1997)	M	
	3.7×10^{-2}		Sato and Nakajima (1979a)	M	14
	6.8×10^{-2}		Buttery et al. (1969)	M	
	7.5×10^{-2}		Mackay et al. (2006c)	V	
	7.5×10^{-2}		Shiu and Mackay (1997)	V	
	7.5×10^{-2}		Mackay et al. (1995)	V	
	1.8	5600	Djerki and Laub (1988)	V	
	1.7×10^{-1}		Rathbun and Tai (1982)	V	
	7.5×10^{-2}		Yaws (2003)	X	259
	7.4×10^{-2}		Yaws (2003)	X	238
	3.5×10^{-1}	4500	Janini and Quaddora (1986)	X	299
	1.5×10^{-1}		Dupeux et al. (2022)	Q	260
	5.3×10^{-2}		Keshavarz et al. (2022)	Q	
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	185
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	272, 244
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	5.1×10^{-2}		Gharagheizi et al. (2010)	Q	247
	6.2×10^{-2}		Hilal et al. (2008)	Q	
	1.3×10^{-1}		Modarresi et al. (2007)	Q	68
		6900	Kühne et al. (2005)	Q	
	1.2×10^{-1}		Yaffe et al. (2003)	Q	249, 273
	6.5×10^{-2}		English and Carroll (2001)	Q	231, 275
	2.3×10^{-2}		Katritzky et al. (1998)	Q	
	7.2×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	6.2×10^{-2}		Russell et al. (1992)	Q	280
	6.9×10^{-2}		Suzuki et al. (1992)	Q	233
	5.8×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	6.8×10^{-2}		Mackay et al. (2006c)	?	21
		6900	Kühne et al. (2005)	?	
	7.5×10^{-2}		Yaws (1999)	?	21
	7.5×10^{-2}		Yaws et al. (1998)	?	
	3.9×10^{-2}		Abraham and Weathersby (1994)	?	21
	6.9×10^{-2}		Abraham et al. (1990)	?	
	1.1×10^{-1}		Mackay and Yeun (1983)	?	
3-heptanone $\text{C}_7\text{H}_{14}\text{O}$ [106-35-4] NGAZZOYFWWSOGK-UHFFFAOYSA-N	7.2×10^{-2}	7000	Brockbank (2013)	L	1
	1.1×10^{-1}		HSDB (2015)	V	
	4.9×10^{-2}		Yaws (2003)	X	259
	5.0×10^{-2}		Yaws (2003)	X	238
	7.3×10^{-2}		Dupeux et al. (2022)	Q	260
	3.1×10^{-2}		Wang et al. (2017)	Q	81, 239
	6.0×10^{-2}		Wang et al. (2017)	Q	81, 240
	1.4×10^{-1}		Wang et al. (2017)	Q	81, 241
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	5.1×10^{-2}		Gharagheizi et al. (2010)	Q	247
	1.3×10^{-1}		Modarresi et al. (2007)	Q	68
		6900	Kühne et al. (2005)	Q	
	1.2×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	1.4×10^{-2}		Katritzky et al. (1998)	Q	
		6000	Kühne et al. (2005)	?	
	2.4×10^{-2}		Yaws et al. (1998)	?	
4-heptanone $\text{C}_7\text{H}_{14}\text{O}$ [123-19-3] HCFAJYNVAYBARA-UHFFFAOYSA-N	5.1×10^{-2}	6800	Brockbank (2013)	L	1, 482
	6.1×10^{-2}	7000	Plyasunov and Shock (2001)	L	
	1.8×10^{-1}		Duchowicz et al. (2020)	V	187
	4.1×10^{-2}		HSDB (2015)	V	
	5.6×10^{-2}		Cabani et al. (1981)	V	
	3.3×10^{-2}		Yaws (2003)	X	259
	3.3×10^{-2}		Yaws (2003)	X	238
	3.8×10^{-2}		Dupeux et al. (2022)	Q	260

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	5.1×10^{-2}		Gharagheizi et al. (2010)	Q	247
	4.8×10^{-2}		Hilal et al. (2008)	Q	
	1.3×10^{-1}		Modarresi et al. (2007)	Q	68
		6900	Kühne et al. (2005)	Q	
	5.8×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	6.5×10^{-2}		English and Carroll (2001)	Q	231, 232
	1.8×10^{-2}		Katritzky et al. (1998)	Q	
	7.7×10^{-2}		Nirmalakhandan et al. (1997)	Q	
		7800	Kühne et al. (2005)	?	
	2.3×10^{-2}		Yaws et al. (1998)	?	38
	5.6×10^{-2}		Abraham et al. (1990)	?	
3-methyl-2-hexanone $\text{C}_7\text{H}_{14}\text{O}$ [2550-21-2] GYWYASONLSQZBB-UHFFFAOYSA-N	2.8×10^{-2}		Yaws (2003)	X	238
	4.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-2}		Gharagheizi et al. (2010)	Q	247
	3.2×10^{-2}		Yaws et al. (1998)	?	
4-methyl-2-hexanone $\text{C}_7\text{H}_{14}\text{O}$ [105-42-0] XUPXMIAWKPTZLZ-UHFFFAOYSA-N	4.9×10^{-2}		Yaws (2003)	X	238
	3.6×10^{-2}		Wang et al. (2017)	Q	81, 239
	9.3×10^{-2}		Wang et al. (2017)	Q	81, 240
	2.1×10^{-1}		Wang et al. (2017)	Q	81, 241
	4.0×10^{-2}		Gharagheizi et al. (2010)	Q	247
	3.3×10^{-2}		Yaws et al. (1998)	?	
5-methyl-2-hexanone $\text{C}_7\text{H}_{14}\text{O}$ [110-12-3] FFWSICBKRCICMR-UHFFFAOYSA-N	6.4×10^{-2}	6800	Brockbank (2013)	L	1
	6.2×10^{-2}		Duchowicz et al. (2020)	V	187
	6.2×10^{-2}		HSDB (2015)	V	
	4.1×10^{-2}		Yaws (2003)	X	238
	1.3×10^{-2}		Duchowicz et al. (2020)	Q	
	3.6×10^{-2}		Wang et al. (2017)	Q	81, 239
	1.1×10^{-1}		Wang et al. (2017)	Q	81, 240
	3.8×10^{-1}		Wang et al. (2017)	Q	81, 241
	4.0×10^{-2}		Gharagheizi et al. (2010)	Q	247
	7.7×10^{-2}		Hilal et al. (2008)	Q	
	1.1×10^{-1}		Modarresi et al. (2007)	Q	68
		6900	Kühne et al. (2005)	Q	
	7.3×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	2.2×10^{-2}		Katritzky et al. (1998)	Q	
		7600	Kühne et al. (2005)	?	
	2.7×10^{-2}		Yaws et al. (1998)	?	

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-3-hexanone $C_7H_{14}O$ [7379-12-6] HIGGFWFRAWSMBR-UHFFFAOYSA-N	4.9×10^{-2} 3.7×10^{-2} 4.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1998)	X Q ?	238 247
4-methyl-3-hexanone $C_7H_{14}O$ [17042-16-9] ULPMRIXHGUZFA-UHFFFAOYSA-N	3.1×10^{-2} 3.7×10^{-2} 3.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1998)	X Q ?	238 247
5-methyl-3-hexanone $C_7H_{14}O$ [623-56-3] DXVYLFHTJZWTRF-UHFFFAOYSA-N	3.1×10^{-2} 3.9×10^{-2} 3.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1998)	X Q ?	238 247
3-ethyl-2-pentanone $C_7H_{14}O$ [6137-03-7] GSNKRSKIWFBEWEG-UHFFFAOYSA-N	2.9×10^{-2} 3.9×10^{-2} 3.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1998)	X Q ?	238 247
3,3-dimethyl-2-pentanone $C_7H_{14}O$ [20669-04-9] QSHJLBQLQVSEFV-UHFFFAOYSA-N	3.1×10^{-2} 3.3×10^{-2} 4.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1998)	X Q ?	238 247
3,4-dimethyl-2-pentanone $C_7H_{14}O$ [565-78-6] QXHRQZNDMYRDPA-UHFFFAOYSA-N	3.2×10^{-2} 3.0×10^{-2} 4.3×10^{-2}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1998)	X Q ?	238 247
4,4-dimethyl-2-pentanone $C_7H_{14}O$ [590-50-1] AZASWVGQEVCS-UHFFFAOYSA-N	3.6×10^{-2} 3.6×10^{-2} 5.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1998)	X Q ?	238 247
2,2-dimethyl-3-pentanone $C_7H_{14}O$ [564-04-5] VLNUTKMHYLQCQB-UHFFFAOYSA-N	3.6×10^{-2} 3.2×10^{-2} 5.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1998)	X Q ?	238 247
2,4-dimethyl-3-pentanone $C_7H_{14}O$ (diisopropyl ketone) [565-80-0] HXVNBWAKAOHACI-UHFFFAOYSA-N	2.3×10^{-2} 2.4×10^{-2} 2.8×10^{-2} 4.1×10^{-2} 9.5×10^{-1}	6100 6500	Brockbank (2013) Plyasunov and Shock (2001) Duchowicz et al. (2020) Cabani et al. (1981) Bagno et al. (1991) Della Gatta et al. (1981)	L L V V T T	1 187 475
	2.8×10^{-2} 4.9×10^{-3} 7.8×10^{-2} 2.5×10^{-2}	6400 6400	Yaws (2003) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	X Q Q Q	238 272, 244 245

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	2.5×10^{-2}		Gharagheizi et al. (2010)	Q	247
	3.5×10^{-2}		Hilal et al. (2008)	Q	
	1.5×10^{-1}	6000	Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	
	2.8×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	1.4×10^{-2}		Yao et al. (2002)	Q	230
	1.4×10^{-2}		English and Carroll (2001)	Q	231, 232
	1.3×10^{-2}		Katritzky et al. (1998)	Q	
	6.0×10^{-2}	4900	Nirmalakhandan et al. (1997)	Q	
			Kühne et al. (2005)	?	
	2.8×10^{-2}		Yaws (1999)	?	21
	2.8×10^{-2}		Yaws et al. (1998)	?	
cycloheptanone $\text{C}_7\text{H}_{12}\text{O}$ [502-42-1] CGZZMOTZONQIA-UHFFFAOYSA-N	7.0×10^{-1}		Hilal et al. (2008)	Q	
2-methylcyclohexanone $\text{C}_7\text{H}_{12}\text{O}$ [583-60-8] LFSAPCRASZRSKS-UHFFFAOYSA-N		5600	Kühne et al. (2005)	Q	
		4600	Kühne et al. (2005)	?	
3-methylcyclohexanone $\text{C}_7\text{H}_{12}\text{O}$ [591-24-2] UJBOOHRTQVGRU-UHFFFAOYSA-N	6.7×10^{-2}		Duchowicz et al. (2020)	V	187
	9.9×10^{-2}		Duchowicz et al. (2020)	Q	
4-methylcyclohexanone $\text{C}_7\text{H}_{12}\text{O}$ [589-92-4] VGVHNLRUAMRIEW-UHFFFAOYSA-N		6500	Kühne et al. (2005)	Q	
		6100	Kühne et al. (2005)	?	
dicyclopropylmethanone $\text{C}_7\text{H}_{10}\text{O}$ (dicyclopropyl ketone) [1121-37-5] BIPUHAHGLJKIPK-UHFFFAOYSA-N	3.1	7300	Bagno et al. (1991)	T	475
		7300	Della Gatta et al. (1981)	T	
2-octanone $\text{C}_6\text{H}_{13}\text{COCH}_3$ [111-13-7] ZPVFWPFBNIEHGJ-UHFFFAOYSA-N	5.0×10^{-2}	7500	Brockbank (2013)	L	1, 483
	5.8×10^{-2}		Plyasunov and Shock (2001)	L	
	2.9×10^{-2}		van Ruth et al. (2002)	M	14
	3.1×10^{-2}		van Ruth and Villeneuve (2002)	M	14, 363
	1.8×10^{-2}		van Ruth et al. (2001)	M	14
	5.2×10^{-2}		Buttery et al. (1969)	M	
	4.9×10^{-2}		Mackay et al. (2006c)	V	
	4.9×10^{-2}		Mackay et al. (1995)	V	
	5.5×10^{-2}		Rathbun and Tai (1982)	V	

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.1×10^{-2}		Keshavarz et al. (2022)	Q	
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	185
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	272, 244
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	5.1×10^{-2}		Hilal et al. (2008)	Q	
	1.2×10^{-1}		Modarresi et al. (2007)	Q	68
		7300	Kühne et al. (2005)	Q	
	5.2×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	5.1×10^{-2}		English and Carroll (2001)	Q	231, 232
	2.0×10^{-2}		Katritzky et al. (1998)	Q	
	5.7×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	3.3×10^{-2}		Russell et al. (1992)	Q	280
	5.3×10^{-2}		Suzuki et al. (1992)	Q	233
	5.2×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	5.2×10^{-2}		Mackay et al. (2006c)	?	21
		7300	Kühne et al. (2005)	?	
	9.6×10^{-2}		Yaws (1999)	?	21, 12
	1.5×10^{-1}		Yaws et al. (1998)	?	12
	5.2×10^{-2}		Abraham et al. (1990)	?	
3-octanone $\text{C}_8\text{H}_{16}\text{O}$ [106-68-3] RHLVCLIPMVJYKS-UHFFFAOYSA-N	4.3×10^{-2}	6900	Brockbank (2013)	L	1
	2.9×10^{-2}	5800	Wu et al. (2022a)	M	484
	7.6×10^{-2}		HSDB (2015)	V	
	2.5×10^{-2}		Wang et al. (2017)	Q	81, 239
	4.2×10^{-2}		Wang et al. (2017)	Q	81, 240
	1.3×10^{-1}		Wang et al. (2017)	Q	81, 241
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	272, 244
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	1.1×10^{-1}		Modarresi et al. (2007)	Q	68
4-octanone $\text{C}_8\text{H}_{16}\text{O}$ [589-63-9] YWXLSHOWXZUMSR-UHFFFAOYSA-N	3.6×10^{-2}		Hilal et al. (2008)	Q	
5-methyl-3-heptanone $\text{C}_8\text{H}_{16}\text{O}$ [541-85-5] PSBKJPTZCVYXSD-UHFFFAOYSA-N	5.0×10^{-2}		Ebert et al. (2023)	?	317
6-methyl-3-heptanone $\text{C}_8\text{H}_{16}\text{O}$ [624-42-0] CCCIYAQYQZQDIZ-UHFFFAOYSA-N	3.7×10^{-2}		HSDB (2015)	Q	100

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cyclohexyl methyl ketone $\text{C}_6\text{H}_{11}\text{COCH}_3$ [823-76-7] RIFKADJTWUGDOV-UHFFFAOYSA-N	2.9×10^{-1}	7200	Bagno et al. (1991)	T	475
	7.1×10^{-2}		Keshavarz et al. (2022)	Q	
	9.9×10^{-2}		Duchowicz et al. (2020)	Q	185
	4.1×10^{-1}		Hilal et al. (2008)	Q	
	4.2×10^{-1}		Modarresi et al. (2007)	Q	68
	2.3×10^{-1}		English and Carroll (2001)	Q	231, 232
	3.1×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	2.9×10^{-1}		Duchowicz et al. (2020)	?	186, 21
2-nonanone $\text{C}_9\text{H}_{18}\text{O}$ [821-55-6] VKCYHJWLVTUGCC-UHFFFAOYSA-N	3.2×10^{-2}	7400	Brockbank (2013)	L	1, 485
	3.7×10^{-2}	7500	Plyasunov and Shock (2001)	L	
	4.1×10^{-2}		Li and Carr (1993)	M	
	2.7×10^{-2}		Buttery et al. (1969)	M	
		7600	Abraham (1984)	V	
	2.1×10^{-2}		Yaws (2003)	X	259
	1.1×10^{-1}		Dupeux et al. (2022)	Q	260
	9.6×10^{-2}		Keshavarz et al. (2022)	Q	
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	300
	4.1×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	4.1×10^{-2}		Hilal et al. (2008)	Q	
	1.0×10^{-1}		Modarresi et al. (2007)	Q	68
		7600	Kühne et al. (2005)	Q	
	2.7×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	3.9×10^{-2}		English and Carroll (2001)	Q	231, 232
	1.3×10^{-2}		Katritzky et al. (1998)	Q	
	4.4×10^{-2}		Nirmalakhandan et al. (1997)	Q	
4.0×10^{-2}		Suzuki et al. (1992)	Q	233	
2.7×10^{-2}		Duchowicz et al. (2020)	?	186, 21	
	8100	Kühne et al. (2005)	?		
2.9×10^{-2}		Yaws et al. (1998)	?		
2.7×10^{-2}		Abraham et al. (1990)	?		
3-nonanone $\text{C}_9\text{H}_{18}\text{O}$ [925-78-0] IYTXKIXETAELAV-UHFFFAOYSA-N	5.1×10^{-2}	6600	Brockbank (2013)	L	
	2.2×10^{-2}		Wang et al. (2017)	Q	81, 239
	3.2×10^{-2}		Wang et al. (2017)	Q	81, 240
	1.2×10^{-1}		Wang et al. (2017)	Q	81, 241
5-nonanone $\text{C}_9\text{H}_{18}\text{O}$ (dibutyl ketone) [502-56-7] WSGCRAOTEDLMFQ-UHFFFAOYSA-N	4.0×10^{-2}	8000	Brockbank (2013)	L	1
	3.5×10^{-2}		Duchowicz et al. (2020)	V	187
	3.5×10^{-2}		HSDB (2015)	V	
	3.4×10^{-2}		Meylan and Howard (1991)	V	
	3.7×10^{-2}		Cabani et al. (1981)	V	
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	
2.7×10^{-2}		Hilal et al. (2008)	Q		

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	9.0×10^{-2}	7600	Modarresi et al. (2007)	Q	68
	2.7×10^{-2}		Kühne et al. (2005)	Q	
	3.9×10^{-2}	7900	Yaffe et al. (2003)	Q	249, 273
	4.7×10^{-2}		English and Carroll (2001)	Q	231, 232
	3.6×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	3.4×10^{-2}		Meylan and Howard (1991)	Q	
	3.5×10^{-2}		Kühne et al. (2005)	?	
			Yaws et al. (1998)	?	38
			Abraham et al. (1990)	?	
2,6-dimethyl-4-heptanone $\text{C}_9\text{H}_{18}\text{O}$ (diisobutyl ketone) [108-83-8] PTTPXKJBBFKCEK-UHFFFAOYSA-N	1.3×10^{-2}	7500	Brockbank (2013)	L	1
	1.3×10^{-2}		Plyasunov and Shock (2001)	L	
	8.4×10^{-2}	7600	Duchowicz et al. (2020)	V	187
	8.2×10^{-2}		HSDB (2015)	V	
	4.9×10^{-3}		Duchowicz et al. (2020)	Q	
	3.1×10^{-2}		Hilal et al. (2008)	Q	
	1.1×10^{-1}		Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	
	8.6×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	1.2×10^{-2}		Katritzky et al. (1998)	Q	
			Kühne et al. (2005)	?	
	8.3×10^{-2}		Yaws (1999)	?	21, 80
	9.2×10^{-2}	Yaws et al. (1998)	?	80	
2,2,4,4-tetramethyl-3-pentanone $\text{C}_9\text{H}_{18}\text{O}$ (di- <i>tert</i> -butyl ketone) [815-24-7] UIQGEWJEWJMQSL-UHFFFAOYSA-N	2.3×10^{-2}		Bagno et al. (1991)	T	475
2-decanone $\text{C}_8\text{H}_{17}\text{COCH}_3$ [693-54-9] ZAJNGDIORYACQU-UHFFFAOYSA-N	1.8×10^{-2}		van Ruth et al. (2002)	M	14
	1.5×10^{-2}		van Ruth and Villeneuve (2002)	M	14, 363
	1.5×10^{-2}		van Ruth et al. (2001)	M	14
	2.1×10^{-2}		Abraham (1984)	V	
	1.7×10^{-2}		Yaws (2003)	X	259
	9.2×10^{-2}		Dupeux et al. (2022)	Q	260
	4.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.4×10^{-2}		Hilal et al. (2008)	Q	
	8.0×10^{-2}		Modarresi et al. (2007)	Q	68
	2.7×10^{-2}		Yaffe et al. (2003)	Q	249, 273
	3.1×10^{-2}		English and Carroll (2001)	Q	231, 261
	1.4×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.4×10^{-2}		Yaws et al. (1998)	?	
	2.1×10^{-2}		Abraham et al. (1990)	?	

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-undecanone $\text{C}_9\text{H}_{19}\text{COCH}_3$ [112-12-9] KYWIYKKSMDLRDC-UHFFFAOYSA-N	1.9×10^{-2}		Plyasunov and Shock (2001)	L	
	1.6×10^{-2}		Buttery et al. (1969)	M	
	1.8×10^{-2}		Yaws (2003)	X	259
	1.7×10^{-2}		Yaws (2003)	X	238
	7.6×10^{-2}		Dupeux et al. (2022)	Q	260
	1.8×10^{-1}		Keshavarz et al. (2022)	Q	
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	300
	1.5×10^{-2}		Li et al. (2014)	Q	242
	4.1×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	2.2×10^{-2}		Gharagheizi et al. (2010)	Q	247
	2.7×10^{-2}		Hilal et al. (2008)	Q	
	6.3×10^{-2}		Modarresi et al. (2007)	Q	68
	1.6×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	2.3×10^{-2}		English and Carroll (2001)	Q	231, 232
	1.2×10^{-2}		Katritzky et al. (1998)	Q	
	2.8×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	2.4×10^{-2}		Suzuki et al. (1992)	Q	233
	1.6×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	5.8×10^{-3}		Yaws et al. (1998)	?	
	1.5×10^{-2}		Abraham et al. (1990)	?	
6-undecanone $\text{C}_{11}\text{H}_{22}\text{O}$ [927-49-1] ZPQAKYPOZRKFA-UHFFFAOYSA-N	1.5×10^{-2}		Hilal et al. (2008)	Q	
	6.9×10^{-2}		Modarresi et al. (2007)	Q	68
2-dodecanone $\text{C}_{12}\text{H}_{24}\text{O}$ [6175-49-1] LSKONYRONEBKA-UHFFFAOYSA-N	4.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.1×10^{-3}		Yaws et al. (1998)	?	
2,6,8-trimethyl-4-nonanone $\text{C}_{12}\text{H}_{24}\text{O}$ [123-18-2] GFWVDQCGDBTBS-UHFFFAOYSA-N			Brockbank (2013)	W	486
2-tridecanone $\text{C}_{13}\text{H}_{26}\text{O}$ [593-08-8] CYIFVRUOHKNECG-UHFFFAOYSA-N	4.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	6.7×10^{-4}		Yaws et al. (1998)	?	
2-tetradecanone $\text{C}_{14}\text{H}_{28}\text{O}$ [2345-27-9] POQLVOYRGNFGRM-UHFFFAOYSA-N	4.7×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.1×10^{-4}		Yaws et al. (1998)	?	

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-pentadecanone $\text{C}_{15}\text{H}_{30}\text{O}$ [2345-28-0] CJPNOLIZCWDHJK-UHFFFAOYSA-N	5.4×10^{-5}		Yaws et al. (1998)	?	
2-hexadecanone $\text{C}_{16}\text{H}_{32}\text{O}$ [18787-63-8] XCXKZBWAKKPCJ-UHFFFAOYSA-N	1.7×10^{-5}		Yaws et al. (1998)	?	
2-heptadecanone $\text{C}_{17}\text{H}_{34}\text{O}$ [2922-51-2] TVTCXPXLRKTHAU-UHFFFAOYSA-N	3.9×10^{-6}		Yaws et al. (1998)	?	
menthone $\text{C}_{10}\text{H}_{18}\text{O}$ [89-80-5] NFLGAXVYCFJBMK-UHFFFAOYSA-N	5.7×10^{-2} 5.0×10^{-2} 6.2×10^{-2} 5.8×10^{-2}		Marin et al. (1999) Marin et al. (1999) HSDB (2015) Marin et al. (1999)	M V Q Q	100
tricyclo[3.3.1.1(3,7)]decanone $\text{C}_{10}\text{H}_{14}\text{O}$ (2-adamantanone) [700-58-3] IYKFYARMMIESOX-UHFFFAOYSA-N	1.4 7.5×10^{-1}	5800	van Roon et al. (2005) Cabani et al. (1981)	V V	
methyl cedryl ketone $\text{C}_{17}\text{H}_{26}\text{O}$ [32388-55-9] YBUIAJZFOGJGLJ-SWRJLBSHSA-N	6.1		Dupeux et al. (2022)	Q	260
3-buten-2-one $\text{C}_4\text{H}_6\text{O}$ (methyl vinyl ketone; MVK) [78-94-4] FUSUHKVFWTUUBE-UHFFFAOYSA-N	4.0×10^{-1} 4.0×10^{-1} 2.6×10^{-1} 4.0×10^{-1} 2.1×10^{-1} 1.6×10^{-1} 1.1×10^{-1} 1.5×10^{-1} 3.1×10^{-1} 7.8×10^{-1} 2.0×10^{-1} 2.0×10^{-1} 3.9×10^{-1} 1.8×10^{-1} 7.1×10^{-1} 2.1×10^{-1}	4800 7800 6000 7800	Burkholder et al. (2019) Burkholder et al. (2015) Ji and Evans (2007) Iraci et al. (1999) Allen et al. (1998) Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Duchowicz et al. (2020) Kühne et al. (2005)	L L M M M Q Q Q Q Q Q Q Q Q Q Q Q Q ?	185 81, 239 81, 240 81, 241 272, 244 245 246 68 186, 21

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
	9.5×10^{-1}	6700	Duchowicz et al. (2020)	?	186, 21	
	1.1		Kühne et al. (2005)	?		
	9.2×10^{-1}		Yaws (1999)	?	21	
			Abraham et al. (1990)	?		
1-phenylethanone-d5 $\text{C}_6\text{D}_5\text{COCH}_3$ (acetophenone-d5) [28077-64-7] KWOLFJPFCHCOCG-VIQYUKPQSA-N	2.3	10000	Hiatt (2013)	M		
4-methoxy-4-methyl-2-pentanone $\text{C}_7\text{H}_{14}\text{O}_2$ [107-70-0] KOKPBCHLPVDQTK-UHFFFAOYSA-N	5.1	8400	Duchowicz et al. (2020)	V	187	
	5.1		HSDB (2015)	V		
	2.2×10^{-1}		Duchowicz et al. (2020)	Q		
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	272, 244	
	2.0		Raventos-Duran et al. (2010)	Q	245	
	7.8		Raventos-Duran et al. (2010)	Q	246	
	1.8		Hilal et al. (2008)	Q		
	2.4	Modarresi et al. (2007)	Q	68		
2'-hydroxyacetophenone $\text{C}_8\text{H}_8\text{O}_2$ [118-93-4] JECYUBVRTQDVAT-UHFFFAOYSA-N	1.0	8400	Ji et al. (2008)	M		
6-methyl-5-hepten-2-one $\text{C}_8\text{H}_{14}\text{O}$ [110-93-0] UHEPJGULSIKKTU-UHFFFAOYSA-N	1.2×10^{-1}	6200	Wu et al. (2022b)	M		
	2.5×10^{-1}		Dupeux et al. (2022)	Q	260	
phenyl ethyl ketone $\text{C}_9\text{H}_{10}\text{O}$ (propiophenone) [93-55-0] KRIOVPPHQLHCZ-UHFFFAOYSA-N	9.9×10^{-1}	7900	Ji et al. (2008)	M		
	6.6×10^{-1}		Duchowicz et al. (2020)	V	187	
	7.6×10^{-2}		HSDB (2015)	V		
	2.2×10^{-1}		Duchowicz et al. (2020)	Q		
	1.9		Wang et al. (2017)	Q	81, 239	
	1.4		Wang et al. (2017)	Q	81, 240	
	9.1×10^{-1}		Wang et al. (2017)	Q	81, 241	
	7.5×10^{-1}		Zhang et al. (2010)	Q	288, 289	
	7.2×10^{-1}		Zhang et al. (2010)	Q	288, 290	
	1.6		Zhang et al. (2010)	Q	288, 291	
	9.7×10^{-1}		Zhang et al. (2010)	Q	288, 292	
	8.6×10^{-1}		Hilal et al. (2008)	Q		
	8.0×10^{-1}		Modarresi et al. (2007)	Q	68	
			6400	Kühne et al. (2005)	Q	
	7.9×10^{-2}		Yaffe et al. (2003)	Q	249, 250	
	2.9×10^{-1}	Katritzky et al. (1998)	Q			
		7700	Kühne et al. (2005)	?		

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2'-methylacetophenone $\text{C}_9\text{H}_{10}\text{O}$ [577-16-2] YXWWHNCQZBVZPV-UHFFFAOYSA-N	7.6×10^{-1} 1.2 2.4 1.3	7600	Ji et al. (2008) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	M Q Q Q	 81, 239 81, 240 81, 241
3'-methylacetophenone $\text{C}_9\text{H}_{10}\text{O}$ [585-74-0] FSPSELPMWGWDRY-UHFFFAOYSA-N	1.5	7600	Ji et al. (2008)	M	
4'-methylacetophenone $\text{C}_9\text{H}_{10}\text{O}$ [122-00-9] GNKZMNRKLTJAY-UHFFFAOYSA-N	1.8 1.1 4.3 1.2 1.2 9.5×10^{-1} 3.8×10^{-1}	8400	Ji et al. (2008) Abraham et al. (1994a) Abney (2021) Hilal et al. (2008) Yaffe et al. (2003) English and Carroll (2001) Nirmalakhandan et al. (1997)	M R Q Q Q Q Q	 401 249, 250 231, 261
2'-methoxyacetophenone $\text{C}_9\text{H}_{10}\text{O}_2$ (2-methoxyphenyl methyl ketone) [579-74-8] DWPLEOPKBWNPQV-UHFFFAOYSA-N	1.7×10^1	9500	Ji et al. (2008)	M	
3'-methoxyacetophenone $\text{C}_9\text{H}_{10}\text{O}_2$ (3-methoxyphenyl methyl ketone) [586-37-8] BAYUSCHCCGXLAY-UHFFFAOYSA-N	1.9×10^1	9400	Ji et al. (2008)	M	
4'-methoxyacetophenone $\text{C}_9\text{H}_{10}\text{O}_2$ (4-methoxyphenyl methyl ketone) [100-06-1] NTPLXRHDUXRPNE-UHFFFAOYSA-N	6.8×10^{-1} 6.9 1.4 1.3		Bagno et al. (1991) Hilal et al. (2008) English and Carroll (2001) Nirmalakhandan et al. (1997)	T Q Q Q	475 231, 232
2-methyl-5-(1-methylethenyl)-2-cyclohexen-1-one $\text{C}_{10}\text{H}_{14}\text{O}$ (carvone) [6485-40-1] ULDHMXUKGWMISQ-SECBINFHSA-N	4.9×10^{-1} 5.5×10^{-1} 8.0×10^{-1}		Amoore and Buttery (1978) Amoore and Buttery (1978) Hilal et al. (2008)	M V Q	
benzophenone $\text{C}_{13}\text{H}_{10}\text{O}$ (diphenyl ketone) [119-61-9] RWCCWEUUXYIKHB-UHFFFAOYSA-N	1.7×10^1 6.1 1.7 9.6 5.2 5.1 2.9	9400	Mackay et al. (2006c) Bagno et al. (1991) Yaws (2003) Dupeux et al. (2022) HSDB (2015) Zhang et al. (2010) Zhang et al. (2010)	V T X Q Q Q Q	 475 259 260 100 288, 289 288, 290

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.6×10^1		Zhang et al. (2010)	Q	288, 291
	3.4×10^1		Zhang et al. (2010)	Q	288, 292
	1.7		Yaws (1999)	?	21
2,4-dihydroxybenzophenone $\text{C}_{13}\text{H}_{10}\text{O}_3$ [131-56-6] ZXDDPOHVAMWLBH-UHFFFAOYSA-N	4.6×10^5		Abraham et al. (2019)	Q	
3,5,5-trimethyl-2-cyclohexen-1-one $\text{C}_9\text{H}_{14}\text{O}$ (isophorone) [78-59-1] HJOVHMDZYOCNQW-UHFFFAOYSA-N	1.5		Duchowicz et al. (2020)	V	187
	1.5		HSDB (2015)	V	
	1.7		Mackay et al. (2006d)	V	
	1.7		Hwang et al. (1992)	V	
	1.7		Suntio et al. (1988)	V	12
	1.7	3900	Goldstein (1982)	X	299
	1.8		Suntio et al. (1988)	C	12
	1.7×10^{-2}		Duchowicz et al. (2020)	Q	
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	6.9×10^{-1}		Hilal et al. (2008)	Q	
	1.3		Modarresi et al. (2007)	Q	68
		7300	Kühne et al. (2005)	Q	
	1.5		Yaffe et al. (2003)	Q	249, 250
	1.2×10^{-1}		Katritzky et al. (1998)	Q	
		7400	Kühne et al. (2005)	?	
	1.5		Yaws (1999)	?	21
bicyclo[2.2.1]heptan-2-one $\text{C}_7\text{H}_{10}\text{O}$ (norcamphor; 2-norbornanone) [497-38-1] KPMKEVXVHNIEY-UHFFFAOYSA-N	4.3×10^{-1}	5100	van Roon et al. (2005)	V	
4-methyl-1-(1-methylethyl)- bicyclo[3.1.0]hexan-3-one $\text{C}_{10}\text{H}_{16}\text{O}$ (thujone) [1125-12-8] USMNOWBWPBYOEA-UHFFFAOYSA-N	1.0×10^{-1}	4700	van Roon et al. (2005)	V	
isopropyl phenyl ketone $\text{C}_{10}\text{H}_{12}\text{O}$ [611-70-1] BSMGLVDZZMBWQB-UHFFFAOYSA-N	5.7×10^{-1}		Zhang et al. (2010)	Q	288, 289
	3.9×10^{-1}		Zhang et al. (2010)	Q	288, 290
	1.7		Zhang et al. (2010)	Q	288, 291
	8.2×10^{-1}		Zhang et al. (2010)	Q	288, 292

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
carvone $\text{C}_{10}\text{H}_{14}\text{O}$ [99-49-0] ULDHMXUKGWMISQ-UHFFFAOYSA-N	1.3×10^{-1}		HSDB (2015)	Q	100
thujone $\text{C}_{10}\text{H}_{16}\text{O}$ [76231-76-0] USMNOWBWPHYOEA-VWHDNNRLSA-N	6.2×10^{-1}		HSDB (2015)	Q	100
<i>cis</i> -jasmone $\text{C}_{11}\text{H}_{16}\text{O}$ [488-10-8] XMLSXPIVAXONDL-PLNGDYQASA-N	5.2		Dupeux et al. (2022)	Q	260
α -damascone $\text{C}_{13}\text{H}_{20}\text{O}$ [24720-09-0] CRIGTVCBMUKRSL-FNORWQNLSA-N	2.1×10^1		Abney (2021)	Q	401
(<i>E</i>)- β -damascenone $\text{C}_{13}\text{H}_{18}\text{O}$ [23726-93-4] POIARNZEYGURDG-FNORWQNLSA-N	3.2×10^{-1}	4600	Wieland et al. (2015)	M	487
9H-fluoren-9-one $\text{C}_{13}\text{H}_8\text{O}$ [486-25-9] YLQWCDOCJODRMT-UHFFFAOYSA-N	6.4 1.5×10^1 2.3×10^1		Abraham et al. (2019) HSDB (2015) Parnis et al. (2015)	Q Q Q	 100 371
anthrone $\text{C}_{14}\text{H}_{10}\text{O}$ [90-44-8] RJGDLRCDCYRQOQ-UHFFFAOYSA-N	1.2×10^1		HSDB (2015)	Q	100
1,2,3,5,6,7-hexahydro-1,1,2,3,3-pentamethyl-4H-inden-4-one $\text{C}_{14}\text{H}_{22}\text{O}$ [33704-61-9] MIZGSAALSARKU-UHFFFAOYSA-N	7.0×10^{-2} 6.7×10^{-3} 2.0×10^1 4.8×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
benzoin $\text{C}_{14}\text{H}_{12}\text{O}_2$ [119-53-9] ISAOCJYIOMOJEB-UHFFFAOYSA-N	2.2×10^5		Abraham et al. (2019)	Q	
methyl-alpha-ionone $\text{C}_{14}\text{H}_{22}\text{O}$ [93302-56-8] VPKMGDRERYMTJX-XEHSLEBBSA-N	1.2		Dupeux et al. (2022)	Q	260

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
iso-e super $\text{C}_{16}\text{H}_{26}\text{O}$ [54464-57-2] FVUGZKDGWKGCFE-UHFFFAOYSA-N	5.5×10^{-1}		Dupeux et al. (2022)	Q	260
2,4,6-trimethylbenzophenone $\text{C}_{16}\text{H}_{16}\text{O}$ [954-16-5] HPAFOABSQZMTHE-UHFFFAOYSA-N	3.8 3.8 1.5×10^1 6.0		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one $\text{C}_{16}\text{H}_{26}\text{O}$ [68155-66-8] NOMWSTMYQKABST-UHFFFAOYSA-N	2.5×10^{-2} 3.0×10^{-1} 1.1×10^1 4.0×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
civetone $\text{C}_{17}\text{H}_{30}\text{O}$ [542-46-1] ZKVZSBSZTMPBQR-UPHRSURJSA-N	3.0		Dupeux et al. (2022)	Q	260
1-(2,3-dihydro-1,1,2,3,3,6-hexamethyl-1H-inden-5-yl)ethanone $\text{C}_{17}\text{H}_{24}\text{O}$ [15323-35-0] VDBHOHJWUDKDRW-UHFFFAOYSA-N	3.1×10^{-1} 2.0 5.2 9.9×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
celestolide $\text{C}_{17}\text{H}_{24}\text{O}$ [13171-00-1] IKTHMQYJOWTSJO-UHFFFAOYSA-N	3.1×10^{-1} 2.4 3.1 8.8×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
7H-benz[de]anthracen-7-one $\text{C}_{17}\text{H}_{10}\text{O}$ (benzanthrone) [82-05-3] HUKPVYBUJRAUAG-UHFFFAOYSA-N	1.5×10^2 8.0×10^2		HSDB (2015) Parnis et al. (2015)	Q Q	100 371
11H-benzo[a]fluoren-11-one $\text{C}_{17}\text{H}_{10}\text{O}$ [479-79-8] RNICURKFVSAHLQ-UHFFFAOYSA-N	7.2×10^1		Parnis et al. (2015)	Q	371
11H-benzo[b]fluoren-11-one $\text{C}_{17}\text{H}_{10}\text{O}$ [3074-03-1] MLMNDNOSVOKYMT-UHFFFAOYSA-N	5.4×10^4		Parnis et al. (2015)	Q	371

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
9,10-phenanthredione $C_{14}H_8O_2$ [84-11-7] YVYAPXYZVYDHN-UHFFFAOYSA-N	3.7×10^3		HSDB (2015)	Q	449
9,10-anthracenedione $C_{14}H_8O_2$ [84-65-1] RZVHIXYEVGDQDX-UHFFFAOYSA-N	4.2×10^2 4.2×10^2 1.1×10^{-1} 4.9×10^2 1.6×10^2 3.1×10^3 5.6×10^2 1.7×10^2 2.5×10^4 1.1×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Duchowicz et al. (2020) Parnis et al. (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Gharagheizi et al. (2010)	V V X Q Q Q Q Q Q	187 238 288, 289 288, 290 288, 291 288, 292 247
2-hydroxy-9,10-anthracenedione $C_{14}H_8O_3$ [605-32-3] GCDBEYOJCZLKMC-UHFFFAOYSA-N	5.4×10^5 2.8×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
1,4-dihydroxy-9,10-anthracenedione $C_{14}H_8O_4$ [81-64-1] GUEIZVNYDFNHJU-UHFFFAOYSA-N	1.2×10^2 1.4×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
benzil $C_{14}H_{10}O_2$ [134-81-6] WURBFLDFSFBTLW-UHFFFAOYSA-N	3.0×10^1		Abraham et al. (2019)	Q	
dibenzoylmethane $C_{15}H_{12}O_2$ [120-46-7] NZZIMKJIVMHWJC-UHFFFAOYSA-N	7.5×10^3 8.0×10^2 6.9×10^4 1.3×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2-methyl-9,10-anthracenedione $C_{15}H_{10}O_2$ [84-54-8] NJWQARXZDRHCD-UHFFFAOYSA-N	2.4×10^2		Parnis et al. (2015)	Q	371
2-ethyl-9,10-anthracenedione $C_{16}H_{12}O_2$ [84-51-5] SJEBAWHUJDUKQK-UHFFFAOYSA-N	2.6×10^1 2.1×10^3 4.2×10^2 1.6×10^2 1.1×10^4		Abraham et al. (2019) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
diphenadione $\text{C}_{23}\text{H}_{16}\text{O}_3$ [82-66-6] JYGLAHS AISAEAL-UHFFFAOYSA-N	6.4×10^4 2.9×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
MCM:CH3COCO3H $\text{C}_3\text{H}_4\text{O}_4$ BXASKOSTAOGNPV-UHFFFAOYSA-N	6.6×10^4 4.7×10^2 4.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HYPERACET $\text{C}_3\text{H}_6\text{O}_3$ LSIGHSKIPNHVEN-UHFFFAOYSA-N	5.0×10^3 2.1×10^2 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BIACETOOH $\text{C}_4\text{H}_6\text{O}_4$ JYWVDPVJSGSFMU-UHFFFAOYSA-N	2.6×10^6 1.2×10^4 5.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2C3CO3H $\text{C}_4\text{H}_6\text{O}_4$ SJOPHMGAZWPERQ-UHFFFAOYSA-N	5.1×10^4 6.2×10^3 2.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MEKAOOH $\text{C}_4\text{H}_8\text{O}_3$ VEPDQRXPXKSSVPR-UHFFFAOYSA-N	4.0×10^3 6.3×10^3 1.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MEKBOOH $\text{C}_4\text{H}_8\text{O}_3$ ISENHDUDKGYVAU-UHFFFAOYSA-N	4.7×10^3 7.4×10^1 2.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MEKCOOH $\text{C}_4\text{H}_8\text{O}_3$ PSPWSCBXMKHAFFW-UHFFFAOYSA-N	4.0×10^3 1.0×10^2 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MVKOOH $\text{C}_4\text{H}_6\text{O}_3$ PRFKYXWFQJOCGY-UHFFFAOYSA-N	1.1×10^4 2.6×10^2 9.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C41CO3H $\text{C}_5\text{H}_8\text{O}_4$ FAYQBJFLFGPEOW-UHFFFAOYSA-N	4.8×10^4 2.0×10^3 3.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5CO14OOH $\text{C}_5\text{H}_6\text{O}_4$ FKGAAIITVQJZMS-UHFFFAOYSA-N	2.0×10^5 7.8×10^4 4.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5CO234 $\text{C}_5\text{H}_6\text{O}_3$ MVDYEFQVZNBPPH-UHFFFAOYSA-N	2.1×10^4 2.2×10^3 2.5×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C5CO234OOH C ₅ H ₆ O ₅ XNGUZQHZGCMOHY-UHFFFAOYSA-N	1.6 × 10 ⁹ 3.0 × 10 ⁶ 1.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5CO23OOH C ₅ H ₈ O ₄ BRUGMCFWMGXRAP-UHFFFAOYSA-N	2.4 × 10 ⁶ 5.3 × 10 ³ 3.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO23C4CO3H C ₅ H ₆ O ₅ BRGQKBIYWSYIOL-UHFFFAOYSA-N	3.2 × 10 ⁷ 4.5 × 10 ⁵ 4.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO23C54OOH C ₅ H ₈ O ₄ QASRSSCEZIIDD-C-UHFFFAOYSA-N	2.5 × 10 ⁶ 4.0 × 10 ³ 2.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO24C53OOH C ₅ H ₈ O ₄ AULGAHCEUUOLTF-UHFFFAOYSA-N	2.5 × 10 ⁶ 2.1 × 10 ⁴ 8.7 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2C4CO3H C ₅ H ₈ O ₄ COVHHGSUFOLHW-UHFFFAOYSA-N	1.9 × 10 ⁴ 4.8 × 10 ⁴ 1.3 × 10 ⁴ 7.1 × 10 ¹	12000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:CO3C4CO3H C ₅ H ₈ O ₄ HMOQHXYQXPCOJD-UHFFFAOYSA-N	4.8 × 10 ⁴ 2.5 × 10 ³ 1.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DIEKAOOH C ₅ H ₁₀ O ₃ GVIFMISHBUBLQF-UHFFFAOYSA-N	3.7 × 10 ³ 3.6 × 10 ¹ 1.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DIEKBOOH C ₅ H ₁₀ O ₃ PNIUWVGTVWVIRO-UHFFFAOYSA-N	3.2 × 10 ³ 3.4 × 10 ³ 3.0 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MIPKAOOH C ₅ H ₁₀ O ₃ UWVYZAHMDOAIIN-UHFFFAOYSA-N	2.6 × 10 ³ 1.6 × 10 ¹ 9.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MIPKBOOH C ₅ H ₁₀ O ₃ OWEKNVJRJSTQCB-UHFFFAOYSA-N	3.7 × 10 ³ 3.2 × 10 ³ 6.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MPRKAOOH C ₅ H ₁₀ O ₃ RFXMBEJILJIJHO-UHFFFAOYSA-N	3.7 × 10 ³ 4.0 × 10 ¹ 8.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MPRKBOOH $\text{C}_5\text{H}_{10}\text{O}_3$ BOKMIGXVNYNOOE-UHFFFAOYSA-N	3.7×10^3 2.3×10^3 8.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PE2ONE1OOH $\text{C}_5\text{H}_{10}\text{O}_3$ NFPIZNOAHNBIPJ-UHFFFAOYSA-N	3.2×10^3 5.8×10^1 3.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C23C54CO3H $\text{C}_6\text{H}_8\text{O}_5$ FOQTZZGGVXWRDJ-UHFFFAOYSA-N	3.0×10^7 1.7×10^5 2.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3COCCO3H $\text{C}_6\text{H}_{10}\text{O}_4$ NQEAGXBSWAEEJ-UHFFFAOYSA-N	3.7×10^4 1.4×10^3 2.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4DBDIKET $\text{C}_6\text{H}_8\text{O}_2$ OTSKZNVZOOHRX-UHFFFAOYSA-N	1.0×10^2 1.8×10^3 2.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C51CO3H $\text{C}_6\text{H}_{10}\text{O}_4$ JNOBNCRVAKFDO-UHFFFAOYSA-N	4.5×10^4 3.7×10^3 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5CODBCO3H $\text{C}_6\text{H}_8\text{O}_4$ DSQMAYIDJPXZOY-UHFFFAOYSA-N	1.3×10^5 5.6×10^4 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5DBCOCO3H $\text{C}_6\text{H}_8\text{O}_4$ NVTHKHSWEVMOZ-UHFFFAOYSA-N	1.3×10^5 5.4×10^4 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C611OOH $\text{C}_6\text{H}_{10}\text{O}_4$ YTLUYDMGHZZGIK-UHFFFAOYSA-N	1.4×10^6 3.1×10^3 1.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C619OOH $\text{C}_6\text{H}_8\text{O}_4$ CLPCTPYJHZPKKC-UHFFFAOYSA-N	6.0×10^6 3.0×10^6 1.9×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C627OOH $\text{C}_6\text{H}_{10}\text{O}_4$ BKNNHKNNGIDPKB-UHFFFAOYSA-N	1.9×10^6 2.3×10^5 5.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C62OOH $\text{C}_6\text{H}_8\text{O}_5$ NRJLAAIGKSDANL-UHFFFAOYSA-N	1.5×10^9 1.4×10^6 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CO134OOH $\text{C}_6\text{H}_8\text{O}_5$ KXHHBNOARBHHNQ-UHFFFAOYSA-N	2.5×10^7 2.3×10^5 3.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C6CO34 $\text{C}_6\text{H}_{10}\text{O}_2$ KVFQMAZOBTXCAZ-UHFFFAOYSA-N	2.6×10^1 5.4 1.1×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CO34OOH $\text{C}_6\text{H}_{10}\text{O}_4$ GOPKJUXJYMJAQC-UHFFFAOYSA-N	2.3×10^6 2.0×10^3 1.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CYTONOOH $\text{C}_6\text{H}_6\text{O}_5$ JAWAIWJCBIXQU-UHFFFAOYSA-N	4.8×10^9 2.1×10^9 2.6×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6DCRBBOOH $\text{C}_6\text{H}_8\text{O}_4$ JRENYXREJDINFO-UHFFFAOYSA-N	1.5×10^5 2.9×10^4 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO234C6 $\text{C}_6\text{H}_8\text{O}_3$ FYLKBSXPBXZFJV-UHFFFAOYSA-N	1.7×10^4 1.1×10^3 2.0×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO234C6OOH $\text{C}_6\text{H}_8\text{O}_5$ RXZSKHWIVPRCNE-UHFFFAOYSA-N	1.5×10^9 1.1×10^6 4.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO235C6 $\text{C}_6\text{H}_8\text{O}_3$ POASQEFMMPWSLD-UHFFFAOYSA-N	1.7×10^4 3.1×10^3 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO235C6OOH $\text{C}_6\text{H}_8\text{O}_5$ OFEOQWJKJVUBKA-UHFFFAOYSA-N	1.3×10^9 2.9×10^6 1.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO23C65OOH $\text{C}_6\text{H}_{10}\text{O}_4$ QKJDOFMXAZMTSN-UHFFFAOYSA-N	2.3×10^6 9.6×10^4 3.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO23C6 $\text{C}_6\text{H}_{10}\text{O}_2$ MWVFEVNXHTDNF-UHFFFAOYSA-N	2.6×10^1 6.0 7.3×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO24C63OOH $\text{C}_6\text{H}_{10}\text{O}_4$ BCTNDVKHSPOTQH-UHFFFAOYSA-N	2.3×10^6 9.1×10^3 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO24C6 $\text{C}_6\text{H}_{10}\text{O}_2$ NDOGLIPWGGRQCO-UHFFFAOYSA-N	2.6×10^1 3.5×10^1 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO24C6OOH $\text{C}_6\text{H}_{10}\text{O}_4$ SLWLMHWJPVVUSV-UHFFFAOYSA-N	2.3×10^6 1.3×10^4 5.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CO24M3C5 $\text{C}_6\text{H}_{10}\text{O}_2$ GSOHKPVFCOWKPU-UHFFFAOYSA-N	3.0×10^1 2.1×10^1 1.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO25C6 $\text{C}_6\text{H}_{10}\text{O}_2$ OJVAMHKKJGICOG-UHFFFAOYSA-N	2.6×10^1 4.9×10^2 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO25C6OOH $\text{C}_6\text{H}_{10}\text{O}_4$ JXALTZPWVLRWQW-UHFFFAOYSA-N	2.3×10^6 6.6×10^4 6.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2C54CO3H $\text{C}_6\text{H}_{10}\text{O}_4$ CNZIZHTUCKWXKF-UHFFFAOYSA-N	4.5×10^4 3.8×10^3 4.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2M33CO3H $\text{C}_6\text{H}_{10}\text{O}_4$ NINAOMADVJMMOS-UHFFFAOYSA-N	2.6×10^4 7.1×10^2 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO3C54CO3H $\text{C}_6\text{H}_{10}\text{O}_4$ VXADHVSNPNTBLA-UHFFFAOYSA-N	4.5×10^4 8.7×10^2 1.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO3C5CO3H $\text{C}_6\text{H}_{10}\text{O}_4$ NEAYDZAAQZUWAX-UHFFFAOYSA-N	3.7×10^4 5.3×10^3 3.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CY6COCOOH $\text{C}_6\text{H}_8\text{O}_4$ PCNCBCRTMCKUHD-UHFFFAOYSA-N	6.0×10^6 1.1×10^8 4.5×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CY6DIONOOH $\text{C}_6\text{H}_8\text{O}_4$ WZMMYHNHRXLTAU-UHFFFAOYSA-N	6.0×10^6 2.2×10^7 5.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CYC613DION $\text{C}_6\text{H}_8\text{O}_2$ HJSLFCCWAKVHIW-UHFFFAOYSA-N	8.0×10^1 2.5×10^3 2.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CYC6DIONE $\text{C}_6\text{H}_8\text{O}_2$ OILAIQUEIWIYQPH-UHFFFAOYSA-N	8.0×10^1 6.5×10^2 8.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CYHXONAOOH $\text{C}_6\text{H}_{10}\text{O}_3$ YLRKXGGQIKRPE-UHFFFAOYSA-N	9.1×10^3 4.8×10^4 5.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ECO3CO3H $\text{C}_6\text{H}_6\text{O}_6$ LOIDTPBEOYVNRI-UHFFFAOYSA-N	2.0×10^{10} 2.6×10^7 1.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:EIPKAOOH $\text{C}_6\text{H}_{12}\text{O}_3$ UUAGRKYHKVSONO-UHFFFAOYSA-N	2.0×10^3 8.9 4.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EIPKBOOH $\text{C}_6\text{H}_{12}\text{O}_3$ GSVDUVPIILFIVQC-UHFFFAOYSA-N	2.9×10^3 1.7×10^3 5.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HEX2ONAOOH $\text{C}_6\text{H}_{12}\text{O}_3$ BPODHSIMBCVMGL-UHFFFAOYSA-N	2.9×10^3 1.4×10^3 2.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HEX2ONBOOH $\text{C}_6\text{H}_{12}\text{O}_3$ XXENGSKOCXRCDY-UHFFFAOYSA-N	2.9×10^3 3.5×10^3 1.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HEX2ONCOOH $\text{C}_6\text{H}_{12}\text{O}_3$ UIIPZQPVNWMUDI-UHFFFAOYSA-N	2.9×10^3 2.8×10^1 4.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HEX3ONAOOH $\text{C}_6\text{H}_{12}\text{O}_3$ ZKBVMKAKXKAOJC-UHFFFAOYSA-N	2.9×10^3 1.3×10^3 6.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HEX3ONBOOH $\text{C}_6\text{H}_{12}\text{O}_3$ CFZVDJFTDOASSJ-UHFFFAOYSA-N	2.9×10^3 2.2×10^1 9.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HEX3ONCOOH $\text{C}_6\text{H}_{12}\text{O}_3$ RCWXBCITQMXQRJ-UHFFFAOYSA-N	2.9×10^3 2.3×10^1 5.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HEX3ONDOOH $\text{C}_6\text{H}_{12}\text{O}_3$ GTTLVNDFVPDHBU-UHFFFAOYSA-N	2.5×10^3 2.2×10^3 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2BKAOOH $\text{C}_6\text{H}_{12}\text{O}_3$ UYZBTKCJJDJNOE-UHFFFAOYSA-N	3.5×10^3 1.6×10^3 8.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2BKBOOH $\text{C}_6\text{H}_{12}\text{O}_3$ HXTZBJMRLHBTDT-UHFFFAOYSA-N	2.0×10^3 1.1×10^1 3.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MIBK3CO $\text{C}_6\text{H}_{10}\text{O}_2$ JENYBWHRLYZSSZ-UHFFFAOYSA-N	3.0×10^1 5.1 5.9×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MIBK3COOOH $\text{C}_6\text{H}_{10}\text{O}_4$ REESTLWXXTVHDK-UHFFFAOYSA-N	1.4×10^6 8.9×10^2 6.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MIBKAOOH $\text{C}_6\text{H}_{12}\text{O}_3$ TVLYPTZVJFAYSU-UHFFFAOYSA-N	2.0×10^3 8.5×10^2 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MIBKBOOH $\text{C}_6\text{H}_{12}\text{O}_3$ NTAUGUQNNYBRPR-UHFFFAOYSA-N	3.5×10^3 3.2×10^1 3.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTBKOOH $\text{C}_6\text{H}_{12}\text{O}_3$ FSDVGLADHCPPED-UHFFFAOYSA-N	2.0×10^3 1.6×10^3 5.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C235C6CO3H $\text{C}_7\text{H}_8\text{O}_6$ MCULIRAVDBAPRO-UHFFFAOYSA-N	1.6×10^{10} 4.4×10^7 2.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C710OOH $\text{C}_7\text{H}_{14}\text{O}_3$ WMYMHKADBIKCY-UHFFFAOYSA-N	1.7×10^3 5.1×10^2 6.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C713OOH $\text{C}_7\text{H}_{12}\text{O}_4$ BVAIBJLRLSWCNT-UHFFFAOYSA-N	1.2×10^6 1.2×10^4 2.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C714OOH $\text{C}_7\text{H}_{12}\text{O}_4$ FQLJODGQMVISEK-UHFFFAOYSA-N	2.0×10^6 3.0×10^4 2.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C715OOH $\text{C}_7\text{H}_{10}\text{O}_5$ IFAJGMRYPBSYLP-UHFFFAOYSA-N	8.3×10^8 2.5×10^5 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7236CO $\text{C}_7\text{H}_8\text{O}_3$ ZXGNLLPQXKXPQ-UHFFFAOYSA-N	6.3×10^4 6.8×10^4 8.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C726CO5OOH $\text{C}_7\text{H}_{10}\text{O}_4$ DRGOPDAWFSWANX-UHFFFAOYSA-N	7.3×10^6 1.0×10^5 6.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C727CO $\text{C}_7\text{H}_{10}\text{O}_3$ XDJAUXXWCBLXGT-UHFFFAOYSA-N	1.6×10^4 5.6×10^3 6.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C727OOH $\text{C}_7\text{H}_{12}\text{O}_4$ IMCLYNFQESJQRO-UHFFFAOYSA-N	2.0×10^5 1.8×10^6 4.3×10^4 9.8×10^2	13000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C73OOH $C_7H_{10}O_5$ QFXLTANEYKLBH-UHFFFAOYSA-N	1.2×10^9 1.1×10^6 7.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C74OOH $C_7H_{10}O_5$ ZLQFKUKGFRBMM-UHFFFAOYSA-N	1.2×10^9 1.4×10^6 4.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C75OOH $C_7H_{14}O_3$ YNKHFYFADYHYPZ-UHFFFAOYSA-N	2.7×10^3 8.9×10^2 1.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7ADCCO3H $C_7H_{10}O_4$ KFHCVBUEDOHUEG-UHFFFAOYSA-N	8.5×10^4 6.5×10^4 5.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7BDICARB $C_7H_{10}O_2$ SGWFXGZCQBUONH-UHFFFAOYSA-N	6.9×10^1 1.4×10^3 3.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7DCCO3H $C_7H_{10}O_4$ VBFDFNFUMYAFQG-UHFFFAOYSA-N	1.4×10^5 1.5×10^4 1.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7DDCCO3H $C_7H_{10}O_4$ ITRURPAVBVUCD-UHFFFAOYSA-N	1.0×10^5 2.2×10^4 5.6×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7EDICARB $C_7H_{10}O_2$ YTVSAHBJOWKZHT-UHFFFAOYSA-N	9.3×10^1 1.1×10^3 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C821OOH $C_7H_{10}O_5$ VNKKTGYQOPWEKF-UHFFFAOYSA-N	1.2×10^9 2.6×10^6 3.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO235C7 $C_7H_{10}O_3$ PLNIFROICNOROEN-UHFFFAOYSA-N	1.6×10^4 9.6×10^2 9.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO245C7 $C_7H_{10}O_3$ SOSHREJUCDQQIR-UHFFFAOYSA-N	1.6×10^4 9.6×10^2 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO25C6CO3H $C_7H_{10}O_5$ NZAOVWOYFADSGM-UHFFFAOYSA-N	2.3×10^7 4.6×10^6 7.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO25C73OOH $C_7H_{12}O_4$ NWTMJMDPQCZCE-UHFFFAOYSA-N	1.8×10^6 2.8×10^4 9.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CO25C74OOH $\text{C}_7\text{H}_{12}\text{O}_4$ VDRXHYKLZSMLBZ-UHFFFAOYSA-N	1.8×10^6 2.8×10^4 3.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO25C7 $\text{C}_7\text{H}_{12}\text{O}_2$ HGRGPAAXHOTBAM-UHFFFAOYSA-N	2.0×10^1 2.6×10^2 8.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO3C75OOH $\text{C}_7\text{H}_{14}\text{O}_3$ TVVPPVSOZMPRIM-UHFFFAOYSA-N	2.7×10^3 8.0×10^2 4.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IC7DCCO3H $\text{C}_7\text{H}_{10}\text{O}_4$ JFPQYVJBAXIOAT-UHFFFAOYSA-N	1.4×10^5 1.6×10^4 1.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M3CO245C6 $\text{C}_7\text{H}_{10}\text{O}_3$ FMABCBYNHKBBEH-UHFFFAOYSA-N	1.6×10^4 6.3×10^2 8.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M3CO25C6 $\text{C}_7\text{H}_{12}\text{O}_2$ NLLILAUVOOREKR-UHFFFAOYSA-N	2.3×10^1 1.8×10^2 8.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5DBECO3H $\text{C}_8\text{H}_{10}\text{O}_5$ QHSWUEYXPZRIAH-UHFFFAOYSA-N	6.0×10^7 1.5×10^6 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5EDBCO3H $\text{C}_8\text{H}_{10}\text{O}_5$ YXJCVNQUVAHMKT-UHFFFAOYSA-N	6.0×10^7 1.6×10^6 6.9×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C727CO3H $\text{C}_8\text{H}_{12}\text{O}_5$ FJTLPX SURBYIDW-UHFFFAOYSA-N	2.1×10^7 9.6×10^5 1.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7CO2M5OOH $\text{C}_8\text{H}_{12}\text{O}_4$ GOMWBXPFFZKXIF-UHFFFAOYSA-N	4.0×10^6 1.1×10^4 2.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7M2CO5OOH $\text{C}_8\text{H}_{12}\text{O}_4$ BVDWDBGMQXZSJX-UHFFFAOYSA-N	4.9×10^6 7.6×10^4 4.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7M3CO $\text{C}_8\text{H}_{10}\text{O}_3$ WFGYJTUNUNWJHJN-UHFFFAOYSA-N	4.3×10^4 8.1×10^4 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7ODLBCO3H $\text{C}_8\text{H}_{12}\text{O}_4$ NMESNSUDSMNPLZ-UHFFFAOYSA-N	8.1×10^4 1.2×10^4 3.2×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C816CO $\text{C}_8\text{H}_{12}\text{O}_2$ FXXXYZSMIIVJDG-UHFFFAOYSA-N	3.1×10^2 3.8×10^1 3.0×10^2 6.2×10^1	10000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C816OOH $\text{C}_8\text{H}_{14}\text{O}_3$ GWYFGLCLLKWVIQ-UHFFFAOYSA-N	4.9×10^3 2.0×10^3 1.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C817OOH $\text{C}_8\text{H}_{14}\text{O}_4$ WQMXPSRLZCZTO-UHFFFAOYSA-N	1.2×10^6 1.5×10^6 1.5×10^6 1.6×10^4	13000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C8236CO $\text{C}_8\text{H}_{10}\text{O}_3$ IOHUPZZTKNTURH-UHFFFAOYSA-N	4.9×10^4 6.0×10^4 4.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C826CO3OOH $\text{C}_8\text{H}_{12}\text{O}_4$ JGDMXPACXAYITG-UHFFFAOYSA-N	6.5×10^6 4.4×10^4 1.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C827OOH $\text{C}_8\text{H}_{14}\text{O}_4$ MYZHYUNBFYQPIX-UHFFFAOYSA-N	9.8×10^5 1.5×10^4 1.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C828OOH $\text{C}_8\text{H}_{12}\text{O}_5$ IPIPKWBUGMDLTO-UHFFFAOYSA-N	6.8×10^8 3.1×10^5 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C83OOH $\text{C}_8\text{H}_{12}\text{O}_5$ MTDHYROWVQXAOV-UHFFFAOYSA-N	1.1×10^9 3.6×10^5 5.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C84OOH $\text{C}_8\text{H}_{14}\text{O}_4$ HQUQRVBRVTTSE-UHFFFAOYSA-N	1.5×10^6 1.4×10^4 7.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C85OOH $\text{C}_8\text{H}_{14}\text{O}_3$ MGHQHXXZPXRHRQ-UHFFFAOYSA-N	5.5×10^3 5.5×10^3 1.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C88CO $\text{C}_8\text{H}_{10}\text{O}_3$ KYJUTSWXKQCOOZ-UHFFFAOYSA-N	2.8×10^4 7.4×10^4 3.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C88OOH $\text{C}_8\text{H}_{12}\text{O}_4$ LSPOECQNSUKNPK-UHFFFAOYSA-N	3.2×10^6 6.9×10^5 1.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C8BCCO $\text{C}_8\text{H}_{12}\text{O}$ BYOKRVKHSHTAOM-UHFFFAOYSA-N	2.0×10^{-1} 9.6×10^{-1} 3.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO346C8 $\text{C}_8\text{H}_{12}\text{O}_3$ YUHNMHTZZXLCQZ-UHFFFAOYSA-N	1.3×10^4 1.1×10^3 7.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO36C8 $\text{C}_8\text{H}_{14}\text{O}_2$ CVZGUJMLZZTPKH-UHFFFAOYSA-N	1.8×10^1 1.5×10^2 3.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO3C85OOH $\text{C}_8\text{H}_{16}\text{O}_3$ RPACFUNWVVDXHA-UHFFFAOYSA-N	2.1×10^3 5.9×10^2 3.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYQONE $\text{C}_8\text{H}_8\text{O}_2$ SENUUPBBLQWHMF-UHFFFAOYSA-N	2.1 5.3×10^3 1.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYQONE $\text{C}_8\text{H}_8\text{O}_2$ AIACLXROWHONEE-UHFFFAOYSA-N	2.1 5.3×10^3 1.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PEBQONE $\text{C}_8\text{H}_8\text{O}_2$ IGRSQEOIAAGSGS-UHFFFAOYSA-N	2.7 4.7×10^3 1.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYQONE $\text{C}_8\text{H}_8\text{O}_2$ MYKLQMNSFPAPLZ-UHFFFAOYSA-N	2.1 5.3×10^3 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C816CO3H $\text{C}_9\text{H}_{14}\text{O}_4$ IXOBDJNWKDFSA-UHFFFAOYSA-N	5.3×10^4 1.5×10^3 3.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C817CO3H $\text{C}_9\text{H}_{14}\text{O}_5$ NVUUBBWWYYUIRJW-UHFFFAOYSA-N	3.4×10^7 1.7×10^7 1.7×10^6 2.0×10^4	16000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C827CO3H $\text{C}_9\text{H}_{14}\text{O}_5$ DZJUGPICXPPSEN-UHFFFAOYSA-N	1.2×10^7 6.0×10^5 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C828CO3H $\text{C}_9\text{H}_{12}\text{O}_6$ XCCOWFUPSCLDCA-UHFFFAOYSA-N	7.8×10^9 2.0×10^7 8.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C85CO3H $\text{C}_9\text{H}_{14}\text{O}_4$ DAYKQISVSRMABH-UHFFFAOYSA-N	5.8×10^4 3.8×10^3 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C88CO3H $\text{C}_9\text{H}_{12}\text{O}_5$ KOEDWBONHQRVNE-UHFFFAOYSA-N	3.7×10^7 2.0×10^7 4.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C8M2CO6OOH $\text{C}_9\text{H}_{14}\text{O}_4$ LMHVWEUXUKAUUE-UHFFFAOYSA-N	3.9×10^6 3.3×10^4 1.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C8M3CO $\text{C}_9\text{H}_{12}\text{O}_3$ VNKKGGMTAOGJCS-UHFFFAOYSA-N	3.3×10^4 6.0×10^4 1.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C917OOH $\text{C}_9\text{H}_{14}\text{O}_4$ USPARXGTYFQAAO-UHFFFAOYSA-N	2.9×10^6 1.2×10^7 1.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C91OOH $\text{C}_9\text{H}_{18}\text{O}_3$ LTHHCRGMHVQJHW-UHFFFAOYSA-N	1.7×10^3 4.9×10^2 4.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C923OOH $\text{C}_9\text{H}_{16}\text{O}_3$ ZSCOJLRNNZZYOH-UHFFFAOYSA-N	1.1×10^4 4.1×10^3 2.2×10^3 2.9×10^2	12000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C928OOH $\text{C}_9\text{H}_{16}\text{O}_4$ NVMDAOHKHIQTQS-UHFFFAOYSA-N	8.0×10^5 1.4×10^6 1.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C94OOH $\text{C}_9\text{H}_{16}\text{O}_4$ ZEMHBLLRPWJDGD-UHFFFAOYSA-N	1.3×10^6 9.3×10^3 2.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C95OOH $\text{C}_9\text{H}_{14}\text{O}_5$ OKPNQXXXVOPUSS-UHFFFAOYSA-N	8.7×10^8 2.3×10^5 5.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C96OOH $\text{C}_9\text{H}_{16}\text{O}_3$ UOSOYGOFNRNBVGT-UHFFFAOYSA-N	4.4×10^3 6.9×10^3 4.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C9DC $\text{C}_9\text{H}_{12}\text{O}_2$ MRLMBLCAGJIZHM-UHFFFAOYSA-N	1.2×10^2 2.3×10^3 4.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C9DCCO $\text{C}_9\text{H}_{10}\text{O}_3$ CNGBBXSWKSNDDL-UHFFFAOYSA-N	9.6×10^4 7.6×10^5 2.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C9DCCOOH $\text{C}_9\text{H}_{12}\text{O}_4$ LVYPIBNFNZWIN-UHFFFAOYSA-N	1.1×10^7 8.3×10^7 2.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO356C9 $\text{C}_9\text{H}_{14}\text{O}_3$ UAWDJSGDSYOWDW-UHFFFAOYSA-N	1.0×10^4 1.1×10^3 5.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO36C9 $\text{C}_9\text{H}_{16}\text{O}_2$ NTESQURXNMSRF-UHFFFAOYSA-N	1.5×10^1 1.0×10^2 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPRBQONE $\text{C}_9\text{H}_{10}\text{O}_2$ XLTSBDOZTUSCMX-UHFFFAOYSA-N	2.5 2.4×10^3 8.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LIMKET $\text{C}_9\text{H}_{14}\text{O}$ HOBBEYSRFFJETF-UHFFFAOYSA-N	6.4×10^{-1} 2.4×10^{-1} 9.8×10^{-1} 3.2	8000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:METLQONE $\text{C}_9\text{H}_{10}\text{O}_2$ FBVFNJVAGSWLOP-UHFFFAOYSA-N	1.8 3.7×10^3 1.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOPINAOOH $\text{C}_9\text{H}_{14}\text{O}_3$ AGOGLNHOUZEO-UHFFFAOYSA-N	1.4×10^4 2.9×10^4 8.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOPINBCO $\text{C}_9\text{H}_{12}\text{O}_2$ AQDJLLQBRRXMBZ-UHFFFAOYSA-N	1.2×10^2 2.2×10^3 4.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOPINBOOH $\text{C}_9\text{H}_{14}\text{O}_3$ ICIAOEDGJQUKIV-UHFFFAOYSA-N	1.4×10^4 4.0×10^4 9.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOPINCOOH $\text{C}_9\text{H}_{14}\text{O}_3$ YDBPVAMAGOPNKC-UHFFFAOYSA-N	8.5×10^3 1.3×10^4 7.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOPINDCO $\text{C}_9\text{H}_{12}\text{O}_2$ QEZVNLZLSDOZRT-UHFFFAOYSA-N	1.2×10^2 5.0×10^2 8.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOPINDOOH $\text{C}_9\text{H}_{14}\text{O}_3$ MUTHAEIFCDWSQQ-UHFFFAOYSA-N	1.4×10^4 5.4×10^2 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NOPINONE $\text{C}_9\text{H}_{14}\text{O}$ XZFDKWMYCUEKSS-UHFFFAOYSA-N	1.8×10^{-1} 1.0 1.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OETLQONE $\text{C}_9\text{H}_{10}\text{O}_2$ CMBANAGVBLPIPT-UHFFFAOYSA-N	1.8 3.7×10^3 8.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PETLQONE $\text{C}_9\text{H}_{10}\text{O}_2$ JUIQOKRNPGGIPV-UHFFFAOYSA-N	1.8 3.7×10^3 1.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PPRBQONE $\text{C}_9\text{H}_{10}\text{O}_2$ NBHAZVWKRHTWRW-UHFFFAOYSA-N	2.2 3.0×10^3 1.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124QONE $\text{C}_9\text{H}_{10}\text{O}_2$ QIXDHVDGXPBRD-UHFFFAOYSA-N	1.4 4.1×10^3 7.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1011CO $\text{C}_{10}\text{H}_{16}\text{O}_2$ HCTKOTXYXFZDNL-UHFFFAOYSA-N	3.1×10^1 3.3×10^2 1.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1011OOH $\text{C}_{10}\text{H}_{18}\text{O}_3$ SNMQVMGNQAVOQP-UHFFFAOYSA-N	3.6×10^3 4.3×10^3 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C101OOH $\text{C}_{10}\text{H}_{20}\text{O}_3$ SFSDJTUNVGVIIHA-UHFFFAOYSA-N	1.4×10^3 4.4×10^2 3.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C104OOH $\text{C}_{10}\text{H}_{18}\text{O}_4$ NAKDXHBWPFMZPE-UHFFFAOYSA-N	1.0×10^6 6.9×10^3 2.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C105OOH $\text{C}_{10}\text{H}_{16}\text{O}_5$ SMUSKFONQIUMCM-UHFFFAOYSA-N	7.1×10^8 1.7×10^5 2.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C923CO3H $\text{C}_{10}\text{H}_{16}\text{O}_4$ JSHGCXGTVADTAK-UHFFFAOYSA-N	2.2×10^4 4.7×10^4 1.0×10^3 3.1×10^2	15000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C928CO3H $\text{C}_{10}\text{H}_{16}\text{O}_5$ LCMHUZKVXFPENZ-UHFFFAOYSA-N	9.1×10^6 1.5×10^6 1.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C9M2CO6OOH $\text{C}_{10}\text{H}_{16}\text{O}_4$ ACPAJMUJFSDSAX-UHFFFAOYSA-N	3.6×10^6 1.9×10^4 9.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C9M3CO $\text{C}_{10}\text{H}_{14}\text{O}_3$ DYAPBQRZCZYWEA-UHFFFAOYSA-N	3.1×10^4 3.5×10^4 9.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO356C10 $\text{C}_{10}\text{H}_{16}\text{O}_3$ OKXFSYMNZFSQOL-UHFFFAOYSA-N	8.7×10^3 9.1×10^2 4.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO36C10 $\text{C}_{10}\text{H}_{18}\text{O}_2$ WYDYPTCJLWEFAY-UHFFFAOYSA-N	1.2×10^1 8.0×10^1 2.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DEC3ONE $\text{C}_{10}\text{H}_{20}\text{O}$ XJLDYKIEURAVBW-UHFFFAOYSA-N	1.8×10^{-2} 2.6×10^{-2} 1.0×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PERPINONIC $\text{C}_{10}\text{H}_{16}\text{O}_4$ VFMUYIAYOIENK-UHFFFAOYSA-N	5.3×10^4 3.0×10^3 5.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1011CO3H $\text{C}_{11}\text{H}_{18}\text{O}_4$ MDKPIQZZHUIYJQ-UHFFFAOYSA-N	4.2×10^4 2.5×10^3 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C111OOH $\text{C}_{11}\text{H}_{22}\text{O}_3$ AMJEMPORNLGBW-UHFFFAOYSA-N	1.3×10^3 3.6×10^2 2.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C114OOH $\text{C}_{11}\text{H}_{20}\text{O}_4$ YQNGKLISCMALPY-UHFFFAOYSA-N	8.3×10^5 5.4×10^3 4.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C115OOH $\text{C}_{11}\text{H}_{18}\text{O}_5$ VPBZYPGTLQIKG-UHFFFAOYSA-N	6.3×10^8 1.3×10^5 6.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO356C11 $\text{C}_{11}\text{H}_{18}\text{O}_3$ YADKKYWEPSBFCL-UHFFFAOYSA-N	7.3×10^3 7.8×10^2 4.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO36C11 $\text{C}_{11}\text{H}_{20}\text{O}_2$ KWHQQLQVDJMZTG-UHFFFAOYSA-N	1.1×10^1 6.5×10^1 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:UDEC3ONE $\text{C}_{11}\text{H}_{22}\text{O}$ YNMZZHPSYMOGCI-UHFFFAOYSA-N	1.4×10^{-2} 2.1×10^{-2} 1.0×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C121OOH $\text{C}_{12}\text{H}_{24}\text{O}_3$ NWJGDRGQGOZUDJ-UHFFFAOYSA-N	9.8×10^2 2.8×10^2 2.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C124OOH $\text{C}_{12}\text{H}_{22}\text{O}_4$ DCPRRPHGFZBUMW-UHFFFAOYSA-N	6.6×10^5 4.8×10^3 9.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C125OOH $\text{C}_{12}\text{H}_{20}\text{O}_5$ FTFXETPWXOMYNK-UHFFFAOYSA-N	4.9×10^8 1.1×10^5 2.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO356C12 $\text{C}_{12}\text{H}_{20}\text{O}_3$ FQYVJQVZHPFSKC-UHFFFAOYSA-N	5.6×10^3 7.3×10^2 3.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO36C12 $\text{C}_{12}\text{H}_{22}\text{O}_2$ RUTQSYKISNASLK-UHFFFAOYSA-N	8.5 5.8×10^1 2.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DDEC3ONE $\text{C}_{12}\text{H}_{24}\text{O}$ PERHWAPLOBAJM-UHFFFAOYSA-N	1.1×10^{-2} 1.7×10^{-2} 9.6×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C131OOH $\text{C}_{13}\text{H}_{22}\text{O}_4$ HPZPYFVEAXAGHY-UHFFFAOYSA-N	1.5×10^6 2.0×10^6 1.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCKET $\text{C}_{14}\text{H}_{22}\text{O}$ MBZBBVTYLUNZPJ-UHFFFAOYSA-N	2.3×10^{-1} 2.6 2.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C131CO3H $\text{C}_{14}\text{H}_{22}\text{O}_5$ LLSRBTGTUZRQT-UHFFFAOYSA-N	1.7×10^7 2.1×10^6 8.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C141OOH $\text{C}_{14}\text{H}_{24}\text{O}_3$ HKWHMEKBBPOBSQ-UHFFFAOYSA-N	3.8×10^3 4.9×10^3 7.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C141CO3H $\text{C}_{15}\text{H}_{24}\text{O}_4$ ADRMPTUALHKSOU-UHFFFAOYSA-N	4.6×10^4 1.8×10^3 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C619CO $\text{C}_6\text{H}_6\text{O}_3$ NGHVTTBOPYXCFB-UHFFFAOYSA-N	5.3×10^4 1.1×10^6 1.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CY6TRION $\text{C}_6\text{H}_6\text{O}_3$ GKSCYCYSPXQFY-UHFFFAOYSA-N	5.3×10^4 4.6×10^6 1.9×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PHCOMEEOH $\text{C}_8\text{H}_8\text{O}_3$ BXVCLOREWF XMNM-UHFFFAOYSA-N	1.6×10^5 1.4×10^3 3.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MPHCOME00H C ₉ H ₁₀ O ₃ NJDRUBYBGCJLJU-UHFFFAOYSA-N	9.1 × 10 ⁴ 1.4 × 10 ³ 3.1 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PHCOCOCOOH C ₉ H ₈ O ₄ XMJMKOZGMVOAIC-UHFFFAOYSA-N	9.1 × 10 ⁷ 4.7 × 10 ⁴ 5.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PHCOCOME C ₉ H ₈ O ₂ BVQVLAIMHVDZEL-UHFFFAOYSA-N	1.3 × 10 ³ 9.1 × 10 ¹ 6.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PHCOETOOH C ₉ H ₁₀ O ₃ RYQHVKZCKUBIFL-UHFFFAOYSA-N	1.5 × 10 ⁵ 6.0 × 10 ² 3.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMPHCOME C ₁₀ H ₁₂ O BKIHFZLJJUNKMZ-UHFFFAOYSA-N	7.4 × 10 ⁻¹ 1.5 5.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMPHCOMOOH C ₁₀ H ₁₂ O ₃ SEDWELDPOZYWLL-UHFFFAOYSA-N	5.4 × 10 ⁴ 8.5 × 10 ² 3.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EMPHCOME C ₁₁ H ₁₄ O CZLNQKVDQIGBEW-UHFFFAOYSA-N	6.5 × 10 ⁻¹ 1.2 5.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EMPHCOMOOH C ₁₁ H ₁₄ O ₃ OJNDCDHAKIGFTB-UHFFFAOYSA-N	5.0 × 10 ⁴ 5.0 × 10 ² 2.3 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BIACETOH C ₄ H ₆ O ₃ NXIVQSJQXMAXJR-UHFFFAOYSA-N	5.1 × 10 ³ 4.3 × 10 ³ 3.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2H3CO3H C ₄ H ₆ O ₅ WNDCKJVOGKFRM-UHFFFAOYSA-N	2.0 × 10 ⁶ 1.7 × 10 ⁴ 1.4 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H13CO2CO3H C ₄ H ₆ O ₆ RXVYYLAFXUAZCR-UHFFFAOYSA-N	1.2 × 10 ⁹ 4.0 × 10 ⁵ 1.7 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H14CO23C4 C ₄ H ₆ O ₄ GJCZUCLKDGABDS-UHFFFAOYSA-N	2.1 × 10 ⁶ 6.5 × 10 ⁵ 1.0 × 10 ⁶ 1.6 × 10 ³	17000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:H1C23C4OOH $\text{C}_4\text{H}_6\text{O}_5$ FQXHRCVOGVCTSR-UHFFFAOYSA-N	3.9×10^8 6.0×10^7 3.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HMVKAOOH $\text{C}_4\text{H}_8\text{O}_4$ XTELZFGIGJBUGR-UHFFFAOYSA-N	8.3×10^5 7.8×10^4 1.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HMVKBOOH $\text{C}_4\text{H}_8\text{O}_4$ NGLQGLCPXKPDMS-UHFFFAOYSA-N	1.6×10^7 2.0×10^5 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO12CO3C4 $\text{C}_4\text{H}_8\text{O}_3$ SEYLP RWNVFCVRQ-UHFFFAOYSA-N	9.8×10^3 3.7×10^4 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO14CO2C4 $\text{C}_4\text{H}_8\text{O}_3$ XBJODPUPYBBDEM-UHFFFAOYSA-N	1.9×10^4 9.8×10^5 1.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOCO3C4OOH $\text{C}_4\text{H}_8\text{O}_4$ GQXQZBROPOTXJQ-UHFFFAOYSA-N	1.0×10^7 1.9×10^6 1.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MEKAOH $\text{C}_4\text{H}_8\text{O}_2$ LVSQXDHWDMMRJ-UHFFFAOYSA-N	1.5×10^2 1.2×10^3 2.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MEKCOH $\text{C}_4\text{H}_8\text{O}_2$ GFAZHVHNLUBROE-UHFFFAOYSA-N	7.8 7.8×10^1 8.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MVKOHAOH $\text{C}_4\text{H}_8\text{O}_4$ UQPHVQVXLPRNCX-UHFFFAOYSA-N	6.2×10^6 3.7×10^6 8.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MVKOHAOOH $\text{C}_4\text{H}_8\text{O}_5$ MOVXURHCNUWOQO-UHFFFAOYSA-N	4.6×10^8 2.2×10^7 1.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MVKOHBOOH $\text{C}_4\text{H}_8\text{O}_5$ WSMWIMXDHMPHIN-UHFFFAOYSA-N	2.0×10^9 2.7×10^8 5.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MVKOH $\text{C}_4\text{H}_6\text{O}_2$ LHBQGXZUVXFJRH-UHFFFAOYSA-N	2.1×10^1 2.3×10^2 4.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C517OH $\text{C}_5\text{H}_{10}\text{O}_3$ NQMZUMSFJBKHAU-UHFFFAOYSA-N	3.8×10^5 1.6×10^6 3.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C517OOH $\text{C}_5\text{H}_{10}\text{O}_4$ OAFCGFSFCVKGSH-UHFFFAOYSA-N	1.1×10^6 1.0×10^7 4.9×10^5 1.1×10^4	13000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C519OOH $\text{C}_5\text{H}_{10}\text{O}_4$ RDSFTYTWLRHJGZ-UHFFFAOYSA-N	1.7×10^5 1.0×10^7 4.0×10^5 8.0×10^4	13000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C51OH2CO $\text{C}_5\text{H}_{10}\text{O}_2$ WOVLKXLXZJMSN-UHFFFAOYSA-N	6.0 4.2×10^1 9.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C51OH $\text{C}_5\text{H}_{10}\text{O}_3$ NJUQBPKVORANW-UHFFFAOYSA-N	1.5×10^5 2.1×10^5 4.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C51OOH $\text{C}_5\text{H}_{10}\text{O}_4$ IZBMMNKBXWVQLB-UHFFFAOYSA-N	1.3×10^7 2.1×10^6 1.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C521OH $\text{C}_5\text{H}_8\text{O}_4$ UOGQGBWLBOULD-UHFFFAOYSA-N	1.2×10^7 4.8×10^7 9.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C521OOH $\text{C}_5\text{H}_8\text{O}_5$ INSNYERMNWOCIO-UHFFFAOYSA-N	6.5×10^9 1.9×10^7 2.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C524CO $\text{C}_5\text{H}_8\text{O}_3$ JVYSLPFI SVGRS-UHFFFAOYSA-N	3.5×10^4 1.9×10^5 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C525OOH $\text{C}_5\text{H}_{10}\text{O}_6$ KYXSOONCNSTMJK-UHFFFAOYSA-N	3.8×10^{12} 2.0×10^{11} 3.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C53OH $\text{C}_5\text{H}_{10}\text{O}_3$ PLVCXNLHUHTLCR-UHFFFAOYSA-N	1.8×10^4 1.1×10^6 6.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C53OOH $\text{C}_5\text{H}_{10}\text{O}_4$ VCGFNBZCPLQTJR-UHFFFAOYSA-N	1.0×10^7 1.8×10^6 6.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C55OOH $\text{C}_5\text{H}_{10}\text{O}_4$ IEXMEMALQGSKE-UHFFFAOYSA-N	3.2×10^5 1.3×10^6 2.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C59OOH $\text{C}_5\text{H}_{10}\text{O}_5$ JWNCLQLBUYGJMN-UHFFFAOYSA-N	1.1×10^9 1.6×10^8 3.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5CO243OH $\text{C}_5\text{H}_8\text{O}_3$ SLKPFOVYRYRNB-UHFFFAOYSA-N	1.1×10^3 1.1×10^4 9.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5OHCO4OOH $\text{C}_5\text{H}_{10}\text{O}_4$ DSLXKXSJLFFUGE-UHFFFAOYSA-N	4.7×10^5 1.6×10^6 4.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2C5OH $\text{C}_5\text{H}_{10}\text{O}_2$ JSHPTIGHEWEXRW-UHFFFAOYSA-N	3.6×10^3 1.2×10^2 2.6×10^3 1.3×10^3	9800	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:CO2H3MCO3H $\text{C}_5\text{H}_8\text{O}_5$ LZACDMRRAOGIBF-UHFFFAOYSA-N	1.1×10^6 3.2×10^3 3.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO3H4CO3H $\text{C}_5\text{H}_8\text{O}_5$ LAOPLCWFGWEKGR-UHFFFAOYSA-N	1.6×10^6 1.0×10^4 1.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DIEKAOH $\text{C}_5\text{H}_{10}\text{O}_2$ QMXCHEVUAIPIRM-UHFFFAOYSA-N	7.3 6.8×10^1 7.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H3C2C4CO3H $\text{C}_5\text{H}_8\text{O}_5$ NYZNEBYYQANOB-UHFFFAOYSA-N	6.9×10^6 3.0×10^6 6.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HC23C4CO3H $\text{C}_5\text{H}_6\text{O}_6$ UQNPRLJBDVQJQC-UHFFFAOYSA-N	4.5×10^9 1.1×10^8 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HCO5 $\text{C}_5\text{H}_8\text{O}_2$ LSMLKPXBSFFBNR-UHFFFAOYSA-N	1.4×10^1 1.4×10^2 3.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HMKBCO3H $\text{C}_5\text{H}_8\text{O}_5$ VFNGUWSZFHBRW-UHFFFAOYSA-N	1.4×10^8 5.8×10^6 2.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO13CO4C5 $\text{C}_5\text{H}_{10}\text{O}_3$ CGPIPFJOMJUWGK-UHFFFAOYSA-N	1.8×10^4 2.6×10^5 3.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HO14CO2C5 $\text{C}_5\text{H}_{10}\text{O}_3$ XLDKDOKPMNKVMP-UHFFFAOYSA-N	1.8×10^4 1.5×10^6 4.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO14CO3C5 $\text{C}_5\text{H}_{10}\text{O}_3$ YMIRLILUDYUWGY-UHFFFAOYSA-N	1.8×10^4 1.6×10^6 4.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO1CO24C5 $\text{C}_5\text{H}_8\text{O}_3$ VBUBLWCIADYRMB-UHFFFAOYSA-N	4.1×10^3 3.2×10^4 4.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO1CO34C5 $\text{C}_5\text{H}_8\text{O}_3$ LKLKMCUVBQDYFU-UHFFFAOYSA-N	7.8×10^4 4.7×10^4 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO1CO3C5 $\text{C}_5\text{H}_{10}\text{O}_2$ TYXULUBCBKMSK-UHFFFAOYSA-N	1.2×10^2 4.6×10^2 6.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2CO4C5 $\text{C}_5\text{H}_{10}\text{O}_2$ PCYZZYAEGNVNMH-UHFFFAOYSA-N	1.4×10^2 1.3×10^3 9.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOCO3C5OOH $\text{C}_5\text{H}_{10}\text{O}_4$ ZLPJDXTYGYNOQK-UHFFFAOYSA-N	1.0×10^7 1.3×10^6 4.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOCO4C5OOH $\text{C}_5\text{H}_{10}\text{O}_4$ MYGJVQXASPJPCS-UHFFFAOYSA-N	1.0×10^7 1.9×10^6 3.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MBOACO $\text{C}_5\text{H}_{10}\text{O}_3$ FEIUXLCYBVUGD-UHFFFAOYSA-N	2.8×10^3 9.8×10^2 6.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ME3CO2BUOL $\text{C}_5\text{H}_{10}\text{O}_2$ NBEGXSQMWTIAR-UHFFFAOYSA-N	7.3 4.6×10^1 6.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MIPKAOH $\text{C}_5\text{H}_{10}\text{O}_2$ BNDRWEVUODOUDW-UHFFFAOYSA-N	4.5 4.4×10^1 7.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MIPKBOH $\text{C}_5\text{H}_{10}\text{O}_2$ VVSRECWZBBJOTG-UHFFFAOYSA-N	1.4×10^2 6.3×10^2 6.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MPRKAOH $\text{C}_5\text{H}_{10}\text{O}_2$ HDKKRASBPFFULQ-UHFFFAOYSA-N	7.3 8.5×10^1 4.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:BZOBIPEROH $\text{C}_6\text{H}_6\text{O}_4$ OGRXSIBGKCRBOL-UHFFFAOYSA-N	6.2×10^6 3.6×10^3 1.7×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4COME0H $\text{C}_6\text{H}_{12}\text{O}_2$ FDJJNIXWMAWMBP-UHFFFAOYSA-N	5.0 2.7×10^1 8.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4COMOH3OH $\text{C}_6\text{H}_{12}\text{O}_3$ NCEURKGQTPCVEC-UHFFFAOYSA-N	1.6×10^4 7.6×10^5 1.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4COMOHO0H $\text{C}_6\text{H}_{12}\text{O}_4$ JZGTXIGKACACHL-UHFFFAOYSA-N	4.3×10^5 8.9×10^5 3.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4MOHOCO3H $\text{C}_6\text{H}_{10}\text{O}_5$ BJXKNHIKUQDPQL-UHFFFAOYSA-N	1.4×10^6 5.4×10^3 8.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C517CO3H $\text{C}_6\text{H}_{10}\text{O}_5$ HTNOTPIWPYZOLN-UHFFFAOYSA-N	1.2×10^8 1.1×10^7 7.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C519CO3H $\text{C}_6\text{H}_{10}\text{O}_5$ OBKQTPZEBGGJT-UHFFFAOYSA-N	1.2×10^8 1.6×10^7 5.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5COHOCO3H $\text{C}_6\text{H}_8\text{O}_6$ BPYCYKKOURHNJX-UHFFFAOYSA-N	5.9×10^8 2.3×10^5 8.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5O5OHCO3H $\text{C}_6\text{H}_{10}\text{O}_5$ GCQMJNYHSPBFDA-UHFFFAOYSA-N	1.3×10^6 4.8×10^3 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C610OH $\text{C}_6\text{H}_{12}\text{O}_3$ YFEDHAOQJOZUIL-UHFFFAOYSA-N	1.6×10^5 2.4×10^5 2.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C610OH $\text{C}_6\text{H}_{12}\text{O}_4$ VBFRWQFSDXQDV-UHFFFAOYSA-N	1.2×10^7 2.0×10^6 6.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C611OH $\text{C}_6\text{H}_{10}\text{O}_3$ PYRMISJRKRVNPG-UHFFFAOYSA-N	5.9×10^2 3.0×10^3 3.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C612OH $\text{C}_6\text{H}_{12}\text{O}_3$ VCLSUNMNDIKRMY-UHFFFAOYSA-N	9.8×10^3 6.0×10^5 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C612OOH $\text{C}_6\text{H}_{12}\text{O}_4$ OANIXDZJWBECQD-UHFFFAOYSA-N	5.6×10^6 9.3×10^5 5.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C613OOH $\text{C}_6\text{H}_{12}\text{O}_5$ MBLADDFAKVGAFO-UHFFFAOYSA-N	1.2×10^9 2.0×10^8 1.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C614CO $\text{C}_6\text{H}_8\text{O}_4$ DFWHGSPVJPYJZ-UHFFFAOYSA-N	2.5×10^6 1.4×10^6 8.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C614OH $\text{C}_6\text{H}_{10}\text{O}_4$ WLPHOQAEQJPJID-UHFFFAOYSA-N	9.3×10^7 9.1×10^6 8.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C614OOH $\text{C}_6\text{H}_{10}\text{O}_5$ AZSLPKKGLPCKMI-UHFFFAOYSA-N	7.8×10^9 8.3×10^7 4.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C619OH $\text{C}_6\text{H}_8\text{O}_3$ WEYIBABPZCYASX-UHFFFAOYSA-N	1.2×10^4 2.5×10^6 4.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C61CO $\text{C}_6\text{H}_{10}\text{O}_3$ MGEAAKFVOQZVFH-UHFFFAOYSA-N	3.8×10^3 2.2×10^4 1.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C61OH $\text{C}_6\text{H}_{12}\text{O}_3$ JOVKXRBMZIPRBZ-UHFFFAOYSA-N	1.6×10^5 3.6×10^5 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C61OOH $\text{C}_6\text{H}_{12}\text{O}_4$ ZUQHNSGBJLTRH-UHFFFAOYSA-N	1.2×10^7 1.7×10^6 3.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C621OOH $\text{C}_6\text{H}_{10}\text{O}_6$ OMSKVAAPFLCUBC-UHFFFAOYSA-N	9.8×10^{11} 2.7×10^{10} 3.5×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C624CO $\text{C}_6\text{H}_{10}\text{O}_2$ SAJQFIMRYKQCMA-UHFFFAOYSA-N	2.3×10^2 6.3×10^2 5.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C625OH $\text{C}_6\text{H}_{12}\text{O}_4$ UHZLCNNVPSWLBK-UHFFFAOYSA-N	1.2×10^7 3.9×10^8 2.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C625OOH $\text{C}_6\text{H}_{12}\text{O}_5$ RLEQEEKQTRHVBK-UHFFFAOYSA-N	2.0×10^{10} 7.8×10^8 1.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C627OH $\text{C}_6\text{H}_{10}\text{O}_3$ YXADPHVQSSNJLB-UHFFFAOYSA-N	3.7×10^3 1.9×10^5 5.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C630OH $\text{C}_6\text{H}_{10}\text{O}_3$ LTOZVYXSZHIKZ-UHFFFAOYSA-N	2.9×10^4 1.7×10^6 2.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C630OOH $\text{C}_6\text{H}_{10}\text{O}_4$ FPSNWWZQINIJKM-UHFFFAOYSA-N	1.8×10^7 2.2×10^6 1.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C63OH $\text{C}_6\text{H}_{12}\text{O}_3$ YEHSOHVSOJHCML-UHFFFAOYSA-N	1.4×10^5 1.2×10^5 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C63OOH $\text{C}_6\text{H}_{12}\text{O}_4$ RYUSCYCDUHZJRL-UHFFFAOYSA-N	1.0×10^7 1.1×10^6 1.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C64OH $\text{C}_6\text{H}_{12}\text{O}_3$ DWHFVPVYPLVOER-UHFFFAOYSA-N	8.5×10^4 2.2×10^5 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C64OOH $\text{C}_6\text{H}_{12}\text{O}_4$ WKWKMZQJHCBFC-UHFFFAOYSA-N	7.3×10^6 1.1×10^6 1.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C66CO $\text{C}_6\text{H}_{10}\text{O}_3$ PQXOVUFKUOIXAY-UHFFFAOYSA-N	7.4×10^4 2.9×10^4 4.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C66OH $\text{C}_6\text{H}_{12}\text{O}_3$ YKCRSYHGTATDJD-UHFFFAOYSA-N	1.7×10^4 9.3×10^5 6.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C66OOH $\text{C}_6\text{H}_{12}\text{O}_4$ ZIMKSUJZUDHWGV-UHFFFAOYSA-N	1.0×10^7 7.4×10^5 9.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C67CO3H $\text{C}_6\text{H}_{10}\text{O}_5$ BGZGHPIMJSIBNB-UHFFFAOYSA-N	3.9×10^6 6.6×10^5 3.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C69OH $\text{C}_6\text{H}_{12}\text{O}_3$ UAFVHAXODPLTF-UHFFFAOYSA-N	1.7×10^4 8.9×10^5 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C69OOH $\text{C}_6\text{H}_{12}\text{O}_4$ IBTXITPBBCYNLS-UHFFFAOYSA-N	1.0×10^7 1.3×10^6 6.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C6CO23HO5 $\text{C}_6\text{H}_{10}\text{O}_3$ ZFXUWHPHUNDYBV-UHFFFAOYSA-N	7.4×10^4 2.6×10^4 5.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CO243OH $\text{C}_6\text{H}_{10}\text{O}_3$ YZRCADLLOAXRLD-UHFFFAOYSA-N	8.5×10^2 6.6×10^3 5.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CO34HO1 $\text{C}_6\text{H}_{10}\text{O}_3$ LBGWMVXVPMPEID-UHFFFAOYSA-N	7.3×10^4 2.0×10^4 9.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CO3HO14 $\text{C}_6\text{H}_{12}\text{O}_3$ AEYYIRCLAOJEMX-UHFFFAOYSA-N	1.6×10^4 9.1×10^5 9.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CO3HO25 $\text{C}_6\text{H}_{12}\text{O}_3$ AQJAHIKLRWQRAX-UHFFFAOYSA-N	1.7×10^4 1.1×10^6 1.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CO3HO4 $\text{C}_6\text{H}_{12}\text{O}_2$ SKCYVGUCBRYGTE-UHFFFAOYSA-N	5.6 4.6×10^1 6.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CO3OHOOH $\text{C}_6\text{H}_{12}\text{O}_4$ VJHRZIUXRMRGDC-UHFFFAOYSA-N	1.0×10^7 6.3×10^5 6.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6HOCOOOH $\text{C}_6\text{H}_{12}\text{O}_4$ DEZHLOWLMWYLS-UHFFFAOYSA-N	9.1×10^6 7.4×10^5 8.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO24M3C5OH $\text{C}_6\text{H}_{10}\text{O}_3$ JUTFYFRULBWUNH-UHFFFAOYSA-N	3.8×10^3 1.1×10^4 2.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO25C6OH $\text{C}_6\text{H}_{10}\text{O}_3$ MXGSILCFPNVDMX-UHFFFAOYSA-N	3.8×10^3 1.6×10^5 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2HO3C6 $\text{C}_6\text{H}_{12}\text{O}_2$ UHSBCAJZDUQTHH-UHFFFAOYSA-N	5.6 5.8×10^1 4.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2HO4C6 $\text{C}_6\text{H}_{12}\text{O}_2$ ODWYTDVNWFBCLV-UHFFFAOYSA-N	1.1×10^2 7.8×10^2 3.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2HOC6OOH $\text{C}_6\text{H}_{12}\text{O}_4$ DONIGPAOCGSEHJ-UHFFFAOYSA-N	9.1×10^6 1.0×10^6 1.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CO2M3C5OH $\text{C}_6\text{H}_{12}\text{O}_2$ YJCMJVMCCJIPRV-UHFFFAOYSA-N	1.1×10^2 1.7×10^3 4.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2MC5OH $\text{C}_6\text{H}_{12}\text{O}_2$ NZBRXFKHZBOFBW-UHFFFAOYSA-N	1.1×10^2 1.9×10^3 5.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CY6DIONOH $\text{C}_6\text{H}_8\text{O}_3$ ACRUCDPQQCIOID-UHFFFAOYSA-N	2.3×10^5 6.5×10^7 2.9×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CYHXOLACO $\text{C}_6\text{H}_{10}\text{O}_2$ ODZTXUXIYGJLMC-UHFFFAOYSA-N	1.8×10^1 1.4×10^3 6.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CYHXONAOH $\text{C}_6\text{H}_{10}\text{O}_2$ TWEVQGUWCLBRMJ-UHFFFAOYSA-N	3.5×10^2 3.5×10^4 8.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMK2OH $\text{C}_6\text{H}_{10}\text{O}_4$ RQDWELNLPMBYMA-UHFFFAOYSA-N	2.8×10^5 4.2×10^6 2.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMKCOOH $\text{C}_6\text{H}_8\text{O}_4$ OKDWWGVTKQPUTM-UHFFFAOYSA-N	6.5×10^5 3.2×10^5 1.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMKOOH $\text{C}_6\text{H}_{10}\text{O}_5$ WAHPQVAXIMVNL-UHFFFAOYSA-N	4.1×10^8 7.3×10^6 1.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EIPKAOH $\text{C}_6\text{H}_{12}\text{O}_2$ SYAVYWAMVZKGTU-UHFFFAOYSA-N	3.9 3.3×10^1 4.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EIPKBOH $\text{C}_6\text{H}_{12}\text{O}_2$ JYEMLYGXHDIVRA-UHFFFAOYSA-N	1.1×10^2 3.1×10^2 4.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H13M3CO4C5 $\text{C}_6\text{H}_{12}\text{O}_3$ NBNMOYHUQSLZCQ-UHFFFAOYSA-N	9.8×10^3 1.7×10^5 3.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H3C25C6OH $\text{C}_6\text{H}_{10}\text{O}_4$ XLUGOLRJPRATMY-UHFFFAOYSA-N	5.6×10^5 4.8×10^7 3.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H3C25C6OOH $\text{C}_6\text{H}_{10}\text{O}_5$ XIJKANBCMKWKRM-UHFFFAOYSA-N	2.9×10^8 5.0×10^7 1.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HEX3ONAOH $\text{C}_6\text{H}_{12}\text{O}_2$ XHYXKWWFNRBCGE-UHFFFAOYSA-N	1.1×10^2 6.5×10^2 4.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HEX3ONCOH $\text{C}_6\text{H}_{12}\text{O}_2$ ZWBUSAWJHMPQJ-UHFFFAOYSA-N	5.6 4.2×10^1 3.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HEX3ONDOH $\text{C}_6\text{H}_{12}\text{O}_2$ ITHSWIXXHGKJW-UHFFFAOYSA-N	9.8×10^1 2.6×10^2 5.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO1CO24C6 $\text{C}_6\text{H}_{10}\text{O}_3$ NUDMYLMVZRZHHU-UHFFFAOYSA-N	3.7×10^3 1.4×10^4 1.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO1CO4C6 $\text{C}_6\text{H}_{12}\text{O}_2$ APQMHEQLBDXGMP-UHFFFAOYSA-N	9.8×10^1 1.4×10^3 4.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2CO5C6 $\text{C}_6\text{H}_{12}\text{O}_2$ ZSLLTJVENEIDW-UHFFFAOYSA-N	2.8×10^3 1.1×10^2 2.3×10^3 6.9×10^2	10000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:M2BKAOH $\text{C}_6\text{H}_{12}\text{O}_2$ ZXZUCILLTLHIBZ-UHFFFAOYSA-N	1.3×10^2 6.9×10^2 4.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2BKBOH $\text{C}_6\text{H}_{12}\text{O}_2$ KHCUSEDQRQWYNDU-UHFFFAOYSA-N	3.9 4.4×10^1 3.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MBKCOOHOH $\text{C}_6\text{H}_{10}\text{O}_5$ VGLNQNYMXFMHPV-UHFFFAOYSA-N	2.5×10^8 2.1×10^6 4.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MIBKAOH3CO $\text{C}_6\text{H}_{10}\text{O}_3$ NARMPYMUEZMSEV-UHFFFAOYSA-N	2.6×10^3 4.6×10^2 2.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MIBKBOH $\text{C}_6\text{H}_{12}\text{O}_2$ IGPIDYBTABPKQT-UHFFFAOYSA-N	6.5 6.3×10^1 2.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MIBKHO14 $\text{C}_6\text{H}_{12}\text{O}_3$ UZSRJTNDUYOLE-UHFFFAOYSA-N	9.8×10^3 8.1×10^5 2.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MIBKHO4OOH $\text{C}_6\text{H}_{12}\text{O}_4$ FGHCAVJLMYVGOV-UHFFFAOYSA-N	5.6×10^6 1.1×10^6 1.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MIBKOH34 $\text{C}_6\text{H}_{12}\text{O}_3$ OSPIOFUQWMUWOI-UHFFFAOYSA-N	5.0×10^3 4.1×10^4 3.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MIBKOHOOH $\text{C}_6\text{H}_{12}\text{O}_4$ WIXFQYMFUSUQGGT-UHFFFAOYSA-N	8.1×10^6 1.8×10^5 4.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MIBKOHBOOH $\text{C}_6\text{H}_{12}\text{O}_4$ NCKNZQNPSVRYAP-UHFFFAOYSA-N	7.3×10^6 2.9×10^5 3.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTBKOH $\text{C}_6\text{H}_{12}\text{O}_2$ DYAWMXSWDGP GOI-UHFFFAOYSA-N	7.6×10^1 3.8×10^2 3.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBZQCO $\text{C}_6\text{H}_4\text{O}_4$ LTWQMDFZHUKN-UHFFFAOYSA-N	8.3×10^6 3.6×10^9 3.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBZQOH $\text{C}_6\text{H}_6\text{O}_4$ KGAUAKJVBKFEJK-UHFFFAOYSA-N	3.6×10^6 5.0×10^8 1.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBZQOOH $\text{C}_6\text{H}_6\text{O}_5$ GWWKDNIKIVTFLV-UHFFFAOYSA-N	5.3×10^9 1.9×10^9 1.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C61CO3H $\text{C}_7\text{H}_{10}\text{O}_6$ LNQZNTUCDYUQNY-UHFFFAOYSA-N	7.8×10^8 4.6×10^5 4.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C62CO3H $\text{C}_7\text{H}_{10}\text{O}_6$ OTMFEIRKQNFPTO-UHFFFAOYSA-N	8.9×10^8 5.1×10^5 1.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C711OOH $\text{C}_7\text{H}_{14}\text{O}_4$ CHMPWQJFRSDBMP-UHFFFAOYSA-N	5.0×10^6 7.4×10^5 5.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C712OH $\text{C}_7\text{H}_{14}\text{O}_3$ XKQDJNZCXUTPAB-UHFFFAOYSA-N	8.7×10^4 3.6×10^5 5.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C712OOH $\text{C}_7\text{H}_{14}\text{O}_4$ ISDXEEIPAJYQKS-UHFFFAOYSA-N	6.5×10^6 7.6×10^5 8.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C713OH $C_7H_{12}O_3$ KKMPMNHUJNYFMY-UHFFFAOYSA-N	2.1×10^3 4.0×10^4 2.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C714OH $C_7H_{12}O_3$ BDJIDAHXOAZMLT-UHFFFAOYSA-N	3.6×10^3 6.8×10^4 4.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C719OH $C_7H_{12}O_4$ SNLGDZBHBGDGF-UHFFFAOYSA-N	5.4×10^8 7.1×10^{10} 2.3×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C719OOH $C_7H_{12}O_5$ RIQZESWBZQGTQF-UHFFFAOYSA-N	7.1×10^{10} 5.8×10^{11} 2.0×10^9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C71OOH $C_7H_{14}O_4$ NBQALOYIKVIATH-UHFFFAOYSA-N	8.5×10^6 4.1×10^5 3.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C726CO3OH $C_7H_{10}O_3$ KXKCGTAVIRFZLI-UHFFFAOYSA-N	1.4×10^4 9.1×10^4 6.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C72OH $C_7H_{14}O_3$ NSVUCXUEJIZYCX-UHFFFAOYSA-N	1.3×10^5 1.9×10^5 8.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C72OOH $C_7H_{14}O_4$ HOCRXLJRXJDOAI-UHFFFAOYSA-N	9.3×10^6 9.3×10^5 1.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C76OOH $C_7H_{14}O_4$ RNKPJWWQPAQZAU-UHFFFAOYSA-N	8.5×10^6 8.0×10^5 1.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C77CO $C_7H_{12}O_3$ LRWMVVHMPWURQP-UHFFFAOYSA-N	2.1×10^3 8.1×10^3 7.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C77OH $C_7H_{14}O_3$ BWFQHNHYIFKCYIN-UHFFFAOYSA-N	8.7×10^4 3.2×10^5 8.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C77OOH $C_7H_{14}O_4$ VLZZBCPVZYCEGU-UHFFFAOYSA-N	6.5×10^6 6.5×10^5 4.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C78CO $C_7H_{12}O_3$ XZDSUXRHWGXGLP-UHFFFAOYSA-N	4.2×10^4 1.8×10^4 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C78OH C ₇ H ₁₄ O ₃ RHPFPSWJNNLJIH-UHFFFAOYSA-N	9.1 × 10 ³ 3.0 × 10 ⁵ 1.6 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C78OOH C ₇ H ₁₄ O ₄ CHSMMMZNDATLZ-UHFFFAOYSA-N	5.6 × 10 ⁶ 3.7 × 10 ⁵ 1.4 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C79OOH C ₇ H ₁₂ O ₅ PAASZTKJDWJXEO-UHFFFAOYSA-N	2.2 × 10 ⁸ 1.0 × 10 ⁷ 1.7 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7BDCOH C ₇ H ₁₂ O ₄ IQLAANIUQOXZGT-UHFFFAOYSA-N	1.6 × 10 ⁵ 3.6 × 10 ⁶ 7.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7BDCCOH C ₇ H ₁₂ O ₅ YSGKLAZJXASOJQ-UHFFFAOYSA-N	2.3 × 10 ⁸ 2.5 × 10 ⁶ 2.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7EDCCO C ₇ H ₁₀ O ₄ ZZJOBVIMQADRSQ-UHFFFAOYSA-N	5.3 × 10 ⁵ 2.2 × 10 ⁵ 8.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7EDCOH C ₇ H ₁₂ O ₄ ILHMXLYATWSMQV-UHFFFAOYSA-N	2.3 × 10 ⁵ 2.7 × 10 ⁶ 1.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7EDCCOH C ₇ H ₁₂ O ₅ GFYCWYCYSZRKIC-UHFFFAOYSA-N	3.7 × 10 ⁸ 4.6 × 10 ⁶ 4.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO25C73OH C ₇ H ₁₂ O ₃ SUAOXERUOLNODJ-UHFFFAOYSA-N	3.5 × 10 ³ 8.3 × 10 ⁴ 1.0 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO25C74OH C ₇ H ₁₂ O ₃ WVDVIEDFZYMNAI-UHFFFAOYSA-N	3.5 × 10 ³ 8.5 × 10 ⁴ 1.2 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2M2CO5C6 C ₇ H ₁₄ O ₂ GNNBSAPGFGNCCT-UHFFFAOYSA-N	6.0 × 10 ¹ 1.5 × 10 ³ 4.2 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2M3CO5C6 C ₇ H ₁₄ O ₂ JXXNGUYHZPNXHL-UHFFFAOYSA-N	1.0 × 10 ² 1.7 × 10 ³ 2.4 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2M4CO5C6 C ₇ H ₁₄ O ₂ ZIVAMUMQDXZFCR-UHFFFAOYSA-N	1.0 × 10 ² 1.4 × 10 ³ 2.3 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:H3C25CCO3H $\text{C}_7\text{H}_{10}\text{O}_6$ ARDZNBQBCJILRHG-UHFFFAOYSA-N	3.3×10^9 9.8×10^8 6.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HCC7CO $\text{C}_7\text{H}_{10}\text{O}_2$ WVMVYBISUAVCBD-UHFFFAOYSA-N	9.1×10^2 4.6×10^4 1.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2CO35C7 $\text{C}_7\text{H}_{12}\text{O}_3$ LULWLYVLBHVZLB-UHFFFAOYSA-N	3.5×10^3 1.1×10^4 5.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2CO5C7 $\text{C}_7\text{H}_{14}\text{O}_2$ DWMNUVZLRBCGOL-UHFFFAOYSA-N	8.7×10^1 1.3×10^3 2.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3CO6C7 $\text{C}_7\text{H}_{14}\text{O}_2$ MQRALJJAASQPNT-UHFFFAOYSA-N	2.1×10^3 8.7×10^1 1.6×10^3 1.7×10^2	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:PTLQCO $\text{C}_7\text{H}_6\text{O}_4$ QCLUMLMJJNMFFX-UHFFFAOYSA-N	5.6×10^6 6.2×10^9 6.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PTLQOH $\text{C}_7\text{H}_8\text{O}_4$ FWCZASAUлмадеU-UHFFFAOYSA-N	2.4×10^6 5.1×10^8 1.2×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PTLQOOH $\text{C}_7\text{H}_8\text{O}_5$ ULCYCDVSDDOIBS-UHFFFAOYSA-N	3.6×10^9 1.8×10^9 3.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TLCOBIPEOH $\text{C}_7\text{H}_8\text{O}_4$ BTRXIMYXFXXDNL-UHFFFAOYSA-N	3.3×10^6 7.3×10^2 2.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TLOBIPEROH $\text{C}_7\text{H}_8\text{O}_4$ OGIZZGFCOPERO-UHFFFAOYSA-N	3.3×10^6 1.3×10^3 1.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6MOCOCO3H $\text{C}_8\text{H}_{10}\text{O}_6$ UAMJQIWWNIVSAA-UHFFFAOYSA-N	2.1×10^9 1.7×10^9 4.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7CO2M5OH $\text{C}_8\text{H}_{12}\text{O}_3$ VIGCXZSBZQABDL-UHFFFAOYSA-N	7.8×10^3 2.0×10^4 2.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C7CO2OCO3H $\text{C}_8\text{H}_{10}\text{O}_6$ PYNUJNZYCLWJPS-UHFFFAOYSA-N	2.1×10^9 2.0×10^9 4.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7M2CO5OH $\text{C}_8\text{H}_{12}\text{O}_3$ IWFVDGADKJRMAL-UHFFFAOYSA-N	9.1×10^3 8.5×10^4 2.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C817OH $\text{C}_8\text{H}_{14}\text{O}_3$ HXKXVESDDNIBIQ-UHFFFAOYSA-N	5.4×10^4 4.9×10^5 2.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C818CO $\text{C}_8\text{H}_{12}\text{O}_4$ CRQAGKNTHDNGEW-UHFFFAOYSA-N	6.5×10^6 3.6×10^7 1.7×10^7 1.3×10^3	16000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C818OH $\text{C}_8\text{H}_{14}\text{O}_4$ GYBDPSWJEGVQPC-UHFFFAOYSA-N	8.0×10^6 2.9×10^8 7.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C818OOH $\text{C}_8\text{H}_{14}\text{O}_5$ DLMBPALZQHFDH-UHFFFAOYSA-N	5.7×10^8 5.0×10^9 1.0×10^8 9.1×10^4	17000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C819OOH $\text{C}_8\text{H}_{14}\text{O}_5$ JRXMSSDNDAZISI-UHFFFAOYSA-N	2.1×10^7 3.5×10^9 6.3×10^7 6.3×10^4	17000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C81OOH $\text{C}_8\text{H}_{16}\text{O}_4$ SFFBCYBCCUXGLX-UHFFFAOYSA-N	6.8×10^6 3.3×10^5 1.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C820OOH $\text{C}_8\text{H}_{12}\text{O}_6$ MPCACGHSMGOFNV-UHFFFAOYSA-N	2.3×10^{12} 1.4×10^9 1.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C826CO3OH $\text{C}_8\text{H}_{12}\text{O}_3$ GGSZUEZFMJTLBX-UHFFFAOYSA-N	1.1×10^4 5.6×10^4 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C827OH $\text{C}_8\text{H}_{14}\text{O}_3$ VYHQZXLAUHJBAB-UHFFFAOYSA-N	1.9×10^3 5.4×10^4 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C829OH $\text{C}_8\text{H}_{14}\text{O}_4$ ZFRREEXTYBESJX-UHFFFAOYSA-N	1.0×10^8 1.0×10^8 1.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C829OOH $\text{C}_8\text{H}_{14}\text{O}_5$ PFFZQAOPEABNHW-UHFFFAOYSA-N	2.8×10^9 8.0×10^7 9.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C82OOH $\text{C}_8\text{H}_{16}\text{O}_4$ AQECYOJQUIJAFS-UHFFFAOYSA-N	8.5×10^6 6.8×10^5 1.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C84OH $\text{C}_8\text{H}_{14}\text{O}_3$ HXKSWDLNZPICFQ-UHFFFAOYSA-N	2.8×10^3 4.1×10^4 5.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C88OH $\text{C}_8\text{H}_{12}\text{O}_3$ DCTATDQRTQNXHW-UHFFFAOYSA-N	6.0×10^3 1.1×10^6 3.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EBZOBPEROH $\text{C}_8\text{H}_{10}\text{O}_4$ YDVGTQTYIBCIQC-UHFFFAOYSA-N	2.8×10^6 8.3×10^2 6.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO34CO6C8 $\text{C}_8\text{H}_{16}\text{O}_3$ GQDVWZAGWHUXKX-UHFFFAOYSA-N	1.0×10^5 1.7×10^5 3.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3CO46C8 $\text{C}_8\text{H}_{14}\text{O}_3$ LLYUJOAMIUBKSA-UHFFFAOYSA-N	2.8×10^3 8.3×10^3 3.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3CO6C8 $\text{C}_8\text{H}_{16}\text{O}_2$ VJZJBNBTVLGPPEM-UHFFFAOYSA-N	8.0×10^1 9.6×10^2 8.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYOBBPEROH $\text{C}_8\text{H}_{10}\text{O}_4$ BQJOHFWATKFGAQ-UHFFFAOYSA-N	1.9×10^6 3.0×10^2 4.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYQOH $\text{C}_8\text{H}_{10}\text{O}_4$ DNSXSZYLXRHYTM-UHFFFAOYSA-N	1.3×10^6 3.0×10^8 3.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYQOOH $\text{C}_8\text{H}_{10}\text{O}_5$ UAWVAAITGKOKNW-UHFFFAOYSA-N	1.9×10^9 3.0×10^8 5.9×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYQCO $\text{C}_8\text{H}_8\text{O}_4$ QSCBEAAIZLBQA-UHFFFAOYSA-N	3.4×10^6 6.2×10^9 1.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYQOH $\text{C}_8\text{H}_{10}\text{O}_4$ LJMMKZLQFVIDLQ-UHFFFAOYSA-N	1.6×10^6 3.5×10^8 7.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:OXYQOOH $\text{C}_8\text{H}_{10}\text{O}_5$ NOWQTCYBLCRAEJ-UHFFFAOYSA-N	2.3×10^9 1.2×10^9 1.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYQOH $\text{C}_8\text{H}_{10}\text{O}_4$ RORXCXPFLRGHV-UHFFFAOYSA-N	1.3×10^6 3.0×10^8 5.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYQOOH $\text{C}_8\text{H}_{10}\text{O}_5$ FYDHRLZPZZTRLJ-UHFFFAOYSA-N	1.9×10^9 4.2×10^8 2.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6EO2HCO3H $\text{C}_9\text{H}_{12}\text{O}_6$ KMUWHHLOUXRZEC-UHFFFAOYSA-N	1.7×10^9 1.6×10^9 3.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7MJPCO3H $\text{C}_9\text{H}_{12}\text{O}_6$ HVGFXMJLWNDQT-UHFFFAOYSA-N	1.7×10^9 1.2×10^9 6.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7MOCOCO3H $\text{C}_9\text{H}_{12}\text{O}_6$ UXMGGYROBLVKA-UHFFFAOYSA-N	1.4×10^9 2.3×10^9 9.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C8M2CO6OH $\text{C}_9\text{H}_{14}\text{O}_3$ AUYUFIFJEJTMG-UHFFFAOYSA-N	7.6×10^3 4.8×10^4 8.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C917OH $\text{C}_9\text{H}_{14}\text{O}_3$ DVAQWOBQFULNSX-UHFFFAOYSA-N	9.8×10^4 4.3×10^6 3.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C920OOH $\text{C}_9\text{H}_{16}\text{O}_4$ CXKZGZZGALDRTB-UHFFFAOYSA-N	6.5×10^5 1.6×10^6 6.9×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C921OOH $\text{C}_9\text{H}_{16}\text{O}_5$ MIFQELLQXZRDIQ-UHFFFAOYSA-N	1.2×10^9 3.2×10^9 7.1×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C922OOH $\text{C}_9\text{H}_{16}\text{O}_6$ IOTRHTNOHNKLT-UHFFFAOYSA-N	3.6×10^{11} 7.8×10^9 6.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C923OH $\text{C}_9\text{H}_{16}\text{O}_2$ VZYSLJNPEGILSI-UHFFFAOYSA-N	5.3×10^3 1.5×10^2 2.0×10^3 7.4×10^2	12000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C924CO $\text{C}_9\text{H}_{14}\text{O}_3$ IEIWFPISZBHOOD-UHFFFAOYSA-N	1.0×10^5 5.6×10^4 4.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C924OH $\text{C}_9\text{H}_{16}\text{O}_3$ OXSRPARPRXNCEH-UHFFFAOYSA-N	3.8×10^5 2.2×10^4 1.4×10^5 2.7×10^3	16000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C924OOH $\text{C}_9\text{H}_{16}\text{O}_4$ BVODBOGLMHSHGK-UHFFFAOYSA-N	3.0×10^6 1.2×10^7 3.1×10^5 5.0×10^4	16000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C925OOH $\text{C}_9\text{H}_{16}\text{O}_6$ BGVLBDREANINMN-UHFFFAOYSA-N	9.1×10^{12} 5.0×10^{10} 1.6×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C927OH $\text{C}_9\text{H}_{16}\text{O}_3$ JILOVKBSEXPMT-UHFFFAOYSA-N	2.9×10^5 1.2×10^7 9.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C927OOH $\text{C}_9\text{H}_{16}\text{O}_4$ UVVCFMCOUIWEJ-UHFFFAOYSA-N	7.6×10^6 8.9×10^6 6.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C928OH $\text{C}_9\text{H}_{16}\text{O}_3$ QGCNXROUFNWXOO-UHFFFAOYSA-N	2.9×10^4 3.8×10^5 1.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C929CO $\text{C}_9\text{H}_{14}\text{O}_4$ BWILLNTUIBCKIM-UHFFFAOYSA-N	2.0×10^7 5.4×10^6 3.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C929OH $\text{C}_9\text{H}_{16}\text{O}_4$ PMWQIXWFMSCXRH-UHFFFAOYSA-N	4.4×10^6 5.9×10^8 6.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C929OOH $\text{C}_9\text{H}_{16}\text{O}_5$ IKUORCWWMOEDGL-UHFFFAOYSA-N	2.9×10^9 3.3×10^8 1.2×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C92OOH $\text{C}_9\text{H}_{18}\text{O}_4$ MOTPUWPPGZYDTM-UHFFFAOYSA-N	5.3×10^6 2.9×10^5 2.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C93CO $\text{C}_9\text{H}_{16}\text{O}_3$ NCWLHDSPIENNF-UHFFFAOYSA-N	2.2×10^3 6.6×10^3 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C93OH $\text{C}_9\text{H}_{18}\text{O}_3$ XOZZRVPGLURXSY-UHFFFAOYSA-N	8.0×10^4 1.5×10^5 2.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C93OOH $\text{C}_9\text{H}_{18}\text{O}_4$ DSWUVSMVGXSNEV-UHFFFAOYSA-N	6.8×10^6 3.3×10^5 8.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C94OH $\text{C}_9\text{H}_{16}\text{O}_3$ RCWXDPYULCSTKX-UHFFFAOYSA-N	2.2×10^3 2.6×10^4 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C96OH $\text{C}_9\text{H}_{16}\text{O}_2$ RRFQMYCDTHUGSU-UHFFFAOYSA-N	1.7×10^2 3.3×10^3 1.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C97OH $\text{C}_9\text{H}_{16}\text{O}_3$ QWYKJUJQBVIHQW-UHFFFAOYSA-N	1.4×10^4 1.2×10^6 8.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C97OOH $\text{C}_9\text{H}_{16}\text{O}_4$ AXRJNDGSGFVBSX-UHFFFAOYSA-N	8.1×10^6 3.9×10^5 1.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C98OH $\text{C}_9\text{H}_{16}\text{O}_4$ BWKWRXKCGJAJAO-UHFFFAOYSA-N	9.3×10^7 1.0×10^8 4.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C98OOH $\text{C}_9\text{H}_{16}\text{O}_5$ MEUGYCLQCHCPCY-UHFFFAOYSA-N	2.9×10^9 3.3×10^7 1.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C9DCOH $\text{C}_9\text{H}_{12}\text{O}_3$ DIFRJFLUSYQBJM-UHFFFAOYSA-N	4.0×10^5 1.9×10^7 4.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO4CO7C9 $\text{C}_9\text{H}_{18}\text{O}_2$ BPRAKHMXALGYKO-UHFFFAOYSA-N	6.3×10^1 8.3×10^2 7.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPBZOBPROH $\text{C}_9\text{H}_{12}\text{O}_4$ WRQNGVASMLSOGA-UHFFFAOYSA-N	2.6×10^6 7.1×10^2 3.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPRBQCO $\text{C}_9\text{H}_{10}\text{O}_4$ UYSSVGYDANWBFJ-UHFFFAOYSA-N	4.1×10^6 2.6×10^9 1.2×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPRBQOH $\text{C}_9\text{H}_{12}\text{O}_4$ BQKYQBQGYWJSQ-UHFFFAOYSA-N	1.8×10^6 1.7×10^8 7.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:IPRBQOOH $\text{C}_9\text{H}_{12}\text{O}_5$ CCPBRYDTGCPJNX-UHFFFAOYSA-N	2.9×10^9 6.9×10^8 1.2×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LMKAOH $\text{C}_9\text{H}_{16}\text{O}_3$ RDFVUMNEKCADL-UHFFFAOYSA-N	2.0×10^5 6.2×10^6 1.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LMKAOOH $\text{C}_9\text{H}_{16}\text{O}_4$ ZYSXBTHWQDNLBX-UHFFFAOYSA-N	1.5×10^7 2.7×10^7 3.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LMKBCO $\text{C}_9\text{H}_{14}\text{O}_3$ QJYRJOZGIVJKQK-UHFFFAOYSA-N	5.0×10^3 3.7×10^5 2.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LMKBOOH $\text{C}_9\text{H}_{16}\text{O}_4$ PMLHMEIQMSUJKR-UHFFFAOYSA-N	1.5×10^7 2.6×10^7 8.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:METLOBPROH $\text{C}_9\text{H}_{12}\text{O}_4$ ZSTYNOBMCJBFRA-UHFFFAOYSA-N	1.5×10^6 1.8×10^2 2.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:METLQOH $\text{C}_9\text{H}_{12}\text{O}_4$ YIUSRNITCRMQJW-UHFFFAOYSA-N	1.1×10^6 2.0×10^8 2.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:METLQOOH $\text{C}_9\text{H}_{12}\text{O}_5$ JBNOKZJMGKNXDA-UHFFFAOYSA-N	1.7×10^9 1.3×10^8 5.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOPINAOH $\text{C}_9\text{H}_{14}\text{O}_2$ CVWGOJDPALGYKB-UHFFFAOYSA-N	5.4×10^2 2.5×10^4 4.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOPINBOH $\text{C}_9\text{H}_{14}\text{O}_2$ FPBMXOVOMRHDTB-UHFFFAOYSA-N	5.4×10^2 3.2×10^4 2.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOPINCOH $\text{C}_9\text{H}_{14}\text{O}_2$ OXRZVROAQDQDWA-UHFFFAOYSA-N	3.1×10^2 9.3×10^3 3.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOPINDOH $\text{C}_9\text{H}_{14}\text{O}_2$ MLOBETUCFXAOL-UHFFFAOYSA-N	2.8×10^1 7.3×10^2 8.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OETLQCO $\text{C}_9\text{H}_{10}\text{O}_4$ WOEKXHYIEUECKR-UHFFFAOYSA-N	3.0×10^6 4.7×10^9 1.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:OETLQOH $\text{C}_9\text{H}_{12}\text{O}_4$ DZHQWTGZQAKVBN-UHFFFAOYSA-N	1.3×10^6 2.0×10^8 5.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OETLQOOH $\text{C}_9\text{H}_{12}\text{O}_5$ KKWSBZSFLIKUTL-UHFFFAOYSA-N	1.9×10^9 8.0×10^8 2.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBZOBPEROH $\text{C}_9\text{H}_{12}\text{O}_4$ JGNLEXNHGWFGHL-UHFFFAOYSA-N	2.1×10^6 5.5×10^2 5.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PETLQOH $\text{C}_9\text{H}_{12}\text{O}_4$ KZQAJFYPECZGSC-UHFFFAOYSA-N	1.1×10^6 2.2×10^8 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PETLQOOH $\text{C}_9\text{H}_{12}\text{O}_5$ BJRXYYOXPPIRVAX-UHFFFAOYSA-N	1.7×10^9 2.0×10^8 2.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM123OBPOH $\text{C}_9\text{H}_{12}\text{O}_4$ WQSRICCLTUNRX-UHFFFAOYSA-N	1.0×10^6 1.7×10^2 4.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124QOH $\text{C}_9\text{H}_{12}\text{O}_4$ GVKLCWOTVYVOTB-UHFFFAOYSA-N	8.9×10^5 1.7×10^8 2.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124QOOH $\text{C}_9\text{H}_{12}\text{O}_5$ SLEWHRYFRSXVOQ-UHFFFAOYSA-N	1.3×10^9 2.6×10^8 3.2×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM135OBPOH $\text{C}_9\text{H}_{12}\text{O}_4$ MWFJWFJYOSXFGA-UHFFFAOYSA-N	1.2×10^6 1.9×10^2 4.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:APINBCO $\text{C}_{10}\text{H}_{16}\text{O}_2$ VZRRCCOUNSHSGB-UHFFFAOYSA-N	1.5×10^1 4.4×10^2 1.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1011OH $\text{C}_{10}\text{H}_{18}\text{O}_2$ FSFKNSSBELMLGT-UHFFFAOYSA-N	1.3×10^2 2.1×10^3 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C102OOH $\text{C}_{10}\text{H}_{20}\text{O}_4$ QHLMVJFPLBXXZ-UHFFFAOYSA-N	4.9×10^6 2.6×10^5 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C103CO $\text{C}_{10}\text{H}_{18}\text{O}_3$ QIIAZEBRWZSMOM-UHFFFAOYSA-N	2.0×10^3 5.4×10^3 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C103OH $\text{C}_{10}\text{H}_{20}\text{O}_3$ SXEGIXJYQPFAQK-UHFFFAOYSA-N	7.4×10^4 1.3×10^5 2.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C103OOH $\text{C}_{10}\text{H}_{20}\text{O}_4$ DOFXWCNTKKGZWNUN-UHFFFAOYSA-N	5.5×10^6 3.0×10^5 1.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C104OH $\text{C}_{10}\text{H}_{18}\text{O}_3$ FHITZQAABUJLCH-UHFFFAOYSA-N	2.0×10^3 1.9×10^4 4.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C920CO3H $\text{C}_{10}\text{H}_{16}\text{O}_5$ OFVMBWQGLFFRLM-UHFFFAOYSA-N	6.6×10^6 9.1×10^5 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C9M2CO6OH $\text{C}_{10}\text{H}_{16}\text{O}_3$ SLPXKTFAPIGCFF-UHFFFAOYSA-N	5.9×10^3 2.4×10^4 4.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMEOBPROH $\text{C}_{10}\text{H}_{14}\text{O}_4$ ZCTKJUASOMJGQC-UHFFFAOYSA-N	1.0×10^6 1.3×10^2 9.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO5CO8C10 $\text{C}_{10}\text{H}_{20}\text{O}_2$ GDOWVFFRHQHNBS-UHFFFAOYSA-N	5.1×10^1 7.4×10^2 8.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LIMBCO $\text{C}_{10}\text{H}_{16}\text{O}_2$ JEQLRDRDFLXSHY-UHFFFAOYSA-N	1.4×10^1 3.5×10^2 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C112OOH $\text{C}_{11}\text{H}_{22}\text{O}_4$ IFXOTQISYXBGBQ-UHFFFAOYSA-N	3.8×10^6 2.4×10^5 5.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C113CO $\text{C}_{11}\text{H}_{20}\text{O}_3$ VJVDGYIYRBYKOQ-UHFFFAOYSA-N	1.6×10^3 4.5×10^3 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C113OH $\text{C}_{11}\text{H}_{22}\text{O}_3$ IBMABDXBRFZEGO-UHFFFAOYSA-N	5.8×10^4 1.1×10^5 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C113OOH $\text{C}_{11}\text{H}_{22}\text{O}_4$ PBWNXGFXFLKSE-UHFFFAOYSA-N	4.9×10^6 3.0×10^5 8.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C114OH $\text{C}_{11}\text{H}_{20}\text{O}_3$ UGVQLPIEIIICAJP-UHFFFAOYSA-N	1.6×10^3 1.4×10^4 3.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:DETLOBPROH $\text{C}_{11}\text{H}_{16}\text{O}_4$ QNKVJNYVYVQVHN-UHFFFAOYSA-N	8.0×10^5 9.1×10^1 1.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO6CO9C11 $\text{C}_{11}\text{H}_{22}\text{O}_2$ HEIFQPPUFKWMSE-UHFFFAOYSA-N	4.6×10^1 6.5×10^2 5.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C122OOH $\text{C}_{12}\text{H}_{24}\text{O}_4$ PWTYXUGOJRDLPW-UHFFFAOYSA-N	3.2×10^6 2.3×10^5 9.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C123CO $\text{C}_{12}\text{H}_{22}\text{O}_3$ IVLDSNPYDYHHKW-UHFFFAOYSA-N	1.3×10^3 4.1×10^3 2.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C123OH $\text{C}_{12}\text{H}_{24}\text{O}_3$ FTSJAGYKUWYWCN-UHFFFAOYSA-N	4.8×10^4 9.6×10^4 1.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C123OOH $\text{C}_{12}\text{H}_{24}\text{O}_4$ YANZHJXFRFYAEY-UHFFFAOYSA-N	4.0×10^6 2.8×10^5 1.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C124OH $\text{C}_{12}\text{H}_{22}\text{O}_3$ ABVYFIKKAQHKSU-UHFFFAOYSA-N	1.3×10^3 1.3×10^4 2.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO7CO10C12 $\text{C}_{12}\text{H}_{24}\text{O}_2$ AJDNADCNQXGLCC-UHFFFAOYSA-N	3.7×10^1 5.1×10^2 4.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C131OH $\text{C}_{13}\text{H}_{22}\text{O}_3$ AONUZHGLRYBQFR-UHFFFAOYSA-N	5.1×10^4 2.3×10^5 1.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C132OH $\text{C}_{13}\text{H}_{22}\text{O}_4$ FIXMRMMYQTVSPU-UHFFFAOYSA-N	5.1×10^6 4.1×10^8 1.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C132OOH $\text{C}_{13}\text{H}_{22}\text{O}_5$ VUANIPKMYHABIK-UHFFFAOYSA-N	2.9×10^9 1.7×10^8 1.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C133CO $\text{C}_{13}\text{H}_{20}\text{O}_5$ NSPNCQPMMIIWRH-UHFFFAOYSA-N	7.1×10^9 4.6×10^9 4.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C133OH $\text{C}_{13}\text{H}_{22}\text{O}_5$ PJPMMZIOBGUFRQ-UHFFFAOYSA-N	3.2×10^{10} 6.0×10^{10} 8.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C133OOH $\text{C}_{13}\text{H}_{22}\text{O}_6$ TWNMHUJEMNHLMV-UHFFFAOYSA-N	8.5×10^{11} 3.7×10^{10} 5.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C134CO $\text{C}_{13}\text{H}_{18}\text{O}_6$ XVPKZNMZKWIEGC-UHFFFAOYSA-N	4.7×10^{12} 2.3×10^{11} 2.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C134OH $\text{C}_{13}\text{H}_{20}\text{O}_6$ CKMYGJKMMJWXII-UHFFFAOYSA-N	1.0×10^{12} 1.1×10^{13} 8.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C134OOH $\text{C}_{13}\text{H}_{20}\text{O}_7$ RYVAPXIZXOQMSU-UHFFFAOYSA-N	6.8×10^{14} 1.7×10^{12} 2.3×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C135OOH $\text{C}_{13}\text{H}_{18}\text{O}_8$ VAECXYXKQRKKGE-UHFFFAOYSA-N	5.0×10^{17} 6.6×10^{13} 9.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCKAOH $\text{C}_{14}\text{H}_{24}\text{O}_3$ ARSAOHGCYSGONM-UHFFFAOYSA-N	2.0×10^5 8.3×10^6 7.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCKAOOH $\text{C}_{14}\text{H}_{24}\text{O}_4$ OXLVMLPVWDEZIL-UHFFFAOYSA-N	1.4×10^7 4.0×10^6 7.8×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCKBCO $\text{C}_{14}\text{H}_{22}\text{O}_3$ IWYBCVOMQFEOMA-UHFFFAOYSA-N	5.3×10^3 7.6×10^5 2.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCKBOOH $\text{C}_{14}\text{H}_{24}\text{O}_4$ SISQWITWYDFXLW-UHFFFAOYSA-N	1.4×10^7 2.6×10^6 3.7×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C141OH $\text{C}_{14}\text{H}_{24}\text{O}_2$ OMNNANPOKVZFEY-UHFFFAOYSA-N	1.4×10^2 2.3×10^3 7.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C142OH $\text{C}_{14}\text{H}_{24}\text{O}_3$ TZIWCZUVZZOIAP-UHFFFAOYSA-N	2.7×10^5 8.5×10^6 2.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C142OOH $\text{C}_{14}\text{H}_{24}\text{O}_4$ OJVOLXXWTGQGEJ-UHFFFAOYSA-N	7.4×10^6 1.8×10^7 1.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C143CO $\text{C}_{14}\text{H}_{22}\text{O}_4$ IPHIBGAHOYIGTO-UHFFFAOYSA-N	2.0×10^7 5.1×10^8 5.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C143OH $\text{C}_{14}\text{H}_{24}\text{O}_4$ PUMKKTACSBJGTI-UHFFFAOYSA-N	9.1×10^7 5.0×10^9 2.3×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C143OOH $\text{C}_{14}\text{H}_{24}\text{O}_5$ FMXAUTXFPHKMFA-UHFFFAOYSA-N	2.5×10^9 3.4×10^9 1.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C145OH $\text{C}_{14}\text{H}_{24}\text{O}_6$ CADDZNIARUDOF-UHFFFAOYSA-N	1.0×10^{12} 3.1×10^{13} 1.5×10^9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C145OOH $\text{C}_{14}\text{H}_{24}\text{O}_7$ CEBXMSFHIDLJKH-UHFFFAOYSA-N	1.5×10^{15} 4.9×10^{13} 1.8×10^{10}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCBCO $\text{C}_{15}\text{H}_{24}\text{O}_2$ VLNGGDKMXDHPMK-UHFFFAOYSA-N	1.4×10^1 6.5×10^2 8.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PHCOMEOH $\text{C}_8\text{H}_8\text{O}_2$ ZWHVTXAYIKBEE-UHFFFAOYSA-N	3.0×10^2 1.2×10^3 6.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MPHCOMEOH $\text{C}_9\text{H}_{10}\text{O}_2$ CEJINNSYZFLSCS-UHFFFAOYSA-N	1.8×10^2 1.3×10^3 4.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PHCOETOH $\text{C}_9\text{H}_{10}\text{O}_2$ WLVPARCUSRDNII-UHFFFAOYSA-N	2.8×10^2 7.4×10^2 6.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMPHCOMOH $\text{C}_{10}\text{H}_{12}\text{O}_2$ DBYMNZNOFJHQFFD-UHFFFAOYSA-N	1.0×10^2 7.8×10^2 1.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EMPHCOMOH $\text{C}_{11}\text{H}_{14}\text{O}_2$ MHJXTDDYZBYNEF-UHFFFAOYSA-N	8.3×10^1 4.5×10^2 8.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ALCOCH2OOH $\text{C}_3\text{H}_4\text{O}_4$ RQBGWFCHIWSUOK-UHFFFAOYSA-N	4.1×10^6 7.6×10^3 3.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C33CO $\text{C}_3\text{H}_2\text{O}_3$ ICQNCHSXWNQIHC-UHFFFAOYSA-N	4.8×10^4 2.8×10^3 4.3×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C312COCO3H $\text{C}_4\text{H}_4\text{O}_5$ GUGBJTDAGNLAJO-UHFFFAOYSA-N	4.7×10^7 3.2×10^5 8.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C413COOOH $\text{C}_4\text{H}_6\text{O}_4$ XUKQLOKOLCMAI-UHFFFAOYSA-N	3.6×10^6 3.5×10^4 4.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4CO2OOH $\text{C}_4\text{H}_6\text{O}_4$ NOBUEMWCPQFCCN-UHFFFAOYSA-N	3.6×10^6 2.6×10^4 2.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4CODIAL $\text{C}_4\text{H}_4\text{O}_3$ OWIMZZMOFXSCLT-UHFFFAOYSA-N	4.3×10^4 5.0×10^3 2.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO23C3CHO $\text{C}_4\text{H}_4\text{O}_3$ LVZozHOAAHWEOQ-UHFFFAOYSA-N	3.3×10^4 3.3×10^3 1.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2C3CHO $\text{C}_4\text{H}_6\text{O}_2$ PKQIDSVLSKFZQC-UHFFFAOYSA-N	4.7×10^1 6.0×10^1 1.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2C4DIAL $\text{C}_4\text{H}_2\text{O}_4$ OURVMEXCDVXLPR-UHFFFAOYSA-N	2.8×10^7 5.0×10^5 1.0×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EGLYOX $\text{C}_4\text{H}_6\text{O}_2$ RWHQMRRVZJSGX-UHFFFAOYSA-N	4.7×10^1 8.0 2.3×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:VGLYOX $\text{C}_4\text{H}_4\text{O}_2$ SDQVYUNYDAWYIK-UHFFFAOYSA-N	1.4×10^2 2.6×10^1 3.5×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4CO2DCO3H $\text{C}_5\text{H}_4\text{O}_5$ AXIVSVGHKYPZBE-UHFFFAOYSA-N	1.7×10^8 5.1×10^6 8.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4MCO2OOH $\text{C}_5\text{H}_8\text{O}_4$ RKGLOUQDKXPRQL-UHFFFAOYSA-N	2.0×10^6 3.6×10^3 6.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C511OOH $\text{C}_5\text{H}_8\text{O}_4$ NBNBXTZOPWFTP-UHFFFAOYSA-N	3.3×10^6 7.8×10^4 1.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5124COOOH $\text{C}_5\text{H}_6\text{O}_5$ BXDCDQOWFJMSCY-UHFFFAOYSA-N	2.0×10^9 3.0×10^6 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C512OOH $\text{C}_5\text{H}_8\text{O}_4$ UGOJGQBYYBLKDX-UHFFFAOYSA-N	2.8×10^6 9.3×10^5 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C515CO C ₅ H ₄ O ₄ OONLXUUWPUJOU-UHFFFAOYSA-N	2.3 × 10 ⁷ 1.0 × 10 ⁶ 1.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C515OOH C ₅ H ₆ O ₅ KCJHAINVUWKSI-UHFFFAOYSA-N	2.0 × 10 ⁹ 3.5 × 10 ⁶ 1.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C54CO C ₅ H ₄ O ₄ KDLDWLXQVYMIBX-UHFFFAOYSA-N	2.0 × 10 ⁷ 5.8 × 10 ⁵ 5.8 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5CO23CHO C ₅ H ₆ O ₃ IPHREVVCNNUEQ-UHFFFAOYSA-N	2.6 × 10 ⁴ 1.4 × 10 ³ 1.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5COCHOOH C ₅ H ₈ O ₄ QJMQOTDLHJFXUFN-UHFFFAOYSA-N	2.8 × 10 ⁶ 2.3 × 10 ⁵ 5.0 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5DIALCO C ₅ H ₄ O ₃ SFSCHQJUYKUKJM-UHFFFAOYSA-N	1.4 × 10 ⁵ 4.9 × 10 ⁴ 1.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5DICARB C ₅ H ₆ O ₂ GBLMMVFQENXAFZ-UHFFFAOYSA-N	1.6 × 10 ² 1.1 × 10 ³ 2.7 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHOC3COOOH C ₅ H ₆ O ₅ KFSMXRNQWYDJRM-UHFFFAOYSA-N	3.8 × 10 ⁷ 7.4 × 10 ⁵ 3.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO12C4CHO C ₅ H ₆ O ₃ VUSMENNBCBGZQI-UHFFFAOYSA-N	3.6 × 10 ⁴ 9.3 × 10 ³ 1.5 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO13C4CHO C ₅ H ₆ O ₃ SSMCEDESANTCBB-UHFFFAOYSA-N	3.6 × 10 ⁴ 6.5 × 10 ³ 1.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO23C4CHO C ₅ H ₆ O ₃ QGGCMCHYJIPQCE-UHFFFAOYSA-N	2.6 × 10 ⁴ 3.8 × 10 ³ 7.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO24C4CHO C ₅ H ₆ O ₃ XHTYNUBGUBFOA-UHFFFAOYSA-N	2.6 × 10 ⁴ 4.3 × 10 ³ 9.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2C43CHO C ₅ H ₈ O ₂ KNTLTMLEQPLVDA-UHFFFAOYSA-N	4.4 × 10 ¹ 1.7 × 10 ¹ 4.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CO2C4CHO $\text{C}_5\text{H}_8\text{O}_2$ KEHNRUNQZGRQHU-UHFFFAOYSA-N	5.5×10^2 3.9×10^1 3.6×10^2 7.6×10^1	8400	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:CO3C4CHO $\text{C}_5\text{H}_8\text{O}_2$ ZNNXJRURXWWGLN-UHFFFAOYSA-N	3.9×10^1 2.6×10^1 6.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPRGLYOX $\text{C}_5\text{H}_8\text{O}_2$ FTDZDHIBENIBKZ-UHFFFAOYSA-N	4.4×10^1 4.9 1.9×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PGLYOX $\text{C}_5\text{H}_8\text{O}_2$ GDTHVMAIBQVUMV-UHFFFAOYSA-N	3.9×10^1 5.8 1.9×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C23C54CHO $\text{C}_6\text{H}_8\text{O}_3$ CBIOWOAHGWGTSI-UHFFFAOYSA-N	2.7×10^4 7.4×10^2 2.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3COCCHO $\text{C}_6\text{H}_{10}\text{O}_2$ PVLKSJIUOKAUMV-UHFFFAOYSA-N	3.0×10^1 2.2×10^1 7.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C45IC5CHO $\text{C}_6\text{H}_8\text{O}_3$ WETHXHAOPNKQLZ-UHFFFAOYSA-N	2.7×10^4 8.0×10^2 4.5×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4ECO2OOH $\text{C}_6\text{H}_{10}\text{O}_4$ CMRDMVGIWXXQFX-UHFFFAOYSA-N	1.8×10^6 1.8×10^3 3.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C511CHO $\text{C}_6\text{H}_8\text{O}_3$ SLKPDJWQVFRFW-UHFFFAOYSA-N	3.2×10^4 1.4×10^4 1.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C511CO3H $\text{C}_6\text{H}_8\text{O}_5$ PKVJBWZRBQBAMT-UHFFFAOYSA-N	3.5×10^7 1.6×10^6 1.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C512CO3H $\text{C}_6\text{H}_8\text{O}_5$ OPLKNVAQLNTMAR-UHFFFAOYSA-N	3.4×10^7 1.6×10^6 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C515CHO $\text{C}_6\text{H}_6\text{O}_4$ JHVNJBQABGTRPH-UHFFFAOYSA-N	2.0×10^7 8.7×10^5 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C515CO3H $\text{C}_6\text{H}_6\text{O}_6$ XPLLUAMAYNXAT-UHFFFAOYSA-N	2.2×10^{10} 1.1×10^8 2.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5CO2DCO3H $\text{C}_6\text{H}_6\text{O}_5$ DHHXAZIMZDQV-UHFFFAOYSA-N	1.1×10^8 4.5×10^6 3.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5DCO2CO3H $\text{C}_6\text{H}_6\text{O}_5$ GJOWGOOSLUXRQO-UHFFFAOYSA-N	1.1×10^8 4.2×10^6 6.8×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5MDICARB $\text{C}_6\text{H}_8\text{O}_2$ PFLPZDBOPDYUJU-UHFFFAOYSA-N	1.0×10^2 1.0×10^3 5.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5TRONCO3H $\text{C}_6\text{H}_6\text{O}_6$ GGHLQXKHXYQGCE-UHFFFAOYSA-N	2.2×10^{10} 4.6×10^7 1.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6125CO $\text{C}_6\text{H}_6\text{O}_3$ RFTMILUWMDIPHH-UHFFFAOYSA-N	9.3×10^4 6.2×10^4 5.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6135COOOH $\text{C}_6\text{H}_8\text{O}_5$ HGYTXVUJMUREIP-UHFFFAOYSA-N	1.7×10^9 4.8×10^6 2.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6145COOOH $\text{C}_6\text{H}_8\text{O}_5$ DSJLQKNTJKMXRQ-UHFFFAOYSA-N	1.7×10^9 7.8×10^6 2.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C615CO2OOH $\text{C}_6\text{H}_8\text{O}_4$ MOFLPBBDWVVKPL-UHFFFAOYSA-N	1.1×10^7 1.2×10^5 2.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C615CO $\text{C}_6\text{H}_8\text{O}_3$ BRRWJVYIMRBLKB-UHFFFAOYSA-N	2.2×10^4 2.8×10^2 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C616OOH $\text{C}_6\text{H}_8\text{O}_5$ RZNSBZRPHHAAABM-UHFFFAOYSA-N	2.4×10^9 1.7×10^7 3.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C617OOH $\text{C}_6\text{H}_{10}\text{O}_4$ VPKXUGZDYIOAPR-UHFFFAOYSA-N	1.8×10^6 6.2×10^3 4.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C618OOH $\text{C}_6\text{H}_{10}\text{O}_4$ AMQFKFSLRYJMS-UHFFFAOYSA-N	1.8×10^6 2.8×10^3 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C620OOH $\text{C}_6\text{H}_8\text{O}_5$ UWWRYPJKFSIPFS-UHFFFAOYSA-N	2.4×10^9 1.0×10^7 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C626OOH $\text{C}_6\text{H}_{10}\text{O}_4$ DHTMLHKAZOWLFT-UHFFFAOYSA-N	2.6×10^6 2.3×10^6 4.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C65OOH $\text{C}_6\text{H}_{10}\text{O}_4$ LHKMAYQHAYSMQO-UHFFFAOYSA-N	1.8×10^6 1.6×10^4 5.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CO134 $\text{C}_6\text{H}_8\text{O}_3$ VIOZXSHLWOADQ-UHFFFAOYSA-N	2.3×10^4 1.3×10^3 6.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CO4DB $\text{C}_6\text{H}_4\text{O}_4$ OGFBTMOHTIWBJU-UHFFFAOYSA-N	8.3×10^7 2.3×10^6 1.6×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6COALCO3H $\text{C}_6\text{H}_8\text{O}_5$ WRLXIVUJPLXKIG-UHFFFAOYSA-N	3.4×10^7 4.3×10^6 6.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6COCHOOH $\text{C}_6\text{H}_{10}\text{O}_4$ DQAWORJSQGOPLV-UHFFFAOYSA-N	2.3×10^6 1.5×10^6 5.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CODIAL $\text{C}_6\text{H}_8\text{O}_3$ PAXFMQWEAJBIJB-UHFFFAOYSA-N	2.8×10^4 3.2×10^4 2.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6DICARB $\text{C}_6\text{H}_8\text{O}_2$ GVKYFODEMNCLGS-UHFFFAOYSA-N	1.4×10^2 6.5×10^2 5.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO123C5CHO $\text{C}_6\text{H}_6\text{O}_4$ GLSSGXNMIEKBR-UHFFFAOYSA-N	2.0×10^7 1.7×10^6 1.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO235C5CHO $\text{C}_6\text{H}_6\text{O}_4$ GPIFCHFPYCMSRY-UHFFFAOYSA-N	1.6×10^7 2.1×10^5 4.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO24M3CHO $\text{C}_6\text{H}_8\text{O}_3$ OQYGUGGUHGKPLC-UHFFFAOYSA-N	2.7×10^4 8.0×10^2 2.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2C4GLYOX $\text{C}_6\text{H}_8\text{O}_3$ YEJDUVJLIVLCFZ-UHFFFAOYSA-N	2.3×10^4 7.4×10^3 8.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CO2C54CHO $\text{C}_6\text{H}_{10}\text{O}_2$ IDA HIBMEKOE BRG-UHFFFAOYSA-N	3.6×10^1 1.8×10^2 5.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2M33CHO $\text{C}_6\text{H}_{10}\text{O}_2$ HOOWKSPRVCRTJK-UHFFFAOYSA-N	2.5×10^1 1.1×10^1 1.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2M3C4CHO $\text{C}_6\text{H}_{10}\text{O}_2$ GQHWESFTVGVFIA-UHFFFAOYSA-N	3.6×10^1 1.8×10^2 4.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO35C5CHO $\text{C}_6\text{H}_8\text{O}_3$ KXLMWINKDVAJKB-UHFFFAOYSA-N	2.3×10^4 1.4×10^3 2.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO3C54CHO $\text{C}_6\text{H}_{10}\text{O}_2$ HFHZCESKBNQESK-UHFFFAOYSA-N	3.6×10^1 1.6×10^1 1.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO3C5CHO $\text{C}_6\text{H}_{10}\text{O}_2$ KKOFYQBBUSZDKJ-UHFFFAOYSA-N	3.0×10^1 2.3×10^2 2.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO45C5CHO $\text{C}_6\text{H}_8\text{O}_3$ WXTRRXKCNKUUA-UHFFFAOYSA-N	2.3×10^4 9.1×10^2 8.1×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ECO4 $\text{C}_6\text{H}_6\text{O}_4$ RGMUISDTMIPFQK-UHFFFAOYSA-N	1.6×10^7 2.5×10^5 4.2×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MC5DICARB $\text{C}_6\text{H}_8\text{O}_2$ PEBBIJGMJUFNQE-UHFFFAOYSA-N	1.0×10^2 8.9×10^2 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4DBM2CO3H $\text{C}_7\text{H}_8\text{O}_5$ OAFSDIWBIPMWQP-UHFFFAOYSA-N	7.8×10^7 5.1×10^6 8.0×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C617CHO $\text{C}_7\text{H}_{10}\text{O}_3$ NFXFJRVNKKYMOX-UHFFFAOYSA-N	1.8×10^4 4.6×10^2 7.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C617CO3H $\text{C}_7\text{H}_{10}\text{O}_5$ GEJLCFNTSCJUHB-UHFFFAOYSA-N	2.0×10^7 1.2×10^5 5.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C618CO3H $\text{C}_7\text{H}_{10}\text{O}_5$ BCVYZYXNMFZMHQ-UHFFFAOYSA-N	2.0×10^7 1.0×10^5 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C626CHO C ₇ H ₁₀ O ₃ HBIBDTPQGUCOQ-UHFFFAOYSA-N	2.6 × 10 ⁴ 5.4 × 10 ⁴ 2.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C626CO3H C ₇ H ₁₀ O ₅ XXGYBOYKTQFTKB-UHFFFAOYSA-N	3.2 × 10 ⁷ 2.9 × 10 ⁶ 8.0 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6M5CO2OOH C ₇ H ₁₀ O ₄ BPEPZMFTCHTDHQ-UHFFFAOYSA-N	6.0 × 10 ⁶ 1.4 × 10 ⁴ 1.5 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C715CO2OOH C ₇ H ₁₀ O ₄ MXRQCKDWMJYUGS-UHFFFAOYSA-N	1.0 × 10 ⁷ 5.8 × 10 ⁴ 1.0 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C716OOH C ₇ H ₁₀ O ₅ PDOSKCUHLZEIAA-UHFFFAOYSA-N	1.6 × 10 ⁹ 8.3 × 10 ⁶ 2.5 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C717OOH C ₇ H ₁₀ O ₅ PIJZITIWVOWVNF-UHFFFAOYSA-N	1.6 × 10 ⁹ 4.9 × 10 ⁷ 6.8 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C718OOH C ₇ H ₁₂ O ₄ IUOFUPZPJIEECL-UHFFFAOYSA-N	1.5 × 10 ⁶ 2.0 × 10 ⁵ 1.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C731OOH C ₇ H ₁₂ O ₄ GGMJSZWHXPYNJN-UHFFFAOYSA-N	2.1 × 10 ⁶ 4.3 × 10 ⁶ 4.8 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C735OOH C ₇ H ₁₀ O ₅ FKXMDVITUJPH-UHFFFAOYSA-N	1.4 × 10 ⁹ 8.0 × 10 ⁶ 1.4 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C736CO C ₇ H ₈ O ₃ XIQVOMVDKSOEBZ-UHFFFAOYSA-N	5.3 × 10 ⁴ 1.4 × 10 ⁴ 2.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C736OOH C ₇ H ₁₀ O ₄ FLZNSMFAMOSJOT-UHFFFAOYSA-N	4.3 × 10 ⁶ 1.4 × 10 ⁵ 4.6 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7ADICARB C ₇ H ₁₀ O ₂ JOIPXRIQHWMFPFU-UHFFFAOYSA-N	6.9 × 10 ¹ 1.3 × 10 ³ 8.5 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7CO2DBAL C ₇ H ₈ O ₃ YGMUVGSOGISXBZ-UHFFFAOYSA-N	7.6 × 10 ⁴ 5.5 × 10 ⁴ 3.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C7CO2DCO3H C ₇ H ₈ O ₅ GSEZJGCNNFTSDI-UHFFFAOYSA-N	9.3 × 10 ⁷ 1.8 × 10 ⁶ 2.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7CO4DB C ₇ H ₆ O ₄ RYPSCZRULGRFHH-UHFFFAOYSA-N	5.8 × 10 ⁷ 1.5 × 10 ⁶ 4.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7DDICARB C ₇ H ₁₀ O ₂ SRVPSCZJUZZLCY-UHFFFAOYSA-N	9.3 × 10 ¹ 6.2 × 10 ² 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7DICARB C ₇ H ₁₀ O ₂ GLRVVKVYRCSDLF-UHFFFAOYSA-N	1.1 × 10 ² 3.7 × 10 ² 1.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO235C6CHO C ₇ H ₈ O ₄ DKBJFPXQZAZJBK-UHFFFAOYSA-N	1.2 × 10 ⁷ 2.6 × 10 ⁵ 4.2 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO25C6CHO C ₇ H ₁₀ O ₃ ZTMYUKBUAYLBJN-UHFFFAOYSA-N	1.9 × 10 ⁴ 2.6 × 10 ⁴ 4.9 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IC7DICARB C ₇ H ₁₀ O ₂ XQMMKHYZYQABV-UHFFFAOYSA-N	1.3 × 10 ² 3.1 × 10 ² 1.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MC6CO2OOH C ₇ H ₁₀ O ₄ HBFXSTFRJMUUSF-UHFFFAOYSA-N	6.0 × 10 ⁶ 6.2 × 10 ³ 1.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4DBMECO3H C ₈ H ₁₀ O ₅ MRKOFGLXZVJMLJ-UHFFFAOYSA-N	6.0 × 10 ⁷ 2.2 × 10 ⁶ 6.5 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CO4M2DB C ₈ H ₈ O ₄ XSTUBABFSAZOJC-UHFFFAOYSA-N	3.9 × 10 ⁷ 1.7 × 10 ⁶ 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6ETCO4DB C ₈ H ₈ O ₄ OAOBTICOMUFUNE-UHFFFAOYSA-N	4.5 × 10 ⁷ 8.1 × 10 ⁵ 2.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C718CO3H C ₈ H ₁₂ O ₅ TVOCFMMHLDKVAZ-UHFFFAOYSA-N	1.7 × 10 ⁷ 2.4 × 10 ⁵ 8.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C731CO3H C ₈ H ₁₂ O ₅ NTZMYPVPFVPPPF-UHFFFAOYSA-N	2.5 × 10 ⁷ 2.1 × 10 ⁶ 8.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C7M6CO2OOH $\text{C}_8\text{H}_{12}\text{O}_4$ SYXNCLQMRSNQ-UHFFFAOYSA-N	5.4×10^6 6.6×10^3 5.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7MCO2DBAL $\text{C}_8\text{H}_{10}\text{O}_3$ PDQBXAJOXSGWHJ-UHFFFAOYSA-N	7.1×10^4 3.2×10^4 1.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7MCO2OOH $\text{C}_8\text{H}_{12}\text{O}_4$ IVJZKSXAPVTQOQ-UHFFFAOYSA-N	8.9×10^6 3.6×10^4 7.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C815CO2OOH $\text{C}_8\text{H}_{12}\text{O}_4$ BDUHFTDKOJODDX-UHFFFAOYSA-N	7.8×10^6 3.2×10^4 6.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C817CO $\text{C}_8\text{H}_{12}\text{O}_3$ WSCYQCAMZDXSLH-UHFFFAOYSA-N	3.1×10^5 1.7×10^4 5.8×10^3 3.1×10^3	12000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C830CO $\text{C}_8\text{H}_{12}\text{O}_2$ MHDCXCKIQVLVLU-UHFFFAOYSA-N	5.9×10^1 3.8×10^2 1.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C831CO $\text{C}_8\text{H}_{12}\text{O}_3$ ZUSGUVUFJOBUST-UHFFFAOYSA-N	1.4×10^4 5.4×10^3 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C86OOH $\text{C}_8\text{H}_{14}\text{O}_4$ DHFNMJQLYJIWHS-UHFFFAOYSA-N	1.4×10^6 3.0×10^5 3.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C87CO $\text{C}_8\text{H}_{10}\text{O}_4$ ZGSYEZWRFTZRGU-UHFFFAOYSA-N	1.5×10^7 7.1×10^4 2.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C87OOH $\text{C}_8\text{H}_{12}\text{O}_5$ ZOZQVMIZJFBYCH-UHFFFAOYSA-N	1.2×10^9 2.8×10^6 9.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C8CO2DBAL $\text{C}_8\text{H}_{10}\text{O}_3$ WFUAEUZWLUFGPU-UHFFFAOYSA-N	6.8×10^4 3.9×10^4 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C8CO2DCO3H $\text{C}_8\text{H}_{10}\text{O}_5$ AFZRTBPBEHNFPV-UHFFFAOYSA-N	7.4×10^7 1.0×10^6 1.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C8CO4DB $\text{C}_8\text{H}_8\text{O}_4$ XMBXSFIUGNBAMW-UHFFFAOYSA-N	3.9×10^7 1.1×10^6 2.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C8DCO2CO3H $\text{C}_8\text{H}_{10}\text{O}_5$ LSJULYFTAQYGE-UHFFFAOYSA-N	8.3×10^7 1.2×10^6 1.9×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO4DBC8 $\text{C}_8\text{H}_8\text{O}_4$ UUVQUVHMBIAKFN-UHFFFAOYSA-N	3.9×10^7 1.1×10^6 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MC7CO2OOH $\text{C}_8\text{H}_{12}\text{O}_4$ XEFYLFAPQOHXQI-UHFFFAOYSA-N	5.4×10^6 3.0×10^3 9.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CO4MEDB $\text{C}_9\text{H}_{10}\text{O}_4$ KWNNUZJFJQSMOTR-UHFFFAOYSA-N	3.0×10^7 1.1×10^6 6.9×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6IPRCO4DB $\text{C}_9\text{H}_{10}\text{O}_4$ PHOIWTKCTUWXFI-UHFFFAOYSA-N	4.2×10^7 8.7×10^5 1.9×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PRCO4DB $\text{C}_9\text{H}_{10}\text{O}_4$ ZAOQHXFQWRKJIE-UHFFFAOYSA-N	3.7×10^7 9.6×10^5 1.9×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7CO4EDB $\text{C}_9\text{H}_{10}\text{O}_4$ ZLFZFHOUVMHREF-UHFFFAOYSA-N	3.0×10^7 1.3×10^6 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7ECO4DB $\text{C}_9\text{H}_{10}\text{O}_4$ AWHQTSPUFRSDOO-UHFFFAOYSA-N	3.0×10^7 1.3×10^6 7.3×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C827CHO $\text{C}_9\text{H}_{14}\text{O}_3$ WRGXNTJIWBXAOX-UHFFFAOYSA-N	9.6×10^3 8.5×10^3 3.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C828CHO $\text{C}_9\text{H}_{12}\text{O}_4$ YZUHPZZEPOWVFM-UHFFFAOYSA-N	7.1×10^6 5.8×10^4 1.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C87CO3H $\text{C}_9\text{H}_{12}\text{O}_6$ AJHPLULEOIFIGV-UHFFFAOYSA-N	1.5×10^{10} 5.3×10^7 2.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C88CHO $\text{C}_9\text{H}_{12}\text{O}_3$ NXCXUGLKKPDWEC-UHFFFAOYSA-N	3.5×10^4 8.9×10^4 8.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C914CO C ₉ H ₁₀ O ₄ RDBINALOBQAVHT-UHFFFAOYSA-N	2.3 × 10 ⁷ 1.5 × 10 ⁷ 5.8 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C914OOH C ₉ H ₁₂ O ₅ ZERYOMDBUHTQAV-UHFFFAOYSA-N	2.6 × 10 ⁹ 1.6 × 10 ⁸ 3.0 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C915OOH C ₉ H ₁₄ O ₄ IHUGTHJLMVJZBZ-UHFFFAOYSA-N	4.0 × 10 ⁶ 4.2 × 10 ⁶ 2.8 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C916OOH C ₉ H ₁₄ O ₅ FURCCROLNKVFJP-UHFFFAOYSA-N	1.0 × 10 ⁹ 4.8 × 10 ⁷ 4.9 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C918OOH C ₉ H ₁₄ O ₄ RVRGXPTVZZTPQO-UHFFFAOYSA-N	4.0 × 10 ⁶ 7.8 × 10 ⁵ 1.1 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C919OOH C ₉ H ₁₄ O ₅ HGDKSMVLGYFVMB-UHFFFAOYSA-N	1.0 × 10 ⁹ 4.5 × 10 ⁷ 2.6 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C926OOH C ₉ H ₁₄ O ₅ YGLJXDYJGXWZRQ-UHFFFAOYSA-N	7.3 × 10 ⁸ 5.5 × 10 ⁶ 2.0 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C930OOH C ₉ H ₁₄ O ₅ UQPOFUKCKANZIY-UHFFFAOYSA-N	7.3 × 10 ⁸ 2.6 × 10 ⁷ 2.0 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO4DBC9 C ₉ H ₁₀ O ₄ KCIAXTRCVKQJBW-UHFFFAOYSA-N	2.5 × 10 ⁷ 1.2 × 10 ⁶ 7.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LMLKACO C ₉ H ₁₂ O ₄ JZUAMOXWRDMCCH-UHFFFAOYSA-N	1.0 × 10 ⁷ 8.1 × 10 ⁵ 8.9 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LMLKAOOH C ₉ H ₁₄ O ₅ VTXNRXDJNZTEJV-UHFFFAOYSA-N	1.2 × 10 ⁹ 1.7 × 10 ⁷ 9.1 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LMLKBCO C ₉ H ₁₂ O ₄ UMGHNOQMPCCKSD-UHFFFAOYSA-N	1.3 × 10 ⁷ 5.5 × 10 ⁵ 6.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LMLKBOOH C ₉ H ₁₄ O ₅ YVDVZIZUYUAKKJ-UHFFFAOYSA-N	1.0 × 10 ⁹ 3.6 × 10 ⁷ 3.0 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:LMLKET $\text{C}_9\text{H}_{14}\text{O}_3$ CWEQHJLFCCKMWEU-UHFFFAOYSA-N	1.1×10^6 1.4×10^4 5.4×10^4 3.8×10^4	13000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:NORLIMAL $\text{C}_9\text{H}_{14}\text{O}_2$ WPNOYHDEEVPEJH-UHFFFAOYSA-N	6.1×10^2 4.9×10^1 1.0×10^2 9.8×10^1	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:NORPINAL $\text{C}_9\text{H}_{14}\text{O}_2$ CRBGTDXDFEDFKSU-UHFFFAOYSA-N	5.3×10^1 2.2×10^2 4.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1010OOH $\text{C}_{10}\text{H}_{16}\text{O}_4$ PQCOZMUQYGSZBV-UHFFFAOYSA-N	2.0×10^6 3.8×10^5 1.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1012CO $\text{C}_{10}\text{H}_{16}\text{O}_3$ ZTXNVHZVZBDWRG-UHFFFAOYSA-N	7.4×10^3 6.5×10^4 1.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1012OOH $\text{C}_{10}\text{H}_{18}\text{O}_4$ NQAGNHJKHGEOIP-UHFFFAOYSA-N	9.8×10^5 3.5×10^5 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C106OOH $\text{C}_{10}\text{H}_{16}\text{O}_5$ QENSMPURVPBEBQ-UHFFFAOYSA-N	6.8×10^8 3.2×10^7 1.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C107OOH $\text{C}_{10}\text{H}_{16}\text{O}_4$ JYIMELQJWXRSLA-UHFFFAOYSA-N	2.1×10^6 1.6×10^4 3.2×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C108OOH $\text{C}_{10}\text{H}_{16}\text{O}_5$ AIXQDYAMZUITKH-UHFFFAOYSA-N	6.8×10^8 1.7×10^7 2.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C109CO $\text{C}_{10}\text{H}_{14}\text{O}_3$ GPWOGFGLGKGEOT-UHFFFAOYSA-N	3.9×10^4 5.6×10^3 8.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C109OOH $\text{C}_{10}\text{H}_{16}\text{O}_4$ ODTCGEGBAGAWAJ-UHFFFAOYSA-N	3.2×10^6 5.8×10^4 5.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LIMALACO $\text{C}_{10}\text{H}_{14}\text{O}_3$ OXUPJDFJWCMZMO-UHFFFAOYSA-N	4.3×10^4 2.6×10^4 2.9×10^3 3.2×10^1	13000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:LIMALAOOH $\text{C}_{10}\text{H}_{16}\text{O}_4$ DVORBFWFUCUOYLW-UHFFFAOYSA-N	2.5×10^5 3.5×10^6 1.1×10^4 4.2×10^3	15000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:LIMALBCO $\text{C}_{10}\text{H}_{14}\text{O}_3$ OFCYPGCYWHDSNB-UHFFFAOYSA-N	3.5×10^4 2.0×10^3 8.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LIMALBOOH $\text{C}_{10}\text{H}_{16}\text{O}_4$ DCWLKDSHBWMMQU-UHFFFAOYSA-N	2.4×10^5 2.9×10^6 2.0×10^4 1.4×10^4	15000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:LIMAL $\text{C}_{10}\text{H}_{16}\text{O}_2$ OGCGCISRMFSLTC-UHFFFAOYSA-N	4.0×10^2 3.8×10^1 7.4×10^1 2.1×10^2	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:PINAL $\text{C}_{10}\text{H}_{16}\text{O}_2$ GCHDWVBHKDJOKU-UHFFFAOYSA-N	4.3×10^1 2.0×10^2 1.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PINALOOH $\text{C}_{10}\text{H}_{16}\text{O}_4$ IKYOAMQPSDRUHL-UHFFFAOYSA-N	2.1×10^6 1.0×10^6 5.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C116CO $\text{C}_{11}\text{H}_{16}\text{O}_3$ XGVKCXDPYHMTU-UHFFFAOYSA-N	3.0×10^4 2.0×10^4 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C116OOH $\text{C}_{11}\text{H}_{18}\text{O}_4$ GLQKGYMROFUHSE-UHFFFAOYSA-N	2.6×10^6 2.0×10^6 2.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C116CHO $\text{C}_{12}\text{H}_{18}\text{O}_3$ LCDZSXGLJAAQMI-UHFFFAOYSA-N	2.8×10^4 1.4×10^5 1.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C116CO3H $\text{C}_{12}\text{H}_{18}\text{O}_5$ DYOBAPPYFCOAS-UHFFFAOYSA-N	3.0×10^7 2.4×10^6 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1210OOH $\text{C}_{12}\text{H}_{20}\text{O}_4$ KZRFFJDVJJJBDU-UHFFFAOYSA-N	2.2×10^6 4.7×10^6 4.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C129CO $\text{C}_{12}\text{H}_{16}\text{O}_4$ RGVZWLUBXGGBI-UHFFFAOYSA-N	1.9×10^7 8.7×10^5 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C129OOH $\text{C}_{12}\text{H}_{18}\text{O}_5$ OVAMHHASBHCMIZ-UHFFFAOYSA-N	2.2×10^9 1.5×10^7 2.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1210CO3H $\text{C}_{13}\text{H}_{20}\text{O}_5$ BXGKTBFSJURUHS-UHFFFAOYSA-N	2.8×10^7 1.9×10^6 6.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C131CO $\text{C}_{13}\text{H}_{20}\text{O}_3$ FDPPFMUIMWYEIX-UHFFFAOYSA-N	1.8×10^4 2.1×10^4 3.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCLKACO $\text{C}_{14}\text{H}_{20}\text{O}_4$ ARRZIWJBJSIOKE-UHFFFAOYSA-N	1.0×10^7 3.2×10^6 4.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCLKAOOH $\text{C}_{14}\text{H}_{22}\text{O}_5$ CKBNEDHFWOQWQD-UHFFFAOYSA-N	1.1×10^9 1.7×10^7 2.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCLKBCO $\text{C}_{14}\text{H}_{20}\text{O}_4$ NZHCLRCYZNBCMK-UHFFFAOYSA-N	1.4×10^7 2.9×10^6 1.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCLKBOOH $\text{C}_{14}\text{H}_{22}\text{O}_5$ CNYMBWKCKYTSRZ-UHFFFAOYSA-N	1.1×10^9 4.6×10^7 1.5×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCLKCCO $\text{C}_{14}\text{H}_{20}\text{O}_4$ RVZWWCAHYGTHHX-UHFFFAOYSA-N	1.0×10^7 1.2×10^6 1.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCLKCOOH $\text{C}_{14}\text{H}_{22}\text{O}_5$ OVPKMRRDRUAGIL-UHFFFAOYSA-N	1.1×10^9 1.5×10^7 6.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCLKET $\text{C}_{14}\text{H}_{22}\text{O}_3$ UGDRYISIDBCIAI-UHFFFAOYSA-N	1.5×10^4 1.4×10^5 1.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C141CO $\text{C}_{14}\text{H}_{22}\text{O}_2$ LUPUYUXNGLIEMW-UHFFFAOYSA-N	4.7×10^1 1.6×10^2 7.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C146CO $\text{C}_{14}\text{H}_{20}\text{O}_4$ ODTZTSYYOIXMEF-UHFFFAOYSA-N	1.0×10^7 1.1×10^6 1.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C146OOH $\text{C}_{14}\text{H}_{22}\text{O}_5$ SPXXDEIFDYFSMG-UHFFFAOYSA-N	1.1×10^9 1.3×10^7 1.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:BCALACO $\text{C}_{15}\text{H}_{22}\text{O}_3$ ULXUQSOGQJAAAV-UHFFFAOYSA-N	2.8×10^4 3.6×10^3 4.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCALAOOH $\text{C}_{15}\text{H}_{24}\text{O}_4$ CATQWYAHYHBBFL-UHFFFAOYSA-N	3.2×10^6 1.4×10^4 1.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCALBCO $\text{C}_{15}\text{H}_{22}\text{O}_3$ DVBAGSYXLVWTHM-UHFFFAOYSA-N	3.4×10^4 2.9×10^3 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCALBOOH $\text{C}_{15}\text{H}_{24}\text{O}_4$ BXDTVEFUTYSWEH-UHFFFAOYSA-N	2.8×10^6 3.6×10^4 1.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCAL $\text{C}_{15}\text{H}_{24}\text{O}_2$ PJJC DGMFEIUQRZ-UHFFFAOYSA-N	3.7×10^1 1.1×10^2 3.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCALCCO $\text{C}_{15}\text{H}_{22}\text{O}_3$ RMGPJKLPPRXORI-UHFFFAOYSA-N	2.8×10^4 4.7×10^3 2.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCALCOOH $\text{C}_{15}\text{H}_{24}\text{O}_4$ WQOUANLPJNTVBV-UHFFFAOYSA-N	3.2×10^6 1.7×10^4 2.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PHGLYOX $\text{C}_8\text{H}_6\text{O}_2$ OJUGVDODNPJEEC-UHFFFAOYSA-N	1.9×10^3 8.9×10^1 8.1×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MPHGLYOX $\text{C}_9\text{H}_8\text{O}_2$ ILRFLXHICGHRIN-UHFFFAOYSA-N	1.1×10^3 1.1×10^2 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMPHGLYOX $\text{C}_{10}\text{H}_{10}\text{O}_2$ COKLAMNWIKZGIN-UHFFFAOYSA-N	6.5×10^2 6.6×10^1 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EMPHGLYOX $\text{C}_{11}\text{H}_{12}\text{O}_2$ LRURQBQJFCJOPF-UHFFFAOYSA-N	5.9×10^2 5.3×10^1 8.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOCH2COCHO $\text{C}_3\text{H}_4\text{O}_3$ JLPAWRLRMTZCSF-UHFFFAOYSA-N	7.6×10^3 4.4×10^3 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CCOCOCOH $\text{C}_4\text{H}_6\text{O}_3$ AWMGPEHDHJUMEN-UHFFFAOYSA-N	7.1×10^3 3.2×10^3 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CO13C4OH $\text{C}_4\text{H}_6\text{O}_3$ KATSYVMPKZTIRW-UHFFFAOYSA-N	6.2×10^3 2.3×10^4 4.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2H3CHO $\text{C}_4\text{H}_6\text{O}_3$ GTYYZUSWKGYETP-UHFFFAOYSA-N	1.6×10^3 1.1×10^4 1.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H13CO2CHO $\text{C}_4\text{H}_6\text{O}_4$ RAPYKXPBVBNJGC-UHFFFAOYSA-N	1.0×10^6 4.6×10^5 3.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H1CO23CHO $\text{C}_4\text{H}_4\text{O}_4$ XSEYITBSKRUSNL-UHFFFAOYSA-N	4.7×10^6 1.2×10^6 3.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO1CO3CHO $\text{C}_4\text{H}_6\text{O}_3$ CUSSNCHZLYDUPJ-UHFFFAOYSA-N	1.2×10^5 4.0×10^4 6.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOCOC4DIAL $\text{C}_4\text{H}_4\text{O}_4$ JWBVDBDNUQOAG-UHFFFAOYSA-N	1.4×10^6 5.3×10^5 1.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4MCO2OH $\text{C}_5\text{H}_8\text{O}_3$ YKNUMNAVGAMCFT-UHFFFAOYSA-N	8.7×10^2 3.2×10^3 2.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C512OH $\text{C}_5\text{H}_8\text{O}_3$ ZSJOVUGBPPFONP-UHFFFAOYSA-N	1.1×10^5 1.5×10^5 5.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5134CO2OH $\text{C}_5\text{H}_6\text{O}_4$ UFXCMYYHMGNRSQ-UHFFFAOYSA-N	9.8×10^5 4.2×10^5 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C513CO $\text{C}_5\text{H}_6\text{O}_4$ GBFAZHBQOBSKET-UHFFFAOYSA-N	7.1×10^7 5.9×10^6 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C513OH $\text{C}_5\text{H}_8\text{O}_4$ VLANIYKAIBIISW-UHFFFAOYSA-N	3.6×10^6 8.9×10^7 4.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C513OOH $\text{C}_5\text{H}_8\text{O}_5$ FJRVRXOZJCMNIT-UHFFFAOYSA-N	8.9×10^9 2.5×10^8 5.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C514CO23OH $\text{C}_5\text{H}_8\text{O}_4$ JLVNMCMGUWUGCO-UHFFFAOYSA-N	4.3×10^5 4.5×10^6 4.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C520OH $\text{C}_5\text{H}_8\text{O}_4$ BXHDMMHJHUOSNS-UHFFFAOYSA-N	1.1×10^6 1.1×10^6 1.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C520OOH $\text{C}_5\text{H}_8\text{O}_5$ BCWSZSNYCYSGOQJ-UHFFFAOYSA-N	7.1×10^9 3.0×10^6 2.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5CO3OH $\text{C}_5\text{H}_6\text{O}_4$ UUUQEQLQOQXBA-UHFFFAOYSA-N	9.8×10^5 6.2×10^5 1.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5DICAROOH $\text{C}_5\text{H}_8\text{O}_5$ SXCXUVJXNGWYKY-UHFFFAOYSA-N	6.2×10^8 1.3×10^7 2.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO3H4CHO $\text{C}_5\text{H}_8\text{O}_3$ GHHQRUFNLVFPQ-UHFFFAOYSA-N	1.3×10^3 7.1×10^3 5.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H1C23C4CHO $\text{C}_5\text{H}_6\text{O}_4$ VBLXHDGHHJBCMK-UHFFFAOYSA-N	3.6×10^6 1.1×10^6 3.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HMVKBCHO $\text{C}_5\text{H}_8\text{O}_3$ XYGGNMZYIGPNCC-UHFFFAOYSA-N	3.6×10^5 1.1×10^5 1.3×10^5 2.5×10^2	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:HO2CO4CHO $\text{C}_5\text{H}_8\text{O}_3$ NSUJYXKDWVMPFQ-UHFFFAOYSA-N	1.1×10^5 2.5×10^4 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOIPRGLYOX $\text{C}_5\text{H}_8\text{O}_3$ ROKRLJNHSUEOC-UHFFFAOYSA-N	1.1×10^5 3.2×10^4 1.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IEC2OOH $\text{C}_5\text{H}_8\text{O}_5$ KGZJHQJCDPZOFQ-UHFFFAOYSA-N	3.0×10^8 2.0×10^6 2.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MBOCOCO $\text{C}_5\text{H}_8\text{O}_3$ OCAJTNNCRSVJNU-UHFFFAOYSA-N	3.9×10^3 6.8×10^2 8.3×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C43OHCOCHO $\text{C}_6\text{H}_{10}\text{O}_3$ NMZPCKZSNUOBSC-UHFFFAOYSA-N	1.0×10^5 2.8×10^4 7.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C517CHO $\text{C}_6\text{H}_{10}\text{O}_3$ JGHPNZFTVGLKF-UHFFFAOYSA-N	9.5×10^2 1.0×10^5 7.8×10^5 2.8×10^3	13000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C519CHO $\text{C}_6\text{H}_{10}\text{O}_3$ PVAHQKAVPKMXGV-UHFFFAOYSA-N	2.8×10^6 1.0×10^5 2.6×10^5 6.9×10^3	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C5COOHCO3H $\text{C}_6\text{H}_6\text{O}_6$ DETDOHNNOYOALO-UHFFFAOYSA-N	4.7×10^9 3.2×10^9 8.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5MO132OH $\text{C}_6\text{H}_{10}\text{O}_3$ YVTXQDAOLHXGGS-UHFFFAOYSA-N	1.2×10^3 3.0×10^3 2.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6134CO2OH $\text{C}_6\text{H}_8\text{O}_4$ ZUSWTYLGBZLTMD-UHFFFAOYSA-N	7.8×10^5 1.8×10^5 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C614CO23OH $\text{C}_6\text{H}_{10}\text{O}_4$ FTHGMBBEYTXWQT-UHFFFAOYSA-N	3.4×10^5 3.6×10^6 1.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C615CO2OH $\text{C}_6\text{H}_8\text{O}_3$ AEWAJJJBQFQHEAB-UHFFFAOYSA-N	2.1×10^4 1.1×10^5 3.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C616OH $\text{C}_6\text{H}_8\text{O}_4$ VJOSQGBXCQMKDE-UHFFFAOYSA-N	9.3×10^5 7.4×10^6 8.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C617OH $\text{C}_6\text{H}_{10}\text{O}_3$ GSQCYSIEWGMUPC-UHFFFAOYSA-N	3.2×10^3 4.8×10^3 7.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C620OH $\text{C}_6\text{H}_8\text{O}_4$ SMLWDBHBBFROKP-UHFFFAOYSA-N	4.2×10^6 9.6×10^6 4.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C628OH $\text{C}_6\text{H}_{10}\text{O}_4$ XRZKKNMIWFXFNJQ-UHFFFAOYSA-N	4.0×10^6 3.6×10^7 3.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C628OOH $\text{C}_6\text{H}_{10}\text{O}_5$ BGLCDSUTRBZUMD-UHFFFAOYSA-N	6.3×10^9 5.4×10^7 3.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C629OH $\text{C}_6\text{H}_{10}\text{O}_4$ MIXLBBAGKJLCSO-UHFFFAOYSA-N	2.0×10^6 1.1×10^7 3.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C629OOH $\text{C}_6\text{H}_{10}\text{O}_5$ PARGUUHBPMBOS-UHFFFAOYSA-N	4.9×10^9 2.0×10^7 2.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C630CO $\text{C}_6\text{H}_8\text{O}_3$ AUMGTZPDEFNUMP-UHFFFAOYSA-N	2.0×10^5 3.4×10^5 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C65OH $\text{C}_6\text{H}_{10}\text{O}_3$ ZWRMEYSYDMGCIE-UHFFFAOYSA-N	3.2×10^3 3.4×10^4 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C67CHO $\text{C}_6\text{H}_{10}\text{O}_3$ BZFZPOBVBGFEBG-UHFFFAOYSA-N	3.2×10^3 6.2×10^3 8.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CO2M2OH $\text{C}_6\text{H}_{10}\text{O}_4$ ZFPKEBYORKZJID-UHFFFAOYSA-N	2.3×10^5 4.4×10^6 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CO2OHOOH $\text{C}_6\text{H}_{10}\text{O}_5$ LMEOLDNWXVMAA-UHFFFAOYSA-N	3.4×10^8 3.3×10^6 1.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CO3MOH $\text{C}_6\text{H}_8\text{O}_4$ WBLLHOUAAGAGCV-UHFFFAOYSA-N	5.4×10^5 8.3×10^4 4.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6COHOCHO $\text{C}_6\text{H}_{10}\text{O}_3$ HJNIDOQIVMJXHS-UHFFFAOYSA-N	8.3×10^4 4.0×10^5 2.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6DICAROOH $\text{C}_6\text{H}_{10}\text{O}_5$ HIILQMKIFXFEHC-UHFFFAOYSA-N	5.5×10^8 9.6×10^6 2.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6O132OH $\text{C}_6\text{H}_{10}\text{O}_3$ GIDOBZXUXDNRDY-UHFFFAOYSA-N	1.2×10^3 3.6×10^3 3.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6TONOHOOH $\text{C}_6\text{H}_8\text{O}_6$ CIXJOARRJVUNUNZ-UHFFFAOYSA-N	2.6×10^{11} 1.1×10^{10} 1.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2M3CO4CHO $\text{C}_6\text{H}_{10}\text{O}_3$ MIIVJRGFVJVTGE-UHFFFAOYSA-N	1.1×10^5 2.6×10^4 9.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:H3C25C5CHO $\text{C}_6\text{H}_8\text{O}_4$ CLPDOVMSDUESLY-UHFFFAOYSA-N	3.4×10^6 2.0×10^6 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM22COCHO $\text{C}_6\text{H}_{10}\text{O}_3$ UTYMQWKKMYQTHJ-UHFFFAOYSA-N	6.2×10^4 1.8×10^4 6.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MC52CO2OH $\text{C}_6\text{H}_{10}\text{O}_4$ LGFUKTGFFSPNKZ-UHFFFAOYSA-N	2.3×10^5 4.6×10^6 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MC5COOHOH $\text{C}_6\text{H}_{10}\text{O}_5$ XFHCIPDXRRXAPB-UHFFFAOYSA-N	3.4×10^8 6.0×10^6 8.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MIBKHO4CHO $\text{C}_6\text{H}_{10}\text{O}_3$ OYDFBAKICJVUQJ-UHFFFAOYSA-N	6.2×10^4 1.3×10^4 1.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C61CHO $\text{C}_7\text{H}_{10}\text{O}_4$ BDFRSVKDVGXKLG-UHFFFAOYSA-N	6.3×10^5 1.4×10^5 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C62CHO $\text{C}_7\text{H}_{10}\text{O}_4$ QCTBGQUOJXZEIH-UHFFFAOYSA-N	7.3×10^5 1.3×10^5 4.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6COOHCO3H $\text{C}_7\text{H}_8\text{O}_6$ BNWBZUAKPODUMK-UHFFFAOYSA-N	3.0×10^9 2.4×10^9 3.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6M5CO2OH $\text{C}_7\text{H}_{10}\text{O}_3$ YAAUSHWRBSRFSJ-UHFFFAOYSA-N	1.1×10^4 2.2×10^4 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C715CO2OH $\text{C}_7\text{H}_{10}\text{O}_3$ KBBGTWJMYAKIO-UHFFFAOYSA-N	1.7×10^4 7.6×10^4 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C716OH $\text{C}_7\text{H}_{10}\text{O}_4$ QFGSQPDLKNLDDS-UHFFFAOYSA-N	2.8×10^6 6.8×10^6 9.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C717OH $\text{C}_7\text{H}_{10}\text{O}_4$ SEENFYUXRUQNHQ-UHFFFAOYSA-N	5.3×10^7 1.6×10^7 2.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C718OH $\text{C}_7\text{H}_{12}\text{O}_3$ ALYGFZDZOCWXM-F-UHFFFAOYSA-N	5.5×10^4 2.7×10^4 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C731OH $\text{C}_7\text{H}_{12}\text{O}_3$ KHEBQEUBDOAJRG-UHFFFAOYSA-N	8.0×10^4 1.7×10^6 8.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C733CO $\text{C}_7\text{H}_{10}\text{O}_4$ IRSIMXCKMCQRGW-UHFFFAOYSA-N	5.3×10^7 1.9×10^7 1.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C733OH $\text{C}_7\text{H}_{12}\text{O}_4$ WRHSSXYTISGZIA-UHFFFAOYSA-N	1.2×10^7 3.3×10^8 3.7×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C733OOH $\text{C}_7\text{H}_{12}\text{O}_5$ OWEUBRYSVXGVIC-UHFFFAOYSA-N	7.4×10^9 7.3×10^8 2.7×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C735OH $\text{C}_7\text{H}_{10}\text{O}_4$ PHOAHMZZKPNPAM-UHFFFAOYSA-N	2.2×10^6 1.7×10^7 4.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C736OH $\text{C}_7\text{H}_{10}\text{O}_3$ QWXLVLIZAXRZBR-UHFFFAOYSA-N	8.3×10^3 1.3×10^5 3.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7ADCOH $\text{C}_7\text{H}_{12}\text{O}_4$ SVQINHOHTZDOCH-UHFFFAOYSA-N	1.3×10^5 2.8×10^6 7.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7ADCOOH $\text{C}_7\text{H}_{12}\text{O}_5$ COQUITHNSRNVBJ-UHFFFAOYSA-N	1.9×10^8 5.1×10^6 1.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7CO3OHOOH $\text{C}_7\text{H}_{10}\text{O}_6$ YAEIVOJGWQGWPS-UHFFFAOYSA-N	3.0×10^{11} 3.2×10^8 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7DCOH $\text{C}_7\text{H}_{12}\text{O}_4$ VIPBNCDHDKDPDM-UHFFFAOYSA-N	2.8×10^5 1.9×10^6 1.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7DCOOH $\text{C}_7\text{H}_{12}\text{O}_5$ AVRZSWZUKXCJRK-UHFFFAOYSA-N	4.4×10^8 5.1×10^6 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7DDCOH $\text{C}_7\text{H}_{12}\text{O}_4$ HYCGRSOMYJQICU-UHFFFAOYSA-N	1.8×10^5 2.6×10^6 6.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7DDCOOH $\text{C}_7\text{H}_{12}\text{O}_5$ VSEOFSAKNXJKSZ-UHFFFAOYSA-N	3.0×10^8 1.4×10^6 8.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:IC7DCOH $\text{C}_7\text{H}_{12}\text{O}_4$ DEDFQTYPJDBATI-UHFFFAOYSA-N	3.2×10^5 1.5×10^6 7.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IC7DCOOH $\text{C}_7\text{H}_{12}\text{O}_5$ ZVFWDEWSMKAAIM-UHFFFAOYSA-N	5.1×10^8 5.8×10^6 1.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MC6CO2OH $\text{C}_7\text{H}_{10}\text{O}_3$ BNJUZVCUVNAPOM-UHFFFAOYSA-N	1.1×10^4 1.0×10^4 3.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5M2OHCO3H $\text{C}_8\text{H}_{10}\text{O}_6$ BRIBGOXGRALVGI-UHFFFAOYSA-N	2.1×10^9 3.2×10^9 9.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7M15CO2OH $\text{C}_8\text{H}_{12}\text{O}_3$ OEJDBFGAEKTZGI-UHFFFAOYSA-N	1.6×10^4 3.0×10^4 6.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7M6CO2OH $\text{C}_8\text{H}_{12}\text{O}_3$ WXVOVBAGQNBDEE-UHFFFAOYSA-N	9.3×10^3 1.3×10^4 4.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7MO3OHOOH $\text{C}_8\text{H}_{12}\text{O}_6$ UOUKTGYLQYQUAO-UHFFFAOYSA-N	3.0×10^{11} 2.2×10^8 4.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7OHO2CO3H $\text{C}_8\text{H}_{10}\text{O}_6$ AOHPTSIBUCEZIY-UHFFFAOYSA-N	2.8×10^9 1.7×10^9 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C815CO2OH $\text{C}_8\text{H}_{12}\text{O}_3$ IPCSMQASRIZASM-UHFFFAOYSA-N	1.5×10^4 3.8×10^4 6.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C824CO $\text{C}_8\text{H}_{12}\text{O}_3$ BQDQKENHFIFOJZ-UHFFFAOYSA-N	1.5×10^5 4.6×10^4 2.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C83COOHOH $\text{C}_8\text{H}_{12}\text{O}_6$ LBBMWNQOJHPRQL-UHFFFAOYSA-N	2.7×10^{11} 2.0×10^8 6.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C87OH $\text{C}_8\text{H}_{12}\text{O}_4$ DFOLUFIWIMPWQH-UHFFFAOYSA-N	2.4×10^6 2.1×10^6 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MC7CO2OH $\text{C}_8\text{H}_{12}\text{O}_3$ BSMWBPAKWVVEKL-UHFFFAOYSA-N	9.3×10^3 6.6×10^3 1.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C5MEJCO3H $\text{C}_9\text{H}_{12}\text{O}_6$ IZKMPGKTEBWFPK-UHFFFAOYSA-N	1.7×10^9 2.2×10^9 5.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C8O2OHCO3H $\text{C}_9\text{H}_{12}\text{O}_6$ MBOWYQZNYXRQRC-UHFFFAOYSA-N	2.6×10^9 1.3×10^9 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C8OHO2CO3H $\text{C}_9\text{H}_{12}\text{O}_6$ CJLPRBWWJFSMFP-UHFFFAOYSA-N	2.2×10^9 1.1×10^9 8.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C914OH $\text{C}_9\text{H}_{12}\text{O}_4$ LFDXAZOJHXEEGS-UHFFFAOYSA-N	5.1×10^6 8.3×10^7 2.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C915OH $\text{C}_9\text{H}_{14}\text{O}_3$ FAAQZCMVHKUUSB-UHFFFAOYSA-N	1.5×10^5 2.8×10^6 8.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C916OH $\text{C}_9\text{H}_{14}\text{O}_4$ MXDMOPCDPNEDIT-UHFFFAOYSA-N	3.6×10^7 1.4×10^7 6.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C918OH $\text{C}_9\text{H}_{14}\text{O}_3$ NFJZVEFTUBPOLY-UHFFFAOYSA-N	1.5×10^5 4.4×10^5 1.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C919OH $\text{C}_9\text{H}_{14}\text{O}_4$ ULXJXURNPDAXQL-UHFFFAOYSA-N	3.6×10^7 1.5×10^7 3.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C926OH $\text{C}_9\text{H}_{14}\text{O}_4$ DBPGQZSZWKEZHT-UHFFFAOYSA-N	1.4×10^6 7.3×10^6 1.2×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C930OH $\text{C}_9\text{H}_{14}\text{O}_4$ LNIVXHBNNGOOPM-UHFFFAOYSA-N	2.6×10^7 5.3×10^6 3.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LMLKAOH $\text{C}_9\text{H}_{14}\text{O}_4$ XDMVMFNHBSJDJ-UHFFFAOYSA-N	2.3×10^6 2.6×10^7 1.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LMLKBOH $\text{C}_9\text{H}_{14}\text{O}_4$ JSAHIYWZESQWRA-UHFFFAOYSA-N	2.0×10^6 3.0×10^7 1.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NORLIMOOH $\text{C}_9\text{H}_{16}\text{O}_5$ CUMGKBRSRBORIJ-UHFFFAOYSA-N	3.8×10^9 3.8×10^8 6.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C1010OH $\text{C}_{10}\text{H}_{16}\text{O}_3$ NQWGMQLCPYJCB-UHFFFAOYSA-N	6.8×10^4 5.3×10^5 8.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1012OH $\text{C}_{10}\text{H}_{18}\text{O}_3$ ZSBQFHQMMVQAKS-UHFFFAOYSA-N	3.3×10^4 5.6×10^5 1.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C106OH $\text{C}_{10}\text{H}_{16}\text{O}_4$ LWIDJJPVYZGLI-UHFFFAOYSA-N	2.5×10^7 8.1×10^6 9.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C107OH $\text{C}_{10}\text{H}_{16}\text{O}_3$ DUMRJPIWTJFZCT-UHFFFAOYSA-N	3.7×10^3 5.9×10^4 6.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C108OH $\text{C}_{10}\text{H}_{16}\text{O}_4$ ZDBVABFEYYIFLR-UHFFFAOYSA-N	2.5×10^7 3.2×10^6 5.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C109OH $\text{C}_{10}\text{H}_{16}\text{O}_3$ PUENXTSKKXKPMK-UHFFFAOYSA-N	6.0×10^3 4.3×10^4 2.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LIMALAOH $\text{C}_{10}\text{H}_{16}\text{O}_3$ VNYSFQVUCPNMDZ-UHFFFAOYSA-N	3.1×10^4 5.8×10^3 3.6×10^4 1.0×10^3	15000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:LIMALBOH $\text{C}_{10}\text{H}_{16}\text{O}_3$ SMXSHIAZMJGAE-UHFFFAOYSA-N	5.6×10^3 1.8×10^4 5.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LIMALOH $\text{C}_{10}\text{H}_{18}\text{O}_4$ ISUQULRVPSRIP-UHFFFAOYSA-N	2.2×10^{10} 4.2×10^7 2.8×10^8 9.3×10^5	18000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:LIMALOOH $\text{C}_{10}\text{H}_{18}\text{O}_5$ OQLBLHLZVAPRGN-UHFFFAOYSA-N	4.3×10^{10} 3.5×10^9 4.0×10^8 9.6×10^5	18000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:PINALOH $\text{C}_{10}\text{H}_{16}\text{O}_3$ NGFXWFWSYUSJM-UHFFFAOYSA-N	8.1×10^4 6.0×10^5 7.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C116OH $\text{C}_{11}\text{H}_{18}\text{O}_3$ JMGXHRKVVURTTA-UHFFFAOYSA-N	9.8×10^4 2.6×10^5 5.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C117OH $\text{C}_{11}\text{H}_{18}\text{O}_4$ XYBUENVNXDXQKB-UHFFFAOYSA-N	8.5×10^6 4.9×10^8 4.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C117OOH $\text{C}_{11}\text{H}_{18}\text{O}_5$ NUIUIELMTMWFAB-UHFFFAOYSA-N	5.4×10^9 2.0×10^8 5.9×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C118CO $\text{C}_{11}\text{H}_{16}\text{O}_5$ QFBAMJSHDLKQRE-UHFFFAOYSA-N	1.3×10^{10} 5.6×10^8 6.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C118OH $\text{C}_{11}\text{H}_{18}\text{O}_5$ GQNPBTACCNTXDZ-UHFFFAOYSA-N	6.2×10^{10} 3.6×10^{10} 2.9×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C118OOH $\text{C}_{11}\text{H}_{18}\text{O}_6$ DZELKNYJHUANPY-UHFFFAOYSA-N	1.6×10^{12} 3.0×10^{10} 1.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1210OH $\text{C}_{12}\text{H}_{20}\text{O}_3$ RDCPBXUNBHOYIW-UHFFFAOYSA-N	7.6×10^4 2.6×10^6 1.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1214OH $\text{C}_{12}\text{H}_{20}\text{O}_4$ LBONAAUBRWCFPL-UHFFFAOYSA-N	7.6×10^6 4.7×10^8 2.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1214OOH $\text{C}_{12}\text{H}_{20}\text{O}_5$ RDWLNWMMPUJYPV-UHFFFAOYSA-N	4.4×10^9 1.8×10^8 8.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1215CO $\text{C}_{12}\text{H}_{18}\text{O}_5$ MFAMPSJMWGSBSP-UHFFFAOYSA-N	1.0×10^{10} 3.2×10^9 2.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1215OH $\text{C}_{12}\text{H}_{20}\text{O}_5$ ICTVPTJMPURCGE-UHFFFAOYSA-N	4.8×10^{10} 1.1×10^{11} 3.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1215OOH $\text{C}_{12}\text{H}_{20}\text{O}_6$ PWIVJRAMQXZVCR-UHFFFAOYSA-N	1.3×10^{12} 4.6×10^{10} 5.1×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C128CO $\text{C}_{12}\text{H}_{18}\text{O}_4$ UGSIBTFJEGNWKQ-UHFFFAOYSA-N	3.3×10^7 8.3×10^7 6.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C128OH $\text{C}_{12}\text{H}_{20}\text{O}_4$ CFXREDIWINSYMD-UHFFFAOYSA-N	1.5×10^8 2.8×10^9 1.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C128OOH $\text{C}_{12}\text{H}_{20}\text{O}_5$ UJLXMZVGYRRHNB-UHFFFAOYSA-N	4.7×10^9 2.6×10^9 3.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C129OH $\text{C}_{12}\text{H}_{18}\text{O}_4$ LZLVFWPHHNPPPO-UHFFFAOYSA-N	4.1×10^6 3.8×10^7 1.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1312CO $\text{C}_{13}\text{H}_{20}\text{O}_4$ OXGUTNXNCKSGQJ-UHFFFAOYSA-N	2.9×10^7 5.9×10^7 6.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1312OH $\text{C}_{13}\text{H}_{22}\text{O}_4$ IOOAKPNHTHIGJB-UHFFFAOYSA-N	1.4×10^8 1.7×10^9 2.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1312OOH $\text{C}_{13}\text{H}_{22}\text{O}_5$ IMCVJRKOQRMDFG-UHFFFAOYSA-N	3.6×10^9 6.5×10^8 3.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCLKAOH $\text{C}_{14}\text{H}_{22}\text{O}_4$ OIHLIYIMTKSRRQE-UHFFFAOYSA-N	2.1×10^6 4.2×10^7 5.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCLKBOH $\text{C}_{14}\text{H}_{22}\text{O}_4$ LFMWXXSOGPOZAN-UHFFFAOYSA-N	1.9×10^6 3.0×10^7 7.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCLKCOH $\text{C}_{14}\text{H}_{22}\text{O}_4$ WUCWLUFQNHHRAC-UHFFFAOYSA-N	2.1×10^6 3.6×10^7 1.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C144OOH $\text{C}_{14}\text{H}_{24}\text{O}_5$ GLUIAMUUMIPXJY-UHFFFAOYSA-N	4.2×10^9 6.2×10^8 5.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C146OH $\text{C}_{14}\text{H}_{22}\text{O}_4$ MRXVSIMJFRVVPVPA-UHFFFAOYSA-N	2.1×10^6 3.2×10^7 2.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCALAOH $\text{C}_{15}\text{H}_{24}\text{O}_3$ SOIICZPFVBOBSJ-UHFFFAOYSA-N	6.3×10^3 3.3×10^4 6.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCALBOH $\text{C}_{15}\text{H}_{24}\text{O}_3$ WYNIZHBHTSXQQC-UHFFFAOYSA-N	5.3×10^3 2.1×10^4 5.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCALCOH $\text{C}_{15}\text{H}_{24}\text{O}_3$ NQPQIVDLCLYNNZ-UHFFFAOYSA-N	6.3×10^3 3.4×10^4 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:BCALOH	4.4×10^7		Wang et al. (2017)	Q	81, 239
$\text{C}_{15}\text{H}_{26}\text{O}_4$	4.2×10^8		Wang et al. (2017)	Q	81, 240
MPEWUZJEETZOE-UHFFFAOYSA-N	5.4×10^5		Wang et al. (2017)	Q	81, 241
MCM:BCALOOH	3.2×10^9		Wang et al. (2017)	Q	81, 239
$\text{C}_{15}\text{H}_{26}\text{O}_5$	8.7×10^8		Wang et al. (2017)	Q	81, 240
HSCKVTFOUFPNNB-UHFFFAOYSA-N	3.6×10^7		Wang et al. (2017)	Q	81, 241

A3.7 Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH)

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methanoic acid	8.8×10^1	6100	Burkholder et al. (2019)	L	
HCOOH	8.8×10^1	6100	Burkholder et al. (2015)	L	
(formic acid)	8.8×10^1	6100	Sander et al. (2011)	L	
[64-18-6]	8.8×10^1	6100	Sander et al. (2006)	L	
BDAGIHXXWWSANSR-UHFFFAOYSA-N	6.7×10^1	5900	Staudinger and Roberts (2001)	L	
	8.8×10^1	6100	Johnson et al. (1996)	M	
	5.4×10^1		Khan et al. (1995)	M	
	5.4×10^1	5600	Khan and Brimblecombe (1992)	M	
	1.3×10^2		Servant et al. (1991)	M	489
	7.3×10^1		Johnson (1990)	M	80
	1.5×10^1		Hwang et al. (1992)	V	
		5700	Abraham (1984)	V	
		5600	Abraham (1984)	R	490
		5700	Winiwarter et al. (1988)	T	491
	3.7×10^1	5700	Jacob (1986)	T	492
	5.5×10^1		Keene and Galloway (1986)	T	
	5.9×10^1		Gaffney and Senum (1984)	X	391, 493
	5.1×10^1		Johnson et al. (1996)	C	
	5.1×10^1		Keene et al. (1995)	C	
	5.3×10^1		Keene et al. (1995)	C	
	3.7×10^1	5700	Lelieveld and Crutzen (1991)	C	
	3.5×10^1	5700	Pandis and Seinfeld (1989)	C	
	2.1×10^2		Keshavarz et al. (2022)	Q	
	4.0×10^1		Duchowicz et al. (2020)	Q	185
	2.2×10^1		Wang et al. (2017)	Q	81, 239
	2.5×10^2		Wang et al. (2017)	Q	81, 240
	1.0×10^2		Wang et al. (2017)	Q	81, 241
	2.3×10^2		Hilal et al. (2008)	Q	
	1.2×10^1		Modarresi et al. (2007)	Q	68
		5800	Kühne et al. (2005)	Q	
	5.8×10^1		Yaffe et al. (2003)	Q	249, 250
	8.6×10^1		Abraham (2003)	Q	
	7.7		Katritzky et al. (1998)	Q	
	5.9×10^1		Duchowicz et al. (2020)	?	186, 21
		6500	Kühne et al. (2005)	?	
	1.3×10^1		Yaws (1999)	?	21
	8.9		Yaws and Yang (1992)	?	21

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethanoic acid	4.0×10^1	6200	Burkholder et al. (2019)	L	
CH ₃ COOH	4.0×10^1	6200	Burkholder et al. (2015)	L	
(acetic acid)	4.0×10^1	6200	Sander et al. (2011)	L	
[64-19-7]	4.0×10^1	6200	Sander et al. (2006)	L	
QTBSBXVTEAMEQO-UHFFFAOYSA-N	4.6×10^1	6300	Staudinger and Roberts (2001)	L	
	1.4×10^1		von Hartungen et al. (2004)	M	
	4.0×10^1	6300	Johnson et al. (1996)	M	
	5.4×10^1		Khan et al. (1995)	M	
	5.4×10^1	8300	Khan and Brimblecombe (1992)	M	
	9.2×10^1		Servant et al. (1991)	M	489
			Fredenhagen and Liebster (1932)	M	330
	9.1		Hwang et al. (1992)	V	
		6300	Abraham (1984)	V	
		6200	Abraham (1984)	R	490
	4.8×10^1	6400	Plyasunov et al. (2001)	T	
	8.7×10^1	6400	Jacob et al. (1989)	T	
		6400	Winiwarter et al. (1988)	T	491
	8.7×10^1		Keene and Galloway (1986)	T	
	9.7	4900	Goldstein (1982)	X	299
	9.9×10^1		Gaffney and Senum (1984)	X	391, 493
	5.1×10^1		Johnson et al. (1996)	C	
	5.2×10^1		Keene et al. (1995)	C	
	8.5×10^1		Keene et al. (1995)	C	
	1.0×10^2		Keshavarz et al. (2022)	Q	
	3.1×10^1		Duchowicz et al. (2020)	Q	
	1.4×10^1		Wang et al. (2017)	Q	81, 239
	2.9×10^2		Wang et al. (2017)	Q	81, 240
	6.5×10^1		Wang et al. (2017)	Q	81, 241
	3.3×10^1		Li et al. (2014)	Q	242
	2.0×10^1		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^2		Raventos-Duran et al. (2010)	Q	245
	2.0×10^1		Raventos-Duran et al. (2010)	Q	246
	1.3×10^2		Hilal et al. (2008)	Q	
	3.2×10^1		Modarresi et al. (2007)	Q	68
		6100	Kühne et al. (2005)	Q	
	9.9×10^1		Yaffe et al. (2003)	Q	249, 250
	3.1×10^1		Abraham (2003)	Q	
	3.1×10^1		English and Carroll (2001)	Q	231, 232
	1.1×10^1		Katritzky et al. (1998)	Q	
	2.3×10^1		Russell et al. (1992)	Q	280
	3.1×10^1		Suzuki et al. (1992)	Q	233
	3.9×10^1		Nirmalakhandan and Speece (1988)	Q	
	9.9×10^1		Duchowicz et al. (2020)	?	186, 21
	1.1×10^1		Maniere et al. (2011)	?	242, 166
		6200	Kühne et al. (2005)	?	
	8.4		Yaws (1999)	?	21

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	8.2		Yaws and Yang (1992)	?	21
	3.3×10^1		Abraham et al. (1990)	?	
	3.3×10^1		Hine and Mookerjee (1975)	?	
acetic anhydride $\text{C}_4\text{H}_6\text{O}_3$ [108-24-7] WFDIJRYMOXRFFG-UHFFFAOYSA-N	1.7		Duchowicz et al. (2020)	V	187
	3.6		Yaws (2003)	X	238
	6.3×10^{-1}		Duchowicz et al. (2020)	Q	
	1.4		Wang et al. (2017)	Q	81, 239
	5.3×10^1		Wang et al. (2017)	Q	81, 240
	1.7		Wang et al. (2017)	Q	81, 241
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^1		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	3.9		Gharagheizi et al. (2010)	Q	247
	7.1×10^{-1}		Modarresi et al. (2007)	Q	68
	2.3		Yaws (1999)	?	21
propanoic acid $\text{C}_2\text{H}_5\text{COOH}$ (propionic acid) [79-09-4] XBDQKXXYIPTUBI-UHFFFAOYSA-N	7.1×10^1		Kim and Kim (2016)	M	
	1.5×10^1		von Hartungen et al. (2004)	M	
	5.6×10^1		Khan et al. (1995)	M	
	5.5×10^1		Khan and Brimblecombe (1992)	M	
	6.1×10^1		Servant et al. (1991)	M	489
	2.2×10^1		Butler and Ramchandani (1935)	M	
		6800	Abraham (1984)	V	
		6800	Abraham (1984)	R	490
		6800	Plyasunov et al. (2001)	T	
	3.7×10^1		Keshavarz et al. (2022)	Q	
	2.6×10^1		Duchowicz et al. (2020)	Q	300
	4.2×10^1		Wang et al. (2017)	Q	81, 239
	2.6×10^2		Wang et al. (2017)	Q	81, 240
	1.6×10^1		Wang et al. (2017)	Q	81, 241
	1.6×10^1		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^2		Raventos-Duran et al. (2010)	Q	245
	1.2×10^1		Raventos-Duran et al. (2010)	Q	246
	7.0×10^1		Hilal et al. (2008)	Q	
	2.8×10^1		Modarresi et al. (2007)	Q	68
	2.4×10^1		Yaffe et al. (2003)	Q	249, 250
	2.2×10^1		Abraham (2003)	Q	
	2.3×10^1		English and Carroll (2001)	Q	231, 232
	2.4		Katritzky et al. (1998)	Q	
	5.6		Russell et al. (1992)	Q	360
	2.4×10^1		Suzuki et al. (1992)	Q	233
	3.4×10^1		Nirmalakhandan and Speece (1988)	Q	
	2.2×10^1		Duchowicz et al. (2020)	?	186, 21
	1.1×10^1		Yaws (1999)	?	21
	2.2×10^1		Abraham et al. (1990)	?	
	2.2×10^1		Hine and Mookerjee (1975)	?	

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methoxyacetic acid	1.5×10^3		Duchowicz et al. (2020)	V	187
$\text{C}_3\text{H}_6\text{O}_3$	3.0×10^2		Duchowicz et al. (2020)	Q	
[625-45-6]	3.0×10^2		Wang et al. (2017)	Q	81, 239
RMIODHQZRUFFFF-UHFFFAOYSA-N	6.6×10^2		Wang et al. (2017)	Q	81, 240
	1.0×10^3		Wang et al. (2017)	Q	81, 241
butanoic acid	4.3×10^1		Kim and Kim (2016)	M	
$\text{C}_3\text{H}_7\text{COOH}$	9.7		von Hartungen et al. (2004)	M	
(butyric acid)	4.7×10^1		Khan et al. (1995)	M	
[107-92-6]	4.5×10^1		Khan and Brimblecombe (1992)	M	
FERIUCNNQJTOY-UHFFFAOYSA-N	1.8×10^1		Butler and Ramchandani (1935)	M	
	9.4		Hwang et al. (1992)	V	
		7100	Abraham (1984)	V	
		7300	Abraham (1984)	R	490
	2.5×10^1		Keshavarz et al. (2022)	Q	
	5.0×10^1		Duchowicz et al. (2020)	Q	
	9.1		Wang et al. (2017)	Q	81, 239
	1.3×10^2		Wang et al. (2017)	Q	81, 240
	1.4×10^1		Wang et al. (2017)	Q	81, 241
	1.2×10^1		Raventos-Duran et al. (2010)	Q	272, 244
	6.2×10^1		Raventos-Duran et al. (2010)	Q	245
	9.9		Raventos-Duran et al. (2010)	Q	246
	4.4×10^1		Hilal et al. (2008)	Q	
	2.5×10^1		Modarresi et al. (2007)	Q	68
	1.7×10^1		Abraham (2003)	Q	
	1.8×10^1		English and Carroll (2001)	Q	231, 275
	2.8		Russell et al. (1992)	Q	280
	1.8×10^1		Suzuki et al. (1992)	Q	233
	2.7×10^1		Nirmalakhandan and Speece (1988)	Q	
	1.8×10^1		Duchowicz et al. (2020)	?	186, 21
	1.8×10^1		Abraham et al. (1990)	?	
	1.8×10^1		Hine and Mookerjee (1975)	?	
2-methylpropanoic acid	4.6×10^1		Kim and Kim (2016)	M	
$(\text{CH}_3)_2\text{CHCOOH}$	9.6		von Hartungen et al. (2004)	M	
(isobutyric acid)	1.1×10^1		Khan et al. (1995)	M	
[79-31-2]	1.1×10^1		Khan and Brimblecombe (1992)	M	
KQNPFTWMSNSAP-UHFFFAOYSA-N	5.6×10^1		Servant et al. (1991)	M	489
	1.4		Mackay et al. (2006c)	V	
	2.5×10^1		Keshavarz et al. (2022)	Q	
	1.9×10^1		Duchowicz et al. (2020)	Q	
	1.1×10^1		Wang et al. (2017)	Q	81, 239
	6.3×10^1		Wang et al. (2017)	Q	81, 240
	1.7×10^1		Wang et al. (2017)	Q	81, 241
	2.0×10^1		Gharagheizi et al. (2012)	Q	
	1.2×10^1		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^1		Raventos-Duran et al. (2010)	Q	245

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	9.9		Raventos-Duran et al. (2010)	Q	246
	2.5×10^1		Hilal et al. (2008)	Q	
	4.7×10^1		Modarresi et al. (2007)	Q	68
	1.1×10^1		Duchowicz et al. (2020)	?	186, 21
	1.1×10^1		Yaws (1999)	?	21, 12
pentanoic acid $\text{C}_4\text{H}_9\text{COOH}$ (valeric acid) [109-52-4] NQPDZGIKBAWPEJ-UHFFFAOYSA-N	2.3×10^1	6900	Staudinger and Roberts (2001)	L	
	2.4×10^1		Kim and Kim (2016)	M	
	1.2×10^1		von Hartungen et al. (2004)	M	
	2.3×10^1	6600	Khan et al. (1995)	M	
	2.1×10^1	6900	Khan and Brimblecombe (1992)	M	
	1.2×10^1		Mackay et al. (2006c)	V	
	1.2×10^1		Mackay et al. (1995)	V	
	1.6×10^1		Brimblecombe et al. (1992)	V	
		7500	Abraham (1984)	V	
	1.3×10^1		Amoore and Buttery (1978)	V	
		7700	Abraham (1984)	R	490
	7.7		Yaws (2003)	X	238
	1.2×10^1		Keshavarz et al. (2022)	Q	
	5.5×10^1		Duchowicz et al. (2020)	Q	185
	8.5		Wang et al. (2017)	Q	81, 239
	6.6×10^1		Wang et al. (2017)	Q	81, 240
	1.4×10^1		Wang et al. (2017)	Q	81, 241
	9.9		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^1		Raventos-Duran et al. (2010)	Q	245
	7.8		Raventos-Duran et al. (2010)	Q	246
	1.6×10^1		Gharagheizi et al. (2010)	Q	247
	3.3×10^1		Hilal et al. (2008)	Q	
	1.8×10^1		Modarresi et al. (2007)	Q	68
		7200	Kühne et al. (2005)	Q	
	1.4×10^1		Yaffe et al. (2003)	Q	249, 273
	1.1×10^1		Abraham (2003)	Q	
	1.4×10^1		English and Carroll (2001)	Q	231, 232
	2.9		Katritzky et al. (1998)	Q	
	2.2×10^1		Nirmalakhandan et al. (1997)	Q	
	2.1×10^1		Duchowicz et al. (2020)	?	186, 21
		6900	Kühne et al. (2005)	?	
	7.4		Yaws (1999)	?	21
	1.3×10^1		Abraham et al. (1990)	?	
2-methylbutanoic acid $\text{C}_5\text{H}_{10}\text{O}_2$ [116-53-0] WLAMNBDJUVNPJU-UHFFFAOYSA-N	6.7		Duchowicz et al. (2020)	V	187
	4.9		Yaws (2003)	X	238
	2.1×10^1		Duchowicz et al. (2020)	Q	
	8.5		Wang et al. (2017)	Q	81, 239
	3.3×10^1		Wang et al. (2017)	Q	81, 240
	1.6×10^1		Wang et al. (2017)	Q	81, 241
	8.3		Gharagheizi et al. (2010)	Q	247

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.6×10^1		Hilal et al. (2008)	Q	
	4.4×10^1		Modarresi et al. (2007)	Q	68
3-methylbutanoic acid (CH_3) ₂ CHCH ₂ COOH (isovaleric acid) [503-74-2] GWYFCOCPABKNJV-UHFFFAOYSA-N	2.7×10^1		Kim and Kim (2016)	M	
	1.1×10^1		von Hartungen et al. (2004)	M	
	1.2×10^1		Khan et al. (1995)	M	
	1.2×10^1		Khan and Brimblecombe (1992)	M	
	1.2×10^1		Amoore and Buttery (1978)	M	
	1.6		Mackay et al. (2006c)	V	
	1.6		Mackay et al. (1995)	V	
	7.3		Amoore and Buttery (1978)	V	
	1.1×10^1		Yaws (2003)	X	238, 12
	1.2×10^1		Keshavarz et al. (2022)	Q	
	2.1×10^1		Duchowicz et al. (2020)	Q	300
	8.5		Wang et al. (2017)	Q	81, 239
	6.8×10^1		Wang et al. (2017)	Q	81, 240
	1.7×10^1		Wang et al. (2017)	Q	81, 241
	2.2×10^1		Gharagheizi et al. (2012)	Q	
	9.9		Raventos-Duran et al. (2010)	Q	243, 244
	3.9×10^1		Raventos-Duran et al. (2010)	Q	245
	7.8		Raventos-Duran et al. (2010)	Q	246
	8.4		Gharagheizi et al. (2010)	Q	247
	2.8×10^1		Hilal et al. (2008)	Q	
	2.0×10^1		Modarresi et al. (2007)	Q	68
	4.8×10^1		Yao et al. (2002)	Q	230
	1.4×10^1		English and Carroll (2001)	Q	231, 232
	1.2×10^1		Duchowicz et al. (2020)	?	186, 21
	7.0		Yaws (1999)	?	21, 12
	1.2×10^1		Abraham et al. (1990)	?	
2,2-dimethylpropanoic acid (CH_3) ₃ CCOOH (pivalic acid) [75-98-9] IUGYQRQAERSCNH-UHFFFAOYSA-N	3.5		Khan et al. (1995)	M	
	3.5		Khan and Brimblecombe (1992)	M	
	8.4		Yaws (2003)	X	238
	1.2×10^1		Keshavarz et al. (2022)	Q	
	9.4		Duchowicz et al. (2020)	Q	
	9.9		Raventos-Duran et al. (2010)	Q	243, 244
	9.9		Raventos-Duran et al. (2010)	Q	245
	7.8		Raventos-Duran et al. (2010)	Q	246
	6.9		Gharagheizi et al. (2010)	Q	247
	1.2×10^1		Hilal et al. (2008)	Q	
	1.6×10^1		Modarresi et al. (2007)	Q	68
	3.8		Yaffe et al. (2003)	Q	249, 250
	9.0×10^{-1}		Katritzky et al. (1998)	Q	
	3.6		Duchowicz et al. (2020)	?	186, 21

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.2×10^1		Modarresi et al. (2007)	Q	68
	6.1		Yaffe et al. (2003)	Q	249, 250
	7.9×10^{-1}		Katritzky et al. (1998)	Q	
heptanoic acid $C_7H_{14}O_2$ [111-14-8] MNWFXJYAQYHMED-UHFFFAOYSA-N	1.5×10^1		Kim and Kim (2016)	M	
	1.5×10^1		Duchowicz et al. (2020)	V	187
	9.6		Brimblecombe et al. (1992)	V	
		8500	Abraham (1984)	V	
		8500	Abraham (1984)	R	490
	6.1×10^1		Duchowicz et al. (2020)	Q	
	5.5		Wang et al. (2017)	Q	81, 239
	2.9×10^1		Wang et al. (2017)	Q	81, 240
	2.0×10^1		Wang et al. (2017)	Q	81, 241
	1.0×10^1		Gharagheizi et al. (2012)	Q	
	1.7×10^1		Hilal et al. (2008)	Q	
	1.6×10^1		Modarresi et al. (2007)	Q	68
		7800	Kühne et al. (2005)	Q	
	3.0×10^1		Yaffe et al. (2003)	Q	249, 250
	6.4		Abraham (2003)	Q	
	2.9×10^1		Yao et al. (2002)	Q	230
	4.3		Katritzky et al. (1998)	Q	
		7900	Kühne et al. (2005)	?	
	2.5×10^1		Yaws (1999)	?	21, 12
	1.3×10^1		Abraham et al. (1990)	?	
4,4-dimethylpentanoic acid $C_7H_{14}O_2$ [95823-36-2] HMMSZUQCCUWXRA-UHFFFAOYSA-N	4.3		Zhang et al. (2010)	Q	288, 289
	1.4×10^1		Zhang et al. (2010)	Q	288, 290
	1.6×10^3		Zhang et al. (2010)	Q	288, 291
	1.6		Zhang et al. (2010)	Q	288, 292
2-ethyl-2-methylbutanoic acid $C_7H_{14}O_2$ [19889-37-3] LHJPKLWGGMAUAN-UHFFFAOYSA-N	4.3		Zhang et al. (2010)	Q	288, 289
	5.4		Zhang et al. (2010)	Q	288, 290
	2.3×10^2		Zhang et al. (2010)	Q	288, 291
	1.6		Zhang et al. (2010)	Q	288, 292
octanoic acid $C_8H_{16}O_2$ (caprylic acid) [124-07-2] WWZKQHOICKIZLMA-UHFFFAOYSA-N	1.1×10^1		Duchowicz et al. (2020)	V	187
	1.5×10^{-1}		Mackay et al. (2006c)	V	
	1.5×10^{-1}		Mackay et al. (1995)	V	
	7.6		Brimblecombe et al. (1992)	V	
		9600	Abraham (1984)	V	
		8900	Abraham (1984)	R	490
	1.9×10^1		Yaws (2003)	X	238, 12
	6.4×10^1		Duchowicz et al. (2020)	Q	
	6.5		Gharagheizi et al. (2012)	Q	
	1.2×10^1		Gharagheizi et al. (2010)	Q	247
	1.3×10^1		Hilal et al. (2008)	Q	
	1.2×10^1		Modarresi et al. (2007)	Q	68
		8200	Kühne et al. (2005)	Q	

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^1		Yaffe et al. (2003)	Q	249, 250
	5.7		Abraham (2003)	Q	
	2.7×10^1		Yao et al. (2002)	Q	230
	5.8	8400	Katritzky et al. (1998)	Q	
			Kühne et al. (2005)	?	
	1.0×10^1		Yaws (1999)	?	21, 12
	1.1×10^1		Abraham et al. (1990)	?	
2-ethylhexanoic acid $\text{C}_8\text{H}_{16}\text{O}_2$ [149-57-5] OBETXYAYXDNJHR-UHFFFAOYSA-N	3.5		HSDB (2015)	V	
	3.4		Hilal et al. (2008)	Q	
	2.4×10^1		Modarresi et al. (2007)	Q	68
endothal $\text{C}_8\text{H}_{10}\text{O}_5$ [145-73-3] GXEKYRXVROBEV-UHFFFAOYSA-N	2.6×10^{10}		Duchowicz et al. (2020)	V	187
	1.4×10^6		Duchowicz et al. (2020)	Q	
nonanoic acid $\text{C}_9\text{H}_{18}\text{O}_2$ (pelargic acid) [112-05-0] FBUKVWPVBMHYJY-UHFFFAOYSA-N	6.1		Duchowicz et al. (2020)	V	187
	3.8		Brimblecombe et al. (1992)	V	
	2.0×10^1		Yaws (2003)	X	238, 12
	6.9		Hilal et al. (2008)	C	
	6.5×10^1		Duchowicz et al. (2020)	Q	
	4.0		Gharagheizi et al. (2012)	Q	
	1.3×10^1		Gharagheizi et al. (2010)	Q	247
	9.9		Hilal et al. (2008)	Q	
	1.2×10^1		Modarresi et al. (2007)	Q	68
	1.2×10^1		Yaffe et al. (2003)	Q	249, 273
	4.2		Abraham (2003)	Q	
	2.3×10^1		Yao et al. (2002)	Q	230
	5.6		Katritzky et al. (1998)	Q	
	3.0		Maniere et al. (2011)	?	12, 166
	1.1×10^1		Yaws (1999)	?	21, 12
decanoic acid $\text{C}_{10}\text{H}_{20}\text{O}_2$ [334-48-5] GHVNFZFCNZKVNT-UHFFFAOYSA-N	7.4		Duchowicz et al. (2020)	V	187
	6.5		Hilal et al. (2008)	C	
	6.7×10^1		Duchowicz et al. (2020)	Q	
	7.7		Hilal et al. (2008)	Q	
	1.0×10^1		Modarresi et al. (2007)	Q	68
	3.0		Abraham (2003)	Q	
	1.9×10^2		Yaws (1999)	?	21, 12
3,3,5,5-tetramethylhexanoic acid $\text{C}_{10}\text{H}_{20}\text{O}_2$ [1135681-77-4] WRPPDRMFGQJMAR-UHFFFAOYSA-N	1.9		Zhang et al. (2010)	Q	288, 289
	3.5		Zhang et al. (2010)	Q	288, 290
	1.0×10^3		Zhang et al. (2010)	Q	288, 291
	6.1×10^{-1}		Zhang et al. (2010)	Q	288, 292

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pinonic acid $\text{C}_{10}\text{H}_{16}\text{O}_3$ [473-72-3] SIZDUQQDBXJXLQ-UHFFFAOYSA-N	6.2×10^3 3.0×10^5 6.2×10^5 5.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Isaacman-VanWertz et al. (2016)	Q Q Q Q	81, 239 81, 240 81, 241 443
undecanoic acid $\text{C}_{11}\text{H}_{22}\text{O}_2$ [112-37-8] ZDPHROEEEOARMN-UHFFFAOYSA-N	7.7 1.8×10^1 5.8 2.2		Yaws (2003) Gharagheizi et al. (2010) Hilal et al. (2008) Abraham (2003)	X Q Q Q	238 247
dodecanoic acid $\text{C}_{12}\text{H}_{24}\text{O}_2$ [143-07-7] POULHZVOKOAJMA-UHFFFAOYSA-N	4.5 1.7 1.7×10^1 8.4×10^1		Hilal et al. (2008) Abraham (2003) Yao et al. (2002) Yaws (1999)	Q Q Q ?	230 21, 12
tridecanoic acid $\text{C}_{13}\text{H}_{26}\text{O}_2$ [638-53-9] SZHOJFHSIKHZHA-UHFFFAOYSA-N	8.0 3.8×10^1 1.2		Yaws (2003) Gharagheizi et al. (2010) Abraham (2003)	X Q Q	238 247
tetradecanoic acid $\text{C}_{14}\text{H}_{28}\text{O}_2$ [544-63-8] TUNFSRHWOTWDNC-UHFFFAOYSA-N	2.0×10^1 7.1×10^1 9.4×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020) Abraham (2003)	V Q Q	187
pentadecanoic acid $\text{C}_{15}\text{H}_{30}\text{O}_2$ [1002-84-2] WQEPLUUGTLDZJY-UHFFFAOYSA-N	7.1×10^{-1}		Abraham (2003)	Q	
hexadecanoic acid $\text{C}_{16}\text{H}_{32}\text{O}_2$ (palmitic acid) [57-10-3] IPCSVZSSVZVIGE-UHFFFAOYSA-N	4.9×10^{-1} 7.2×10^1 3.0 5.2×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020) Gharagheizi et al. (2012) Abraham (2003)	V Q Q Q	187
heptadecanoic acid $\text{C}_{17}\text{H}_{34}\text{O}_2$ (margaric acid) [506-12-7] KEMQGTRYUADPNZ-UHFFFAOYSA-N	3.8×10^{-1}		Abraham (2003)	Q	
octadecanoic acid $\text{C}_{18}\text{H}_{36}\text{O}_2$ (stearic acid) [57-11-4] QIQXTHQIDYTFRH-UHFFFAOYSA-N	2.1×10^1 2.5×10^5 7.3×10^1 8.4×10^{-1} 3.5 3.0×10^{-1}		Duchowicz et al. (2020) Mackay et al. (1995) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Abraham (2003)	V V Q Q Q Q	187 68

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
nonadecanoic acid $\text{C}_{19}\text{H}_{38}\text{O}_2$ [646-30-0] ISYWECDDZWTKFF-UHFFFAOYSA-N	2.3×10^{-1}		Abraham (2003)	Q	
eicosanoic acid $\text{C}_{20}\text{H}_{40}\text{O}_2$ (arachidic acid) [506-30-9] VKOBVWXKNCXXDE-UHFFFAOYSA-N	1.7×10^{-1}		Abraham (2003)	Q	
heneicosanoic acid $\text{C}_{21}\text{H}_{42}\text{O}_2$ [2363-71-5] CKDDRHZIAZRDBW-UHFFFAOYSA-N	1.3×10^{-1}		Abraham (2003)	Q	
docosanoic acid $\text{C}_{22}\text{H}_{44}\text{O}_2$ (behenic acid) [112-85-6] UKMSUNONTOPIO-UHFFFAOYSA-N	9.5×10^{-2}		Abraham (2003)	Q	
tricosanoic acid $\text{C}_{23}\text{H}_{46}\text{O}_2$ [2433-96-7] XEZVDURJDFGERA-UHFFFAOYSA-N	7.2×10^{-2}		Abraham (2003)	Q	
tetracosanoic acid $\text{C}_{24}\text{H}_{48}\text{O}_2$ (lignoceric acid) [557-59-5] QZZGJDVWVLFXDLK-UHFFFAOYSA-N	5.4×10^{-2}		Abraham (2003)	Q	
propenoic acid $\text{C}_3\text{H}_4\text{O}_2$ (acrylic acid) [79-10-7] NIXOWILDQLNWCW-UHFFFAOYSA-N	2.7×10^1 3.1×10^1 1.2×10^2 3.3×10^1 2.2×10^1 4.6×10^1 1.6×10^1 9.9 3.1×10^1 2.2×10^1 9.4×10^2 2.4×10^1 2.4×10^1		Duchowicz et al. (2020) Lide and Frederikse (1995) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaws (1999) Yaws and Yang (1992)	V V Q Q Q Q Q Q Q Q Q ? ?	187 81, 239 81, 240 81, 241 243, 244 245 246 68 21 21

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-butenic acid $\text{C}_4\text{H}_6\text{O}_2$ (crotonic acid) [3724-65-0] LDHQZJRKDOVOX-UHFFFAOYSA-N	2.3×10^1 5.1×10^1 4.2×10^1 2.2×10^1 5.0×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	V Q Q Q Q	187 81, 239 81, 240 81, 241
(<i>E</i>)-2-butenic acid $\text{C}_4\text{H}_6\text{O}_2$ (<i>trans</i> -crotonic acid) [107-93-7] LDHQZJRKDOVOX-NSCUHMNNSA-N	4.1×10^1		HSDB (2015)	V	
(<i>Z</i>)-2-butenic acid $\text{C}_4\text{H}_6\text{O}_2$ (isocrotonic acid) [503-64-0] LDHQZJRKDOVOX-IHWYPQMZSA-N	1.5×10^2 5.1×10^1 1.2×10^1 1.2×10^1 2.0×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	V Q Q Q Q	187 243, 244 245 246
2-methyl-2-propenoic acid $\text{C}_4\text{H}_6\text{O}_2$ (methacrylic acid) [79-41-4] CERQOIWHTDAKMF-UHFFFAOYSA-N	2.5×10^1 1.0 9.2 5.0×10^1 2.1×10^1		Khan et al. (1992) Mackay et al. (2006c) Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017)	M V Q Q Q	 300 81, 239
	1.7×10^1 8.3 1.2×10^1 9.9 2.0×10^1 1.9×10^1 1.4×10^2 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	Q Q Q Q Q Q Q ?	81, 240 81, 241 243, 244 245 246 68 186, 21
methacrylic acid epoxide $\text{C}_4\text{H}_6\text{O}_3$ CSEUSVYSDPXJAP-UHFFFAOYSA-N	1.2×10^3		Pye et al. (2013)	Q	494
benzenecarboxylic acid $\text{C}_6\text{H}_5\text{COOH}$ (benzoic acid) [65-85-0] WPYMKLBDIGXBTP-UHFFFAOYSA-N	2.9×10^2 2.6×10^2 2.5×10^2 1.4×10^2 2.1 1.7×10^2 1.4×10^2 1.4×10^2 3.1×10^2		Li et al. (2007) Duchowicz et al. (2020) Mackay et al. (2006c) Lide and Frederikse (1995) Mackay et al. (1995) Meylan and Howard (1991) Goldstein (1982) Howard (1989) Duchowicz et al. (2020)	M V V V V V X X Q	187 299 414

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.6×10^2		Wang et al. (2017)	Q	81, 239
	5.1×10^2		Wang et al. (2017)	Q	81, 240
	3.5×10^2		Wang et al. (2017)	Q	81, 241
	1.2×10^2		Raventos-Duran et al. (2010)	Q	243, 244
	1.6×10^2		Raventos-Duran et al. (2010)	Q	245
	9.9×10^1		Raventos-Duran et al. (2010)	Q	246
	2.4×10^2		Hilal et al. (2008)	Q	
		6700	Kühne et al. (2005)	Q	
	9.1×10^1		Meylan and Howard (1991)	Q	
	1.5×10^3		Maniere et al. (2011)	?	12, 166
		6200	Kühne et al. (2005)	?	
	2.4×10^2		Yaws and Yang (1992)	?	21
sorbic acid $C_6H_8O_2$ [110-44-1] WSWCOQWTEOXDQX-MQQKCMAXSA-N	3.3×10^1 2.0×10^2		Abraham et al. (2019) HSDB (2015)	Q Q	 100
<i>D</i> (-)-isoascorbic acid $C_6H_8O_6$ (erythorbic acid) [89-65-6] CIWBSHSHKDKBQ-DUZGATOHSA-N	2.4×10^2		HSDB (2015)	Q	100
shikimic acid $C_7H_{10}O_5$ [138-59-0] JXOHGGNKMLTUBP-UHFFFAOYSA-N	3.7×10^8		HSDB (2015)	Q	100
4-hydroxybenzoic acid $C_7H_6O_3$ [99-96-7] FJKROLUGYXJWQN-UHFFFAOYSA-N	1.4×10^6 1.4×10^6 2.7×10^6		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
3,4,5-trihydroxybenzoic acid $C_7H_6O_5$ (gallic acid) [149-91-7] LNTHITQWFMADLM-UHFFFAOYSA-N	1.2×10^{14}		HSDB (2015)	Q	100
2-methylbenzoic acid $C_8H_8O_2$ (<i>o</i> -toluic acid) [118-90-1] ZWLPBLYKEWSWPD-UHFFFAOYSA-N	9.7 2.7×10^2 8.0×10^1 9.3×10^1 8.2×10^1 3.2×10^1 9.9×10^1 1.1×10^2		Abraham et al. (2019) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q Q Q Q	 81, 239 81, 240 81, 241 288, 289 288, 290 288, 291 288, 292

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methylbenzoic acid $\text{C}_8\text{H}_8\text{O}_2$ (<i>m</i> -toluic acid) [99-04-7] GPSDUZXPYCFOSQ-UHFFFAOYSA-N	6.6 1.4×10^{-1} 3.9×10^1 2.7×10^2 3.7×10^2 3.6×10^2 8.2×10^1 1.2×10^2 5.1×10^2 1.1×10^2		Mackay et al. (2006c) Mackay et al. (1995) Abraham et al. (2019) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V V Q Q Q Q Q Q Q Q	
4-methylbenzoic acid $\text{C}_8\text{H}_8\text{O}_2$ (<i>p</i> -toluic acid) [99-94-5] LPNBFFKOUUSUB-UHFFFAOYSA-N	2.7×10^2 4.2×10^2 4.7×10^2 8.2×10^1 1.4×10^2 8.8×10^2 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Kühne et al. (2005) Kühne et al. (2005)	Q Q Q Q Q Q Q Q Q ?	81, 239 81, 240 81, 241 288, 289 288, 290 288, 291 288, 292
2-hydroxy-benzoic acid $\text{C}_7\text{H}_6\text{O}_3$ (salicylic acid) [69-72-7] YGSDEFMSJLZEOE-UHFFFAOYSA-N	1.3×10^3 8.0×10^2 6.9×10^2 1.8 9.0×10^1 1.5×10^3 1.6×10^3 4.9×10^2 6.2×10^2 8.9×10^1		Duchowicz et al. (2020) Mackay et al. (2006c) Mackay et al. (1995) Mackay et al. (1995) Yaws (2003) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010)	V V V V X Q Q Q Q Q Q	187 238 243, 244 245 246 247
benzeneethanoic acid $\text{C}_8\text{H}_8\text{O}_2$ (phenylacetic acid) [103-82-2] WLJVXDMOQOGPHL-UHFFFAOYSA-N	2.4×10^2 1.5×10^2 1.8×10^2 1.4×10^1 3.4×10^2 4.1×10^2 2.1×10^3 3.6×10^3 1.2×10^3 1.2×10^3 2.0×10^2 9.9×10^2 3.2×10^2 2.4×10^2 5.1×10^1		Duchowicz et al. (2020) Mackay et al. (2006c) Mackay et al. (1995) Mackay et al. (1995) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998)	V V V V Q Q Q Q Q Q Q Q Q Q Q Q	187 81, 239 81, 240 81, 241 243, 244 245 246 68 249, 250

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
phthalic anhydride $\text{C}_8\text{H}_4\text{O}_3$ [85-44-9] LGRFSURHDFAFJT-UHFFFAOYSA-N	6.1×10^2 1.6×10^3 1.2×10^1 4.4×10^1 1.2×10^1		Duchowicz et al. (2020) Lide and Frederikse (1995) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2010)	V V X Q Q	187 238 247
1,2-benzenedicarboxylic acid $\text{C}_8\text{H}_6\text{O}_4$ (phthalic acid) [88-99-3] XNGIFLGASWRNHJ-UHFFFAOYSA-N	4.9×10^5 4.9×10^5 8.2×10^6		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
terephthalic acid $\text{C}_8\text{H}_6\text{O}_4$ [100-21-0] KKEYFWRCBNT PAC-UHFFFAOYSA-N	2.5×10^7 4.8×10^9		HSDB (2015) Gharagheizi et al. (2012)	Q Q	449
isophthalic acid $\text{C}_8\text{H}_6\text{O}_4$ [121-91-5] QQVIHTHCMHWDBS-UHFFFAOYSA-N	4.0×10^9 7.3×10^4 4.5×10^6 7.1×10^8 3.7×10^9		Yaws (2003) Abraham et al. (2019) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q Q Q	238 100 247
dehydroacetic acid $\text{C}_8\text{H}_8\text{O}_4$ [520-45-6] PGRHXDWITVMQBC-UHFFFAOYSA-N	2.9×10^1		HSDB (2015)	V	
2-methoxybenzoic acid $\text{C}_8\text{H}_8\text{O}_3$ [579-75-9] ILUJQPXNXACGAN-UHFFFAOYSA-N	2.5×10^3		Abraham et al. (2019)	Q	
4-methoxybenzoic acid $\text{C}_8\text{H}_8\text{O}_3$ [100-09-4] ZEYHEAKUIGZSGI-UHFFFAOYSA-N	1.8×10^3		Abraham et al. (2019)	Q	
caffeic acid $\text{C}_9\text{H}_8\text{O}_4$ [331-39-5] QAIPRVGONGVQAS-DUXPYHPUSA-N	7.0×10^{10}		HSDB (2015)	Q	100
4-methylphthalic anhydride $\text{C}_9\text{H}_6\text{O}_3$ [19438-61-0] ZOXBWJMCXHTKNU-UHFFFAOYSA-N	1.4 6.4×10^4 3.5×10^1 3.6×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-phenyl-2-propenoic acid $\text{C}_9\text{H}_8\text{O}_2$ (cinnamic acid) [621-82-9] WBYWAXJHAXSJNI-UHFFFAOYSA-N	5.8×10^2 4.1×10^2 9.9×10^2 1.6×10^2 7.8×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	V Q Q Q Q	187 243, 244 245 246
<i>trans</i> -cinnamic acid $\text{C}_9\text{H}_8\text{O}_2$ [140-10-3] WBYWAXJHAXSJNI-VOTSOKGWSA-N	2.8×10^{11}		Abraham et al. (2019)	Q	
<i>p</i> -coumaric acid $\text{C}_9\text{H}_8\text{O}_3$ [501-98-4] NGSWKAQJJWESNS-ZZXKWWIFSA-N	7.2×10^5		Abraham et al. (2019)	Q	
3,4-dimethoxybenzoic acid $\text{C}_9\text{H}_{10}\text{O}_4$ (veratric acid) [93-07-2] DAUAQNGYDSHRET-UHFFFAOYSA-N	1.1×10^5		Abraham et al. (2019)	Q	
3,4,5-trimethoxybenzoic acid $\text{C}_{10}\text{H}_{12}\text{O}_5$ (eudesmic acid) [118-41-2] SJSOFNCYXJUNBT-UHFFFAOYSA-N	7.3×10^5		Abraham et al. (2019)	Q	
1-naphthaleneacetic acid $\text{C}_{12}\text{H}_{10}\text{O}_2$ [86-87-3] PRPINYUDVPFIRX-UHFFFAOYSA-N	3.3×10^2 7.9×10^3		Maniere et al. (2011) Maniere et al. (2011)	? ?	12, 495, 166 12, 496, 166
2-naphthoxyacetic acid $\text{C}_{12}\text{H}_{10}\text{O}_3$ [120-23-0] RZCJYMOBWWJQGV-UHFFFAOYSA-N	3.5×10^5		Ebert et al. (2023)	?	319
<i>p</i> - <i>tert</i> -butylbenzoic acid $\text{C}_{11}\text{H}_{14}\text{O}_2$ [98-73-7] KDVYCTOWXSLNNI-UHFFFAOYSA-N	3.5×10^1 4.5×10^1 3.6×10^2 4.2×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
trinexapac $\text{C}_{11}\text{H}_{12}\text{O}_5$ [104273-73-6] DFFWZNDNCNBOKDI-UHFFFAOYSA-N	3.9×10^6 4.3×10^8		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
benzoic acid, anhydride $\text{C}_{14}\text{H}_{10}\text{O}_3$ [93-97-0] CHIHQLCVLOXUJW-UHFFFAOYSA-N	7.0 3.7×10^2 6.5×10^3 6.4×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
pyromellitic acid $\text{C}_{10}\text{H}_6\text{O}_8$ [89-05-4] CYIDZMCFTVVTJO-UHFFFAOYSA-N	1.6×10^{13} 3.0×10^{13} 1.6×10^{13}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238, 497 247
pyromellitic dianhydride $\text{C}_{10}\text{H}_2\text{O}_6$ [89-32-7] ANSXAPJVJOKRDJ-UHFFFAOYSA-N	1.3×10^3 1.3×10^3 1.4×10^{11} 4.8×10^4 9.7×10^5		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
naproxen $\text{C}_{14}\text{H}_{14}\text{O}_3$ [22204-53-1] CMWTZPSULFXXJA-VIFPVBQESA-N	2.5×10^5		Abraham et al. (2019)	Q	
(<i>Z,Z</i>)-9,12-octadecadienoic acid $\text{C}_{18}\text{H}_{32}\text{O}_2$ (linoleic acid) [60-33-3] OYHQOLUKZRVURQ-HZJYTRNSA-N	4.9×10^1		HSDB (2015)	V	
rosmarinic acid $\text{C}_{18}\text{H}_{16}\text{O}_8$ [537-15-5] DOUMFZQKYFQNTF-WUTVXBCWSA-N	3.7×10^{21}		HSDB (2015)	Q	449
abietic acid $\text{C}_{20}\text{H}_{30}\text{O}_2$ [514-10-3] RSWGGJHLUYNHPMX-ONCXSQPRSA-N	1.5×10^5 1.7×10^5		Yaws (2003) Gharagheizi et al. (2010)	X Q	238, 12 247
ethanedioic acid HOCCOOH (oxalic acid) [144-62-7] MUBZPKHOEPUJKR-UHFFFAOYSA-N	6.1×10^6 6.1×10^6 6.1×10^6 7.1×10^6 3.1×10^4 4.2×10^5 6.9×10^4 1.6×10^4 1.6×10^3 3.7×10^7 4.9×10^4 2.0×10^4 3.9×10^5	9800 7300	Burkholder et al. (2019) Burkholder et al. (2015) Compernelle and Müller (2014a) Clegg et al. (1996) Brimblecombe et al. (1992) Yaws (2003) Gaffney and Senum (1984) Keshavarz et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	L L V V V X X Q Q Q Q Q Q Q	238, 12 391, 493 243, 244 245 246

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	4.2×10^5		Gharagheizi et al. (2010)	Q	247
	2.4×10^3		Hilal et al. (2008)	Q	
	2.3×10^5		Modarresi et al. (2007)	Q	68
	4.1×10^5		Meylan and Howard (1991)	Q	
	4.9×10^6		Saxena and Hildemann (1996)	E	403
	6.9×10^4		Duchowicz et al. (2020)	?	186, 21
propanedioic acid HOOCCH ₂ COOH (malonic acid) [141-82-2] OFOBLEOULBTSOW-UHFFFAOYSA-N	2.4×10^8		Burkholder et al. (2019)	L	
	2.4×10^8		Burkholder et al. (2015)	L	
	3.7×10^4		Duchowicz et al. (2020)	V	187
	3.8×10^8	11000	Compernelle and Müller (2014a)	V	
	9.3×10^7	14000	Compernelle and Müller (2014a)	V	
	2.1×10^1		Duchowicz et al. (2020)	Q	
	2.5×10^5		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^6		Raventos-Duran et al. (2010)	Q	245
	2.5×10^6		Raventos-Duran et al. (2010)	Q	246
	1.2×10^5		Modarresi et al. (2007)	Q	68
	3.9×10^6		Saxena and Hildemann (1996)	E	403
butanedioic acid HOOC(CH ₂) ₂ COOH (succinic acid) [110-15-6] KDYFGRWQOYBRFD-UHFFFAOYSA-N	3.1×10^7		Burkholder et al. (2019)	L	
	3.1×10^7		Burkholder et al. (2015)	L	
	2.8×10^7		Duchowicz et al. (2020)	V	187
	2.7×10^7		HSDB (2015)	V	
	4.1×10^7	11000	Compernelle and Müller (2014a)	V	
	2.0×10^7	12000	Compernelle and Müller (2014a)	V	
	7.2×10^5		Yaws (2003)	X	238
	6.5×10^4		Duchowicz et al. (2020)	Q	
	1.4×10^7		Gharagheizi et al. (2012)	Q	
	4.9×10^6		Raventos-Duran et al. (2010)	Q	243, 244
	2.5×10^6		Raventos-Duran et al. (2010)	Q	245
	2.0×10^6		Raventos-Duran et al. (2010)	Q	246
	3.2×10^5		Gharagheizi et al. (2010)	Q	247
	3.0×10^6		Saxena and Hildemann (1996)	E	403
pentanedioic acid HOOC(CH ₂) ₃ COOH (glutaric acid) [110-94-1] JFCQEDHGNNZCLN-UHFFFAOYSA-N	3.8×10^7		Burkholder et al. (2019)	L	
	3.8×10^7		Burkholder et al. (2015)	L	
	1.9×10^7		Mentel et al. (2004)	M	
	5.1×10^7	12000	Compernelle and Müller (2014a)	V	
	2.4×10^7	13000	Compernelle and Müller (2014a)	V	
	1.0×10^5		Yaws (2003)	X	238, 498
	5.0×10^6		Gharagheizi et al. (2012)	Q	
	4.9×10^6		Raventos-Duran et al. (2010)	Q	272, 244
	3.9×10^7		Raventos-Duran et al. (2010)	Q	245
	1.2×10^6		Raventos-Duran et al. (2010)	Q	246
	3.5×10^5		Gharagheizi et al. (2010)	Q	247
	2.2×10^7		Hilal et al. (2008)	Q	
	2.3×10^5		Modarresi et al. (2007)	Q	68

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	2.0×10^6		Saxena and Hildemann (1996)	E	403
3-hydroxy glutaric acid $\text{C}_5\text{H}_8\text{O}_5$ [638-18-6] ZQHYNXNQIDNTL-UHFFFAOYSA-N	6.7×10^8		Isaacman-VanWertz et al. (2016)	Q	443
hexanedioic acid $\text{HOOC}(\text{CH}_2)_4\text{COOH}$ (adipic acid) [124-04-9] WNLRTBMRVJRJNCN-UHFFFAOYSA-N	6.6×10^7 6.6×10^7 2.1×10^6 2.1×10^6 6.6×10^7 1.1×10^1 1.8×10^5 3.3×10^6 2.2×10^6 3.9×10^6 4.9×10^7 9.9×10^5 2.5×10^7 2.5×10^5 2.0×10^6	13000 11000	Burkholder et al. (2019) Burkholder et al. (2015) Duchowicz et al. (2020) HSDB (2015) Compernelle and Müller (2014a) Lide and Frederikse (1995) Goldstein (1982) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Saxena and Hildemann (1996)	L L V V V V X Q Q Q Q Q Q Q E	187 243, 244 245 246 68 403
tricarballic acid $\text{C}_6\text{H}_8\text{O}_6$ [99-14-9] KQTIICEAUMSDG-UHFFFAOYSA-N	1.9×10^9		Isaacman-VanWertz et al. (2016)	Q	443
heptanedioic acid $\text{C}_7\text{H}_{12}\text{O}_4$ (pimelic acid) [111-16-0] WLJVNTCWHIRURA-UHFFFAOYSA-N	2.6×10^7 8.1×10^7 4.1×10^6	15000	Duchowicz et al. (2020) Compernelle and Müller (2014a) Duchowicz et al. (2020)	V V Q	187
3-acetyl pentanedioic acid $\text{C}_7\text{H}_{10}\text{O}_5$ [149474-71-5] TZPGYCKKEMNHRS-UHFFFAOYSA-N	4.5×10^9		Isaacman-VanWertz et al. (2016)	Q	443
octanedioic acid $\text{C}_8\text{H}_{14}\text{O}_4$ (suberic acid) [505-48-6] TYFQFVWCELRYAO-UHFFFAOYSA-N	1.8×10^6 7.7×10^7 4.8×10^6	14000	Duchowicz et al. (2020) Compernelle and Müller (2014a) Duchowicz et al. (2020)	V V Q	187

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methyl-1,2,3-butanetricarboxylic acid $\text{C}_8\text{H}_{12}\text{O}_6$ [77370-41-3] VMWJGTKDJFMTFZ-UHFFFAOYSA-N	1.9×10^8		Isaacman-VanWertz et al. (2016)	Q	443
nonanedioic acid $\text{C}_9\text{H}_{16}\text{O}_4$ (azelaic acid) [123-99-9] BDJRBEYXGGNYIS-UHFFFAOYSA-N	8.9×10^7 3.6×10^6 1.9×10^5 9.3×10^5	17000	Compernelle and Müller (2014a) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	238, 12 247
decanedioic acid $\text{C}_{10}\text{H}_{18}\text{O}_4$ (sebacic acid) [111-20-6] CXMXRPHRNRROMY-UHFFFAOYSA-N	7.6×10^7 1.7×10^6 1.6×10^5 1.4×10^6		Compernelle and Müller (2014a) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	238, 12 247
dodecanedioic acid $\text{C}_{12}\text{H}_{22}\text{O}_4$ [693-23-2] TVIDDXQYHWJXFK-UHFFFAOYSA-N	9.9×10^5		Ebert et al. (2023)	?	317
<i>cis</i> -butenedioic acid $\text{HOOC}(\text{CH}_2)\text{COOH}$ (maleic acid) [110-16-7] VZCYOOQTPOCHFL-UPHRSURJSA-N	1.4×10^8 1.3×10^6 6.8×10^6 1.3×10^6 9.9×10^6		Lide and Frederikse (1995) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Saxena and Hildemann (1996)	V X Q Q E	238 247 403
citraconic acid $\text{C}_5\text{H}_6\text{O}_4$ [498-23-7] HNEGQIOMVPPMNR-IHWYPQMZSA-N	3.6×10^7 4.0×10^6 3.7×10^7		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
itaconic acid $\text{C}_5\text{H}_6\text{O}_4$ [97-65-4] LVHBZHANLOWSRM-UHFFFAOYSA-N	1.3×10^6 1.3×10^7 1.3×10^6		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238, 12 247
1,4-cyclohexanedicarboxylic acid $\text{C}_8\text{H}_{12}\text{O}_4$ [619-82-9] PXGZQGDTEZPERC-UHFFFAOYSA-N	1.1×10^6 2.3×10^6 1.1×10^6		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238, 155 247
pinic acid $\text{C}_9\text{H}_{14}\text{O}_4$ [473-73-4] LEVONNIFUFSRKZ-UHFFFAOYSA-N	1.4×10^6 7.1×10^7 3.2×10^7 1.0×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Isaacman-VanWertz et al. (2016)	Q Q Q Q	81, 239 81, 240 81, 241 443

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methanoic peroxyacid HCOOOH (peroxyformic acid) [107-32-4] SCKXCAADGDQQCS-UHFFFAOYSA-N	2.9×10^1 5.2		Sauer (1997) HSDB (2015)	M Q	451 100
ethanoic peroxyacid CH ₃ COOOH (peroxyacetic acid) [79-21-0] KFSLWBXXFJQRDL-UHFFFAOYSA-N	8.3 8.3 8.3 7.3 2.4×10^1 8.3 6.5 1.1×10^2 9.6 1.3×10^{-1} 7.8 2.5 7.8 1.8×10^1 9.3×10^1	5300 5300 5300 5600 5300 5900 5300 5300 5300 5300 6100 5300	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Staudinger and Roberts (2001) Sauer (1997) O'Sullivan et al. (1996) Lind and Kok (1994) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Kühne et al. (2005)	L L L L M M M Q Q Q Q Q Q Q Q Q Q ?	451 53 81, 239 81, 240 81, 241 243, 244 245 246 68
MCM:M2C43CO2H C ₆ H ₁₂ O ₂ XFOASZQZPWEJAA-UHFFFAOYSA-N	8.0 1.7×10^1 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M33C3CO2H C ₆ H ₁₂ O ₂ VUAXHMVRKOTJKP-UHFFFAOYSA-N	4.9 1.7×10^1 9.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C721OOH C ₇ H ₁₂ O ₄ ZLURETBBUKLNQX-UHFFFAOYSA-N	1.2×10^6 2.8×10^6 6.2×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C721CO3H C ₈ H ₁₂ O ₅ HYEGRGIGVZWWFM-UHFFFAOYSA-N	1.4×10^7 5.5×10^6 1.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C811OOH C ₈ H ₁₄ O ₄ RYDSGVCXHLRTGT-UHFFFAOYSA-N	9.8×10^5 3.3×10^6 2.5×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C823OOH C ₈ H ₁₄ O ₄ KIIRSRLFRXTUMU-UHFFFAOYSA-N	8.7×10^5 3.0×10^6 2.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NORPINIC $\text{C}_8\text{H}_{12}\text{O}_4$ KLGKVMWWRDYKJM-UHFFFAOYSA-N	1.7×10^6 2.0×10^7 6.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C811CO3H $\text{C}_9\text{H}_{14}\text{O}_5$ ZVOGBTSHONFRIW-UHFFFAOYSA-N	1.1×10^7 3.7×10^6 2.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C823CO3H $\text{C}_9\text{H}_{14}\text{O}_5$ IESQFENJEQJSTC-UHFFFAOYSA-N	1.0×10^7 1.6×10^6 3.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LIMONIC $\text{C}_9\text{H}_{14}\text{O}_4$ JUCWCJYNDRRZRKR-UHFFFAOYSA-N	1.2×10^6 6.6×10^7 1.8×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C137OOH $\text{C}_{13}\text{H}_{22}\text{O}_4$ RDYPCLKIKFUKHY-UHFFFAOYSA-N	8.5×10^5 3.7×10^6 4.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C137CO2H $\text{C}_{14}\text{H}_{22}\text{O}_4$ IYTMEDMFNUDFPT-UHFFFAOYSA-N	1.2×10^6 1.7×10^8 1.7×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C137CO3H $\text{C}_{14}\text{H}_{22}\text{O}_5$ WIBVBPZGNYNCKK-UHFFFAOYSA-N	9.8×10^6 2.4×10^6 1.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM123BCO2H $\text{C}_9\text{H}_{10}\text{O}_2$ RIZUCYSQUWMQLX-UHFFFAOYSA-N	1.6×10^2 9.1×10^1 2.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124BCO2H $\text{C}_9\text{H}_{10}\text{O}_2$ OPVAJFQBSDUNQA-UHFFFAOYSA-N	1.6×10^2 4.1×10^2 5.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TMBCO2H $\text{C}_9\text{H}_{10}\text{O}_2$ UMVOQQDNEYOJOK-UHFFFAOYSA-N	1.6×10^2 2.6×10^2 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C2OHOCO2H $\text{C}_3\text{H}_6\text{O}_4$ RBNPOMFGQQGHHO-UHFFFAOYSA-N	2.1×10^6 2.0×10^7 2.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOC2H4CO2H $\text{C}_3\text{H}_6\text{O}_3$ ALRHLSYJTWAHJZ-UHFFFAOYSA-N	3.2×10^4 1.1×10^5 7.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HC3CO2H $\text{C}_4\text{H}_6\text{O}_3$ RMQJECWPWQIIPW-UHFFFAOYSA-N	1.0×10^5 3.6×10^5 1.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HMACO2H $\text{C}_4\text{H}_6\text{O}_3$ AAMTXHVZOHPPQR-UHFFFAOYSA-N	6.2×10^4 8.3×10^2 3.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2C3CO2H $\text{C}_4\text{H}_8\text{O}_3$ WHBMMWSBFZVSSR-UHFFFAOYSA-N	3.0×10^4 6.9×10^4 6.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOC3H6CO2H $\text{C}_4\text{H}_8\text{O}_3$ SJZRECIVHVDYJC-UHFFFAOYSA-N	2.6×10^4 1.4×10^5 1.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOIPRCO2H $\text{C}_4\text{H}_8\text{O}_3$ DBXBTMSZEOQQDU-UHFFFAOYSA-N	3.0×10^4 4.5×10^4 6.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPRHOCO2H $\text{C}_4\text{H}_8\text{O}_3$ BWLBMIXKSTLSX-UHFFFAOYSA-N	9.6×10^2 2.3×10^4 5.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C46CO2H $\text{C}_5\text{H}_8\text{O}_3$ NJMYQRVWBCSLEU-UHFFFAOYSA-N	4.9×10^4 1.5×10^5 5.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HC4ACO2H $\text{C}_5\text{H}_8\text{O}_3$ BERUOTKXCOOJUM-UHFFFAOYSA-N	6.9×10^4 2.3×10^5 6.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HC4CCO2H $\text{C}_5\text{H}_8\text{O}_3$ NCQCQZXQBYAHBZ-UHFFFAOYSA-N	6.9×10^4 2.0×10^5 6.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM22CO2H $\text{C}_5\text{H}_{10}\text{O}_3$ RDFQSFQGVZWKF-UHFFFAOYSA-N	1.7×10^4 2.1×10^4 1.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2C43CO2H $\text{C}_5\text{H}_{10}\text{O}_3$ VEXDRERIMPLZLU-UHFFFAOYSA-N	2.8×10^4 1.6×10^4 3.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2C4CO2H $\text{C}_5\text{H}_{10}\text{O}_3$ FMHKPLXYWVCLME-UHFFFAOYSA-N	2.3×10^4 8.0×10^4 8.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOBUT2CO2H $\text{C}_5\text{H}_{10}\text{O}_3$ JYTYEGKJKIXWOJ-UHFFFAOYSA-N	2.3×10^4 3.5×10^4 7.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C518CO2H $\text{C}_6\text{H}_{10}\text{O}_3$ COPVWTGWVHHSRKH-UHFFFAOYSA-N	4.6×10^4 2.8×10^4 2.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:H2M2C4CO2H $\text{C}_6\text{H}_{12}\text{O}_3$ PQJUMPXLDAZULJ-UHFFFAOYSA-N	1.4×10^4 3.0×10^4 3.2×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2M3C4CO2H $\text{C}_6\text{H}_{12}\text{O}_3$ BNTHHYUWQILHSA-UHFFFAOYSA-N	2.2×10^4 2.9×10^4 2.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM22C3CO2H $\text{C}_6\text{H}_{12}\text{O}_3$ WLKUATLKPJGHKX-UHFFFAOYSA-N	1.4×10^4 2.3×10^4 1.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM2C43CO2H $\text{C}_6\text{H}_{12}\text{O}_3$ QSMSJHRQUBQMKD-UHFFFAOYSA-N	2.2×10^4 2.3×10^4 4.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM33C3CO2H $\text{C}_6\text{H}_{12}\text{O}_3$ NGRPJOQCQYDOJX-UHFFFAOYSA-N	1.4×10^4 1.7×10^4 6.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2C54CO2H $\text{C}_6\text{H}_{12}\text{O}_3$ IOXPMKQXROCYFL-UHFFFAOYSA-N	2.2×10^4 1.6×10^4 6.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C5CO2H $\text{C}_6\text{H}_{12}\text{O}_3$ ABIKNKURIGPIRJ-UHFFFAOYSA-N	2.0×10^4 3.7×10^4 6.2×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C622CO2H $\text{C}_7\text{H}_{12}\text{O}_3$ PHVXTLWKDLVJPT-UHFFFAOYSA-N	3.6×10^4 4.7×10^4 2.7×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C624CO2H $\text{C}_7\text{H}_{12}\text{O}_3$ IOGKLHPXZHQWIG-UHFFFAOYSA-N	3.6×10^4 3.0×10^4 4.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H3M3C5CO2H $\text{C}_7\text{H}_{14}\text{O}_3$ BHWOTLCMMUBASI-UHFFFAOYSA-N	1.1×10^4 1.7×10^4 2.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C811OH $\text{C}_8\text{H}_{14}\text{O}_3$ UVNHICQQCWWSMK-UHFFFAOYSA-N	3.6×10^4 1.7×10^6 9.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C812OH $\text{C}_8\text{H}_{14}\text{O}_4$ VFUDATRQVLCLSF-UHFFFAOYSA-N	3.4×10^6 2.9×10^8 1.2×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C812OOH $\text{C}_8\text{H}_{14}\text{O}_5$ TXANCYVWZQZPGK-UHFFFAOYSA-N	1.8×10^9 4.9×10^8 1.5×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C823OH $\text{C}_8\text{H}_{14}\text{O}_3$ HTVBHPNLYICQSI-UHFFFAOYSA-N	3.3×10^4 2.0×10^6 9.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C825OH $\text{C}_8\text{H}_{14}\text{O}_4$ GZVYHBJSBFFII-UHFFFAOYSA-N	5.5×10^6 3.7×10^7 5.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C825OOH $\text{C}_8\text{H}_{14}\text{O}_5$ XYVJCVMMBMHSFM-UHFFFAOYSA-N	2.8×10^9 7.8×10^8 1.8×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C137OH $\text{C}_{13}\text{H}_{22}\text{O}_3$ GRQGZSRPJJOBF-UHFFFAOYSA-N	3.1×10^4 1.7×10^6 2.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C139OH $\text{C}_{13}\text{H}_{22}\text{O}_4$ RQGWJIBQKQBFEC-UHFFFAOYSA-N	6.0×10^7 7.6×10^9 1.4×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C139OOH $\text{C}_{13}\text{H}_{22}\text{O}_5$ MQHLLQJDKGKDCU-UHFFFAOYSA-N	1.8×10^9 1.7×10^{10} 9.8×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C44OOH $\text{C}_4\text{H}_6\text{O}_5$ RIVXGQNQRYOWAN-UHFFFAOYSA-N	7.3×10^8 4.1×10^7 1.9×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MALDALCO2H $\text{C}_4\text{H}_4\text{O}_3$ ZOIRMVZWDRLJPI-UHFFFAOYSA-N	3.4×10^4 6.0×10^3 5.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PRPAL2CO2H $\text{C}_4\text{H}_6\text{O}_3$ VOKUMXABRRXHAR-UHFFFAOYSA-N	9.8×10^3 5.0×10^3 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3MCOCO2H $\text{C}_5\text{H}_6\text{O}_3$ VXAWORVMCLXEKH-UHFFFAOYSA-N	2.3×10^4 9.6×10^3 7.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO1M22CO2H $\text{C}_5\text{H}_8\text{O}_3$ SUMZWDXUXLTFFX-UHFFFAOYSA-N	5.4×10^3 1.3×10^3 6.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MC3ODBCO2H $\text{C}_5\text{H}_6\text{O}_3$ QPFAKLVWFPTSX-UHFFFAOYSA-N	2.3×10^4 9.3×10^3 3.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3EODBCO2H $\text{C}_6\text{H}_8\text{O}_3$ XIZBOUDCWHEQCF-UHFFFAOYSA-N	2.0×10^4 8.3×10^3 4.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C3M2COCO2H $\text{C}_6\text{H}_8\text{O}_3$ HLFIROOBCUFLFC-UHFFFAOYSA-N	1.6×10^4 9.1×10^3 5.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C522CO2H $\text{C}_6\text{H}_8\text{O}_3$ NSMTVDIDRFOALU-UHFFFAOYSA-N	1.3×10^4 2.3×10^4 9.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:RGDCO2H $\text{C}_6\text{H}_8\text{O}_3$ HNXWTHGWCGDLKB-UHFFFAOYSA-N	2.0×10^4 8.5×10^3 3.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C615CO2H $\text{C}_7\text{H}_{10}\text{O}_4$ BRDQYLNZHVUNQF-UHFFFAOYSA-N	3.6×10^6 5.4×10^5 2.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C722OOH $\text{C}_7\text{H}_{12}\text{O}_5$ XJSSOLXEKAZFKL-UHFFFAOYSA-N	3.0×10^8 1.6×10^7 8.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IP3ODBCO2H $\text{C}_7\text{H}_{10}\text{O}_3$ HLXOYOZOZOGAJW-UHFFFAOYSA-N	1.9×10^4 4.5×10^3 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PC3ODBCO2H $\text{C}_7\text{H}_{10}\text{O}_3$ SHOOYBDWMZRRKO-UHFFFAOYSA-N	1.7×10^4 5.4×10^3 2.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C721CHO $\text{C}_8\text{H}_{12}\text{O}_3$ MQTHUXQLMJSVGN-UHFFFAOYSA-N	1.2×10^4 2.8×10^5 2.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C729CO2H $\text{C}_8\text{H}_{12}\text{O}_3$ NHNJUKWYLMFOQP-UHFFFAOYSA-N	1.0×10^4 1.1×10^5 1.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C823CO $\text{C}_8\text{H}_{12}\text{O}_3$ KUOQBGRIDTXEZ-UHFFFAOYSA-N	1.0×10^4 2.2×10^5 7.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C822CO2H $\text{C}_9\text{H}_{14}\text{O}_3$ ADULCIYKWWJSFE-UHFFFAOYSA-N	4.4×10^4 8.5×10^3 9.3×10^4 3.0×10^4	15000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C830CO2H $\text{C}_9\text{H}_{14}\text{O}_3$ NWNQYPOMHUZLML-UHFFFAOYSA-N	9.1×10^3 1.9×10^5 2.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C89CO2H $\text{C}_9\text{H}_{14}\text{O}_3$ RFGXRYLTPBBFIG-UHFFFAOYSA-N	9.1×10^3 2.0×10^5 7.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C126CO2H $\text{C}_{13}\text{H}_{20}\text{O}_3$ FRZAETYQWIEERW-UHFFFAOYSA-N	1.0×10^4 2.4×10^5 2.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C137CO $\text{C}_{13}\text{H}_{20}\text{O}_3$ FQUQDHNCRLRZNB-UHFFFAOYSA-N	1.0×10^4 2.2×10^5 7.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C136CO2H $\text{C}_{14}\text{H}_{22}\text{O}_3$ MUFZWTUKICSBHZ-UHFFFAOYSA-N	8.9×10^3 1.5×10^5 7.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:COHM2CO2H $\text{C}_4\text{H}_6\text{O}_4$ DDNPKLYNPFAlEE-UHFFFAOYSA-N	2.0×10^5 7.1×10^5 2.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1H4C5CO2H $\text{C}_6\text{H}_{10}\text{O}_4$ NIVGPRREFKECGM-UHFFFAOYSA-N	1.8×10^7 3.4×10^7 3.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ECOCO2H $\text{C}_4\text{H}_6\text{O}_3$ TYEYBOSBBBJIV-UHFFFAOYSA-N	7.3×10^3 4.1×10^1 5.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C41CO2H $\text{C}_5\text{H}_8\text{O}_3$ GCXJINGJZAOJHR-UHFFFAOYSA-N	6.5×10^3 4.6×10^3 3.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5CO14OH $\text{C}_5\text{H}_6\text{O}_3$ XGTKSWVCNVUVHG-UHFFFAOYSA-N	2.3×10^4 1.6×10^4 1.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2C4CO2H $\text{C}_5\text{H}_8\text{O}_3$ JOOXCMJARBKPKM-UHFFFAOYSA-N	5.6×10^3 4.6×10^5 7.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO3C4CO2H $\text{C}_5\text{H}_8\text{O}_3$ FHSUFDYFOHSYHI-UHFFFAOYSA-N	5.6×10^3 1.5×10^4 5.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPGLYOXOH $\text{C}_5\text{H}_8\text{O}_3$ QHKABHOOEWYVLI-UHFFFAOYSA-N	6.5×10^3 1.7×10^1 5.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PGLYOXOH $\text{C}_5\text{H}_8\text{O}_3$ KDVFRMMRZOCFLS-UHFFFAOYSA-N	5.6×10^3 2.0×10^1 5.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C51CO2H $\text{C}_6\text{H}_{10}\text{O}_3$ NFIWUVRBASXMGK-UHFFFAOYSA-N	5.3×10^3 1.6×10^5 1.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5CODBCO2H $\text{C}_6\text{H}_8\text{O}_3$ YUICRCSHEOZHST-UHFFFAOYSA-N	1.6×10^4 1.6×10^4 2.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5DBCOCO2H $\text{C}_6\text{H}_8\text{O}_3$ LRRPKULXSOVRRZ-UHFFFAOYSA-N	1.6×10^4 1.4×10^4 2.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6DCRBBOH $\text{C}_6\text{H}_8\text{O}_3$ VUZJJUOKMOGBDH-UHFFFAOYSA-N	2.0×10^4 1.4×10^4 4.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2C54CO2H $\text{C}_6\text{H}_{10}\text{O}_3$ UZTJTKEYGHTNM-UHFFFAOYSA-N	5.3×10^3 8.7×10^4 3.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2M33CO2H $\text{C}_6\text{H}_{10}\text{O}_3$ CBZZWRQRPKSEI-UHFFFAOYSA-N	3.6×10^3 8.5×10^2 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO3C5CO2H $\text{C}_6\text{H}_{10}\text{O}_3$ CLJBDOUIEHLLN-UHFFFAOYSA-N	4.5×10^3 2.6×10^5 3.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C732OOH $\text{C}_7\text{H}_{12}\text{O}_5$ ASSSOSHEUJWVOL-UHFFFAOYSA-N	3.2×10^8 1.8×10^9 2.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7ADCCO2H $\text{C}_7\text{H}_{10}\text{O}_3$ GJWJJSZYGVZNC-UHFFFAOYSA-N	1.0×10^4 1.3×10^4 6.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7CDCCO2H $\text{C}_7\text{H}_{10}\text{O}_3$ OAGXHOMWGVMDLP-UHFFFAOYSA-N	1.4×10^4 7.8×10^3 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7DCCO2H $\text{C}_7\text{H}_{10}\text{O}_3$ LUXOYEZTEWTGMD-UHFFFAOYSA-N	1.7×10^4 8.5×10^3 4.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7DDCCO2H $\text{C}_7\text{H}_{10}\text{O}_3$ MDDQAVHYGMRQBB-UHFFFAOYSA-N	1.4×10^4 8.5×10^3 1.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO25C6CO2H $\text{C}_7\text{H}_{10}\text{O}_4$ WUQQVFQGWMLD-UHFFFAOYSA-N	2.7×10^6 2.2×10^7 1.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:IC7DCCO2H $\text{C}_7\text{H}_{10}\text{O}_3$ TZKNMZPMBZQSMV-UHFFFAOYSA-N	1.9×10^4 6.9×10^3 3.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C732CO3H $\text{C}_8\text{H}_{12}\text{O}_6$ IARLEAITRRLVEZ-UHFFFAOYSA-N	3.6×10^9 2.2×10^9 2.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:KLIMONIC $\text{C}_8\text{H}_{12}\text{O}_5$ POLIOAJLCOGOTJ-UHFFFAOYSA-N	4.5×10^8 3.4×10^{10} 1.1×10^9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C827CO2H $\text{C}_9\text{H}_{14}\text{O}_4$ UOMMGFNPUVSKTE-UHFFFAOYSA-N	1.4×10^6 1.3×10^6 4.9×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C88CO2H $\text{C}_9\text{H}_{12}\text{O}_4$ LOFCXTWTTIFNLN-UHFFFAOYSA-N	4.5×10^6 6.6×10^7 3.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:KLIMONONIC $\text{C}_9\text{H}_{14}\text{O}_4$ RRLLKTDJWPIWHS-UHFFFAOYSA-N	2.0×10^6 5.4×10^7 8.5×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C928CO2H $\text{C}_{10}\text{H}_{16}\text{O}_4$ SANKOOWGNYBKOU-UHFFFAOYSA-N	1.1×10^6 5.6×10^7 1.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LIMONONIC $\text{C}_{10}\text{H}_{16}\text{O}_3$ NJOIWWRMLFSDTM-UHFFFAOYSA-N	5.7×10^4 5.8×10^3 5.9×10^4 2.4×10^5	15000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C1011CO2H $\text{C}_{11}\text{H}_{18}\text{O}_3$ IUOPXZCJHJMHP-UHFFFAOYSA-N	4.9×10^3 1.5×10^5 2.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1211OOH $\text{C}_{12}\text{H}_{20}\text{O}_5$ PTZJPBFCCQIPAZ-UHFFFAOYSA-N	3.5×10^8 1.7×10^9 8.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1211CO2H $\text{C}_{13}\text{H}_{20}\text{O}_5$ QUEDJGCZCJPFDA-UHFFFAOYSA-N	4.7×10^8 9.3×10^{10} 2.8×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1211CO3H $\text{C}_{13}\text{H}_{20}\text{O}_6$ DVDQWECWXWLOQZ-UHFFFAOYSA-N	3.6×10^9 4.5×10^9 8.1×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C131CO2H $\text{C}_{14}\text{H}_{22}\text{O}_4$ QDUXHZZYSCMHPK-UHFFFAOYSA-N	2.2×10^6 1.4×10^8 5.9×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C147CO $\text{C}_{14}\text{H}_{20}\text{O}_5$ MMRJODLWTRWNRH-UHFFFAOYSA-N	1.4×10^9 3.2×10^8 2.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C147OOH $\text{C}_{14}\text{H}_{22}\text{O}_6$ MOUQEZXHGSYER-UHFFFAOYSA-N	1.7×10^{11} 1.0×10^9 3.0×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C141CO2H $\text{C}_{15}\text{H}_{24}\text{O}_3$ VGNFSHPHIKPNED-UHFFFAOYSA-N	5.4×10^3 2.1×10^5 3.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOCH2COCO2H $\text{C}_3\text{H}_4\text{O}_4$ HHDDCCUIIUWNGJ-UHFFFAOYSA-N	1.1×10^6 5.3×10^2 4.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H3C2C4CO2H $\text{C}_5\text{H}_8\text{O}_4$ IQZHXDCQZNRIRW-UHFFFAOYSA-N	8.5×10^5 2.0×10^6 2.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HMVKBCO2H $\text{C}_5\text{H}_8\text{O}_4$ ISMQTZHDHOVBT-UHFFFAOYSA-N	1.7×10^7 2.1×10^6 6.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C517CO2H $\text{C}_6\text{H}_{10}\text{O}_4$ APPVMSIJNZFGHP-UHFFFAOYSA-N	1.4×10^7 1.3×10^7 2.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C519CO2H $\text{C}_6\text{H}_{10}\text{O}_4$ ULHNCRHSCMPZGW-UHFFFAOYSA-N	1.4×10^7 3.8×10^6 3.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C732OH $\text{C}_7\text{H}_{12}\text{O}_4$ PKQMWBHBXJKPID-UHFFFAOYSA-N	1.1×10^7 4.7×10^8 4.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C734CO $\text{C}_7\text{H}_{10}\text{O}_5$ CPJVYXUMUTCGW-UHFFFAOYSA-N	8.0×10^9 6.6×10^7 3.2×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C734OH $\text{C}_7\text{H}_{12}\text{O}_5$ RDRUHSRUZHRAFB-UHFFFAOYSA-N	1.9×10^9 8.7×10^{10} 4.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C734OOH $\text{C}_7\text{H}_{12}\text{O}_6$ ABEMFUWOTMEDPB-UHFFFAOYSA-N	1.1×10^{12} 2.0×10^{11} 1.3×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:H3C25CCO2H C ₇ H ₁₀ O ₅ FMZPEVNVWACALO-UHFFFAOYSA-N	4.1 × 10 ⁸ 4.1 × 10 ⁹ 2.7 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C813OH C ₈ H ₁₄ O ₅ UHMZKUUXAVADP-UHFFFAOYSA-N	2.1 × 10 ¹⁰ 6.5 × 10 ⁸ 2.0 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C813OOH C ₈ H ₁₄ O ₆ FNGYAHKKJFMZCA-UHFFFAOYSA-N	6.2 × 10 ¹¹ 1.7 × 10 ⁸ 4.3 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C825CO C ₈ H ₁₂ O ₄ PGSQVIJDIYGHPF-UHFFFAOYSA-N	2.2 × 10 ⁷ 2.6 × 10 ⁵ 4.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOPINONIC C ₁₀ H ₁₆ O ₄ MZHKOIVHCBFXJV-UHFFFAOYSA-N	8.9 × 10 ⁵ 6.0 × 10 ⁷ 1.0 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1211OH C ₁₂ H ₂₀ O ₄ JNTJQAWMLAKHDW-UHFFFAOYSA-N	1.1 × 10 ⁷ 2.7 × 10 ⁸ 2.8 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1212OH C ₁₂ H ₂₀ O ₅ OINCQTVJDDDYJT-UHFFFAOYSA-N	1.2 × 10 ⁹ 4.7 × 10 ¹¹ 8.9 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1212OOH C ₁₂ H ₂₀ O ₆ KZNQDAPBLSOIR-UHFFFAOYSA-N	6.5 × 10 ¹¹ 1.8 × 10 ¹¹ 1.8 × 10 ¹⁰		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1213CO C ₁₂ H ₁₈ O ₆ IKFUCIVDZJUENZ-UHFFFAOYSA-N	1.5 × 10 ¹² 3.3 × 10 ¹² 2.1 × 10 ⁹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1213OH C ₁₂ H ₂₀ O ₆ DPGLQQDGNMDAAZ-UHFFFAOYSA-N	7.1 × 10 ¹² 9.8 × 10 ¹¹ 1.3 × 10 ⁸		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1213OOH C ₁₂ H ₂₀ O ₇ ZUGVXCQEOPRNF-UHFFFAOYSA-N	1.9 × 10 ¹⁴ 1.3 × 10 ¹³ 3.9 × 10 ⁸		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1310CO C ₁₃ H ₂₀ O ₅ NHYXXXJOGAKHPV-UHFFFAOYSA-N	4.3 × 10 ⁹ 3.9 × 10 ¹¹ 2.6 × 10 ⁹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1310OH C ₁₃ H ₂₂ O ₅ PXEJSKZGVMTSCR-UHFFFAOYSA-N	2.0 × 10 ¹⁰ 1.0 × 10 ¹¹ 1.7 × 10 ⁹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C1310OOH $\text{C}_{13}\text{H}_{22}\text{O}_6$ HXUMLFGRLLCICH-UHFFFAOYSA-N	5.4×10^{11} 1.1×10^{12} 5.9×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C147OH $\text{C}_{14}\text{H}_{22}\text{O}_5$ IPYASLZXSQHCRCG-UHFFFAOYSA-N	3.3×10^8 5.6×10^8 7.8×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C151OH $\text{C}_{15}\text{H}_{26}\text{O}_5$ RRTATIWWWPYIIC-UHFFFAOYSA-N	6.3×10^9 2.4×10^{10} 3.7×10^9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C151OOH $\text{C}_{15}\text{H}_{26}\text{O}_6$ FDHNLWUJMDRLQD-UHFFFAOYSA-N	4.7×10^{11} 1.9×10^{11} 2.8×10^{10}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO13C3CO2H $\text{C}_4\text{H}_4\text{O}_4$ YEZSWHPLZBZVLH-UHFFFAOYSA-N	6.2×10^6 1.5×10^4 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C512CO2H $\text{C}_6\text{H}_8\text{O}_4$ CGRSCFNOTZUXCX-UHFFFAOYSA-N	4.0×10^6 6.3×10^7 1.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6COALCO2H $\text{C}_6\text{H}_8\text{O}_4$ TWNJAPRLIZAXHA-UHFFFAOYSA-N	4.0×10^6 2.3×10^7 1.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C617CO2H $\text{C}_7\text{H}_{10}\text{O}_4$ ZXMACHDUAJJJBQ-UHFFFAOYSA-N	2.6×10^6 9.6×10^5 2.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C618CO2H $\text{C}_7\text{H}_{10}\text{O}_4$ MXMJWVQRGMMLRI-UHFFFAOYSA-N	2.6×10^6 2.3×10^5 5.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C626CO2H $\text{C}_7\text{H}_{10}\text{O}_4$ JCTYMUINH XVDEP-UHFFFAOYSA-N	3.7×10^6 8.3×10^7 1.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C732CO $\text{C}_7\text{H}_{10}\text{O}_4$ ATXVRLJHWCSFDB-UHFFFAOYSA-N	3.7×10^6 5.0×10^7 2.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C718CO2H $\text{C}_8\text{H}_{12}\text{O}_4$ OBYKYHDGLQUNDK-UHFFFAOYSA-N	2.0×10^6 1.6×10^7 1.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C731CO2H $\text{C}_8\text{H}_{12}\text{O}_4$ URWVDUFOGQNELZ-UHFFFAOYSA-N	3.5×10^6 2.0×10^8 3.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C87CO2H $\text{C}_9\text{H}_{12}\text{O}_5$ GZPOIVSRXTZTQZ-UHFFFAOYSA-N	1.7×10^9 3.6×10^8 1.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C116CO2H $\text{C}_{12}\text{H}_{18}\text{O}_4$ HWWVGCXKFWUOCT-UHFFFAOYSA-N	4.1×10^6 1.8×10^8 1.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1211CO $\text{C}_{12}\text{H}_{18}\text{O}_4$ VVPUYBXPESADLR-UHFFFAOYSA-N	4.1×10^6 4.2×10^7 8.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1210CO2H $\text{C}_{13}\text{H}_{20}\text{O}_4$ MERIWEKKXYNSHZ-UHFFFAOYSA-N	3.2×10^6 2.8×10^8 8.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

A3.8 Esters (RCOOR)

Table A3.8: Esters (RCOOR)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3-dioxolan-2-one $\text{C}_3\text{H}_4\text{O}_3$ (ethylene carbonate) [96-49-1] KMTRUDSVKNLOMY-UHFFFAOYSA-N	3.6×10^{-2}		HSDB (2015)	Q	100
carbonic acid, dimethyl ester $\text{C}_3\text{H}_6\text{O}_3$ (dimethyl carbonate) [616-38-6] IEJGPNLZYLBP-UHFFFAOYSA-N	1.6×10^{-1}	4900	Burkholder et al. (2019)	L	
	1.6×10^{-1}	4900	Burkholder et al. (2015)	L	
	1.5×10^{-1}	5000	Brockbank (2013)	L	1
	1.6×10^{-1}	4900	Böhme et al. (2008)	M	
	1.6×10^{-1}	5000	Dohnal et al. (2010)	V	1
	2.5×10^{-1}		Wang et al. (2017)	Q	81, 239
	2.1×10^{-1}		Wang et al. (2017)	Q	81, 240
	2.1×10^{-1}		Wang et al. (2017)	Q	81, 241
	1.6×10^{-2}		HSDB (2015)	Q	100
dimethyl dicarbonate $\text{C}_4\text{H}_6\text{O}_5$ [4525-33-1] GZDFHIJNHMHENY-UHFFFAOYSA-N	2.2×10^{-2}		HSDB (2015)	Q	100
carbonic acid, diethyl ester $\text{C}_5\text{H}_{10}\text{O}_3$ (diethyl carbonate) [105-58-8] OIFBSDVPJOWBCH-UHFFFAOYSA-N	1.0×10^{-1}	6000	Burkholder et al. (2019)	L	
	1.0×10^{-1}	6000	Burkholder et al. (2015)	L	
	1.0×10^{-1}	6400	Brockbank (2013)	L	1
	1.1×10^{-1}	6100	Böhme et al. (2008)	M	
	1.1×10^{-1}		Duchowicz et al. (2020)	V	187
	1.1×10^{-1}		HSDB (2015)	V	
	1.0×10^{-1}	6100	Dohnal et al. (2010)	V	1
	1.5×10^{-2}		Duchowicz et al. (2020)	Q	
	1.6×10^{-1}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	6.9×10^{-2}		Hilal et al. (2008)	Q	
	2.8×10^{-2}		Modarresi et al. (2007)	Q	68
	1.1×10^{-1}		Yaws (1999)	?	21, 12
methyl methanoate HCOOCH_3 (methyl formate) [107-31-3] TZIHFVKZFHZASV-UHFFFAOYSA-N	4.1×10^{-2}	4000	Burkholder et al. (2019)	L	
	4.1×10^{-2}	4000	Burkholder et al. (2015)	L	
	4.2×10^{-2}	3800	Brockbank (2013)	L	
	4.1×10^{-2}	4000	Sander et al. (2011)	L	
	4.2×10^{-2}	3900	Plyasunov et al. (2004)	L	
	4.1×10^{-2}	4000	Kutsuna et al. (2005)	M	
	4.6×10^{-2}		Wittig et al. (2001)	M	
	4.1×10^{-2}		Hoff et al. (1993)	M	
	3.9×10^{-2}	4100	Hartkopf and Karger (1973)	M	

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.9×10^{-2}		Mackay et al. (2006c)	V	
	4.9×10^{-2}		Mackay et al. (1995)	V	
	1.2×10^{-2}		Keshavarz et al. (2022)	Q	
	3.8×10^{-1}		Duchowicz et al. (2020)	Q	
	5.3×10^{-2}		Wang et al. (2017)	Q	81, 239
	1.0×10^{-1}		Wang et al. (2017)	Q	81, 240
	8.7×10^{-2}		Wang et al. (2017)	Q	81, 241
	4.4×10^{-2}		Li et al. (2014)	Q	242
	5.4×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	5.8×10^{-2}		Hilal et al. (2008)	Q	
	5.8×10^{-2}		Modarresi et al. (2007)	Q	68
		4100	Kühne et al. (2005)	Q	
	4.6×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	3.4×10^{-2}		English and Carroll (2001)	Q	231, 232
	2.9×10^{-2}		Katritzky et al. (1998)	Q	
	8.0×10^{-2}		Suzuki et al. (1992)	Q	233
	6.4×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	4.4×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		4200	Kühne et al. (2005)	?	
	5.2×10^{-3}		Yaws (1999)	?	21, 12
	4.4×10^{-2}		Betterton (1992)	?	499
	4.4×10^{-2}		Abraham et al. (1990)	?	
	4.4×10^{-2}		Hine and Mookerjee (1975)	?	499
ethyl methanoate HCOOC ₂ H ₅ (ethyl formate) [109-94-4] WBJINGZRORDGAQ-UHFFFAOYSA-N	3.4×10^{-2}	4600	Burkholder et al. (2019)	L	
	3.4×10^{-2}	4600	Burkholder et al. (2015)	L	
	3.3×10^{-2}	4000	Brockbank (2013)	L	
	3.4×10^{-2}	4600	Sander et al. (2011)	L	
	3.5×10^{-2}	4600	Plyasunov et al. (2004)	L	
	3.4×10^{-2}	4600	Kutsuna et al. (2005)	M	
	4.0×10^{-2}		Wittig et al. (2001)	M	
	2.3×10^{-2}		Richon et al. (1985)	M	38
	1.9×10^{-3}	4600	Hartkopf and Karger (1973)	M	
	4.9×10^{-2}		Mackay et al. (2006c)	V	
	4.9×10^{-2}		Mackay et al. (1995)	V	
	3.1×10^{-2}		Abraham (1984)	V	
	3.5×10^{-2}		Hine and Mookerjee (1975)	V	
	1.6×10^{-2}		Keshavarz et al. (2022)	Q	
	1.8×10^{-1}		Duchowicz et al. (2020)	Q	185
	4.1×10^{-2}		Wang et al. (2017)	Q	81, 239
	4.8×10^{-2}		Wang et al. (2017)	Q	81, 240
	5.0×10^{-2}		Wang et al. (2017)	Q	81, 241
	4.7×10^{-2}		Gharagheizi et al. (2012)	Q	

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	272, 244
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	3.1×10^{-2}		Hilal et al. (2008)	Q	
	5.5×10^{-2}		Modarresi et al. (2007)	Q	68
	2.7×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	2.6×10^{-2}		English and Carroll (2001)	Q	231, 232
	3.5×10^{-2}		Katritzky et al. (1998)	Q	
	6.2×10^{-2}		Suzuki et al. (1992)	Q	233
	5.7×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	2.6×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	4.5×10^{-2}		Yaws (1999)	?	21, 28
	1.7×10^{-2}		Abraham and Weathersby (1994)	?	21
	1.4×10^{-3}		Hoff et al. (1993)	?	21
	3.1×10^{-2}		Abraham et al. (1990)	?	
propyl methanoate HCOOC ₃ H ₇ (propyl formate) [110-74-7] KFNNILCVOLYIR-UHFFFAOYSA-N	2.6×10^{-2}	5100	Burkholder et al. (2019)	L	
	2.6×10^{-2}	5100	Burkholder et al. (2015)	L	
	3.1×10^{-2}	4800	Brockbank (2013)	L	
	2.6×10^{-2}	5100	Sander et al. (2011)	L	
	2.8×10^{-2}	4900	Plyasunov et al. (2004)	L	
	2.6×10^{-2}	5100	Kutsuna et al. (2005)	M	
	2.3×10^{-2}		Duchowicz et al. (2020)	V	187
	2.1×10^{-2}		Mackay et al. (2006c)	V	
	2.7×10^{-2}		Hine and Mookerjee (1975)	V	
	2.7×10^{-2}		Yaws (2003)	X	238, 88
	2.1×10^{-1}		Duchowicz et al. (2020)	Q	
	2.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	2.9×10^{-2}		Gharagheizi et al. (2010)	Q	247
	2.3×10^{-2}		Hilal et al. (2008)	Q	
	4.5×10^{-2}		Modarresi et al. (2007)	Q	68
	1.3×10^{-2}		Yaffe et al. (2003)	Q	249, 273
	1.9×10^{-2}		English and Carroll (2001)	Q	231, 232
	3.5×10^{-2}		Katritzky et al. (1998)	Q	
	4.7×10^{-2}		Suzuki et al. (1992)	Q	233
	4.4×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	2.3×10^{-2}		Yaws (1999)	?	21, 88
	2.7×10^{-2}		Abraham et al. (1990)	?	

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
isopropyl methanoate HCOOC ₃ H ₇ (isopropyl formate) [625-55-8] RMOUBSOVHSONPZ-UHFFFAOYSA-N	1.9×10^{-2} 1.3×10^{-2} 1.2×10^{-2} 8.2×10^{-2} 4.4×10^{-2} 3.1×10^{-2} 7.8×10^{-2} 4.1×10^{-2} 2.1×10^{-2} 1.3×10^{-2} 2.0×10^{-2} 3.8×10^{-2} 4.3×10^{-2} 3.9×10^{-2} 1.2×10^{-2}		Plyasunov et al. (2004) Duchowicz et al. (2020) Hine and Mookerjee (1975) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Gharagheizi et al. (2012) Hilal et al. (2008) Yaffe et al. (2003) English and Carroll (2001) Katritzky et al. (1998) Suzuki et al. (1992) Nirmalakhandan and Speece (1988) Abraham et al. (1990)	L V V Q Q Q Q Q Q Q Q Q Q Q Q ?	187 81, 239 81, 240 81, 241 249, 250 231, 275 233
butyl methanoate HCOOC ₄ H ₉ (butyl formate) [592-84-7] NMJFJNHVMGPGM-UHFFFAOYSA-N	2.6×10^{-2} 1.9×10^{-2} 1.9×10^{-2} 1.9×10^{-2} 1.7×10^{-2} 2.3×10^{-1} 3.0×10^{-2} 2.1×10^{-2} 3.5×10^{-2} 1.4×10^{-2} 2.0×10^{-2} 1.6×10^{-2} 1.6×10^{-2} 1.9×10^{-2} 4.1×10^{-2} 2.0×10^{-2} 3.5×10^{-2} 1.9×10^{-2}	3700	Brockbank (2013) Plyasunov et al. (2004) Wittig et al. (2001) Duchowicz et al. (2020) Yaws (2003) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998) Yaws (1999)	L L M V X Q Q Q Q Q Q Q Q Q Q Q Q Q ?	187 238, 404 81, 239 81, 240 81, 241 243, 244 245 246 247 68 249, 250 21, 404
(1-methylpropyl)-methanoate C ₅ H ₁₀ O ₂ (<i>sec</i> -butyl formate) [589-40-2] OAEQYDZVVPONKW-UHFFFAOYSA-N	1.9×10^{-2}		Gharagheizi et al. (2012)	Q	

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(2-methylpropyl)-methanoate HCOOC ₄ H ₉ (isobutyl formate) [542-55-2] AVMSWPWPYJVYKY-UHFFFAOYSA-N	1.6×10^{-2}	5200	Brockbank (2013)	L	
	1.6×10^{-2}	5200	Plyasunov et al. (2004)	L	
	1.9×10^{-2}		Duchowicz et al. (2020)	V	187
	1.8×10^{-2}		Mackay et al. (2006c)	V	
	1.8×10^{-2}		Mackay et al. (1995)	V	
	1.7×10^{-2}		Hine and Mookerjee (1975)	V	
	1.8×10^{-2}		Yaws (2003)	X	238
	9.1×10^{-2}		Duchowicz et al. (2020)	Q	
	9.5×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.1×10^{-2}		Gharagheizi et al. (2010)	Q	247
	2.0×10^{-2}		Hilal et al. (2008)	Q	
	3.3×10^{-2}		Modarresi et al. (2007)	Q	68
	2.0×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	1.5×10^{-2}		English and Carroll (2001)	Q	231, 261
	(1,1-dimethylethyl)-methanoate HCOOC ₄ H ₉ (<i>tert</i> -butyl formate; TBF) [762-75-4] RUPAXCPQAAOIPB-UHFFFAOYSA-N	3.9×10^{-2}		Katritzky et al. (1998)	Q
3.3×10^{-2}			Suzuki et al. (1992)	Q	233
3.1×10^{-2}			Nirmalakhandan and Speece (1988)	Q	
3.3×10^{-2}			Yaws (1999)	?	21
1.7×10^{-2}			Abraham et al. (1990)	?	
1.4×10^{-2}		3600	Brockbank (2013)	L	
1.4×10^{-2}		3600	Arp and Schmidt (2004)	M	
2.5×10^{-2}			Yaws (2003)	X	259
2.5×10^{-2}			Yaws (2003)	X	238
7.3×10^{-2}			Dupeux et al. (2022)	Q	260
pentyl methanoate C ₆ H ₁₂ O ₂ (pentyl formate) [638-49-3] DIQMPQMYFZXDAX-UHFFFAOYSA-N	2.9×10^{-2}		Keshavarz et al. (2022)	Q	
	4.0×10^{-2}		Duchowicz et al. (2020)	Q	300
	2.3×10^{-2}		Wang et al. (2017)	Q	81, 239
	1.1×10^{-2}		Wang et al. (2017)	Q	81, 240
	6.6×10^{-2}		Wang et al. (2017)	Q	81, 241
	4.5×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.6×10^{-2}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	1.7×10^{-2}	6000	Brockbank (2013)	L	1
(pentyl formate) [638-49-3] DIQMPQMYFZXDAX-UHFFFAOYSA-N	1.6×10^{-2}	5800	Plyasunov et al. (2004)	L	
	1.5×10^{-2}		Yaws (2003)	X	238
	1.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-2}		Gharagheizi et al. (2010)	Q	247
	1.3×10^{-2}		Hilal et al. (2008)	Q	
	7.5×10^{-3}		Yaffe et al. (2003)	Q	249, 250
(pentyl formate) [638-49-3] DIQMPQMYFZXDAX-UHFFFAOYSA-N	2.8×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	2.5×10^{-2}		Yaws (1999)	?	21

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-pentyl methanoate $\text{C}_6\text{H}_{12}\text{O}_2$ (3-pentyl formate) [58368-67-5] YMJOAYHERILFIM-UHFFFAOYSA-N	1.2×10^{-2}		Gharagheizi et al. (2012)	Q	
1,1-dimethylpropyl methanoate $\text{C}_6\text{H}_{12}\text{O}_2$ (1,1-dimethylpropyl formate) [757-88-0] SVZIJXUUTNJSEJ-UHFFFAOYSA-N	1.7×10^{-2} 3.0×10^{-2} 1.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1,2-dimethylpropyl methanoate $\text{C}_6\text{H}_{12}\text{O}_2$ (1,2-dimethylpropyl formate) [66794-46-5] XEQSPMCNFJQDHU-UHFFFAOYSA-N	1.7×10^{-2} 1.1×10^{-2} 1.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-methylbutyl methanoate $\text{C}_6\text{H}_{12}\text{O}_2$ (1-methylbutyl formate) [58368-66-4] JNRQSKFTIYCDIP-UHFFFAOYSA-N	1.7×10^{-2} 1.7×10^{-2} 1.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2-dimethylpropyl methanoate $\text{C}_6\text{H}_{12}\text{O}_2$ (2,2-dimethylpropyl formate) [23361-67-3] DGMIPKNXUDSQGI-UHFFFAOYSA-N	1.5×10^{-2} 3.1×10^{-3} 1.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-methylbutyl methanoate $\text{C}_6\text{H}_{12}\text{O}_2$ (2-methylbutyl formate) [35073-27-9] DWORILFBIRYUDC-UHFFFAOYSA-N	1.6×10^{-2} 5.2×10^{-3} 1.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
3-methylbutyl methanoate $\text{HCOOC}_5\text{H}_{11}$ (isoamyl formate) [110-45-2] XKYICAQFSCFURC-UHFFFAOYSA-N	1.2×10^{-2} 1.5×10^{-2} 1.2×10^{-2} 3.9×10^{-2} 9.7×10^{-2} 8.5×10^{-3} 1.5×10^{-2} 1.7×10^{-2} 3.3×10^{-2} 1.6×10^{-2} 1.1×10^{-2} 3.4×10^{-2} 2.5×10^{-2}	5700	Plyasunov et al. (2004) Hine and Mookerjee (1975) Yaws (2003) Keshavarz et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Katritzky et al. (1998) Suzuki et al. (1992)	L V X Q Q Q Q Q Q Q Q Q Q	238 300 247 68 249, 250 231, 232 233

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.4×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	1.5×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	1.5×10^{-2}		Abraham et al. (1990)	?	
hexyl methanoate $\text{C}_7\text{H}_{14}\text{O}_2$ (hexyl formate) [629-33-4] OUGPMNMLWKS BRI-UHFFFAOYSA-N	1.0×10^{-2}		Plyasunov et al. (2004)	L	
	1.0×10^{-2}		Yaws (2003)	X	238
	8.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	8.2×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.1×10^{-2}		Hilal et al. (2008)	Q	
	1.6×10^{-2}		Nirmalakhandan et al. (1997)	Q	
heptyl methanoate $\text{C}_8\text{H}_{16}\text{O}_2$ (heptyl formate) [112-23-2] XEAMDSXSXYAICO-UHFFFAOYSA-N	6.7×10^{-3}		Yaws (2003)	X	238
	5.9×10^{-3}		Gharagheizi et al. (2012)	Q	
	5.2×10^{-3}		Gharagheizi et al. (2010)	Q	247
octyl methanoate $\text{C}_9\text{H}_{18}\text{O}_2$ (octyl formate) [112-32-3] AVBRYQRTMPHARE-UHFFFAOYSA-N	1.7×10^{-3}		Yaws (2003)	X	238
	3.3×10^{-3}		Gharagheizi et al. (2010)	Q	247
	5.1×10^{-3}		Yaws (1999)	?	21
nonyl methanoate $\text{C}_{10}\text{H}_{20}\text{O}_2$ (nonyl formate) [5451-92-3] MOGJOLMSQWGXPA-UHFFFAOYSA-N	2.3×10^{-3}		Yaws (2003)	X	238
	3.9×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.1×10^{-3}		Gharagheizi et al. (2010)	Q	247
decyl methanoate $\text{C}_{11}\text{H}_{22}\text{O}_2$ (decyl formate) [5451-52-5] BCLJZFLDSC TULJ-UHFFFAOYSA-N	1.5×10^{-3}		Yaws (2003)	X	238
	4.8×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-3}		Gharagheizi et al. (2010)	Q	247
undecyl methanoate $\text{C}_{12}\text{H}_{24}\text{O}_2$ (undecyl formate) [5454-24-0] OASFNORBKVGDRW-UHFFFAOYSA-N	9.3×10^{-4}		Yaws (2003)	X	238
	6.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	9.3×10^{-4}		Gharagheizi et al. (2010)	Q	247
dodecyl methanoate $\text{C}_{13}\text{H}_{26}\text{O}_2$ (dodecyl formate) [28303-42-6] WPSGFSPBRBRLIQ-UHFFFAOYSA-N	6.2×10^{-4}		Yaws (2003)	X	238
	6.6×10^{-4}		Gharagheizi et al. (2010)	Q	247

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
vinyl methanoate $\text{C}_3\text{H}_4\text{O}_2$ (vinyl formate) [692-45-5] GFJVXXWOPWLRNU-UHFFFAOYSA-N	5.2×10^{-2}		Yaws (2003)	X	259
	5.2×10^{-2}		Yaws (2003)	X	238
	1.2×10^{-2}		Dupeux et al. (2022)	Q	260
	5.3×10^{-2}		Gharagheizi et al. (2010)	Q	247
benzyl methanoate $\text{C}_8\text{H}_8\text{O}_2$ (benzyl formate) [104-57-4] UYWQUFXKFGHYNT-UHFFFAOYSA-N	2.0	7100	Brockbank (2013)	L	
methyl ethanoate $\text{CH}_3\text{COOCH}_3$ (methyl acetate) [79-20-9] KXKVLQRXCPHEJC-UHFFFAOYSA-N	8.5×10^{-2}	5900	Burkholder et al. (2019)	L	500, 1
	2.0×10^{-2}	5000	Burkholder et al. (2015)	L	501, 502
	8.5×10^{-2}	5900	Brockbank (2013)	L	1
	8.1×10^{-2}	4800	Plyasunov et al. (2004)	L	
	8.1×10^{-2}	4900	Fenclová et al. (2014)	M	1
	1.2×10^{-1}	7500	Hiatt (2013)	M	
	6.6×10^{-2}	4500	Arp and Schmidt (2004)	M	
	8.3×10^{-2}	4900	Hovorka et al. (2002)	M	
	4.2×10^{-2}		Kaneko et al. (1994)	M	14
	7.7×10^{-2}		Ioffe et al. (1984)	M	
	7.7×10^{-2}	5000	Kieckbusch and King (1979b)	M	503
	8.6×10^{-2}		Buttery et al. (1969)	M	
	1.1×10^{-1}		Butler and Ramchandani (1935)	M	
	8.7×10^{-2}	4800	McKeown and Stowell (1927)	M	
	1.1×10^{-1}		Mackay et al. (2006c)	V	
	1.1×10^{-1}		Mackay et al. (1995)	V	
	4.8×10^{-2}	3300	Djerki and Laub (1988)	V	
	1.1×10^{-1}	4800	Bagno et al. (1991)	T	475
	1.8×10^{-1}		Yaws (2003)	X	259
	9.6×10^{-2}		Dupeux et al. (2022)	Q	260
	1.6×10^{-2}		Keshavarz et al. (2022)	Q	
	1.7×10^{-1}		Duchowicz et al. (2020)	Q	
	3.4×10^{-2}		Wang et al. (2017)	Q	81, 239
	1.2×10^{-1}		Wang et al. (2017)	Q	81, 240
	2.5×10^{-1}		Wang et al. (2017)	Q	81, 241
	7.3×10^{-2}		Li et al. (2014)	Q	242
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	272, 244
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	6.4×10^{-2}		Hilal et al. (2008)	Q	
	6.0×10^{-2}		Modarresi et al. (2007)	Q	68
		4500	Kühne et al. (2005)	Q	
	8.6×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	5.4×10^{-2}		Yao et al. (2002)	Q	230
	7.0×10^{-2}		English and Carroll (2001)	Q	231, 232

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.8×10^{-2}		Katritzky et al. (1998)	Q	
	5.6×10^{-2}		Suzuki et al. (1992)	Q	233
	3.9×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	8.6×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		4900	Kühne et al. (2005)	?	
	1.4×10^{-1}		Yaws (1999)	?	21, 12
	8.0×10^{-2}		Abraham et al. (1990)	?	
ethyl ethanoate CH ₃ COOC ₂ H ₅ (ethyl acetate) [141-78-6] XEKOWRVHYACXOJ-UHFFFAOYSA-N	6.5×10^{-2}	5600	Burkholder et al. (2019)	L	504, 1
	5.9×10^{-2}	5900	Burkholder et al. (2015)	L	
	6.5×10^{-2}	5600	Brockbank (2013)	L	1
	5.9×10^{-2}	5900	Sander et al. (2011)	L	
	6.3×10^{-2}	5500	Plyasunov et al. (2004)	L	
	5.9×10^{-2}	5200	Kutsuna and Kaneyasu (2021)	M	
	5.2×10^{-2}	4800	Ammari and Schroen (2019)	M	11
	6.2×10^{-2}	5500	Fenclová et al. (2014)	M	1
	5.1×10^{-2}		Apra et al. (2007)	M	
	5.9×10^{-2}	5900	Kutsuna et al. (2005)	M	
	3.9×10^{-2}		van Ruth et al. (2002)	M	14
	4.1×10^{-2}		van Ruth and Villeneuve (2002)	M	14, 363
	3.0×10^{-2}		van Ruth et al. (2001)	M	14
			Dewulf et al. (1999)	M	364
	6.6×10^{-2}		Druaux et al. (1998)	M	
	3.4×10^{-2}		Welke et al. (1998)	M	
	5.7×10^{-2}		Landy et al. (1995)	M	
	2.8×10^{-2}		Kaneko et al. (1994)	M	14
	4.4×10^{-2}	3900	Kolb et al. (1992)	M	278
	1.1×10^{-1}		Pividal et al. (1992)	M	81
	4.3×10^{-2}		Guitart et al. (1989)	M	14
	6.2×10^{-2}		Jones et al. (1988)	M	
	4.3×10^{-2}		Richon et al. (1985)	M	38
	1.3×10^{-1}		Ioffe et al. (1984)	M	81
	5.8×10^{-2}	5300	Kieckbusch and King (1979b)	M	503
	5.7×10^{-2}		Nelson and Hoff (1968)	M	298
	7.4×10^{-2}		Butler and Ramchandani (1935)	M	
	7.3×10^{-2}		Mackay et al. (2006c)	V	
	3.1×10^{-2}		Philippe et al. (2003)	V	14
	7.3×10^{-2}		Mackay et al. (1995)	V	
	3.6×10^{-1}		Hwang et al. (1992)	V	
	7.1×10^{-2}		Yaws (2003)	X	259
	4.7×10^{-2}	5700	Janini and Quaddora (1986)	X	299
	3.9×10^{-2}		Nahon et al. (2000)	C	14
	7.8×10^{-2}		Dupeux et al. (2022)	Q	260
	2.2×10^{-2}		Keshavarz et al. (2022)	Q	
	6.9×10^{-2}		Duchowicz et al. (2020)	Q	300
	2.8×10^{-2}		Wang et al. (2017)	Q	81, 239

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.2×10^{-2}		Wang et al. (2017)	Q	81, 240
	2.5×10^{-1}		Wang et al. (2017)	Q	81, 241
	5.2×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	3.6×10^{-2}		Hilal et al. (2008)	Q	
	4.9×10^{-2}		Modarresi et al. (2007)	Q	68
		4800	Kühne et al. (2005)	Q	
	7.3×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	5.4×10^{-2}		Yao et al. (2002)	Q	230
	5.3×10^{-2}		English and Carroll (2001)	Q	231, 232
	4.5×10^{-2}		Katritzky et al. (1998)	Q	
	1.6×10^{-1}		Russell et al. (1992)	Q	280
	4.3×10^{-2}		Suzuki et al. (1992)	Q	233
	4.1×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	7.4×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		5200	Kühne et al. (2005)	?	
	7.1×10^{-2}		Yaws (1999)	?	21
	8.8×10^{-2}		Hoff et al. (1993)	?	21
	5.8×10^{-2}		Abraham et al. (1990)	?	
ethyl ethanoate-1-13C CH ₃ COOC ₂ H ₅ (ethyl acetate-1-13C) [3424-59-7] XEKOWRVHYACXOJ-AZXPZELESA-N	7.1×10^{-2}	6500	Hiatt (2013)	M	
propyl ethanoate CH ₃ COOC ₃ H ₇ (propyl acetate) [109-60-4] YKYONYBAUNKHLG-UHFFFAOYSA-N	4.4×10^{-2}	6100	Burkholder et al. (2019)	L	505, 1
	4.4×10^{-2}	6000	Brockbank (2013)	L	1
	4.5×10^{-2}	5900	Plyasunov et al. (2004)	L	
	4.5×10^{-2}	5900	Fenclová et al. (2014)	M	1
	3.9×10^{-2}		van Ruth et al. (2002)	M	14
	3.0×10^{-2}		van Ruth and Villeneuve (2002)	M	14, 363
	1.8×10^{-2}		van Ruth et al. (2001)	M	14
	3.7×10^{-2}		Welke et al. (1998)	M	
	2.1×10^{-2}		Kaneko et al. (1994)	M	14
	3.1×10^{-2}		Richon et al. (1985)	M	38
	4.5×10^{-2}	5500	Kieckbusch and King (1979b)	M	503
	4.6×10^{-2}		Mackay et al. (2006c)	V	
	4.6×10^{-2}		Mackay et al. (1995)	V	
	5.0×10^{-2}		Hine and Mookerjee (1975)	V	
	5.0×10^{-2}		Butler and Ramchandani (1935)	V	
	3.7×10^{-2}		Yaws (2003)	X	259
	3.7×10^{-2}		Yaws (2003)	X	238
	4.4×10^{-2}	6000	Janini and Quaddora (1986)	X	299
	5.0×10^{-2}		Dupeux et al. (2022)	Q	260

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	2.9×10^{-2}		Keshavarz et al. (2022)	Q	
	7.7×10^{-2}		Duchowicz et al. (2020)	Q	
	2.5×10^{-2}		Wang et al. (2017)	Q	81, 239
	3.9×10^{-2}		Wang et al. (2017)	Q	81, 240
	2.1×10^{-1}		Wang et al. (2017)	Q	81, 241
	2.4×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	4.2×10^{-2}		Gharagheizi et al. (2010)	Q	247
	2.9×10^{-2}		Hilal et al. (2008)	Q	
	4.2×10^{-2}		Modarresi et al. (2007)	Q	68
	4.6×10^{-2}		Yaffe et al. (2003)	Q	249, 273
	2.6×10^{-2}		Yao et al. (2002)	Q	230
	4.0×10^{-2}		English and Carroll (2001)	Q	231, 232
	4.1×10^{-2}		Katritzky et al. (1998)	Q	
	9.9×10^{-2}		Russell et al. (1992)	Q	280
	3.3×10^{-2}		Suzuki et al. (1992)	Q	233
	3.3×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	4.5×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	3.4×10^{-2}		Yaws (1999)	?	21
	4.5×10^{-2}		Abraham et al. (1990)	?	
methyl methoxyacetate $\text{C}_4\text{H}_8\text{O}_3$ [6290-49-9] QRMHDGWGLNLHMN-UHFFFAOYSA-N	2.5		Hovorka et al. (2002)	M	38
2-propenyl ethanoate $\text{C}_5\text{H}_8\text{O}_2$ [591-87-7] FWZUNOYOVVKUNF-UHFFFAOYSA-N	7.6×10^{-2} 2.0×10^{-1} 7.8×10^{-2} 3.9×10^{-2} 7.0×10^{-2} 8.4×10^{-2}		HSDB (2015) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q Q Q	 243, 244 245 246 68
2-propyl ethanoate $\text{CH}_3\text{COOC}_3\text{H}_7$ (isopropyl acetate) [108-21-4] JMMWKPVZQRWMS-UHFFFAOYSA-N	3.3×10^{-2} 3.3×10^{-2} 1.3×10^{-2} 3.5×10^{-2} 3.7×10^{-2} 2.9×10^{-2} 4.5×10^{-2} 2.9×10^{-2} 3.0×10^{-2} 2.6×10^{-2} 3.9×10^{-2} 1.7×10^{-1}	6100 5600	Brockbank (2013) Plyasunov et al. (2004) Kaneko et al. (1994) Hine and Mookerjee (1975) Yaws (2003) Janini and Quaddora (1986) Dupeux et al. (2022) Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	L L M V X X Q Q Q Q Q Q	1 14 259 299 260 185 81, 239 81, 240 81, 241

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.0×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-2}		Hilal et al. (2008)	Q	
	2.8×10^{-2}		Modarresi et al. (2007)	Q	68
	4.6×10^{-6}		Yaffe et al. (2003)	Q	249, 250
	3.3×10^{-2}		Yao et al. (2002)	Q	230
	3.9×10^{-2}		English and Carroll (2001)	Q	231, 275
	4.2×10^{-2}		Katritzky et al. (1998)	Q	
	2.9×10^{-2}		Suzuki et al. (1992)	Q	233
	2.9×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	3.6×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	3.6×10^{-2}		Yaws (1999)	?	21
	3.5×10^{-2}		Abraham et al. (1990)	?	
2-methoxyethyl ethanoate $\text{C}_5\text{H}_{10}\text{O}_3$ (methyl cellosolve acetate) [110-49-6] XLLIQLLCWZCATF-UHFFFAOYSA-N	3.0		Hovorka et al. (2002)	M	38
	9.0		HSDB (2015)	V	
glycerol monoacetate $\text{C}_5\text{H}_{10}\text{O}_4$ (acatin) [26446-35-5] KMZHZAEOEWVPSU-UHFFFAOYSA-N	2.4×10^4		HSDB (2015)	Q	100
1-propen-2-ol, acetate $\text{C}_5\text{H}_8\text{O}_2$ (isopropenyl acetate) [108-22-5] HETCEOQFVDFGSY-UHFFFAOYSA-N	5.5×10^{-3}		HSDB (2015)	Q	100
butyl ethanoate $\text{CH}_3\text{COOC}_4\text{H}_9$ (butyl acetate) [123-86-4] DKPFZGUDAPQIHT-UHFFFAOYSA-N	3.8×10^{-2}	6300	Brockbank (2013)	L	1
	3.5×10^{-2}	6300	Plyasunov et al. (2004)	L	
	2.4×10^{-2}		Kim and Kim (2014)	M	
	3.5×10^{-2}	6300	Fenclová et al. (2014)	M	1
	2.1×10^{-2}		Helburn et al. (2008)	M	
	2.8×10^{-2}		van Ruth et al. (2002)	M	14
	2.3×10^{-2}		van Ruth and Villeneuve (2002)	M	14, 363
	1.7×10^{-2}		van Ruth et al. (2001)	M	14
	2.7×10^{-2}		Welke et al. (1998)	M	
	1.3×10^{-2}		Kaneko et al. (1994)	M	14
	2.3×10^{-2}	4300	Kolb et al. (1992)	M	278
	3.5×10^{-2}	7100	Ioffe et al. (1984)	M	
	3.5×10^{-2}	6000	Kieckbusch and King (1979b)	M	503
	3.2×10^{-2}		Mackay et al. (2006c)	V	
	3.2×10^{-2}		Mackay et al. (1995)	V	
	2.7×10^{-2}		Hwang et al. (1992)	V	
	3.0×10^{-2}		Hine and Mookerjee (1975)	V	

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.2×10^{-2}		Yaws (2003)	X	259
	3.5×10^{-2}	7500	Janini and Quaddora (1986)	X	299
	2.1×10^{-2}	3200	Goldstein (1982)	X	299
	4.3×10^{-2}		Dupeux et al. (2022)	Q	260
	3.9×10^{-2}		Keshavarz et al. (2022)	Q	
	8.2×10^{-2}		Duchowicz et al. (2020)	Q	
	2.0×10^{-2}		Wang et al. (2017)	Q	81, 239
	2.9×10^{-2}		Wang et al. (2017)	Q	81, 240
	1.7×10^{-1}		Wang et al. (2017)	Q	81, 241
	1.9×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	2.3×10^{-2}		Hilal et al. (2008)	Q	
	3.0×10^{-2}		Modarresi et al. (2007)	Q	68
		5500	Kühne et al. (2005)	Q	
	3.7×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	2.4×10^{-2}		Yao et al. (2002)	Q	230, 268
	3.1×10^{-2}		English and Carroll (2001)	Q	231, 232
	4.1×10^{-2}		Katritzky et al. (1998)	Q	
	5.3×10^{-2}		Russell et al. (1992)	Q	360
	1.6×10^{-2}		Suzuki et al. (1992)	Q	233
	2.6×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	3.5×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		5300	Kühne et al. (2005)	?	
	3.8×10^{-2}		Yaws (1999)	?	21
	3.5×10^{-2}		Abraham et al. (1990)	?	
2-butyl ethanoate $\text{C}_6\text{H}_{12}\text{O}_2$ (<i>sec</i> -butyl acetate) [105-46-4] DCKVNWZUADLDEH-UHFFFAOYSA-N	2.3×10^{-2}	6000	Brockbank (2013)	L	1
	2.3×10^{-2}	6200	Plyasunov et al. (2004)	L	
	2.3×10^{-2}		HSDB (2015)	V	
	2.4×10^{-2}		Yaws (2003)	X	259
	2.4×10^{-2}		Yaws (2003)	X	238, 12
	2.5×10^{-2}		Dupeux et al. (2022)	Q	260
	2.3×10^{-2}		Wang et al. (2017)	Q	81, 239
	2.6×10^{-2}		Wang et al. (2017)	Q	81, 240
	1.2×10^{-1}		Wang et al. (2017)	Q	81, 241
	2.9×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.1×10^{-2}		Gharagheizi et al. (2010)	Q	247
	2.9×10^{-2}		Modarresi et al. (2007)	Q	68
	2.4×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	1.7×10^{-2}		Yao et al. (2002)	Q	230
			Katritzky et al. (1998)	Q	506
	1.8×10^{-2}		Yaws (1999)	?	21, 12

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1-dimethylethyl ethanoate $\text{C}_6\text{H}_{12}\text{O}_2$ (<i>tert</i> -butyl acetate) [540-88-5] WMOVHXAZOJBABW-UHFFFAOYSA-N	1.2×10^{-2}	6100	Brockbank (2013)	L	1
	1.1×10^{-2}	5600	Plyasunov et al. (2004)	L	
	1.1×10^{-2}		Duchowicz et al. (2020)	V	187
	3.2×10^{-2}		Yaws (2003)	X	259
	3.2×10^{-2}		Yaws (2003)	X	238
	2.6×10^{-2}		Dupeux et al. (2022)	Q	260
	1.4×10^{-2}		Duchowicz et al. (2020)	Q	
	1.4×10^{-2}		Wang et al. (2017)	Q	81, 239
	1.6×10^{-2}		Wang et al. (2017)	Q	81, 240
	7.4×10^{-2}		Wang et al. (2017)	Q	81, 241
	2.4×10^{-2}		HSDB (2015)	Q	100
	5.8×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.6×10^{-2}		Gharagheizi et al. (2010)	Q	247
	2.2×10^{-2}		Modarresi et al. (2007)	Q	68
1.9×10^{-2}		Yao et al. (2002)	Q	230	
2.9×10^{-2}		Yaws (1999)	?	21	
2-methylpropyl ethanoate $\text{CH}_3\text{COOC}_4\text{H}_9$ (isobutyl acetate) [110-19-0] GJRQTCIYDGXPES-UHFFFAOYSA-N	2.6×10^{-2}	6000	Brockbank (2013)	L	1
	2.4×10^{-2}	6200	Plyasunov et al. (2004)	L	
	1.0×10^{-2}		Kaneko et al. (1994)	M	14
	1.9×10^{-2}		Mackay et al. (2006c)	V	
	1.9×10^{-2}		Mackay et al. (1995)	V	
	2.2×10^{-2}		Hine and Mookerjee (1975)	V	
	3.7×10^{-2}		Yaws (2003)	X	259
	2.3×10^{-2}		Yaws (2003)	X	238
	3.7×10^{-2}		Dupeux et al. (2022)	Q	260
	3.9×10^{-2}		Keshavarz et al. (2022)	Q	
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	185
	1.0×10^{-2}		Gharagheizi et al. (2012)	Q	
	4.0×10^{-2}		Gharagheizi et al. (2010)	Q	247
	2.7×10^{-2}		Hilal et al. (2008)	Q	
	3.2×10^{-2}		Modarresi et al. (2007)	Q	68
		5500	Kühne et al. (2005)	Q	
	1.8×10^{-2}		Yao et al. (2002)	Q	230
	3.1×10^{-2}		English and Carroll (2001)	Q	231, 232
	9.5×10^{-2}		Russell et al. (1992)	Q	280
	2.3×10^{-2}		Suzuki et al. (1992)	Q	233
2.2×10^{-2}		Nirmalakhandan and Speece (1988)	Q		
2.2×10^{-2}		Duchowicz et al. (2020)	?	186, 21	
	4600	Kühne et al. (2005)	?		
2.3×10^{-2}		Yaws (1999)	?	21	
2.2×10^{-2}		Abraham et al. (1990)	?		

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
pentyl ethanoate CH ₃ COOC ₅ H ₁₁ (amyl acetate) [628-63-7] PGMYKACGEOXYJE-UHFFFAOYSA-N	2.5 × 10 ⁻²	7200	Brockbank (2013)	L	1
	2.7 × 10 ⁻²	6700	Plyasunov et al. (2004)	L	
	1.3 × 10 ⁻¹	5000	Meynier et al. (2003)	M	38
	9.3 × 10 ⁻³		Kaneko et al. (1994)	M	14
	3.4 × 10 ⁻²		Hellmann (1987)	M	88
	2.8 × 10 ⁻²	6500	Kieckbusch and King (1979b)	M	503
	2.4 × 10 ⁻²		Mackay et al. (2006c)	V	
	2.4 × 10 ⁻²		Mackay et al. (1995)	V	
	2.5 × 10 ⁻²		Hine and Mookerjee (1975)	V	
	2.8 × 10 ⁻²		Yaws (2003)	X	259
	2.8 × 10 ⁻²		Yaws (2003)	X	238
	2.5 × 10 ⁻²		Meynier et al. (2003)	C	
	3.3 × 10 ⁻²		Dupeux et al. (2022)	Q	260
	5.3 × 10 ⁻²		Keshavarz et al. (2022)	Q	
	8.6 × 10 ⁻²		Duchowicz et al. (2020)	Q	
	1.4 × 10 ⁻²		Gharagheizi et al. (2012)	Q	
	2.5 × 10 ⁻²		Raventos-Duran et al. (2010)	Q	272, 244
	2.0 × 10 ⁻²		Raventos-Duran et al. (2010)	Q	245
	2.0 × 10 ⁻²		Raventos-Duran et al. (2010)	Q	246
	2.3 × 10 ⁻²		Gharagheizi et al. (2010)	Q	247
	2.0 × 10 ⁻²		Hilal et al. (2008)	Q	
	2.8 × 10 ⁻²		Modarresi et al. (2007)	Q	68
	2.7 × 10 ⁻²		Yaffe et al. (2003)	Q	249, 250
	2.1 × 10 ⁻²		Yao et al. (2002)	Q	230, 268
	2.3 × 10 ⁻²		English and Carroll (2001)	Q	231, 261
	3.8 × 10 ⁻²		Katritzky et al. (1998)	Q	
	2.1 × 10 ⁻²		Nirmalakhandan et al. (1997)	Q	
	2.6 × 10 ⁻²		Russell et al. (1992)	Q	280
	1.9 × 10 ⁻²		Suzuki et al. (1992)	Q	233
	2.1 × 10 ⁻²		Nirmalakhandan and Speece (1988)	Q	
	2.3 × 10 ⁻²		Taft et al. (1985)	Q	
	2.5 × 10 ⁻²		Duchowicz et al. (2020)	?	186, 21
	2.9 × 10 ⁻²		Yaws (1999)	?	21
	2.8 × 10 ⁻²		Abraham et al. (1990)	?	
2-methylbutyl ethanoate C ₇ H ₁₄ O ₂ (2-methylbutyl acetate) [624-41-9] XHIUFYZDQBSEMF-UHFFFAOYSA-N	2.8 × 10 ⁻²		Yaws (2003)	X	238
	7.4 × 10 ⁻³		Gharagheizi et al. (2012)	Q	
	2.8 × 10 ⁻²		Gharagheizi et al. (2010)	Q	247
1,2-dimethylpropyl ethanoate C ₇ H ₁₄ O ₂ (1,2-dimethylpropyl acetate) [5343-96-4] ZLSXRPTWWRGMTJ-UHFFFAOYSA-N	2.9 × 10 ⁻²		Yaws (2003)	X	238
	1.2 × 10 ⁻²		Gharagheizi et al. (2012)	Q	
	2.9 × 10 ⁻²		Gharagheizi et al. (2010)	Q	247

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-ethylpropyl ethanoate $\text{C}_7\text{H}_{14}\text{O}_2$ (1-ethylpropyl acetate) [620-11-1] PBKYSIMDORTIEU-UHFFFAOYSA-N	1.3×10^{-2}		Gharagheizi et al. (2012)	Q	
1,1-dimethylpropyl ethanoate $\text{C}_7\text{H}_{14}\text{O}_2$ (<i>tert</i> -pentyl acetate) [625-16-1] JCCIFDCPHCKATH-UHFFFAOYSA-N	2.9×10^{-2}		Yaws (2003)	X	259
	2.9×10^{-2}		Yaws (2003)	X	238
	2.0×10^{-2}		Dupeux et al. (2022)	Q	260
	3.3×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.8×10^{-2}		Gharagheizi et al. (2010)	Q	247
2,2-dimethylpropyl ethanoate $\text{C}_7\text{H}_{14}\text{O}_2$ (neopentyl acetate) [926-41-0] QLNYTCSELYEEPV-UHFFFAOYSA-N	2.6×10^{-2}		Yaws (2003)	X	238
	2.8×10^{-2}		Gharagheizi et al. (2010)	Q	247
1,2-propanediol, diacetate $\text{C}_7\text{H}_{12}\text{O}_4$ [623-84-7] MLHOXUWWKQVEJB-UHFFFAOYSA-N	7.0×10^1		HSDB (2015)	Q	100
2-pentanol, acetate $\text{C}_7\text{H}_{14}\text{O}_2$ [626-38-0] GQKZRWSUJHVIPE-UHFFFAOYSA-N	1.2×10^{-2}		HSDB (2015)	Q	100
	1.9×10^{-2}		Gharagheizi et al. (2012)	Q	
3-methylbutyl ethanoate $\text{CH}_3\text{COOC}_5\text{H}_{11}$ (isoamyl acetate) [123-92-2] MLFHJEHSLIIPHL-UHFFFAOYSA-N	2.1×10^{-2}	6700	Brockbank (2013)	L	1
	2.0×10^{-2}	6500	Plyasunov et al. (2004)	L	
	2.2×10^{-2}	6600	Ammari and Schroen (2019)	M	11
	8.8×10^{-2}	4300	Meynier et al. (2003)	M	38
	8.8×10^{-3}		Kaneko et al. (1994)	M	14
	2.6×10^{-2}		Mackay et al. (2006c)	V	
	2.6×10^{-2}		Mackay et al. (1995)	V	
	2.1×10^{-2}		Meylan and Howard (1991)	V	
	1.7×10^{-2}		Hine and Mookerjee (1975)	V	
	2.2×10^{-2}		Yaws (2003)	X	238
	2.4×10^{-2}	5000	Goldstein (1982)	X	299
	1.7×10^{-2}		Meynier et al. (2003)	C	
	5.3×10^{-2}		Keshavarz et al. (2022)	Q	
	7.0		Abney (2021)	Q	401
	3.3×10^{-2}		Duchowicz et al. (2020)	Q	300
	1.2×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	272, 244
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	2.7×10^{-2}		Gharagheizi et al. (2010)	Q	247
	2.6×10^{-2}		Hilal et al. (2008)	Q	

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.2×10^{-2}		Modarresi et al. (2007)	Q	68
	1.8×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	1.6×10^{-2}		Yao et al. (2002)	Q	230
	2.4×10^{-2}		English and Carroll (2001)	Q	231, 232
	3.8×10^{-2}		Katritzky et al. (1998)	Q	
	1.7×10^{-2}		Suzuki et al. (1992)	Q	233
	1.8×10^{-2}		Meylan and Howard (1991)	Q	
	1.8×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	1.7×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	2.1×10^{-2}		Yaws (1999)	?	21
	1.7×10^{-2}		Abraham et al. (1990)	?	
hexyl ethanoate $\text{CH}_3\text{COOC}_6\text{H}_{13}$ (hexyl acetate) [142-92-7] AOGQPLXWSUTHQB-UHFFFAOYSA-N	2.0×10^{-2}	7100	Brockbank (2013)	L	1, 507
	1.7×10^{-2}	7300	Plyasunov et al. (2004)	L	
	1.4×10^{-2}		Souchon et al. (2004)	M	
	1.5×10^{-2}		Karl et al. (2003)	M	
	5.2×10^{-3}		Mackay et al. (2006c)	V	
	5.2×10^{-3}		Mackay et al. (1995)	V	
	1.8×10^{-2}		Hine and Mookerjee (1975)	V	
	2.0×10^{-2}		Yaws (2003)	X	259
	2.0×10^{-2}		Yaws (2003)	X	238
	3.6×10^{-2}		Dupeux et al. (2022)	Q	260
	7.1×10^{-2}		Keshavarz et al. (2022)	Q	
	8.9×10^{-2}		Duchowicz et al. (2020)	Q	185
	1.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.7×10^{-2}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-2}		Hilal et al. (2008)	Q	
	2.2×10^{-2}		Modarresi et al. (2007)	Q	68
	2.0×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	2.0×10^{-2}		Yao et al. (2002)	Q	230, 268
	1.7×10^{-2}		English and Carroll (2001)	Q	231, 232
	3.6×10^{-2}		Katritzky et al. (1998)	Q	
	9.9×10^{-3}		Russell et al. (1992)	Q	280
	1.5×10^{-2}		Suzuki et al. (1992)	Q	233
	2.2×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	1.9×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	2.0×10^{-2}		Yaws (1999)	?	21
	1.8×10^{-2}		Abraham et al. (1990)	?	
4-methyl-2-pentyl ethanoate $\text{C}_8\text{H}_{16}\text{O}_2$ (4-methyl-2-pentyl acetate) [108-84-9] CPIVYSAVIPTCCX-UHFFFAOYSA-N	1.7×10^{-2}		HSDB (2015)	V	
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	1.1×10^{-2}		Hilal et al. (2008)	Q	
	2.2×10^{-2}		Modarresi et al. (2007)	Q	68
	1.8×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	3.4×10^{-2}		Katritzky et al. (1998)	Q	

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cyclohexyl ethanoate $\text{C}_8\text{H}_{14}\text{O}_2$ (cyclohexyl acetate) [622-45-7] YLLIJHXUJATK-UHFFFAOYSA-N	1.0×10^{-1} 8.2×10^{-2}	7000	Brockbank (2013) HSDB (2015)	L Q	1, 508 100
ethanol, 2-(2-ethoxyethoxy)-, acetate $\text{C}_8\text{H}_{16}\text{O}_4$ (diethylene glycol monoethyl ether acetate) [112-15-2] FPZWZCWUIYYBU-UHFFFAOYSA-N	4.3×10^2		HSDB (2015)	V	
phenyl ethanoate $\text{C}_8\text{H}_8\text{O}_2$ (phenyl acetate) [122-79-2] IPBVNPXQWQGGJP-UHFFFAOYSA-N	1.3 1.5×10^{-1}	7200	Brockbank (2013) HSDB (2015)	L Q	1 100
heptyl ethanoate $\text{C}_9\text{H}_{18}\text{O}_2$ (heptyl acetate) [112-06-1] ZCSIDMEHXZRLG-UHFFFAOYSA-N	1.2×10^{-2} 1.1×10^{-2} 2.4×10^{-2} 1.1×10^{-2} 1.3×10^{-2}		Yaws (2003) Yaws (2003) Dupeux et al. (2022) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Brockbank (2013)	X X Q Q Q W	259 238 260 247 509
phenylmethyl ethanoate $\text{C}_9\text{H}_{10}\text{O}_2$ (benzyl acetate) [140-11-4] QUKGYKBILRGFE-UHFFFAOYSA-N	8.5×10^{-1} 8.7×10^{-1} 9.0×10^{-1} 7.6×10^{-1} 5.2×10^{-1} 7.0×10^{-1} 9.2×10^{-1} 5.4×10^{-1}	6800	Brockbank (2013) Duchowicz et al. (2020) HSDB (2015) Dupeux et al. (2022) Duchowicz et al. (2020) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998)	L V V Q Q Q Q Q	187 260 68 249, 250
octyl ethanoate $\text{CH}_3\text{COOC}_8\text{H}_{17}$ (octyl acetate) [112-14-1] YLYBTZIQSIBWLI-UHFFFAOYSA-N	8.6×10^{-3} 8.6×10^{-3} 1.8×10^{-2} 1.2×10^{-2} 1.0×10^{-2}		Yaws (2003) Yaws (2003) Dupeux et al. (2022) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Brockbank (2013)	X X Q Q Q W	259 238 260 247 510

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-ethylhexyl ethanoate $\text{C}_{10}\text{H}_{20}\text{O}_2$ (2-ethylhexyl acetate) [103-09-3] WOYWLLHHWAMFCB-UHFFFAOYSA-N	1.1×10^{-2} 1.1×10^{-2} 1.3×10^{-2} 6.6×10^{-3} 2.6×10^{-3}		Mackay et al. (2006c) Mackay et al. (1995) Yaws (2003) HSDB (2015) Gharagheizi et al. (2012)	V V X Q Q	
	1.0×10^{-2} 9.8×10^{-3} 1.3×10^{-2}		Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	Q Q ?	247 230 21
nonyl ethanoate $\text{C}_{11}\text{H}_{22}\text{O}_2$ (nonyl acetate) [143-13-5] GJQIMXVRFNMTB-UHFFFAOYSA-N	4.1×10^{-2} 2.1×10^{-2}		Yaws (2003) Dupeux et al. (2022)	X Q	259 260
decyl ethanoate $\text{C}_{12}\text{H}_{24}\text{O}_2$ (decyl acetate) [112-17-4] NUPSHWCALHZGOV-UHFFFAOYSA-N	2.8×10^{-3} 1.2×10^{-2} 8.0×10^{-3}		Yaws (2003) Dupeux et al. (2022) Gharagheizi et al. (2012)	X Q Q	259 260
undecyl ethanoate $\text{C}_{13}\text{H}_{26}\text{O}_2$ (undecyl acetate) [1731-81-3] CKQGCFFDQIFZFA-UHFFFAOYSA-N	1.5×10^{-2}		Gharagheizi et al. (2012)	Q	
ethanol, 2,2'-[1,2-ethanediylbis(oxy)]bis-, diacetate $\text{C}_{10}\text{H}_{18}\text{O}_6$ (triethylene glycol, diacetate) [111-21-7] OVOUKWFJRHALDD-UHFFFAOYSA-N	3.7×10^7		HSDB (2015)	Q	100
1-methoxy-2-propyl ethanoate $\text{C}_6\text{H}_{12}\text{O}_3$ (1-methoxy-2-propyl acetate) [108-65-6] LLHKCFNBLRBOGN-UHFFFAOYSA-N	2.9 8.7×10^{-1} 2.5 1.6 2.5		Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	V Q Q Q Q	187 243, 244 245 246
	9.9×10^{-1} 6.3×10^{-1}		Hilal et al. (2008) Modarresi et al. (2007)	Q Q	68
2-ethoxyethyl ethanoate $\text{C}_6\text{H}_{12}\text{O}_3$ (2-ethoxyethyl acetate) [111-15-9] SVONRAPFKPVNKG-UHFFFAOYSA-N	3.0 3.0 1.5 3.4 7.5×10^{-1}		Brockbank (2013) Hovorka et al. (2002) Johanson and Dynésius (1988) Keshavarz et al. (2022) Duchowicz et al. (2020)	L M M Q Q	
	2.5 2.5		Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	Q Q	185 243, 244 245

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.5		Raventos-Duran et al. (2010)	Q	246
	1.9		Hilal et al. (2008)	Q	
	7.2×10^{-1}		Modarresi et al. (2007)	Q	68
	3.1		Duchowicz et al. (2020)	?	186, 21
	7.0		Yaws (1999)	?	21, 12
2-butoxyethyl ethanoate $\text{C}_8\text{H}_{16}\text{O}_3$ (butyl cellosolve acetate) [112-07-2] NOBXSWAWVZHKBZ-UHFFFAOYSA-N	1.8		Brockbank (2013)	L	
	1.8	25000	Kim et al. (2000)	M	
	6.1		Keshavarz et al. (2022)	Q	
	9.6×10^{-1}		Duchowicz et al. (2020)	Q	300
	1.2		Raventos-Duran et al. (2010)	Q	243, 244
	1.6		Raventos-Duran et al. (2010)	Q	245
	1.6		Raventos-Duran et al. (2010)	Q	246
	1.3		Hilal et al. (2008)	Q	
	5.2×10^{-1}		Modarresi et al. (2007)	Q	68
	1.8		Duchowicz et al. (2020)	?	186, 21
2-(2-butoxyethoxy)-ethanol, ethanoate $\text{C}_{10}\text{H}_{20}\text{O}_4$ [124-17-4] VXQBJTKSVGFQOL-UHFFFAOYSA-N	2.8×10^1		Duchowicz et al. (2020)	V	187
	2.8×10^1		HSDB (2015)	V	
	1.1×10^1		Duchowicz et al. (2020)	Q	
	6.2×10^1		Raventos-Duran et al. (2010)	Q	243, 244
	7.8×10^1		Raventos-Duran et al. (2010)	Q	245
	9.9×10^1		Raventos-Duran et al. (2010)	Q	246
	4.1×10^1		Hilal et al. (2008)	Q	
	7.2		Modarresi et al. (2007)	Q	68
1,2-ethanediol, diethanoate $\text{C}_6\text{H}_{10}\text{O}_4$ [111-55-7] JTXMVXSTHSMVQF-UHFFFAOYSA-N	1.2×10^2		Duchowicz et al. (2020)	V	187
	1.2×10^2		HSDB (2015)	V	
	1.3×10^2		Yaws (2003)	X	238, 88
	6.4		Duchowicz et al. (2020)	Q	
	1.6×10^1		Raventos-Duran et al. (2010)	Q	243, 244
	1.6×10^1		Raventos-Duran et al. (2010)	Q	245
	2.0×10^1		Raventos-Duran et al. (2010)	Q	246
	1.4×10^2		Gharagheizi et al. (2010)	Q	247
	1.3×10^1		Hilal et al. (2008)	Q	
	9.3×10^1		Yaws (1999)	?	21, 88
geranyl acetate $\text{C}_{12}\text{H}_{20}\text{O}_2$ [105-87-3] HIGQPQRQIQDZMP-DHZHZOJOSA-N	4.1×10^{-3}		HSDB (2015)	Q	100
linalyl acetate $\text{C}_{12}\text{H}_{20}\text{O}_2$ [115-95-7] UWKAYLJWKGQEPM-UHFFFAOYSA-N	1.8×10^{-2}		Dupeux et al. (2022)	Q	260
	5.8×10^{-3}		HSDB (2015)	Q	100

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethyl propanoate $\text{C}_2\text{H}_5\text{COOC}_2\text{H}_5$ (ethyl propionate) [105-37-3] FKRCODPIKNYEAC-UHFFFAOYSA-N	3.8×10^{-2}	5900	Brockbank (2013)	L	1
	4.1×10^{-2}	6000	Plyasunov et al. (2004)	L	
	4.1×10^{-2}	5900	Fenclová et al. (2014)	M	1
	3.9×10^{-2}		Duchowicz et al. (2020)	V	187
	3.9×10^{-2}		HSDB (2015)	V	
	3.8×10^{-2}		Mackay et al. (2006c)	V	
	3.8×10^{-2}		Mackay et al. (1995)	V	
	3.7×10^{-2}		Abraham (1984)	V	
	4.5×10^{-2}		Hine and Mookerjee (1975)	V	
	4.5×10^{-2}		Yaws (2003)	X	259
	4.5×10^{-2}		Yaws (2003)	X	238
	4.1×10^{-2}		Dupeux et al. (2022)	Q	260
	7.7×10^{-2}		Duchowicz et al. (2020)	Q	
	4.5×10^{-2}		Li et al. (2014)	Q	242
	2.2×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	272, 244
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	4.7×10^{-2}		Gharagheizi et al. (2010)	Q	247
	2.6×10^{-2}		Hilal et al. (2008)	Q	
	4.4×10^{-2}		Modarresi et al. (2007)	Q	68
	4.6×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	3.5×10^{-2}		Yao et al. (2002)	Q	230
	4.0×10^{-2}		English and Carroll (2001)	Q	231, 232
	3.9×10^{-2}		Katritzky et al. (1998)	Q	
	3.4×10^{-2}		Suzuki et al. (1992)	Q	233
	3.5×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	4.5×10^{-2}		Yaws (1999)	?	21
	3.8×10^{-2}		Abraham et al. (1990)	?	
propyl propanoate $\text{C}_2\text{H}_5\text{COOC}_3\text{H}_7$ (propyl propionate) [106-36-5] MCSINKKTEDDPNK-UHFFFAOYSA-N	2.6×10^{-2}	6400	Brockbank (2013)	L	1, 512
	2.9×10^{-2}	6200	Plyasunov et al. (2004)	L	
	2.5×10^{-2}		Duchowicz et al. (2020)	V	187
	2.5×10^{-2}		Abraham (1984)	V	
	2.5×10^{-2}		Hine and Mookerjee (1975)	V	
	8.2×10^{-2}		Duchowicz et al. (2020)	Q	
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	272, 244
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	2.0×10^{-2}		Hilal et al. (2008)	Q	
	3.6×10^{-2}		Modarresi et al. (2007)	Q	68
	2.7×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	2.6×10^{-2}		Yao et al. (2002)	Q	230
	3.1×10^{-2}		English and Carroll (2001)	Q	231, 275
	3.9×10^{-2}		Katritzky et al. (1998)	Q	
	2.6×10^{-2}		Suzuki et al. (1992)	Q	233

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.8×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	2.1×10^{-2}		Yaws (1999)	?	21
	2.5×10^{-2}		Abraham et al. (1990)	?	
isopropyl propanoate $\text{C}_2\text{H}_5\text{COOC}_3\text{H}_7$ (isopropyl propionate) [637-78-5] IJMWOMHMDSDKKGK-UHFFFAOYSA-N	1.8×10^{-2}		Plyasunov et al. (2004)	L	
	1.7×10^{-2}		Duchowicz et al. (2020)	V	187
	1.7×10^{-2}		Meylan and Howard (1991)	V	
	1.7×10^{-2}		Hine and Mookerjee (1975)	V	
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	
	1.7×10^{-2}		Hilal et al. (2008)	Q	
	3.1×10^{-2}		Modarresi et al. (2007)	Q	68
	2.3×10^{-2}		Suzuki et al. (1992)	Q	233
	2.4×10^{-2}		Meylan and Howard (1991)	Q	
	2.5×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	1.7×10^{-2}		Abraham et al. (1990)	?	
butyl propanoate $\text{C}_7\text{H}_{14}\text{O}_2$ (butyl propionate) [590-01-2] BTMVHUNTONAYDX-UHFFFAOYSA-N	2.2×10^{-2}	6900	Brockbank (2013)	L	1
	2.0×10^{-2}	7000	Plyasunov et al. (2004)	L	
	2.0×10^{-2}		Duchowicz et al. (2020)	V	187
	3.3×10^{-2}		Yaws (2003)	X	259
	3.3×10^{-2}		Yaws (2003)	X	238, 12
	2.6×10^{-2}		Dupeux et al. (2022)	Q	260
	8.6×10^{-2}		Duchowicz et al. (2020)	Q	
	8.9×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.7×10^{-2}		Gharagheizi et al. (2010)	Q	247
	3.2×10^{-2}		Modarresi et al. (2007)	Q	68
	6.2×10^{-3}		Yaffe et al. (2003)	Q	249, 273
	2.3×10^{-2}		Yao et al. (2002)	Q	230
	3.7×10^{-2}		Katritzky et al. (1998)	Q	
	1.4×10^{-2}		Yaws (1999)	?	21
(2-methylpropyl)-propanoate $\text{C}_7\text{H}_{14}\text{O}_2$ (isobutyl propionate) [540-42-1] FZXRKLUIMKDEL-UHFFFAOYSA-N	1.5×10^{-2}	6600	Plyasunov et al. (2004)	L	
	1.5×10^{-2}		Duchowicz et al. (2020)	V	187
	3.3×10^{-2}		Duchowicz et al. (2020)	Q	
	1.8×10^{-2}		Hilal et al. (2008)	Q	
		5900	Kühne et al. (2005)	Q	
	6.2×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	1.9×10^{-2}		Nirmalakhandan et al. (1997)	Q	
		7300	Kühne et al. (2005)	?	
<i>tert</i> -butyl propanoate $\text{C}_7\text{H}_{14}\text{O}_2$ [20487-40-5] JAELLITIZHOGQ-UHFFFAOYSA-N	7.5×10^{-3}		Ebert et al. (2023)	?	367

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pentyl propanoate $\text{C}_2\text{H}_5\text{COOC}_5\text{H}_{11}$ (amyl propionate) [624-54-4] TWSRVQVEYJNFKQ-UHFFFAOYSA-N	1.9×10^{-2}		Plyasunov et al. (2004)	L	
	1.2×10^{-2}		Duchowicz et al. (2020)	V	187
	1.4×10^{-2}		Abraham (1984)	V	
	1.2×10^{-2}		Hine and Mookerjee (1975)	V	
	8.9×10^{-2}		Duchowicz et al. (2020)	Q	
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	1.2×10^{-2}		Hilal et al. (2008)	Q	
	2.6×10^{-2}		Modarresi et al. (2007)	Q	68
	1.2×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	1.7×10^{-2}		English and Carroll (2001)	Q	231, 232
	3.4×10^{-2}		Katritzky et al. (1998)	Q	
	2.2×10^{-2}		Nirmalakhandan et al. (1997)	Q	
1.5×10^{-2}		Suzuki et al. (1992)	Q	233	
1.8×10^{-2}		Nirmalakhandan and Speece (1988)	Q		
1.4×10^{-2}		Abraham et al. (1990)	?		
propanoic acid, 2-hydroxy-, ethyl ester $\text{C}_5\text{H}_{10}\text{O}_3$ (ethyl lactate) [97-64-3] LZCLXQDLBQLTDK-UHFFFAOYSA-N	1.7×10^1		Duchowicz et al. (2020)	V	187
	1.7×10^1		HSDB (2015)	V	
	3.1		Duchowicz et al. (2020)	Q	
ethyl 3-ethoxypropanoate $\text{C}_7\text{H}_{14}\text{O}_3$ (ethyl 3-ethoxypropionate) [763-69-9] BHXIWUJLHYHGSJ-UHFFFAOYSA-N	1.5×10^{-2}		Yaws (1999)	?	21
propanoic acid, 2-phenylethyl ester $\text{C}_{11}\text{H}_{14}\text{O}_2$ [122-70-3] HVGZQCSMLUDISR-UHFFFAOYSA-N	3.9×10^{-1}		HSDB (2015)	Q	100
methyl butanoate $\text{C}_3\text{H}_7\text{COOCH}_3$ (methyl butyrate) [623-42-7] UUIQMZJEGPQKFD-UHFFFAOYSA-N	3.9×10^{-2}	5700	Brockbank (2013)	L	1, 513
	4.2×10^{-2}	5700	Plyasunov et al. (2004)	L	
	3.7×10^{-2}		Aprea et al. (2007)	M	
	3.6×10^{-2}		Ioffe et al. (1984)	M	
	4.8×10^{-2}		Buttery et al. (1969)	M	
	3.6×10^{-1}	4400	Djerki and Laub (1988)	V	
	3.7×10^{-2}		Amoore and Buttery (1978)	V	
		5800	Della Gatta et al. (1981)	T	
	3.5×10^{-2}		Yaws (2003)	X	259
	3.6×10^{-2}		Nahon et al. (2000)	C	14
4.4×10^{-2}		Dupeux et al. (2022)	Q	260	
2.9×10^{-2}		Keshavarz et al. (2022)	Q		

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.3×10^{-1}		Duchowicz et al. (2020)	Q	300
	4.8×10^{-2}		Li et al. (2014)	Q	242
	1.2×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	2.8×10^{-2}		Hilal et al. (2008)	Q	
	4.0×10^{-2}		Modarresi et al. (2007)	Q	68
	4.6×10^{-2}		Yaffe et al. (2003)	Q	249, 273
	3.2×10^{-2}		Yao et al. (2002)	Q	230
	4.0×10^{-2}		English and Carroll (2001)	Q	231, 232
	3.9×10^{-2}		Katritzky et al. (1998)	Q	
	1.5×10^{-1}		Russell et al. (1992)	Q	280
	3.4×10^{-2}		Suzuki et al. (1992)	Q	233
	3.2×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	4.8×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	3.5×10^{-2}		Yaws (1999)	?	21
	4.8×10^{-2}		Abraham et al. (1990)	?	
ethyl butanoate	2.5×10^{-2}	6100	Brockbank (2013)	L	1
$\text{C}_3\text{H}_7\text{COOC}_2\text{H}_5$	2.9×10^{-2}	6300	Plyasunov et al. (2004)	L	
(ethyl butyrate)	2.9×10^{-2}	6400	Fenclová et al. (2014)	M	1
[105-54-4]	2.4×10^{-2}		Apra et al. (2007)	M	
OBNCKNCVKJNDBV-UHFFFAOYSA-N	2.6×10^{-2}		Souchon et al. (2004)	M	
	2.1×10^{-2}		van Ruth et al. (2002)	M	14
	2.1×10^{-2}		van Ruth and Villeneuve (2002)	M	14, 363
	1.6×10^{-2}		van Ruth et al. (2001)	M	14
	4.0×10^{-2}		Landy et al. (1996)	M	
	2.4×10^{-2}		Landy et al. (1995)	M	
	2.5×10^{-2}		HSDB (2015)	V	
	2.4×10^{-2}		Mackay et al. (2006c)	V	
	1.2×10^{-2}		Philippe et al. (2003)	V	14
	2.4×10^{-2}		Mackay et al. (1995)	V	
	2.8×10^{-2}		Abraham (1984)	V	
	2.7×10^{-2}		Hine and Mookerjee (1975)	V	
	2.8×10^{-2}		Yaws (2003)	X	259
	2.8×10^{-2}		Yaws (2003)	X	238, 88
	2.7×10^{-2}		Nahon et al. (2000)	C	14
	4.5×10^{-2}		Dupeux et al. (2022)	Q	260
	3.4		Abney (2021)	Q	401
	2.4×10^{-2}		Savary et al. (2014)	Q	
	1.6×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	272, 244
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	3.5×10^{-2}		Gharagheizi et al. (2010)	Q	247

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.0×10^{-2}		Hilal et al. (2008)	Q	
	3.1×10^{-2}		Modarresi et al. (2007)	Q	68
	2.7×10^{-2}		Yaffe et al. (2003)	Q	249, 273
	2.8×10^{-2}		Yao et al. (2002)	Q	230
	3.1×10^{-2}		English and Carroll (2001)	Q	231, 232
	3.9×10^{-2}		Katritzky et al. (1998)	Q	
	2.6×10^{-2}		Suzuki et al. (1992)	Q	233
	2.8×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	2.4×10^{-2}		Yaws (1999)	?	21, 88
	2.7×10^{-2}		Abraham et al. (1990)	?	
propyl butanoate $\text{C}_3\text{H}_7\text{COOC}_3\text{H}_7$ (propyl butyrate) [105-66-8] HUAZGNHGCJGYNP-UHFFFAOYSA-N	1.8×10^{-2}	6400	Brockbank (2013)	L	1
	2.2×10^{-2}	6600	Plyasunov et al. (2004)	L	
	1.6×10^{-2}		Duchowicz et al. (2020)	V	187
	1.6×10^{-2}		Meylan and Howard (1991)	V	
	1.9×10^{-2}		Hine and Mookerjee (1975)	V	
	2.6×10^{-2}		Yaws (2003)	X	238, 155
	8.6×10^{-2}		Duchowicz et al. (2020)	Q	
	8.1×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	2.7×10^{-2}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-2}		Hilal et al. (2008)	Q	
	2.8×10^{-2}		Modarresi et al. (2007)	Q	68
	2.2×10^{-2}		Yao et al. (2002)	Q	230
	2.3×10^{-2}		English and Carroll (2001)	Q	231, 261
	3.6×10^{-2}		Katritzky et al. (1998)	Q	
	2.0×10^{-2}		Suzuki et al. (1992)	Q	233
	1.8×10^{-2}		Meylan and Howard (1991)	Q	
	2.2×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	1.6×10^{-2}		Yaws (1999)	?	21, 155
	1.9×10^{-2}		Abraham et al. (1990)	?	
2-propyl butanoate $\text{C}_7\text{H}_{14}\text{O}_2$ (isopropyl butyrate) [638-11-9] FFOPEPMHKILNIT-UHFFFAOYSA-N	1.8×10^{-2}		Plyasunov et al. (2004)	L	
	1.9×10^{-2}		Dupeux et al. (2022)	Q	260
butyl butanoate $\text{C}_8\text{H}_{16}\text{O}_2$ (butyl butyrate) [109-21-7] XUPYJHCZDLZNFN-UHFFFAOYSA-N	1.7×10^{-2}	7600	Brockbank (2013)	L	1
	1.6×10^{-2}	7600	Plyasunov et al. (2004)	L	
	1.4×10^{-2}		Duchowicz et al. (2020)	V	187
	1.0×10^{-2}		Dupeux et al. (2022)	Q	260
	8.9×10^{-2}		Duchowicz et al. (2020)	Q	
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	2.3×10^{-2}		Modarresi et al. (2007)	Q	68
	3.4×10^{-2}		Katritzky et al. (1998)	Q	
	1.1×10^{-2}		Yaws (1999)	?	21
2-methylpropyl butanoate $\text{C}_8\text{H}_{16}\text{O}_2$ (2-methylpropyl butyrate) [539-90-2] RGFNRWTWDWVHDD-UHFFFAOYSA-N	1.3×10^{-2}		Hilal et al. (2008)	Q	
2-methylpropyl 2-methylpropanoate $\text{C}_8\text{H}_{16}\text{O}_2$ (isobutyl isobutyrate) [97-85-8] RXGUIWHIADMFCFC-UHFFFAOYSA-N	7.4×10^{-3}	6900	Brockbank (2013)	L	1, 514
	7.8×10^{-3}	6700	Plyasunov et al. (2004)	L	
	1.0×10^{-2}		Amoore and Buttery (1978)	M	
	1.2×10^{-2}		Duchowicz et al. (2020)	V	187
	7.2×10^{-3}		Amoore and Buttery (1978)	V	
	1.4×10^{-2}		Duchowicz et al. (2020)	Q	
	1.8×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	1.2×10^{-2}		Hilal et al. (2008)	Q	
	1.0×10^{-2}		Modarresi et al. (2007)	Q	68
	7.5×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	1.4×10^{-2}		English and Carroll (2001)	Q	231, 232
	1.3×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	6.9×10^{-3}		Yaws (1999)	?	21
	7.0×10^{-3}		Abraham et al. (1990)	?	
pentyl butanoate $\text{C}_9\text{H}_{18}\text{O}_2$ (pentyl butyrate) [540-18-1] CFNJLPHOBMMNS-UHFFFAOYSA-N	1.7×10^{-2}	6400	Brockbank (2013)	L	
	9.8×10^{-3}		Dupeux et al. (2022)	Q	260
3-methylbutyl butanoate $\text{C}_9\text{H}_{18}\text{O}_2$ (isopentyl butyrate) [106-27-4] PQLMXFQTAMDXIZ-UHFFFAOYSA-N	1.1×10^{-2}	7500	Brockbank (2013)	L	1
methyl 2-methylpropanoate $\text{C}_5\text{H}_{10}\text{O}_2$ (methyl isobutyrate) [547-63-7] BHIWKHZACMWWKOJ-UHFFFAOYSA-N	2.6×10^{-2}	5600	Brockbank (2013)	L	1
	2.6×10^{-2}	5500	Plyasunov et al. (2004)	L	
	3.3×10^{-2}	5700	Bagno et al. (1991)	T	475
		5700	Della Gatta et al. (1981)	T	

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethyl 2-methylpropanoate $\text{C}_6\text{H}_{12}\text{O}_2$ (ethyl isobutyrate) [97-62-1] WDAXFOBOLVPLV-UHFFFAOYSA-N	1.5×10^{-2}	6000	Brockbank (2013)	L	1
	1.7×10^{-2}	6200	Plyasunov et al. (2004)	L	
	2.0×10^{-2}		Hilal et al. (2008)	Q	
	1.8×10^{-2}		Yao et al. (2002)	Q	230
	2.4×10^{-2}		Yaws (1999)	?	21
hexyl butanoate $\text{C}_{10}\text{H}_{20}\text{O}_2$ (hexyl butyrate) [2639-63-6] XAPCMTMQBXLDBB-UHFFFAOYSA-N	1.1×10^{-2}		Dupeux et al. (2022)	Q	260
cyclohexyl butanoate $\text{C}_{10}\text{H}_{18}\text{O}_2$ (cyclohexyl butyrate) [1551-44-6] VZHUBBUZNIULNM-UHFFFAOYSA-N		6500	Kühne et al. (2005)	Q	
		5600	Kühne et al. (2005)	?	
3-oxobutanoic acid, methyl ester $\text{C}_5\text{H}_8\text{O}_3$ (methylacetoacetate) [105-45-3] WRQNANDWWMGAFTP-UHFFFAOYSA-N	6.4		Hovorka et al. (2002)	M	38
	3.6×10^1		Duchowicz et al. (2020)	V	187
	3.7×10^1		HSDB (2015)	V	
	1.2×10^1		Duchowicz et al. (2020)	Q	
	1.2×10^1		Raventos-Duran et al. (2010)	Q	243, 244
	2.5×10^1		Raventos-Duran et al. (2010)	Q	245
	7.8×10^1		Raventos-Duran et al. (2010)	Q	246
	1.7×10^1		Hilal et al. (2008)	Q	
7.9		Modarresi et al. (2007)	Q	68	
3-oxobutanoic acid, ethyl ester $\text{C}_6\text{H}_{10}\text{O}_3$ (ethylacetoacetate) [141-97-9] XYIBRDXRRQCHLP-UHFFFAOYSA-N	9.0	7200	Brockbank (2013)	L	
	5.8		Hovorka et al. (2002)	M	38
	8.2		Duchowicz et al. (2020)	V	187
	1.7×10^1		Yaws (2003)	X	259
	1.7×10^1		Yaws (2003)	X	238, 155
	2.4×10^1		Dupeux et al. (2022)	Q	260
	4.5		Duchowicz et al. (2020)	Q	
	7.8		Raventos-Duran et al. (2010)	Q	272, 244
	2.0×10^1		Raventos-Duran et al. (2010)	Q	245
	6.2×10^1		Raventos-Duran et al. (2010)	Q	246
	1.7×10^1		Gharagheizi et al. (2010)	Q	247
	1.1×10^1		Hilal et al. (2008)	Q	
5.6		Modarresi et al. (2007)	Q	68	
9.1		Yaws (1999)	?	21, 155	

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methyl pentanoate $\text{C}_4\text{H}_9\text{COOCH}_3$ (methyl valerate) [624-24-8] HNBDRPTVWVGKBR-UHFFFAOYSA-N	3.0×10^{-2}	6100	Plyasunov et al. (2004)	L	
	3.1×10^{-2}		Buttery et al. (1969)	M	
	9.7×10^{-1}	5000	Djerki and Laub (1988)	V	
		6200	Della Gatta et al. (1981)	T	
	3.9×10^{-2}		Keshavarz et al. (2022)	Q	
	2.4×10^{-1}		Duchowicz et al. (2020)	Q	300
	2.9×10^{-2}		Li et al. (2014)	Q	242
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	272, 244
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	2.2×10^{-2}		Hilal et al. (2008)	Q	
	3.6×10^{-2}		Modarresi et al. (2007)	Q	68
	3.1×10^{-2}		English and Carroll (2001)	Q	231, 232
	3.8×10^{-2}		Katritzky et al. (1998)	Q	
	2.6×10^{-2}		Suzuki et al. (1992)	Q	233
2.5×10^{-2}		Nirmalakhandan and Speece (1988)	Q		
3.1×10^{-2}		Duchowicz et al. (2020)	?	186, 21	
3.1×10^{-2}		Abraham et al. (1990)	?		
ethyl pentanoate $\text{C}_4\text{H}_9\text{COOC}_2\text{H}_5$ (ethyl valerate) [539-82-2] ICMAFTSLXCXHRK-UHFFFAOYSA-N	2.3×10^{-2}	6800	Plyasunov et al. (2004)	L	
	1.4×10^{-1}	4800	Meynier et al. (2003)	M	38
	2.7×10^{-2}		Duchowicz et al. (2020)	V	187
	2.8×10^{-2}		Meylan and Howard (1991)	V	
	2.8×10^{-2}		Abraham (1984)	V	
	2.9×10^{-2}		Hine and Mookerjee (1975)	V	
	2.7×10^{-2}		Meynier et al. (2003)	C	
	8.6×10^{-2}		Duchowicz et al. (2020)	Q	
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	1.5×10^{-2}		Hilal et al. (2008)	Q	
	2.6×10^{-2}		Modarresi et al. (2007)	Q	68
	2.3×10^{-2}		English and Carroll (2001)	Q	231, 232
	2.0×10^{-2}		Suzuki et al. (1992)	Q	233
1.8×10^{-2}		Meylan and Howard (1991)	Q		
2.2×10^{-2}		Nirmalakhandan and Speece (1988)	Q		
2.7×10^{-2}		Abraham et al. (1990)	?		
methyl 2,2-dimethylpropanoate $\text{C}_6\text{H}_{12}\text{O}_2$ (methyl pivalate) [598-98-1] CNMFHDIDIMZHXY-UHFFFAOYSA-N	9.5×10^{-3}	5600	Plyasunov et al. (2004)	L	
	2.3×10^{-2}	6000	Bagno et al. (1991)	T	475
		6000	Della Gatta et al. (1981)	T	
	3.9×10^{-2}		Keshavarz et al. (2022)	Q	
	4.1×10^{-2}		Duchowicz et al. (2020)	Q	
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	245
2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	246	
1.7×10^{-2}		Hilal et al. (2008)	Q		

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	3.7×10^{-2}		Modarresi et al. (2007)	Q	68
	1.8×10^{-2}		Yaffe et al. (2003)	Q	249, 273
	2.3×10^{-2}		English and Carroll (2001)	Q	231, 232
	1.8×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	2.3×10^{-2}		Duchowicz et al. (2020)	?	186, 21
ethyl 2-methylbutanoate $C_7H_{14}O_2$ [7452-79-1] HCRBXQFHJMCTLF-UHFFFAOYSA-N	1.4×10^{-2} 8.9×10^{-3} 2.7×10^{-2}	6700	Plyasunov et al. (2004) Pollien et al. (2003) Roberts and Pollien (1997)	L M M	
ethyl 3-methylbutanoate $C_7H_{14}O_2$ (ethyl isovalerate) [108-64-5] PPXUHEORWJQRHJ-UHFFFAOYSA-N	1.4×10^{-2} 1.4×10^{-2} 1.1×10^{-2} 1.4×10^{-2} 2.2×10^{-2} 3.3×10^{-2} 2.5×10^{-2} 1.6×10^{-2} 2.0×10^{-2} 1.6×10^{-2} 2.8×10^{-2} 1.5×10^{-2} 1.6×10^{-2}	6500 6700 5900	Brockbank (2013) Plyasunov et al. (2004) Wieland et al. (2015) Duchowicz et al. (2020) Dupeux et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yao et al. (2002) Yaws (1999)	L L M V Q Q Q Q Q Q Q Q Q ?	1 515 187 260 272, 244 245 246 68 230 21
ethyl 2,2-dimethylpropanoate $C_7H_{14}O_2$ (ethyl pivalate) [3938-95-2] HHEIMYAXCOIQCJ-UHFFFAOYSA-N	6.4×10^{-3} 5.7×10^{-3}	6700 6100	Brockbank (2013) Plyasunov et al. (2004)	L L	1
butyl pentanoate $C_9H_{18}O_2$ (butyl valerate) [591-68-4] OKJADYKTJGKDX-UHFFFAOYSA-N	9.8×10^{-3} 2.3×10^{-2} 2.0×10^{-2} 1.5×10^{-2}		Plyasunov et al. (2004) Dupeux et al. (2022) Yao et al. (2002) Yaws (1999)	L Q Q ?	260 230 21
3-methylbutyl 3-methylbutanoate $C_{10}H_{20}O_2$ (isoamyl isovalerate) [659-70-1] XINCEQTMHSORG-UHFFFAOYSA-N	4.0×10^{-3}		Yaws (1999)	?	21

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methyl hexanoate $\text{C}_5\text{H}_{11}\text{COOCH}_3$ (methyl caproate) [106-70-7] NUKZAGXMHTUAFE-UHFFFAOYSA-N	2.6×10^{-2}	6600	Plyasunov et al. (2004)	L	
	1.9×10^{-2}		Aprea et al. (2007)	M	
	2.7×10^{-2}	5600	Buttery et al. (1969)	M	
	2.6		Djerki and Laub (1988)	V	
	5.3×10^{-2}		Keshavarz et al. (2022)	Q	
	2.5×10^{-1}		Duchowicz et al. (2020)	Q	300
	2.7×10^{-2}		Li et al. (2014)	Q	242
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	1.8×10^{-2}		Hilal et al. (2008)	Q	
	2.9×10^{-2}		Modarresi et al. (2007)	Q	68
	2.7×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	2.3×10^{-2}		English and Carroll (2001)	Q	231, 275
	3.6×10^{-2}		Katritzky et al. (1998)	Q	
2.0×10^{-2}	Suzuki et al. (1992)	Q	233		
2.0×10^{-2}	Nirmalakhandan and Speece (1988)	Q			
2.7×10^{-2}	Duchowicz et al. (2020)	?	186, 21		
2.7×10^{-2}	Abraham et al. (1990)	?			
ethyl hexanoate $\text{C}_5\text{H}_{11}\text{COOC}_2\text{H}_5$ (ethyl caproate) [123-66-0] SHZIWNPUGXLDXT-UHFFFAOYSA-N	1.9×10^{-2}	7200	Plyasunov et al. (2004)	L	
	1.4×10^{-2}		Aprea et al. (2007)	M	
	1.6×10^{-2}		Landy et al. (1996)	M	
	9.4×10^{-3}		Landy et al. (1995)	M	
	6.9×10^{-3}		Philippe et al. (2003)	V	14
	1.8×10^{-2}		Abraham (1984)	V	
	3.0		Abney (2021)	Q	401
	1.4×10^{-2}		Savary et al. (2014)	Q	
	1.1×10^{-2}		Hilal et al. (2008)	Q	
	1.7×10^{-2}		English and Carroll (2001)	Q	231, 261
	1.7×10^{-2}		Nirmalakhandan et al. (1997)	Q	
1.8×10^{-2}	Abraham et al. (1990)	?			
2-ethylbutanoic acid, 1,2-ethanediylobis(oxy-2,1-ethanediyloxy) ester $\text{C}_{18}\text{H}_{34}\text{O}_6$ [95-08-9] JEYLQXCXBYFQJRO-UHFFFAOYSA-N	9.9×10^5		HSDB (2015)	Q	100
methyl heptanoate $\text{C}_8\text{H}_{16}\text{O}_2$ [106-73-0] XNCNNDVCAUWAIT-UHFFFAOYSA-N	1.8×10^{-2}		Plyasunov et al. (2004)	L	

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethyl heptanoate $\text{C}_6\text{H}_{13}\text{COOC}_2\text{H}_5$ [106-30-9] TVQGDYNRXLTQAP-UHFFFAOYSA-N	2.0×10^{-2}		Meylan and Howard (1991)	V	
	2.0×10^{-2}		Abraham (1984)	V	
	2.0×10^{-2}		Hine and Mookerjee (1975)	V	
	9.6×10^{-2}		Keshavarz et al. (2022)	Q	
	9.1×10^{-2}		Duchowicz et al. (2020)	Q	300
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	272, 244
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	9.2×10^{-3}		Hilal et al. (2008)	Q	
	1.9×10^{-2}		Modarresi et al. (2007)	Q	68
	1.2×10^{-2}		Suzuki et al. (1992)	Q	233
	1.0×10^{-2}		Meylan and Howard (1991)	Q	
	2.1×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
2.0×10^{-2}		Duchowicz et al. (2020)	?	186, 21	
2.0×10^{-2}		Abraham et al. (1990)	?		
methyl octanoate $\text{C}_6\text{H}_{13}\text{COOCH}_3$ [111-11-5] JGHZJRVDZXSNIKQ-UHFFFAOYSA-N	1.2×10^{-2}		Plyasunov et al. (2004)	L	
	9.9×10^{-3}		Aprea et al. (2007)	M	
	1.3×10^{-2}		Buttery et al. (1969)	M	
	9.6×10^{-2}		Keshavarz et al. (2022)	Q	
	2.7×10^{-1}		Duchowicz et al. (2020)	Q	300
	1.3×10^{-2}		Li et al. (2014)	Q	242
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	1.2×10^{-2}		Hilal et al. (2008)	Q	
	2.2×10^{-2}		Modarresi et al. (2007)	Q	68
	4.7×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	1.2×10^{-2}		Suzuki et al. (1992)	Q	233
1.1×10^{-2}		Nirmalakhandan and Speece (1988)	Q		
1.3×10^{-2}		Duchowicz et al. (2020)	?	186, 21	
ethyl octanoate $\text{C}_7\text{H}_{15}\text{COOC}_2\text{H}_5$ [106-32-1] YYZUSRORWSJGET-UHFFFAOYSA-N	1.7×10^{-2}		Plyasunov et al. (2004)	L	
	1.1×10^{-2}		Aprea et al. (2007)	M	
	1.2×10^{-2}		Abraham (1984)	V	
	7.8×10^{-3}		Savary et al. (2014)	Q	
octadecanoic acid, 2-methylpropyl ester $\text{C}_{22}\text{H}_{44}\text{O}_2$ (isobutyl stearate) [646-13-9] ORFWYUFLWUWSFM-UHFFFAOYSA-N	2.6×10^{-4}		HSDB (2015)	Q	100

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
octadecanoic acid, butyl ester $\text{C}_{22}\text{H}_{44}\text{O}_2$ [123-95-5] ULBTUVJTXULMLP-UHFFFAOYSA-N	2.6×10^{-4}		HSDB (2015)	Q	100
methyl nonanoate $\text{C}_{10}\text{H}_{20}\text{O}_2$ [1731-84-6] IJXHLVMUNBOGRR-UHFFFAOYSA-N	8.2×10^{-3} 7.0×10^{-3}		Plyasunov et al. (2004) Abraham (1984)	L V	
ethyl nonanoate $\text{C}_8\text{H}_{17}\text{COOC}_2\text{H}_5$ [123-29-5] BYEVBITUADOIGY-UHFFFAOYSA-N	1.3×10^{-2}		Abraham (1984)	V	
nonanedioic acid, bis(2-ethylhexyl) ester $\text{C}_{25}\text{H}_{48}\text{O}_4$ (di-2-ethylhexyl azelate) [103-24-2] ZDWGXBPVPVXVMQ-UHFFFAOYSA-N	8.2×10^{-2}		HSDB (2015)	Q	100
methyl decanoate $\text{C}_{11}\text{H}_{22}\text{O}_2$ (methyl caprate) [110-42-9] YRHYCMZPEVDGFQ-UHFFFAOYSA-N	1.1×10^{-2} 4.8×10^{-3} 1.4×10^{-2} 3.2×10^{-3} 2.8×10^{-1} 5.8×10^{-3} 7.7×10^{-3}		Aprea et al. (2007) Duchowicz et al. (2020) Krop et al. (1997) Abraham (1984) Duchowicz et al. (2020) HSDB (2015) Hilal et al. (2008)	M V V V Q Q Q	187 100
ethyl decanoate $\text{C}_9\text{H}_{19}\text{COOC}_2\text{H}_5$ [110-38-3] RGXWDWUGBIJHDO-UHFFFAOYSA-N	1.2×10^{-2} 1.4×10^{-2} 1.7×10^{-2}		Plyasunov et al. (2004) Aprea et al. (2007) Abraham (1984)	L M V	
decanedioic acid, diethyl ester $\text{C}_{14}\text{H}_{26}\text{O}_4$ (diethyl sebacate) [110-40-7] ONKUXPIBRRIDU-UHFFFAOYSA-N	2.7		Bartelt-Hunt et al. (2008)	?	21
methyl dodecanoate $\text{C}_{13}\text{H}_{26}\text{O}_2$ (methyl laurate) [111-82-0] UQDUPQYQJKYHQI-UHFFFAOYSA-N	8.3×10^{-3} 7.5×10^{-3} 3.3×10^{-3} 4.8×10^{-3}		Krop et al. (1997) Dupeux et al. (2022) HSDB (2015) Hilal et al. (2008)	V Q Q Q	260 100

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethyl dodecanoate $\text{C}_{14}\text{H}_{28}\text{O}_2$ (ethyl laurate) [106-33-2] MMXKVMNBHPAILY-UHFFFAOYSA-N	7.7×10^{-3} 3.1×10^{-3}		Krop et al. (1997) Hilal et al. (2008)	V Q	
propyl dodecanoate $\text{C}_{15}\text{H}_{30}\text{O}_2$ (propyl laurate) [3681-78-5] FTBUKOLPOATXGV-UHFFFAOYSA-N	7.7×10^{-3} 2.1×10^{-3}		Krop et al. (1997) Hilal et al. (2008)	V Q	
2-hydroxypropyl dodecanoate $\text{C}_{15}\text{H}_{30}\text{O}_3$ [142-55-2] BHIZVZJETFVJMJ-UHFFFAOYSA-N	9.5×10^{-2}		Ebert et al. (2023)	?	319
dodecanoic acid, 2-hydroxy-1-methylethyl ester $\text{C}_{15}\text{H}_{30}\text{O}_3$ [107328-11-0] SVWZGNLBKFWCMV-UHFFFAOYSA-N	2.6×10^1		Ebert et al. (2023)	?	319
butyl dodecanoate $\text{C}_{16}\text{H}_{32}\text{O}_2$ (butyl laurate) [106-18-3] NDKYEUQMPZIGFN-UHFFFAOYSA-N	7.1×10^{-3} 1.5×10^{-3}		Krop et al. (1997) Hilal et al. (2008)	V Q	
2-ethylhexyl dodecanoate $\text{C}_{20}\text{H}_{40}\text{O}_2$ (2-ethylhexyl laurate) [20292-08-4] LWLRMRFJCCMNML-UHFFFAOYSA-N	3.0×10^{-3} 8.6×10^{-4}		Krop et al. (1997) Hilal et al. (2008)	V Q	
methyl tetradecanoate $\text{C}_{15}\text{H}_{30}\text{O}_2$ (methyl myristate) [124-10-7] ZAZKJZBWRNLDLDS-UHFFFAOYSA-N	5.0×10^{-3} 1.9×10^{-3} 3.1×10^{-3}		Krop et al. (1997) HSDB (2015) Hilal et al. (2008)	V Q Q	100
methyl hexadecanoate $\text{C}_{17}\text{H}_{34}\text{O}_2$ (methyl palmitate) [112-39-0] FLIACVVOZYBSBS-UHFFFAOYSA-N	2.9×10^{-3} 1.1×10^{-3} 1.8×10^{-3}		Krop et al. (1997) HSDB (2015) Hilal et al. (2008)	V Q Q	100

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
isopropyl palmitate $\text{C}_{19}\text{H}_{38}\text{O}_2$ [142-91-6] XUGNVMKQXJXZCD-UHFFFAOYSA-N	2.1×10^{-4}		HSDB (2015)	Q	449
ascorbic palmitate $\text{C}_{22}\text{H}_{38}\text{O}_7$ [137-66-6] QAQJMLQRFWZOBN-LAUBAEHRSA-N	7.0×10^1		HSDB (2015)	Q	100
methyl octadecanoate $\text{C}_{19}\text{H}_{38}\text{O}_2$ (methyl stearate) [112-61-8] HPEUJJPJOZXNMSJ-UHFFFAOYSA-N	1.7×10^{-3} 6.2×10^{-4} 1.1×10^{-3}		Krop et al. (1997) HSDB (2015) Hilal et al. (2008)	V Q Q	100
methyl eicosanoate $\text{C}_{21}\text{H}_{42}\text{O}_2$ (methyl arachidate) [1120-28-1] QGBRLVONZXHAKJ-UHFFFAOYSA-N	1.0×10^{-3}		Krop et al. (1997)	V	
methyl docosanoate $\text{C}_{23}\text{H}_{46}\text{O}_2$ (methyl behenate) [929-77-1] QSQLTHHMFHEFIY-UHFFFAOYSA-N	5.9×10^{-4}		Krop et al. (1997)	V	
cyclopropanecarboxylic acid, methyl ester $\text{C}_5\text{H}_8\text{O}_2$ [2868-37-3] PKAHQJNJPDVTDTP-UHFFFAOYSA-N	4.1×10^{-1} 1.1×10^{-1} 1.4×10^{-1}	6100	Bagno et al. (1991) Hilal et al. (2008) English and Carroll (2001)	T Q Q	475 231, 232
cyclohexanecarboxylic acid, methyl ester $\text{C}_6\text{H}_{11}\text{COOCH}_3$ [4630-82-4] ZQWPRMPSCMSAJU-UHFFFAOYSA-N	1.1×10^{-1} 1.1×10^{-1}	7200	Bagno et al. (1991) English and Carroll (2001)	T Q	475 231, 232
(Z,Z,Z)-9,12,15-octadecatrienoic acid, methyl ester $\text{C}_{19}\text{H}_{32}\text{O}_2$ (methyl linolenate) [301-00-8] DVWSXZIH SUZZKJ-YSTUJMKBSA-N	2.8×10^{-1} 7.2×10^{-3}		Krop et al. (1997) Hilal et al. (2008)	V Q	

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(Z,Z)-9,12-octadecadienoic acid, methyl ester $\text{C}_{19}\text{H}_{34}\text{O}_2$ (methyl linolate) [112-63-0] WTTJVINHCBLGX-NQLNTRKDSA-N	6.2×10^{-2}		Krop et al. (1997)	V	
	4.8×10^{-3}		Hilal et al. (2008)	Q	
(Z)-9-octadecenoic acid, methyl ester $\text{C}_{19}\text{H}_{36}\text{O}_2$ (methyl oleate) [112-62-9] QYDYPVFESGNLHU-KHPPLWFESA-N	1.3×10^{-2}		Krop et al. (1997)	V	
	7.0×10^{-4}		HSDB (2015)	Q	100
	2.5×10^{-3}		Hilal et al. (2008)	Q	
(Z)-13-docosenoic acid, methyl ester $\text{C}_{23}\text{H}_{44}\text{O}_2$ (methyl erucate) [1120-34-9] ZYNDJIBBPLNPOW-KHPPLWFESA-N	5.3×10^{-3}		Krop et al. (1997)	V	
	8.2×10^{-4}		Hilal et al. (2008)	Q	
<i>trans</i> -quercus lactone $\text{C}_9\text{H}_{16}\text{O}_2$ (<i>trans</i> -whisky lactone) [105119-22-0] WNVCMFHPRIBNCW-SFYZADRCSA-N	3.5×10^1		Abney (2021)	Q	401
γ -decalactone $\text{C}_{10}\text{H}_{18}\text{O}_2$ [706-14-9] IFYYFLINQYPWGJ-UHFFFAOYSA-N	5.3×10^1		Abney (2021)	Q	401
γ -dodecalactone $\text{C}_{12}\text{H}_{22}\text{O}_2$ [2305-05-7] WGPCZPLRVAWXPW-UHFFFAOYSA-N	3.7×10^1		Abney (2021)	Q	401
oxacyclohexadecan-2-one $\text{C}_{15}\text{H}_{28}\text{O}_2$ (pentadecalactone) [106-02-5] FKUPPRZPSYCDRS-UHFFFAOYSA-N	4.0×10^{-3}		Amoore and Buttery (1978)	M	
	7.6×10^{-2}		Amoore and Buttery (1978)	V	
2- <i>tert</i> -butylcyclohexyl acetate $\text{C}_{12}\text{H}_{22}\text{O}_2$ [88-41-5] FINAUDUYKVGDS-UHFFFAOYSA-N	9.9×10^{-3}		Zhang et al. (2010)	Q	288, 289
	3.8×10^{-2}		Zhang et al. (2010)	Q	288, 290
	5.3×10^{-1}		Zhang et al. (2010)	Q	288, 291
	7.0×10^{-3}		Zhang et al. (2010)	Q	288, 292

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hedione $\text{C}_{13}\text{H}_{22}\text{O}_3$ [24851-98-7] KVWWIYGFBYDJQC-UHFFFAOYSA-N	7.0×10^1		Dupeux et al. (2022)	Q	260
ethylene brassylate $\text{C}_{15}\text{H}_{26}\text{O}_4$ [105-95-3] XRHCAGNSDHCHFJ-UHFFFAOYSA-N	5.3×10^1		Dupeux et al. (2022)	Q	260
propyl 3-oxo-2-pentylcyclopentaneacetate $\text{C}_{15}\text{H}_{26}\text{O}_3$ [158474-72-7] IPDFPNNPBMREIF-UHFFFAOYSA-N	1.4×10^1		Ebert et al. (2023)	?	319
2-ethyl-3-oxo-butanoic acid, ethyl ester $\text{C}_8\text{H}_{14}\text{O}_3$ [607-97-6] OKANYBNORCUKZ-UHFFFAOYSA-N	3.4		Hilal et al. (2008)	Q	
2-hydroxypropanoic acid, butyl ester $\text{C}_7\text{H}_{14}\text{O}_3$ [138-22-7] MRABAEUHTLLEML-UHFFFAOYSA-N	4.9 2.7 2.9×10^1 2.6 1.6 1.2×10^1 1.2×10^{-1} 6.4×10^1 4.3×10^1		HSDB (2015) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q Q Q Q Q Q	81, 239 81, 240 81, 241 272, 244 245 246 68
methyl propenoate $\text{C}_4\text{H}_6\text{O}_2$ (methyl acrylate) [96-33-3] BAPJBEWLBFYGME-UHFFFAOYSA-N	5.0×10^{-2} 4.9×10^{-2} 5.2×10^{-2} 5.2×10^{-2} 5.8×10^{-2} 6.3×10^{-1} 7.2×10^{-2} 6.2×10^{-2} 6.2×10^{-2} 9.9×10^{-2} 6.0×10^{-2} 5.4×10^{-2} 7.4×10^{-2} 5.2×10^{-2}		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Mackay et al. (1995) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaws (1999)	V V V V X Q Q Q Q Q Q Q Q ?	187 238, 73 243, 244 245 246 247 68 21, 73

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethyl propenoate $\text{C}_5\text{H}_8\text{O}_2$ (ethyl acrylate) [140-88-5] JIGUQPWFLLRLWPJ-UHFFFAOYSA-N	3.9×10^{-2}	4400	Brockbank (2013)	L	
	2.9×10^{-2}		Duchowicz et al. (2020)	V	187
	2.9×10^{-2}		HSDB (2015)	V	
	2.9×10^{-2}		Mackay et al. (2006c)	V	
	2.9×10^{-2}		Mackay et al. (1995)	V	
	3.9×10^{-2}		Yaws (2003)	X	259
	4.7×10^{-2}		Dupeux et al. (2022)	Q	260
	2.5×10^{-1}		Duchowicz et al. (2020)	Q	
	8.8×10^{-2}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	3.5×10^{-2}		Hilal et al. (2008)	Q	
5.3×10^{-2}	Modarresi et al. (2007)	Q	68		
8.8×10^{-2}	Yao et al. (2002)	Q	230		
4.0×10^{-2}	Yaws (1999)	?	21		
2-propenoic acid, butyl ester $\text{C}_7\text{H}_{12}\text{O}_2$ (butyl acrylate) [141-32-2] CQEYYJKEWSMYFG-UHFFFAOYSA-N	1.5×10^{-2}	Duchowicz et al. (2020)	V	187	
	2.1×10^{-2}	HSDB (2015)	V		
	2.9×10^{-1}	Duchowicz et al. (2020)	Q		
	2.6×10^{-2}	Gharagheizi et al. (2012)	Q		
	2.5×10^{-2}	Raventos-Duran et al. (2010)	Q	243, 244	
	2.0×10^{-2}	Raventos-Duran et al. (2010)	Q	245	
	4.9×10^{-2}	Raventos-Duran et al. (2010)	Q	246	
	2.0×10^{-2}	Hilal et al. (2008)	Q		
	4.4×10^{-2}	Modarresi et al. (2007)	Q	68	
	5.2×10^{-2}	Yao et al. (2002)	Q	230, 268	
1.7×10^{-2}	Yaws (1999)	?	21, 12		
2-propenoic acid, 2-methylpropyl ester $\text{C}_7\text{H}_{12}\text{O}_2$ (isobutyl acrylate) [106-63-8] CFVWNXQPGQOHRJ-UHFFFAOYSA-N	1.3×10^{-2}	Duchowicz et al. (2020)	V	187	
	1.6×10^{-2}	HSDB (2015)	V		
	1.1×10^{-1}	Duchowicz et al. (2020)	Q		
	1.4×10^{-2}	Gharagheizi et al. (2012)	Q		
	2.5×10^{-2}	Raventos-Duran et al. (2010)	Q	243, 244	
	2.5×10^{-2}	Raventos-Duran et al. (2010)	Q	245	
	4.9×10^{-2}	Raventos-Duran et al. (2010)	Q	246	
	2.4×10^{-2}	Hilal et al. (2008)	Q		
	3.4×10^{-2}	Modarresi et al. (2007)	Q	68	
	3.9×10^{-2}	Yao et al. (2002)	Q	230	
1.5×10^{-2}	Yaws (1999)	?	21, 73		

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-propenoic acid, 2-ethylhexyl ester $\text{C}_{11}\text{H}_{20}\text{O}_2$ (2-ethylhexyl acrylate) [103-11-7] GOXQRTZXKQZDDN-UHFFFAOYSA-N	2.3×10^{-2}		Duchowicz et al. (2020)	V	187
	2.3×10^{-2}		HSDB (2015)	V	
	2.7×10^{-2}		Yaws (2003)	X	238, 73
	1.3×10^{-1}		Duchowicz et al. (2020)	Q	
	6.2×10^{-3}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	272, 244
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	2.8×10^{-2}		Gharagheizi et al. (2010)	Q	247
	1.2×10^{-2}		Hilal et al. (2008)	Q	
	2.2×10^{-2}		Modarresi et al. (2007)	Q	68
	2.0×10^{-2}		Yao et al. (2002)	Q	230
	2.3×10^{-2}		Yaws (1999)	?	21, 73
2-propenoic acid, 2-hydroxyethyl ester $\text{C}_5\text{H}_8\text{O}_3$ (2-hydroxyethyl acrylate) [818-61-1] OMIGHNLMNHATMP-UHFFFAOYSA-N	1.2×10^3		HSDB (2015)	V	
2-methyl-2-propenoic acid, ethyl ester $\text{C}_6\text{H}_{10}\text{O}_2$ [97-63-2] SUPCQIBBMFXVTL-UHFFFAOYSA-N	1.7×10^{-2}		Duchowicz et al. (2020)	V	187
	1.7×10^{-2}		HSDB (2015)	V	
	1.6×10^{-2}		Hilal et al. (2008)	C	
	8.9×10^{-2}		Duchowicz et al. (2020)	Q	
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	2.9×10^{-2}		Hilal et al. (2008)	Q	
	3.5×10^{-2}		Modarresi et al. (2007)	Q	68
2-methyl-2-propenoic acid, 2-propenyl ester $\text{C}_7\text{H}_{10}\text{O}_2$ (allyl methacrylate) [96-05-9] FBCQUCJYYPMKRO-UHFFFAOYSA-N	2.4×10^{-2}		HSDB (2015)	Q	100
2-methyl-2-propenoic acid, oxiranylmethyl ester $\text{C}_7\text{H}_{10}\text{O}_3$ (glycidyl methacrylate) [106-91-2] VOZRNXHHFUQHIL-UHFFFAOYSA-N	3.2×10^1		HSDB (2015)	Q	100

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
allyl acetoacetate $\text{C}_7\text{H}_{10}\text{O}_3$ [1118-84-9] AXLMPTNTPOWPLT-UHFFFAOYSA-N	1.2×10^1		Ebert et al. (2023)	?	319
2-methyl-2-propenoic acid, propyl ester $\text{C}_7\text{H}_{12}\text{O}_2$ (propyl methacrylate) [2210-28-8] NHARPD SAXCBDDR-UHFFFAOYSA-N	1.8×10^{-2}		HSDB (2015)	Q	100
2-methyl-2-propenoic acid, butyl ester $\text{C}_8\text{H}_{14}\text{O}_2$ (butyl methacrylate) [97-88-1] SOGAXMICEFXMKE-UHFFFAOYSA-N	2.0×10^{-2}		Duchowicz et al. (2020)	V	187
	2.0×10^{-2}		HSDB (2015)	V	
	9.9×10^{-2}		Duchowicz et al. (2020)	Q	
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	1.8×10^{-2}		Hilal et al. (2008)	Q	
	4.0×10^{-2}		Modarresi et al. (2007)	Q	68
2-methyl-2-propenoic acid, 2-methylpropyl ester $\text{C}_8\text{H}_{14}\text{O}_2$ [97-86-9] RUMACXVDVNRZJZ-UHFFFAOYSA-N	1.9×10^{-2}		Duchowicz et al. (2020)	V	187
	1.9×10^{-2}		HSDB (2015)	V	
	3.9×10^{-2}		Duchowicz et al. (2020)	Q	
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	272, 244
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	2.1×10^{-2}		Hilal et al. (2008)	Q	
	2.7×10^{-2}		Modarresi et al. (2007)	Q	68
2-methyl-2-propenoic acid, 1,2-ethanediylobis(oxy-2,1-ethanediy) ester $\text{C}_{14}\text{H}_{22}\text{O}_6$ [109-16-0] HWSSEYVMGDIFMH-UHFFFAOYSA-N	5.8×10^6		HSDB (2015)	Q	100
methyl methacrylate $\text{C}_5\text{H}_8\text{O}_2$ [80-62-6] VVQNEPGJFQJSBK-UHFFFAOYSA-N	2.9×10^{-2}	5300	Brockbank (2013)	L	1
	4.3×10^{-2}	7700	Hiatt (2013)	M	
	3.1×10^{-2}		Duchowicz et al. (2020)	V	187
	3.1×10^{-2}		HSDB (2015)	V	
	3.1×10^{-2}	5300	Dohnal et al. (2010)	V	1
	3.1×10^{-2}		Mackay et al. (2006c)	V	
	3.0×10^{-2}		Lide and Frederikse (1995)	V	
	3.1×10^{-2}		Mackay et al. (1995)	V	
	2.4×10^{-1}		Duchowicz et al. (2020)	Q	
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	272, 244

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	4.4×10^{-2}		Hilal et al. (2008)	Q	
	3.5×10^{-2}		Modarresi et al. (2007)	Q	68
			Burkholder et al. (2019)	W	516
			Burkholder et al. (2015)	W	517
(<i>E</i>)-3-hexenyl ethanoate $\text{C}_8\text{H}_{14}\text{O}_2$ [3681-82-1] NPFVVOAXDOBMCE-SNAWJCMRSA-N	3.3×10^{-2}		Karl et al. (2003)	M	
(<i>Z</i>)-3-hexenyl ethanoate $\text{C}_8\text{H}_{14}\text{O}_2$ [3681-71-8] NPFVVOAXDOBMCE-PLNGDYQASA-N	3.1×10^{-2}		Karl et al. (2003)	M	
ethenyl ethanoate $\text{CH}_3\text{COOCHCH}_2$ (vinyl acetate) [108-05-4] XTXRWKRVRITETP-UHFFFAOYSA-N	2.0×10^{-2}	4500	Burkholder et al. (2019)	L	
	2.0×10^{-2}	4500	Burkholder et al. (2015)	L	
	2.0×10^{-2}	4600	Brockbank (2013)	L	1
	2.0×10^{-2}	4400	Böhme et al. (2008)	M	
	1.9×10^{-2}		HSDB (2015)	V	
	2.0×10^{-2}	4600	Dohnal et al. (2010)	V	1
	1.6×10^{-2}		Mackay et al. (2006c)	V	
	2.0×10^{-2}		Lide and Frederikse (1995)	V	
	1.6×10^{-2}		Mackay et al. (1995)	V	
	2.0×10^{-2}		Yaws (2003)	X	259
	2.0×10^{-2}		Yaws (2003)	X	238
	1.7×10^{-2}		Goldstein (1982)	X	448
	1.7×10^{-2}	2600	Goldstein (1982)	X	299
	1.2×10^{-2}		Dupeux et al. (2022)	Q	260
	5.8×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	2.2×10^{-2}		Gharagheizi et al. (2010)	Q	247
	6.9×10^{-2}		Hilal et al. (2008)	Q	
	6.6×10^{-2}		Modarresi et al. (2007)	Q	68
	2.0×10^{-2}		Yaws (1999)	?	21
(7 <i>E</i> ,9 <i>Z</i>)-dodecadienyl acetate $\text{C}_{14}\text{H}_{24}\text{O}_2$ [54364-62-4] LLRZUAWETKPZJO-SCFJQAPRSA-N	1.2×10^{-2}		Ebert et al. (2023)	?	319

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(9Z,12E)-9,12-tetradecadienyl acetate $\text{C}_{16}\text{H}_{28}\text{O}_2$ [30507-70-1] ZZGJZGSVLNSDPG-FDTUMDBZSA-N	1.7×10^{-1}		Ebert et al. (2023)	?	319
isoambrettolide $\text{C}_{16}\text{H}_{28}\text{O}_2$ [28645-51-4] QILMAYXCYBTEDM-IWQZZHSRSA-N	2.5		Dupeux et al. (2022)	Q	260
vetyveryl acetate $\text{C}_{17}\text{H}_{26}\text{O}_2$ [117-98-6] UAVFEMBKDRODDE-UHFFFAOYSA-N	2.2		Dupeux et al. (2022)	Q	260
hydroprene $\text{C}_{17}\text{H}_{30}\text{O}_2$ [41096-46-2] FYQGBXGJFWXIPP-UEVLXMDPSA-N	5.1×10^{-2}		Ebert et al. (2023)	?	317
empenthrin $\text{C}_{18}\text{H}_{26}\text{O}_2$ [54406-48-3] YUGWDVYLFSETPE-UHFFFAOYSA-N	2.9×10^{-2}		Ebert et al. (2023)	?	317
3-(4-methoxyphenyl)-2-propenoic acid, 2-ethylhexyl ester $\text{C}_{18}\text{H}_{26}\text{O}_3$ (octinoxate) [5466-77-3] YBGZDTIWKVFICR-JLHYYAGUSA-N	1.2		HSDB (2015)	Q	449
kinoprene $\text{C}_{18}\text{H}_{28}\text{O}_2$ [42588-37-4] FZRBKIRIBLNOAM-WHVZTFIZSA-N	1.8×10^{-1}		Ebert et al. (2023)	?	317
allethrin $\text{C}_{19}\text{H}_{26}\text{O}_3$ [584-79-2] ZCVAOQKBXKSDMS-UHFFFAOYSA-N	6.0×10^1		Ebert et al. (2023)	?	319
S-methoprene $\text{C}_{19}\text{H}_{34}\text{O}_3$ [65733-16-6] NFGXHKASABOEWEW-GYMWBFFJFSA-N	1.5		Ebert et al. (2023)	?	319

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methyl benzoate $\text{C}_6\text{H}_5\text{COOCH}_3$ [93-58-3] QPJVMBTYPHYUOC-UHFFFAOYSA-N	2.9×10^{-1}	6400	Brockbank (2013)	L	1
	3.0×10^{-1}		Duchowicz et al. (2020)	V	187
	3.0×10^{-1}		HSDB (2015)	V	
	3.0×10^{-1}		Mackay et al. (2006c)	V	
	3.0×10^{-1}		Mackay et al. (1995)	V	
	2.8×10^{-1}		Meylan and Howard (1991)	V	
	5.6×10^{-1}		Hine and Mookerjee (1975)	V	
	3.1×10^{-1}		Abraham et al. (1994a)	R	
	5.8×10^{-1}	6300	Bagno et al. (1991)	T	475
	2.8×10^{-1}		Yaws (2003)	X	259
	2.6×10^{-1}		Dupeux et al. (2022)	Q	260
	1.4		Duchowicz et al. (2020)	Q	
	2.9×10^{-1}		Zhang et al. (2010)	Q	288, 289
	3.6×10^{-1}		Zhang et al. (2010)	Q	288, 290
	9.5×10^{-1}		Zhang et al. (2010)	Q	288, 291
	6.1×10^{-1}		Zhang et al. (2010)	Q	288, 292
	2.9×10^{-1}		Hilal et al. (2008)	Q	
	1.6×10^{-1}	5100	Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	
	3.2×10^{-1}		Yaffe et al. (2003)	Q	249, 250
6.8×10^{-1}	Yao et al. (2002)		Q	230	
1.1	English and Carroll (2001)		Q	231, 275	
3.0×10^{-1}	Katritzky et al. (1998)		Q		
5.6×10^{-1}	Suzuki et al. (1992)		Q	233	
2.8×10^{-1}	Meylan and Howard (1991)		Q		
2.7×10^{-1}	3500	Nirmalakhandan and Speece (1988)	Q		
		Kühne et al. (2005)	?		
2.8×10^{-1}		Yaws (1999)	?	21	
5.6×10^{-1}		Abraham et al. (1990)	?		
ethyl benzoate $\text{C}_6\text{H}_5\text{COOC}_2\text{H}_5$ [93-89-0] MTZQAGJQAFMTAQ-UHFFFAOYSA-N	1.7×10^{-1}	6300	Brockbank (2013)	L	1
	1.3×10^{-1}		Duchowicz et al. (2020)	V	187
	9.7×10^{-2}		Mackay et al. (2006c)	V	
	9.7×10^{-2}		Mackay et al. (1995)	V	
	1.9×10^{-1}		Abraham et al. (1994a)	R	
	1.4×10^{-1}		Yaws (2003)	X	259
	1.5×10^{-1}		Dupeux et al. (2022)	Q	260
	5.2×10^{-1}		Duchowicz et al. (2020)	Q	
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	2.1×10^{-1}		Zhang et al. (2010)	Q	288, 289
	2.1×10^{-1}		Zhang et al. (2010)	Q	288, 290
	5.1×10^{-1}		Zhang et al. (2010)	Q	288, 291
	4.8×10^{-1}		Zhang et al. (2010)	Q	288, 292
1.9×10^{-1}		Hilal et al. (2008)	Q		

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.6×10^{-1}		Modarresi et al. (2007)	Q	68
	1.9×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	6.7×10^{-1}		English and Carroll (2001)	Q	231, 232
	5.1×10^{-1}		Katritzky et al. (1998)	Q	
	2.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.4×10^{-1}		Yaws (1999)	?	21
	1.9×10^{-1}		Abraham et al. (1990)	?	
2-hydroxybenzoic acid methyl ester $\text{C}_8\text{H}_8\text{O}_3$ (methyl salicylate) [119-36-8] OSWPMRLSEDHDFU-UHFFFAOYSA-N	1.6 3.3×10^{-1} 1.0×10^{-1} 1.1×10^1 7.8 1.8×10^1 9.3 1.0×10^{-1} 1.0	9500	Brockbank (2013) Karl et al. (2008) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Bartelt-Hunt et al. (2008) Yaws (1999)	L M V V Q Q Q ? ?	1 187 68 21 21, 38
benzoic acid, 4-methyl-, methyl ester $\text{C}_9\text{H}_{10}\text{O}_2$ [99-75-2] QSSJZLPUHJDYKF-UHFFFAOYSA-N	2.6×10^{-1} 3.9×10^{-1} 1.7 3.5×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
acetylsalicylic acid $\text{C}_9\text{H}_8\text{O}_4$ (aspirin) [50-78-2] BSYNRYMUTXBXSQ-UHFFFAOYSA-N	7.6×10^3 1.5×10^4 1.5×10^5 6.2×10^2 4.9×10^4 7.8×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020) Abraham et al. (2019) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	V Q Q Q Q Q	187 272, 244 245 246
1,4-benzenedicarboxylic acid, dimethyl ester $\text{C}_{10}\text{H}_{10}\text{O}_4$ [120-61-6] WOZVHXUHUFLZGK-UHFFFAOYSA-N	7.4×10^{-2} 7.6×10^{-2} 2.2×10^2 4.4×10^1 1.3×10^2 5.3×10^1 9.2×10^1 2.4		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Modarresi et al. (2007)	V V Q Q Q Q Q Q	187 288, 289 288, 290 288, 291 288, 292 68
butyl benzoate $\text{C}_{11}\text{H}_{14}\text{O}_2$ [136-60-7] XSIFPSYPOVKYCO-UHFFFAOYSA-N	2.5×10^{-1} 1.0×10^{-1} 5.7×10^{-1} 2.0×10^{-1} 9.9×10^{-2} 1.2×10^{-1} 1.2×10^{-1}		Duchowicz et al. (2020) Dupeux et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Zhang et al. (2010)	V Q Q Q Q Q Q	187 260 243, 244 245 246 288, 289

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.0×10^{-1}		Zhang et al. (2010)	Q	288, 290
	5.2×10^{-1}		Zhang et al. (2010)	Q	288, 291
	3.2×10^{-1}		Zhang et al. (2010)	Q	288, 292
	8.3×10^{-2}		Modarresi et al. (2007)	Q	68
diphenyl carbonate	1.2×10^{-1}		HSDB (2015)	Q	100
$\text{C}_{13}\text{H}_{10}\text{O}_3$	1.2×10^{-1}		Zhang et al. (2010)	Q	288, 289
[102-09-0]	1.6×10^1		Zhang et al. (2010)	Q	288, 290
ROORDVPLFPIABK-UHFFFAOYSA-N	9.5×10^{-1}		Zhang et al. (2010)	Q	288, 291
	1.2×10^2		Zhang et al. (2010)	Q	288, 292
benzyl benzoate	1.8		Mackay et al. (2006c)	V	
$\text{C}_{14}\text{H}_{12}\text{O}_2$	1.8		Mackay et al. (1995)	V	
[120-51-4]	1.7		Dupeux et al. (2022)	Q	260
SESFYRSPDFLNCH-UHFFFAOYSA-N					
<i>trans</i> -ethylcinnamate	2.3		Duchowicz et al. (2020)	V	187
$\text{C}_{11}\text{H}_{12}\text{O}_2$	1.4		Abney (2021)	Q	401
[103-36-6]	6.5×10^{-1}		Duchowicz et al. (2020)	Q	
KBEBGUQPQBELIU-CMDGGOBGSA-N					
dipropylene glycol dibenzoate	7.2×10^2		Duchowicz et al. (2020)	V	187
$\text{C}_{20}\text{H}_{22}\text{O}_5$	9.4×10^2		Duchowicz et al. (2020)	Q	
[27138-31-4]					
CGLQOIMEUPORRI-UHFFFAOYSA-N					
dimethyl phthalate	5.1×10^1	8000	Brockbank (2013)	L	1
$\text{C}_{10}\text{H}_{10}\text{O}_4$	2.3×10^1		Chao et al. (2017)	M	
[131-11-3]	5.0×10^1		Duchowicz et al. (2020)	V	187
NIQCNHVCWTJSM-UHFFFAOYSA-N	4.9×10^1		HSDB (2015)	V	
	9.3×10^1		Mackay et al. (2006c)	V	
	2.0×10^1		Saçan et al. (2005)	V	
	1.0×10^2		Cousins and Mackay (2000)	V	
	8.1×10^1		Staples et al. (1997)	V	
	9.1×10^1		Lide and Frederikse (1995)	V	
	9.1×10^1		Mackay et al. (1995)	V	
	5.0×10^1		Hwang et al. (1992)	V	
	9.0		Wolfe et al. (1980)	V	
	8.8×10^1		Yaws (2003)	X	238, 12
	2.9×10^1		Goldstein (1982)	X	448
	3.0×10^1	5700	Goldstein (1982)	X	299
	2.3×10^1		McCarty (1980)	X	370
	5.0×10^1		Ryan et al. (1988)	C	
	2.2×10^2		Duchowicz et al. (2020)	Q	
	4.9×10^1		Raventos-Duran et al. (2010)	Q	243, 244
	3.9×10^2		Raventos-Duran et al. (2010)	Q	245
	4.9×10^1		Raventos-Duran et al. (2010)	Q	246
	8.2×10^1		Gharagheizi et al. (2010)	Q	247
	1.7×10^2		Hilal et al. (2008)	Q	

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	9.6		Saçan et al. (2005)	Q	
	5.4×10^1		Yaws (1999)	?	21, 12
1,4-cyclohexanedicarboxylic acid, dimethyl ester $\text{C}_{10}\text{H}_{16}\text{O}_4$ (dimethyl hexahydroterephthalate) [94-60-0] LNGAGQAGYITKCW-UHFFFAOYSA-N	1.0×10^2		HSDB (2015)	V	
1,3-benzenedicarboxylic acid, dimethyl ester $\text{C}_{10}\text{H}_{10}\text{O}_4$ (dimethyl isophthalate) [1459-93-4] VNGOYPQMJFJDLV-UHFFFAOYSA-N	1.6×10^2		HSDB (2015)	Q	100
diethyl phthalate $\text{C}_{12}\text{H}_{14}\text{O}_4$ [84-66-2] FLKPEMZONWLCSK-UHFFFAOYSA-N	6.0×10^1	10000	Brockbank (2013)	L	1
	2.2×10^1		Chao et al. (2017)	M	
	1.6×10^1		Duchowicz et al. (2020)	V	187
	1.6×10^1		HSDB (2015)	V	
	2.2×10^1		Mackay et al. (2006c)	V	
	4.1×10^1		Cousins and Mackay (2000)	V	
	3.7×10^1		Staples et al. (1997)	V	
	2.1×10^1		Lide and Frederikse (1995)	V	
	1.0×10^2		Mackay et al. (1995)	V	
	4.9×10^2		Wolfe et al. (1980)	V	
	6.9×10^1		Yaws (2003)	X	238
	1.2×10^1		Goldstein (1982)	X	448
	1.2×10^1	5600	Goldstein (1982)	X	299
	2.1×10^{-1}		Ryan et al. (1988)	C	
	5.8×10^{-1}		Petrsek et al. (1983)	C	
	3.4×10^1		Duchowicz et al. (2020)	Q	
	1.5×10^1		Gharagheizi et al. (2012)	Q	
	2.5×10^1		Zhang et al. (2010)	Q	288, 289
	1.5×10^2		Zhang et al. (2010)	Q	288, 290
	2.7×10^2		Zhang et al. (2010)	Q	288, 291
	5.6×10^1		Zhang et al. (2010)	Q	288, 292
	6.5×10^1		Gharagheizi et al. (2010)	Q	247
	7.7×10^1		Hilal et al. (2008)	Q	
		12000	Kühne et al. (2005)	Q	
	5.8		Saçan et al. (2005)	Q	
	2.1×10^1		Yao et al. (2002)	Q	230
	1.6×10^1		Bartelt-Hunt et al. (2008)	?	21
		12000	Kühne et al. (2005)	?	
	6.9×10^1		Yaws (1999)	?	21

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dipropyl phthalate $C_{14}H_{18}O_4$ [131-16-8] MQHNKCZKNAJROC-UHFFFAOYSA-N	2.2×10^1		Brockbank (2013)	L	
	2.4×10^1		Duchowicz et al. (2020)	V	187
	1.8×10^1		Cousins and Mackay (2000)	V	518
	3.3		Cousins and Mackay (2000)	V	518
	3.2×10^1		Staples et al. (1997)	V	
	4.1×10^1		Duchowicz et al. (2020)	Q	
	1.6×10^1		Raventos-Duran et al. (2010)	Q	272, 244
	7.8×10^1		Raventos-Duran et al. (2010)	Q	245
	1.6×10^1		Raventos-Duran et al. (2010)	Q	246
	2.4×10^1		Saçan et al. (2005)	Q	
diallyl phthalate $C_{14}H_{14}O_4$ [131-17-9] QUDWYFHPNIMBFC-UHFFFAOYSA-N	3.5×10^1		Saçan et al. (2005)	V	
	2.3×10^1		Cousins and Mackay (2000)	V	
	3.5×10^1		Staples et al. (1997)	V	
	2.5×10^1		HSDB (2015)	Q	100
	1.7×10^1		Saçan et al. (2005)	Q	
bis(2-methoxyethyl) phthalate $C_{14}H_{18}O_5$ [117-82-8] HSUIVCLOAAJSRE-UHFFFAOYSA-N	2.3×10^1		Fishbein and Albro (1972)	V	12
	3.5×10^7		HSDB (2015)	Q	100
dibutyl phthalate $C_{16}H_{22}O_4$ [84-74-2] DOIRQSBPFJWKBE-UHFFFAOYSA-N	1.1×10^1	12000	Brockbank (2013)	L	1, 519
	9.3		Lee et al. (2012)	M	
	5.5		Atlas et al. (1983)	M	73
	2.2×10^1		Mackay et al. (2006c)	V	
	2.7×10^1		Saçan et al. (2005)	V	
	7.5		Cousins and Mackay (2000)	V	
	1.1×10^1		Staples et al. (1997)	V	
	2.2×10^1		Lide and Frederikse (1995)	V	
	2.0×10^1		Mackay et al. (1995)	V	
	2.6×10^2		Hwang et al. (1992)	V	
	7.6		Wolfe et al. (1980)	V	
	5.6×10^1		Yaws (2003)	X	238, 12
	1.6×10^{-1}		McCarty (1980)	X	370
	3.4×10^1		Ryan et al. (1988)	C	
	5.6×10^1		Gharagheizi et al. (2010)	Q	247
	2.9×10^1		Hilal et al. (2008)	Q	
	1.1		Modarresi et al. (2007)	Q	68
	14000	Kühne et al. (2005)	Q		
3.7×10^1		Saçan et al. (2005)	Q		
	13000	Kühne et al. (2005)	?		
2.7×10^1		Yaws (1999)	?	21, 12	
diisobutyl phthalate $C_{16}H_{22}O_4$ [84-69-5] MGWAVDBGNNKXQV-UHFFFAOYSA-N	3.5		HSDB (2015)	V	
	7.5		Cousins and Mackay (2000)	V	
	5.4×10^1		Staples et al. (1997)	V	
	3.1×10^1		Saçan et al. (2005)	Q	

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2-benzenedicarboxylic acid, butyl cyclohexyl ester $\text{C}_{18}\text{H}_{24}\text{O}_4$ (butyl cyclohexyl phthalate) [84-64-0] BHKLONWXRPNJAE-UHFFFAOYSA-N	1.0×10^1		HSDB (2015)	Q	100
butyl glycolyl butyl phthalate $\text{C}_{18}\text{H}_{24}\text{O}_6$ [85-70-1] GOJJCZVPJCKEBQV-UHFFFAOYSA-N	4.7×10^2		HSDB (2015)	Q	100
diamyl phthalate $\text{C}_{18}\text{H}_{26}\text{O}_4$ [131-18-0] IPKKHRVROFYTEK-UHFFFAOYSA-N	1.1×10^1		HSDB (2015)	Q	100
butyl benzyl phthalate $\text{C}_{19}\text{H}_{20}\text{O}_4$ [85-68-7] IRIAEXORFWYRCZ-UHFFFAOYSA-N	1.0×10^2 7.8 7.6 7.5 1.9×10^1 4.9 1.3×10^1 7.8 9.6 2.9×10^2 3.2×10^1 >9.9		Lee et al. (2012) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Saçan et al. (2005) Cousins and Mackay (2000) Staples et al. (1997) Mackay et al. (1995) Ryan et al. (1988) Duchowicz et al. (2020) Saçan et al. (2005) Petrasek et al. (1983)	M V V V V V V V C Q Q E	187
dihexyl phthalate $\text{C}_{20}\text{H}_{30}\text{O}_4$ [84-75-3] KCXZNSGUUQJJTR-UHFFFAOYSA-N	8.3 3.8×10^{-1} 3.8×10^{-1} 1.4 2.2×10^{-1} 5.5×10^1 1.6×10^1		Brockbank (2013) Duchowicz et al. (2020) HSDB (2015) Cousins and Mackay (2000) Staples et al. (1997) Duchowicz et al. (2020) Saçan et al. (2005)	L V V V V Q Q	187
butyl 2-ethylhexyl phthalate $\text{C}_{20}\text{H}_{30}\text{O}_4$ [85-69-8] AVOLBYOSCILFLL-UHFFFAOYSA-N	2.1 2.5×10^1 4.7 6.9×10^1		Cousins and Mackay (2000) Staples et al. (1997) HSDB (2015) Saçan et al. (2005)	V V Q Q	100
diphenyl terephthalate $\text{C}_{20}\text{H}_{14}\text{O}_4$ [1539-04-4] HPGJOUYGWKFYQW-UHFFFAOYSA-N	3.2×10^2 4.3×10^4 2.7×10^4 7.7×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dicyclohexyl phthalate $\text{C}_{20}\text{H}_{26}\text{O}_4$ [84-61-7] VOWAEIGWURALJQ-UHFFFAOYSA-N	9.9×10^1 9.9×10^1 4.8×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
bis(2-butoxyethyl) phthalate $\text{C}_{20}\text{H}_{30}\text{O}_6$ [117-83-9] GMCJNODIWQEOAI-UHFFFAOYSA-N	4.9×10^6		HSDB (2015)	Q	100
diheptyl phthalate $\text{C}_{22}\text{H}_{34}\text{O}_4$ [3648-21-3] JQCXWCOOWVGKMT-UHFFFAOYSA-N	5.9×10^{-1} 2.8 8.9×10^{-1}		Cousins and Mackay (2000) HSDB (2015) Saçan et al. (2005)	V Q Q	100
diethyl phthalate $\text{C}_{24}\text{H}_{38}\text{O}_4$ [117-84-0] MQIUGAXCHLFZKX-UHFFFAOYSA-N	3.8 3.8 9.6×10^{-2} 2.5×10^{-1} 9.6×10^{-2} 1.8 1.8 8.9×10^1 3.4×10^1 6.2×10^1 7.2×10^1 6.4 >9.9 7.6×10^1		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Cousins and Mackay (2000) Staples et al. (1997) Mackay et al. (1995) Wolfe et al. (1980) Yaws (2003) Ryan et al. (1988) Duchowicz et al. (2020) Gharagheizi et al. (2010) Saçan et al. (2005) Petrasek et al. (1983) Yaws (1999)	V V V V V V V X C Q Q Q E ?	187 238, 80 247 21, 80
diisooctyl phthalate $\text{C}_{24}\text{H}_{38}\text{O}_4$ [27554-26-3] IJFPVINAQGWBRJ-UHFFFAOYSA-N	3.1×10^{-1} 3.2×10^{-1} 2.5×10^{-1} 9.5 1.5×10^2		Duchowicz et al. (2020) HSDB (2015) Cousins and Mackay (2000) Duchowicz et al. (2020) Saçan et al. (2005)	V V V Q Q	187
decyl hexyl phthalate $\text{C}_{24}\text{H}_{38}\text{O}_4$ [25724-58-7] OMQBXAQAHHFSST-UHFFFAOYSA-N	1.6×10^2		Saçan et al. (2005)	Q	
bis(2-ethylhexyl)-phthalate $\text{C}_{24}\text{H}_{38}\text{O}_4$ (DEHP) [117-81-7] BJQHLKABXJIVAM-UHFFFAOYSA-N	3.7×10^1 3.7×10^1 5.8×10^{-1} 1.4×10^1 2.5×10^{-1} 5.8×10^{-1} 3.7×10^1 6.7×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Saçan et al. (2005) Cousins and Mackay (2000) Staples et al. (1997) Mackay et al. (1995) Meylan and Howard (1991)	V V V V V V V V	187

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.4×10^{-2}		Riederer (1990)	V	
	2.2×10^1		Wolfe et al. (1980)	V	
	3.4×10^1		Ryan et al. (1988)	C	
	8.2×10^1		Petrasek et al. (1983)	C	
	9.5		Duchowicz et al. (2020)	Q	
	2.5×10^1		Saçan et al. (2005)	Q	
	8.4×10^{-1}		Meylan and Howard (1991)	Q	
	3.7×10^1		Bartelt-Hunt et al. (2008)	?	21
bis(2-ethylhexyl) terephthalate $\text{C}_{24}\text{H}_{38}\text{O}_4$ [6422-86-2] RWPICVVBGZBXNA-UHFFFAOYSA-N	9.9×10^{-1}		HSDB (2015)	Q	100
dinonyl phthalate $\text{C}_{26}\text{H}_{42}\text{O}_4$ [84-76-4] DROMNWUQASBTFM-UHFFFAOYSA-N	1.1×10^{-1}		Cousins and Mackay (2000)	V	
	7.0×10^{-1}		HSDB (2015)	Q	100
	3.0×10^1		Saçan et al. (2005)	Q	
diisononyl phthalate $\text{C}_{26}\text{H}_{42}\text{O}_4$ [28553-12-0] HBGGXOJOCNVPFY-UHFFFAOYSA-N	6.6		Duchowicz et al. (2020)	V	187
	6.6		HSDB (2015)	V	
	1.1×10^{-1}		Cousins and Mackay (2000)	V	
	9.9		Duchowicz et al. (2020)	Q	
	3.3×10^1		Saçan et al. (2005)	Q	
didecyl phthalate $\text{C}_{28}\text{H}_{46}\text{O}_4$ [84-77-5] PGIBJVOPLXHHGS-UHFFFAOYSA-N	4.6×10^{-2}		Cousins and Mackay (2000)	V	
	3.5×10^{-1}		HSDB (2015)	Q	100
diisodecyl phthalate $\text{C}_{28}\text{H}_{46}\text{O}_4$ [26761-40-0] ZVFDTKUVRCTHQE-UHFFFAOYSA-N	8.9		Duchowicz et al. (2020)	V	187
	9.0		HSDB (2015)	V	
	3.8×10^1		Saçan et al. (2005)	V	
	4.6×10^{-2}		Cousins and Mackay (2000)	V	
	1.1×10^1		Yaws (2003)	X	238, 80
	1.0×10^1		Duchowicz et al. (2020)	Q	
	1.3×10^1		Gharagheizi et al. (2010)	Q	247
	2.4×10^1		Saçan et al. (2005)	Q	
	8.9		Yaws (1999)	?	21, 80
diundecyl phthalate $\text{C}_{30}\text{H}_{50}\text{O}_4$ [3648-20-2] QQVHEQUEHCEAKS-UHFFFAOYSA-N	3.3×10^1		Saçan et al. (2005)	V	
	2.0×10^{-2}		Cousins and Mackay (2000)	V	
	1.8×10^{-1}		HSDB (2015)	Q	100
	1.4×10^1		Saçan et al. (2005)	Q	
ditridecyl phthalate $\text{C}_{34}\text{H}_{58}\text{O}_4$ [119-06-2] YCZJVRCZIPDYHH-UHFFFAOYSA-N	3.6×10^{-3}		Cousins and Mackay (2000)	V	
	4.5×10^{-2}		HSDB (2015)	Q	100
	7.9×10^1		Saçan et al. (2005)	Q	

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethanedioic acid, dimethyl ester $\text{C}_4\text{H}_6\text{O}_4$ (dimethyl oxalate) [553-90-2] LOMVENUNSWAXEN-UHFFFAOYSA-N	3.4		Duchowicz et al. (2020)	V	187
	2.6×10^1		Duchowicz et al. (2020)	Q	
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	1.6×10^1		Raventos-Duran et al. (2010)	Q	245
	3.9		Raventos-Duran et al. (2010)	Q	246
	6.9		Hilal et al. (2008)	Q	
ethanedioic acid, diethyl ester $\text{C}_6\text{H}_{10}\text{O}_4$ [95-92-1] WYACBZDAHNBPPB-UHFFFAOYSA-N	4.6×10^{-1}		Modarresi et al. (2007)	Q	68
	4.5		Duchowicz et al. (2020)	V	187
ethanedioic acid, diethyl ester $\text{C}_6\text{H}_{10}\text{O}_4$ [95-92-1] WYACBZDAHNBPPB-UHFFFAOYSA-N	6.4		Duchowicz et al. (2020)	Q	
	3.8×10^1	11000	Katrib et al. (2003)	M	
propanedioic acid, dimethyl ester $\text{C}_5\text{H}_8\text{O}_4$ (dimethyl malonate) [108-59-8] BEPAFCGSDWSTEL-UHFFFAOYSA-N					
	3.9	7500	Brockbank (2013)	L	1
	4.7		Duchowicz et al. (2020)	V	187
	7.9		Duchowicz et al. (2020)	Q	
	2.0		Raventos-Duran et al. (2010)	Q	243, 244
	4.9		Raventos-Duran et al. (2010)	Q	245
	1.2×10^1		Raventos-Duran et al. (2010)	Q	246
	3.9		Hilal et al. (2008)	Q	
	5.0×10^{-1}		Modarresi et al. (2007)	Q	68
		5900	Kühne et al. (2005)	Q	
	4.2		Bartelt-Hunt et al. (2008)	?	21
		6400	Kühne et al. (2005)	?	
4.1		Yaws (1999)	?	21, 14	
butanedioic acid, dimethyl ester $\text{C}_6\text{H}_{10}\text{O}_4$ (dimethyl succinate) [106-65-0] MUXOBHXGJLMRAB-UHFFFAOYSA-N	3.0×10^1	8500	Katrib et al. (2003)	M	
	1.5×10^2		HSDB (2015)	Q	100
		7100	Kühne et al. (2005)	Q	
		7000	Kühne et al. (2005)	?	
diethyl succinate $\text{C}_8\text{H}_{14}\text{O}_4$ [123-25-1] DKMROQRQHGEIOW-UHFFFAOYSA-N	1.9×10^1		Duchowicz et al. (2020)	V	187
	9.3		Duchowicz et al. (2020)	Q	
	3.9×10^1		Raventos-Duran et al. (2010)	Q	243, 244
	4.9		Raventos-Duran et al. (2010)	Q	245
	9.9		Raventos-Duran et al. (2010)	Q	246
	4.0		Hilal et al. (2008)	Q	
	1.3		Modarresi et al. (2007)	Q	68

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(Z)-2-butenedioic acid dimethyl ester $C_6H_8O_4$ (dimethyl maleate) [624-48-6] LDCRRTXIJACKKU-ARJAWSKDSA-N	1.4×10^1 5.2×10^1 1.2×10^1 3.9×10^1 7.8×10^1 2.3×10^1 1.6		Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q Q Q Q	187 272, 244 245 246 68
(E)-2-butenedioic acid dimethyl ester $C_6H_8O_4$ (dimethyl fumarate) [624-49-7] LDCRRTXIJACKKU-ONEGZZNKA-N	1.4×10^1		HSDB (2015)	Q	100
pentanedioic acid, dimethyl ester $C_7H_{12}O_4$ [1119-40-0] XTDYIOOONNVFMA-UHFFFAOYSA-N	1.5×10^1 6.9×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
diethyl glutarate $C_9H_{16}O_4$ [818-38-2] OUWSNHWQZPEFEX-UHFFFAOYSA-N	1.7×10^1		Ebert et al. (2023)	?	317
diethyl pimelate $C_{11}H_{20}O_4$ [2050-20-6] LKKOGZVQGGUUVHF-UHFFFAOYSA-N	2.2×10^1 1.3×10^1 1.5 8.6×10^{-1} 2.2×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Bartelt-Hunt et al. (2008)	V Q Q Q ?	187 68 21
1,3-benzenedicarboxylic acid, diethyl ester $C_{12}H_{14}O_4$ [636-53-3] JLVWYVWLMFVCDI-UHFFFAOYSA-N	2.5×10^1 1.9×10^1 2.9×10^7 5.6×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
dibutyl maleate $C_{12}H_{20}O_4$ [105-76-0] JBSLOWBPDRZSMB-FPLPWBNSA-N	2.6×10^1 1.5×10^1 2.5 4.9 1.2×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	V Q Q Q Q	187 272, 244 245 246
dimethyl sebacate $C_{12}H_{22}O_4$ (decanedioic acid, dimethyl ester) [106-79-6] ALOUNLDAKADEEB-UHFFFAOYSA-N	1.8×10^1		Ebert et al. (2023)	?	317

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,6-naphthalenedicarboxylic acid, dimethyl ester $\text{C}_{14}\text{H}_{12}\text{O}_4$ [840-65-3] GYUVMLBYMPKZAZ-UHFFFAOYSA-N	4.5×10^2		Zhang et al. (2010)	Q	288, 289
diisooctyl adipate $\text{C}_{22}\text{H}_{42}\text{O}_4$ [1330-86-5] CJFLBOQMPJCWLR-UHFFFAOYSA-N	1.9×10^{-1}		HSDB (2015)	Q	100
di-(2-ethylhexyl)-adipate $\text{C}_{22}\text{H}_{42}\text{O}_4$ [103-23-1] SAOKZLXYCUGLFA-UHFFFAOYSA-N	2.3×10^1 4.3×10^{-1} 4.0×10^{-1}		Felder et al. (1986) Hilal et al. (2008) Modarresi et al. (2007)	M Q Q	88 68
peroxybenzoic acid, <i>tert</i> -butyl ester $\text{C}_{11}\text{H}_{14}\text{O}_3$ [614-45-9] GJBRNHKUVLOCEB-UHFFFAOYSA-N	4.7×10^{-2} 4.7×10^{-2} 1.8×10^{-1} 8.2 5.4		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
neodecaneperoxoic acid, 1,1-dimethylethyl ester $\text{C}_{14}\text{H}_{28}\text{O}_3$ [26748-41-4] NMOALOSNPWTWRH-UHFFFAOYSA-N	9.9×10^{-4} 4.7×10^{-3} 1.2×10^{-1} 2.3×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
neoheptaneperoxoic acid, 1-methyl-1-phenylethyl ester $\text{C}_{16}\text{H}_{24}\text{O}_3$ [130097-36-8] WFAUFYAGXAXBEG-UHFFFAOYSA-N	3.8×10^{-2} 9.0×10^{-2} 2.5 1.3		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
hydroxypropyl acrylate $\text{C}_6\text{H}_{10}\text{O}_3$ [25584-83-2] AYEFIHVHMUFQPZ-UHFFFAOYSA-N	5.8×10^3		HSDB (2015)	Q	100
2-hydroxyethyl methacrylate $\text{C}_6\text{H}_{10}\text{O}_3$ [868-77-9] WOBHKFSMXKNTIM-UHFFFAOYSA-N	4.6×10^1 6.6×10^1 2.1×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015)	V Q Q	187 100
2-hydroxypropyl acrylate $\text{C}_6\text{H}_{10}\text{O}_3$ [999-61-1] GWZMWHWAWHPNHN-UHFFFAOYSA-N	1.6×10^3		HSDB (2015)	Q	100

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hexanedioic acid, dimethyl ester $\text{C}_8\text{H}_{14}\text{O}_4$ (dimethyl adipate) [627-93-0] UDSFAEKRVUSQDD-UHFFFAOYSA-N	4.3 8.1×10^1 1.0×10^1 6.0		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015) Bartelt-Hunt et al. (2008)	V Q Q ?	187 100 21
methyl 4-hydroxybenzoate $\text{C}_8\text{H}_8\text{O}_3$ (methylparaben) [99-76-3] LXCFILQKKGQFO-UHFFFAOYSA-N	4.5×10^3		HSDB (2015)	Q	100
diethyl fumarate $\text{C}_8\text{H}_{12}\text{O}_4$ [623-91-6] IEPRKVQEAMIZSS-AATRIKPKSA-N	4.1×10^2		HSDB (2015)	Q	100
diethyl adipate $\text{C}_{10}\text{H}_{18}\text{O}_4$ [141-28-6] VIZORQUEIQEFRT-UHFFFAOYSA-N	2.7 2.7 1.2×10^1 3.7		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Bartelt-Hunt et al. (2008)	V V Q ?	187 21
propyl 4-hydroxybenzoate $\text{C}_{10}\text{H}_{12}\text{O}_3$ (propylparaben) [94-13-3] QELSKZZBTMNZEB-UHFFFAOYSA-N	1.5×10^3		HSDB (2015)	Q	100
diethylene glycol diacrylate $\text{C}_{10}\text{H}_{14}\text{O}_5$ [4074-88-8] LEJBGNFPAPFKQ-UHFFFAOYSA-N	1.0×10^4		HSDB (2015)	Q	100
(2,2-dimethyl-3-prop-2- enoyloxypropyl) prop-2-enoate $\text{C}_{11}\text{H}_{16}\text{O}_4$ (2,2-dimethyltrimethylene acrylate) [2223-82-7] MXFQRSUWYYSPOC-UHFFFAOYSA-N	2.7×10^1		HSDB (2015)	Q	449
methyl jasmonate $\text{C}_{13}\text{H}_{20}\text{O}_3$ [1211-29-6] GEWDNTWNSAZUDX-NNOMMRTBSA-N	5.0×10^1 7.0×10^2		Karl et al. (2008) HSDB (2015)	M Q	 100

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cinoxate $\text{C}_{14}\text{H}_{18}\text{O}_4$ [104-28-9] CMDKPGRTAQVGFQ-RMKNXTFCSA-N	1.9×10^3		HSDB (2015)	Q	449
trimethylolpropane triacrylate $\text{C}_{15}\text{H}_{20}\text{O}_6$ [15625-89-5] DAKWPKUUDNSNPN-UHFFFAOYSA-N	1.6×10^4		HSDB (2015)	Q	449
benzyl cinnamate $\text{C}_{16}\text{H}_{14}\text{O}_2$ [103-41-3] NGHOLYJTSCBCGC-VAWYXSNFSA-N	3.0×10^1		HSDB (2015)	Q	100
2,2,4-trimethyl-1,3-pentanediol diisobutyrate $\text{C}_{16}\text{H}_{30}\text{O}_4$ [6846-50-0] OMVSWZDEEGIJJI-UHFFFAOYSA-N	9.0×10^{-1}		HSDB (2015)	Q	100
nonanedioic acid, dibutyl ester $\text{C}_{17}\text{H}_{32}\text{O}_4$ (dibutyl azelate) [2917-73-9] RISLXYINQFKFRL-UHFFFAOYSA-N	8.2×10^{-1}		HSDB (2015)	Q	100
isopropyl myristate $\text{C}_{17}\text{H}_{34}\text{O}_2$ [110-27-0] AXISYYRBXTVTFY-UHFFFAOYSA-N	4.2×10^{-4}		HSDB (2015)	Q	100
decanedioic acid, dibutyl ester $\text{C}_{18}\text{H}_{34}\text{O}_4$ [109-43-3] PYGXAGIECVVIOZ-UHFFFAOYSA-N	2.0×10^2 2.1×10^2 1.8×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
diethylene glycol dibenzoate $\text{C}_{18}\text{H}_{18}\text{O}_5$ [120-55-8] NXQMCAOPTPLPRL-UHFFFAOYSA-N	3.3×10^6		HSDB (2015)	Q	100
12-hydroxy-9-octadecenoic acid, methyl ester $\text{C}_{19}\text{H}_{36}\text{O}_3$ (ricinoleic acid, methyl ester) [141-24-2] XKGDWZQXVZSXAO-RAXLEYEMSA-N	6.7×10^1		HSDB (2015)	Q	100

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
chrysanthemumic acid 2,4-dimethylbenzyl ester $\text{C}_{19}\text{H}_{26}\text{O}_2$ (dimethrin) [70-38-2] FHNKBSDJERHDHZ-UHFFFAOYSA-N	1.3×10^{-1}		HSDB (2015)	Q	100
tributyl acetylcitrate $\text{C}_{20}\text{H}_{34}\text{O}_8$ (acetyl tributyl citrate) [77-90-7] QZCLKYGREBVARF-UHFFFAOYSA-N	2.6×10^4		HSDB (2015)	Q	100
hexanedioic acid, bis[2-(2-butoxyethoxy)ethyl] ester $\text{C}_{22}\text{H}_{42}\text{O}_8$ (bis(2-(2-butoxyethoxy)ethyl) adipate) [141-17-3] SCABKEBYDRTODC-UHFFFAOYSA-N	3.2×10^7		HSDB (2015)	Q	100
1,2-benzenedicarboxylic acid, decyl octyl ester $\text{C}_{26}\text{H}_{42}\text{O}_4$ [119-07-3] LVAGMBHLXLZJKZ-UHFFFAOYSA-N	4.7×10^{-1}		HSDB (2015)	Q	100
phthalic acid, isodecyl octyl ester $\text{C}_{26}\text{H}_{42}\text{O}_4$ [1330-96-7] UXLBXTIBYMXRNX-UHFFFAOYSA-N	4.7×10^{-1}		HSDB (2015)	Q	100
diisononyl hexahydrophthalate $\text{C}_{26}\text{H}_{48}\text{O}_4$ [166412-78-8] HORIEQQXBKUKGQ-UHFFFAOYSA-N	1.4×10^{-1}		HSDB (2015)	Q	100
decanedioic acid, bis(2-ethylhexyl) ester $\text{C}_{26}\text{H}_{50}\text{O}_4$ (bis(2-ethylhexyl) sebacate) [122-62-3] VJHINFRDQUWOJ-UHFFFAOYSA-N	1.2×10^{-1}		HSDB (2015)	Q	100
glycerol tricaprylate $\text{C}_{27}\text{H}_{50}\text{O}_6$ (tricaprylin) [538-23-8] VLPFTAMPNXLGLX-UHFFFAOYSA-N	3.9×10^2		HSDB (2015)	Q	100

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tris(2-ethylhexyl) trimellitate $\text{C}_{33}\text{H}_{54}\text{O}_6$ [3319-31-1] KRADHMIOFJQKEZ-UHFFFAOYSA-N	2.2×10^1		HSDB (2015)	Q	100
MCM:CHOOCH2OOH $\text{C}_2\text{H}_4\text{O}_4$ RHCLSHZJFAXOU-UHFFFAOYSA-N	3.8×10^3 7.4×10^2 6.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHOOCHO $\text{C}_2\text{H}_2\text{O}_3$ VGGRCVDNFAQIKO-UHFFFAOYSA-N	3.3 2.5×10^1 1.1×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHOOMCO3H $\text{C}_3\text{H}_4\text{O}_5$ NYMJKVCMDUPZFI-UHFFFAOYSA-N	4.6×10^4 2.0×10^3 3.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETHFORMOOH $\text{C}_3\text{H}_6\text{O}_4$ DUECRZORXDSOEF-UHFFFAOYSA-N	3.6×10^3 2.9×10^2 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MECOFOROOH $\text{C}_3\text{H}_4\text{O}_5$ TUWVUCWHUYJQAO-UHFFFAOYSA-N	1.6×10^5 3.6×10^4 2.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:METACETHO $\text{C}_3\text{H}_4\text{O}_3$ ORWKVZNEPHTCQE-UHFFFAOYSA-N	2.2 4.4×10^1 1.4×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:METACETO2H $\text{C}_3\text{H}_6\text{O}_4$ AIBRVUZTVKELQP-UHFFFAOYSA-N	2.6×10^3 1.4×10^3 4.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MMCF $\text{C}_3\text{H}_4\text{O}_4$ IHOUWJOSQHAAA-UHFFFAOYSA-N	1.7×10^1 7.8×10^1 3.0×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MMCFOOH $\text{C}_3\text{H}_4\text{O}_6$ LQGPNTLGGGGYKM-UHFFFAOYSA-N	1.2×10^6 5.9×10^5 4.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MOCOCH2OOH $\text{C}_3\text{H}_6\text{O}_4$ OQIIXPHPHGKJRP-UHFFFAOYSA-N	2.6×10^3 2.5×10^2 5.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACEC2H4OOH $\text{C}_4\text{H}_8\text{O}_4$ JNHNRRXKAKFYQGM-UHFFFAOYSA-N	2.1×10^3 2.0×10^3 1.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:ACETMECO3H $\text{C}_4\text{H}_6\text{O}_5$ UCKKJLQTXHILBL-UHFFFAOYSA-N	3.2×10^4 3.5×10^3 7.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:COO2C3CO3H $\text{C}_4\text{H}_6\text{O}_5$ CKNWOSHVDVKEZAO-UHFFFAOYSA-N	3.2×10^4 2.9×10^3 2.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:COO2C4OOH $\text{C}_4\text{H}_8\text{O}_4$ KATJWBCCJXQU DM-UHFFFAOYSA-N	2.1×10^3 1.6×10^3 4.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EOCOCH2OOH $\text{C}_4\text{H}_8\text{O}_4$ ZDXGLRBKCR TGP-UHFFFAOYSA-N	2.1×10^3 1.1×10^2 3.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETHACETOOH $\text{C}_4\text{H}_8\text{O}_4$ FITNUWWXWGT MFO-UHFFFAOYSA-N	2.4×10^3 2.7×10^2 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPRFORMOOH $\text{C}_4\text{H}_8\text{O}_4$ DHNDYBGDIQRQB-UHFFFAOYSA-N	2.0×10^3 5.1×10^1 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
maleic anhydride $\text{C}_4\text{H}_2\text{O}_3$ (MCM:MALANHY) [108-31-6] FPYJFEHAWHCUMM-UHFFFAOYSA-N	1.9×10^1 1.2×10^5 9.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MECOACEOOH $\text{C}_4\text{H}_6\text{O}_5$ ZCPJTWSQA FRVMG-UHFFFAOYSA-N	1.1×10^5 6.6×10^4 5.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACCOETOOH $\text{C}_5\text{H}_8\text{O}_5$ MRPVYADEHOUTJI-UHFFFAOYSA-N	8.7×10^4 5.8×10^5 8.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACCOMECO3H $\text{C}_5\text{H}_6\text{O}_6$ OSZJUWKUAMKWAM-UHFFFAOYSA-N	1.3×10^6 8.5×10^5 1.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACETC2CO3H $\text{C}_5\text{H}_8\text{O}_5$ LEM DJBHCHPODAJ-UHFFFAOYSA-N	2.5×10^4 3.2×10^3 5.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACETCOC2H5 $\text{C}_5\text{H}_8\text{O}_3$ KLUDQUOLAFVL OL-UHFFFAOYSA-N	1.2 2.5×10^1 2.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:BUFORMOOH $\text{C}_5\text{H}_{10}\text{O}_4$ HTFWPRQCJNWCFU-UHFFFAOYSA-N	2.6×10^3 9.8×10^1 1.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:COO2C4CO3H $\text{C}_5\text{H}_8\text{O}_5$ XFYUESMQFXHHIL-UHFFFAOYSA-N	2.5×10^4 2.5×10^3 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPRACBCO3H $\text{C}_5\text{H}_8\text{O}_5$ IEXBKLGSAHQBW-UHFFFAOYSA-N	2.8×10^4 6.9×10^2 6.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPRACBOOH $\text{C}_5\text{H}_{10}\text{O}_4$ HJBGHGSQOFAQDB-UHFFFAOYSA-N	1.9×10^3 7.3×10^2 5.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPRACOOH $\text{C}_5\text{H}_{10}\text{O}_4$ UMMAXRSQAGVERV-UHFFFAOYSA-N	1.3×10^3 5.9×10^1 1.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MMALANHY $\text{C}_5\text{H}_4\text{O}_3$ AYKYXWQEBUNJCN-UHFFFAOYSA-N	1.3×10^1 2.1×10^5 8.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTBEAALOOH $\text{C}_5\text{H}_{10}\text{O}_4$ OJPAWJIXAIXDOD-UHFFFAOYSA-N	1.6×10^3 2.3×10^2 5.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTBEALCO3H $\text{C}_5\text{H}_8\text{O}_5$ GVHAIIVWIJOUAR-UHFFFAOYSA-N	2.3×10^4 1.1×10^2 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPRACAOOH $\text{C}_5\text{H}_{10}\text{O}_4$ BAISPQOWBPLMQI-UHFFFAOYSA-N	1.9×10^3 7.4×10^2 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPRACBOOH $\text{C}_5\text{H}_{10}\text{O}_4$ KUTULJFZWKOEBJ-UHFFFAOYSA-N	1.9×10^3 1.5×10^2 9.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPRACCOOH $\text{C}_5\text{H}_{10}\text{O}_4$ GYDFEBDSBUDYEN-UHFFFAOYSA-N	1.7×10^3 1.0×10^3 5.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PRCOFORM $\text{C}_5\text{H}_8\text{O}_3$ JKMPLJUAEDQBOK-UHFFFAOYSA-N	1.6 1.4×10^1 1.4×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PRCOFOROOH $\text{C}_5\text{H}_8\text{O}_5$ VVRHCGIFBEYON-UHFFFAOYSA-N	1.2×10^5 2.4×10^5 9.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PRCOOMO ₂ H	1.7×10^3		Wang et al. (2017)	Q	81, 239
C ₅ H ₁₀ O ₄	4.9×10^2		Wang et al. (2017)	Q	81, 240
JALZRJAYIBRIKJ-UHFFFAOYSA-N	2.2×10^1		Wang et al. (2017)	Q	81, 241
MCM:TLFUONE	3.2×10^{-1}		Wang et al. (2017)	Q	81, 239
C ₅ H ₆ O ₂	1.4×10^2		Wang et al. (2017)	Q	81, 240
BGLUXFNVVSVEET-UHFFFAOYSA-N	8.7×10^2		Wang et al. (2017)	Q	81, 241
MCM:ACCOPROOH	8.1×10^4		Wang et al. (2017)	Q	81, 239
C ₆ H ₁₀ O ₅	2.1×10^5		Wang et al. (2017)	Q	81, 240
HNMHVARGKGGINS-UHFFFAOYSA-N	1.5×10^4		Wang et al. (2017)	Q	81, 241
MCM:ACETCOC3H7	1.0		Wang et al. (2017)	Q	81, 239
C ₆ H ₁₀ O ₃	1.3×10^1		Wang et al. (2017)	Q	81, 240
BVQHHUQLZPXIAQ-UHFFFAOYSA-N	2.4		Wang et al. (2017)	Q	81, 241
MCM:BOCOCH2OOH	1.1×10^3		Wang et al. (2017)	Q	81, 239
C ₆ H ₁₂ O ₄	3.5×10^1		Wang et al. (2017)	Q	81, 240
DQCMTBDKSIDVDF-UHFFFAOYSA-N	1.7×10^1		Wang et al. (2017)	Q	81, 241
MCM:DMMALANHY	8.1		Wang et al. (2017)	Q	81, 239
C ₆ H ₆ O ₃	1.7×10^5		Wang et al. (2017)	Q	81, 240
MFGALGYVFGDXIX-UHFFFAOYSA-N	8.7		Wang et al. (2017)	Q	81, 241
MCM:EBFUONE	3.0×10^{-1}		Wang et al. (2017)	Q	81, 239
C ₆ H ₈ O ₂	7.8×10^1		Wang et al. (2017)	Q	81, 240
GOUILHYTHSOMQJ-UHFFFAOYSA-N	4.9×10^2		Wang et al. (2017)	Q	81, 241
MCM:EMALANHY	1.0×10^1		Wang et al. (2017)	Q	81, 239
C ₆ H ₆ O ₃	1.1×10^5		Wang et al. (2017)	Q	81, 240
AXGOOCCLYBPQWNG-UHFFFAOYSA-N	5.8		Wang et al. (2017)	Q	81, 241
MCM:MCOOTBOOH	1.1×10^3		Wang et al. (2017)	Q	81, 239
C ₆ H ₁₂ O ₄	2.8×10^2		Wang et al. (2017)	Q	81, 240
GZZAVFPVGHZEL-UHFFFAOYSA-N	3.6×10^1		Wang et al. (2017)	Q	81, 241
MCM:MXYFUONE	2.2×10^{-1}		Wang et al. (2017)	Q	81, 239
C ₆ H ₈ O ₂	9.1×10^1		Wang et al. (2017)	Q	81, 240
SAXRUMLUKZBSTO-UHFFFAOYSA-N	3.3×10^2		Wang et al. (2017)	Q	81, 241
MCM:NBUACAOOH	1.7×10^3		Wang et al. (2017)	Q	81, 239
C ₆ H ₁₂ O ₄	5.9×10^2		Wang et al. (2017)	Q	81, 240
VUJYCIVMLKMZJB-UHFFFAOYSA-N	3.6×10^2		Wang et al. (2017)	Q	81, 241
MCM:NBUACBOOH	1.7×10^3		Wang et al. (2017)	Q	81, 239
C ₆ H ₁₂ O ₄	4.4×10^2		Wang et al. (2017)	Q	81, 240
ZDNJENJHBNLWSZ-UHFFFAOYSA-N	6.9		Wang et al. (2017)	Q	81, 241
MCM:NBUACCOOH	1.7×10^3		Wang et al. (2017)	Q	81, 239
C ₆ H ₁₂ O ₄	1.1×10^2		Wang et al. (2017)	Q	81, 240
CCXFYGGGLMIVCI-UHFFFAOYSA-N	1.1×10^1		Wang et al. (2017)	Q	81, 241

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PRCOOMCO3H $\text{C}_6\text{H}_{10}\text{O}_5$ NIEGQMUWIIUQP-UHFFFAOYSA-N	2.0×10^4 8.7×10^2 2.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:SBUACAOOH $\text{C}_6\text{H}_{12}\text{O}_4$ XEFYSNUZBIEBQZ-UHFFFAOYSA-N	1.1×10^3 3.6×10^1 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:SBUACBOOH $\text{C}_6\text{H}_{12}\text{O}_4$ SHPWQWOSZRJPCY-UHFFFAOYSA-N	1.8×10^3 3.6×10^2 1.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TBUACCO3H $\text{C}_6\text{H}_{10}\text{O}_5$ CTLNPRHGCLAPPZ-UHFFFAOYSA-N	1.6×10^4 1.2×10^2 2.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TMB1FUONE $\text{C}_6\text{H}_8\text{O}_2$ GLCOTRLUPUIAFI-UHFFFAOYSA-N	2.2×10^{-1} 1.3×10^2 3.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPBFUONE $\text{C}_7\text{H}_{10}\text{O}_2$ LWFKYUIZWLTJCA-UHFFFAOYSA-N	2.8×10^{-1} 6.9×10^1 4.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPMALANHY $\text{C}_7\text{H}_8\text{O}_3$ QSWLSAYLEATCSH-UHFFFAOYSA-N	9.3 6.3×10^4 2.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MEBFUONE $\text{C}_7\text{H}_{10}\text{O}_2$ UVERQUDHQJYTIT-UHFFFAOYSA-N	2.0×10^{-1} 5.4×10^1 2.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBFUONE $\text{C}_7\text{H}_{10}\text{O}_2$ CLCLZCBNFSGUOD-UHFFFAOYSA-N	2.3×10^{-1} 5.5×10^1 4.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PMALANHY $\text{C}_7\text{H}_8\text{O}_3$ LPFJFXRQANKTRA-UHFFFAOYSA-N	8.7 6.0×10^4 4.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TMB2FUONE $\text{C}_7\text{H}_{10}\text{O}_2$ OSFZDFIHIXIEL-UHFFFAOYSA-N	1.5×10^{-1} 9.1×10^1 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1013OOH $\text{C}_{10}\text{H}_{18}\text{O}_4$ BQYOGPDLQGPEQM-UHFFFAOYSA-N	2.1×10^3 9.8×10^2 2.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1013CO3H $\text{C}_{11}\text{H}_{18}\text{O}_5$ ZWRGNVXICSEPNH-UHFFFAOYSA-N	2.2×10^4 6.3×10^2 1.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PXYFUONE $\text{C}_5\text{H}_6\text{O}_2$ VGHBEPMIVGJJP-UHFFFAOYSA-N	2.3×10^{-1} 3.0×10^2 4.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYFUONE $\text{C}_6\text{H}_8\text{O}_2$ QHQDWCHELGHSTO-UHFFFAOYSA-N	1.6×10^{-1} 2.8×10^2 1.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHOOCH2OH $\text{C}_2\text{H}_4\text{O}_3$ APUQIHKCZFWODD-UHFFFAOYSA-N	1.4×10^2 6.5×10^1 1.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETHFORMOH $\text{C}_3\text{H}_6\text{O}_3$ JRUKHAIVAGVYRP-UHFFFAOYSA-N	1.4×10^2 6.2×10^1 7.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETOHOCHO $\text{C}_3\text{H}_6\text{O}_3$ UKQJDWBNQNAJHB-UHFFFAOYSA-N	1.6×10^2 3.3×10^2 2.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:METACETOH $\text{C}_3\text{H}_6\text{O}_3$ JYVNDCLJHKQUHE-UHFFFAOYSA-N	9.8×10^1 1.1×10^2 1.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MMCFOH $\text{C}_3\text{H}_4\text{O}_5$ XDYLYGBFMHJJOW-UHFFFAOYSA-N	4.6×10^4 1.4×10^5 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MOXCOCH2OH $\text{C}_3\text{H}_6\text{O}_3$ GSJFXBNYJCXDGI-UHFFFAOYSA-N	5.0 1.5×10^2 2.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACEETOHOOH $\text{C}_4\text{H}_8\text{O}_5$ QQYYRFGUJQKRH-UHFFFAOYSA-N	8.3×10^6 2.9×10^4 2.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BZFUOH $\text{C}_4\text{H}_6\text{O}_4$ SGMJBNSHAZVGM-UHFFFAOYSA-N	4.8×10^6 3.3×10^7 1.7×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BZFUOOH $\text{C}_4\text{H}_6\text{O}_5$ LZJWYIKGTDPLAQ-UHFFFAOYSA-N	7.8×10^9 8.9×10^7 3.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EOX2COMEHOH $\text{C}_4\text{H}_8\text{O}_3$ ZANNOFHADGWOLI-UHFFFAOYSA-N	4.0 7.1×10^1 1.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETACETOH $\text{C}_4\text{H}_8\text{O}_3$ HXDLWJWIAHWIKI-UHFFFAOYSA-N	9.6×10^1 3.6×10^2 3.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:ETHACETOH $\text{C}_4\text{H}_8\text{O}_3$ MLAFRLBDNVSLPE-UHFFFAOYSA-N	8.9×10^1 7.1×10^1 7.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOACETEEOH $\text{C}_4\text{H}_8\text{O}_5$ QWYGOSGRTPWCI-UHFFFAOYSA-N	3.0×10^5 5.6×10^5 5.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPRFORMOH $\text{C}_4\text{H}_8\text{O}_3$ SVJMGLNDGCVDT-UHFFFAOYSA-N	7.4×10^1 3.2×10^1 2.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MALANHY2OH $\text{C}_4\text{H}_4\text{O}_5$ BOGVTNYNTGOONP-UHFFFAOYSA-N	7.1×10^8 4.8×10^8 3.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MALANHYOOH $\text{C}_4\text{H}_4\text{O}_6$ UPSCPEYLZZUIND-UHFFFAOYSA-N	1.2×10^{12} 1.0×10^9 1.3×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PROL2FORM $\text{C}_4\text{H}_8\text{O}_3$ CRMUFGZQBODVGS-UHFFFAOYSA-N	1.5×10^2 2.6×10^2 1.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BUOHFORM $\text{C}_5\text{H}_{10}\text{O}_3$ KIZCCPGSHHAFRX-UHFFFAOYSA-N	8.7×10^1 3.0×10^1 4.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPRACBOH $\text{C}_5\text{H}_{10}\text{O}_3$ YJNKLTDJZSXVHQ-UHFFFAOYSA-N	1.0×10^2 2.0×10^2 2.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPRACOH $\text{C}_5\text{H}_{10}\text{O}_3$ MYOAZFOMGTTYOD-UHFFFAOYSA-N	5.0×10^1 4.1×10^1 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MMALNHY2OH $\text{C}_5\text{H}_6\text{O}_5$ DGWWNMWYNUWPBC-UHFFFAOYSA-N	3.9×10^8 6.8×10^8 1.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MMALNHYOOH $\text{C}_5\text{H}_6\text{O}_6$ JNCHKPBVXWMPAJ-UHFFFAOYSA-N	6.3×10^{11} 6.8×10^8 7.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTBEACHOHO $\text{C}_5\text{H}_{10}\text{O}_3$ GQMJADBSHHFADW-UHFFFAOYSA-N	8.1×10^1 7.6×10^1 8.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPRACAOH $\text{C}_5\text{H}_{10}\text{O}_3$ PPPFYBPQAPISCT-UHFFFAOYSA-N	1.0×10^2 3.2×10^2 2.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NPRACBOH $\text{C}_5\text{H}_{10}\text{O}_3$ VEGXEWGKYMMJKP-UHFFFAOYSA-N	7.3×10^1 4.7×10^1 3.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPRACCOH $\text{C}_5\text{H}_{10}\text{O}_3$ DOUBAFNWWFAWEC-UHFFFAOYSA-N	6.0×10^1 6.3×10^2 9.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYFUOH $\text{C}_5\text{H}_8\text{O}_4$ OHTGZAWPVDWARE-UHFFFAOYSA-N	2.7×10^6 4.3×10^7 3.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYFUOOH $\text{C}_5\text{H}_8\text{O}_5$ IEFDVDGOIVKGRZ-UHFFFAOYSA-N	4.5×10^9 4.9×10^7 1.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TLFUOH $\text{C}_5\text{H}_8\text{O}_4$ JYHWQRJRDKSSIF-UHFFFAOYSA-N	4.5×10^6 3.7×10^7 7.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TLFUOOH $\text{C}_5\text{H}_8\text{O}_5$ GNXADMJANDYCAE-UHFFFAOYSA-N	7.3×10^9 1.0×10^8 2.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOX2COMOH $\text{C}_6\text{H}_{12}\text{O}_3$ VFGRALUHHDIQI-UHFFFAOYSA-N	2.9 2.9×10^1 9.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMMALYOH $\text{C}_6\text{H}_8\text{O}_5$ KIOPGGAGDZHZEGB-UHFFFAOYSA-N	2.2×10^8 1.2×10^9 4.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMMALYOOH $\text{C}_6\text{H}_8\text{O}_6$ VRKLPKITGMCVQP-UHFFFAOYSA-N	3.5×10^{11} 8.9×10^8 1.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EBFUOH $\text{C}_6\text{H}_{10}\text{O}_4$ AQSJHOPJZAKOAP-UHFFFAOYSA-N	4.1×10^6 3.5×10^7 3.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EBFUOOH $\text{C}_6\text{H}_{10}\text{O}_5$ KIZOVCBYCGGADC-UHFFFAOYSA-N	6.0×10^9 8.5×10^7 7.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EMALNHY2OH $\text{C}_6\text{H}_8\text{O}_5$ GPJQUVLKFIAXFZ-UHFFFAOYSA-N	3.6×10^8 8.3×10^8 1.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EMALNHYOOH $\text{C}_6\text{H}_8\text{O}_6$ LSSHMOINJMVLHQ-UHFFFAOYSA-N	5.0×10^{11} 8.5×10^8 6.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MXYFUOH $\text{C}_6\text{H}_{10}\text{O}_4$ WCMYKJKBZGIGND-UHFFFAOYSA-N	2.5×10^6 3.7×10^7 3.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYFUOOH $\text{C}_6\text{H}_{10}\text{O}_5$ WCIMCWKIICZLLM-UHFFFAOYSA-N	4.2×10^9 2.8×10^7 3.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NBUACAOH $\text{C}_6\text{H}_{12}\text{O}_3$ KLUHZXMBIDAHSJ-UHFFFAOYSA-N	5.6×10^1 6.5×10^2 6.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NBUACBOH $\text{C}_6\text{H}_{12}\text{O}_3$ BZLQSYFOTWOIDC-UHFFFAOYSA-N	8.0×10^1 2.1×10^2 5.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NBUACCOH $\text{C}_6\text{H}_{12}\text{O}_3$ BMNRJWUOBYYCRX-UHFFFAOYSA-N	5.6×10^1 3.6×10^1 2.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYFUOH $\text{C}_6\text{H}_{10}\text{O}_4$ GZKXVWYDQQSODI-UHFFFAOYSA-N	1.5×10^6 3.2×10^7 1.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYFUOOH $\text{C}_6\text{H}_{10}\text{O}_5$ DHHFHIZBMAEZJT-UHFFFAOYSA-N	2.4×10^9 2.3×10^7 3.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PRCOOETH $\text{C}_6\text{H}_{12}\text{O}_3$ GIOCILWWMFZESP-UHFFFAOYSA-N	6.9×10^1 1.3×10^2 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:SBUACAOH $\text{C}_6\text{H}_{12}\text{O}_3$ WAXXMBOGFVJIHX-UHFFFAOYSA-N	4.0×10^1 3.2×10^1 7.6×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:SBUACBOH $\text{C}_6\text{H}_{12}\text{O}_3$ BCWWODMTUXMSAB-UHFFFAOYSA-N	9.6×10^1 1.7×10^2 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TBOCOCH2OH $\text{C}_6\text{H}_{12}\text{O}_3$ WINGEFIITRDOLJ-UHFFFAOYSA-N	2.0 1.7×10^1 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TBUACOH $\text{C}_6\text{H}_{12}\text{O}_3$ GWOKHTMCBUZSOP-UHFFFAOYSA-N	4.9×10^1 9.1×10^1 1.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TMB1FUOH $\text{C}_6\text{H}_{10}\text{O}_4$ AUTABLFJFWRKGZ-UHFFFAOYSA-N	2.5×10^6 2.2×10^7 1.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:TMB1FUOOH $\text{C}_6\text{H}_{10}\text{O}_5$ NFODFJMABSYJFC-UHFFFAOYSA-N	1.8×10^8 7.4×10^7 4.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXCOOLOOH $\text{C}_7\text{H}_{14}\text{O}_5$ PDOIGHDIMNJPNL-UHFFFAOYSA-N	2.1×10^5 2.4×10^5 1.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPBFUOH $\text{C}_7\text{H}_{12}\text{O}_4$ ZIPHTXAVHSYMQR-UHFFFAOYSA-N	3.9×10^6 3.0×10^7 5.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPBFUOOH $\text{C}_7\text{H}_{12}\text{O}_5$ HVQWCSPFZPPNOE-UHFFFAOYSA-N	5.4×10^9 7.8×10^7 2.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPMLNHY2OH $\text{C}_7\text{H}_{10}\text{O}_5$ RBIJYTIBBLMIRU-UHFFFAOYSA-N	3.2×10^8 1.2×10^9 4.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPMLNHYOOH $\text{C}_7\text{H}_{10}\text{O}_6$ LGGLTRMSNOIPLU-UHFFFAOYSA-N	4.7×10^{11} 1.1×10^9 9.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MEBFUOH $\text{C}_7\text{H}_{12}\text{O}_4$ SYHJYGJIPQZFIO-UHFFFAOYSA-N	2.2×10^6 2.2×10^7 1.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MEBFUOOH $\text{C}_7\text{H}_{12}\text{O}_5$ VRHMFTJWRSNJLN-UHFFFAOYSA-N	3.2×10^9 1.7×10^7 2.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBFUOH $\text{C}_7\text{H}_{12}\text{O}_4$ DMMDFVMQHRHVSU-UHFFFAOYSA-N	3.2×10^6 2.4×10^7 5.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBFUOOH $\text{C}_7\text{H}_{12}\text{O}_5$ KAMUACRVJWJEFX-UHFFFAOYSA-N	5.3×10^9 6.2×10^7 6.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PMALNHY2OH $\text{C}_7\text{H}_{10}\text{O}_5$ PVDNZCIFUUKKBS-UHFFFAOYSA-N	2.8×10^8 8.9×10^8 1.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PMALNHYOOH $\text{C}_7\text{H}_{10}\text{O}_6$ VKSMRBCXNQEUPF-UHFFFAOYSA-N	4.1×10^{11} 8.0×10^8 4.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PRCOOPROL $\text{C}_7\text{H}_{14}\text{O}_3$ QXXGFEMAULVMST-UHFFFAOYSA-N	6.5×10^1 1.3×10^2 4.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:TMB2FUOH $\text{C}_7\text{H}_{12}\text{O}_4$ YEQCQVSGZKCWAA-UHFFFAOYSA-N	1.4×10^6 1.8×10^7 1.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TMB2FUOOH $\text{C}_7\text{H}_{12}\text{O}_5$ MINPHQZFUPUEBD-UHFFFAOYSA-N	2.2×10^9 1.2×10^7 3.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1013OH $\text{C}_{10}\text{H}_{18}\text{O}_3$ OYGVMQZTRRRABW-UHFFFAOYSA-N	7.1×10^1 5.4×10^2 3.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ALCOMOXOOH $\text{C}_3\text{H}_4\text{O}_5$ DRQRCDXSDDWNEU-UHFFFAOYSA-N	2.3×10^6 1.6×10^5 9.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DFC $\text{C}_3\text{H}_2\text{O}_5$ DOMHJQJKOPZSOM-UHFFFAOYSA-N	1.0×10^3 6.9×10^3 1.2×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MOXY2CHO $\text{C}_3\text{H}_4\text{O}_3$ MFRMAQFRVTUENW-UHFFFAOYSA-N	3.7×10^1 1.1×10^2 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MOXYCOCHO $\text{C}_3\text{H}_4\text{O}_3$ KFKXSMSQHIOMSO-UHFFFAOYSA-N	3.1×10^1 3.2×10^1 6.5×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACETETCHO $\text{C}_4\text{H}_6\text{O}_3$ GUPGZURVZDIQPM-UHFFFAOYSA-N	2.5×10^1 1.8×10^2 1.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO14O3CHO $\text{C}_4\text{H}_4\text{O}_4$ ZFWWLKQBCHQUFEJ-UHFFFAOYSA-N	2.3×10^4 1.2×10^4 8.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:COO2C3CHO $\text{C}_4\text{H}_6\text{O}_3$ AGADEVQOWQDDFX-UHFFFAOYSA-N	2.5×10^1 5.4×10^1 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EOCOCHO $\text{C}_4\text{H}_6\text{O}_3$ DBPFRFRFLYGEJI-UHFFFAOYSA-N	2.5×10^1 1.7×10^1 8.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACCOMMECHO $\text{C}_5\text{H}_6\text{O}_4$ GRUDDVNYUQBCU-UHFFFAOYSA-N	1.1×10^3 1.6×10^4 9.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACEC2CHO $\text{C}_5\text{H}_8\text{O}_3$ PRSPLAWXBFRHKV-UHFFFAOYSA-N	2.0×10^1 1.7×10^2 7.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:COO2C4CHO $\text{C}_5\text{H}_8\text{O}_3$ DLZVZNPAPRCRXEG-UHFFFAOYSA-N	2.0×10^1 1.3×10^2 3.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPRACBCHO $\text{C}_5\text{H}_8\text{O}_3$ FXPPNKAYSGWCQG-UHFFFAOYSA-N	2.3×10^1 3.9×10^1 5.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTBEACHO13 $\text{C}_5\text{H}_8\text{O}_3$ MDWWHOIDIKOPHH-UHFFFAOYSA-N	1.9×10^1 5.8 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXCOALOOH $\text{C}_6\text{H}_{10}\text{O}_5$ MZUJTBRWESAMQA-UHFFFAOYSA-N	1.4×10^6 2.0×10^4 4.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXCOCHO $\text{C}_6\text{H}_{10}\text{O}_3$ NRYDRJHYTRBEEA-UHFFFAOYSA-N	1.8×10^1 6.0 1.5×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C14O3ECHO $\text{C}_6\text{H}_8\text{O}_4$ FVLOJCOPOCRBFF-UHFFFAOYSA-N	1.7×10^4 3.3×10^3 5.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PRCOOMCHO $\text{C}_6\text{H}_{10}\text{O}_3$ YEBNSRBQIIWQQC-UHFFFAOYSA-N	1.8×10^1 4.7×10^1 1.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TBOCOCHO $\text{C}_6\text{H}_{10}\text{O}_3$ WDPZTIFGRQKSEN-UHFFFAOYSA-N	1.3×10^1 3.6 1.4×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TBUACCO $\text{C}_6\text{H}_{10}\text{O}_3$ BYYPVMBDPUHHR-UHFFFAOYSA-N	1.3×10^1 6.6 5.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C14O3IPCHO $\text{C}_7\text{H}_{10}\text{O}_4$ NPPWDFRKAMDHMM-UHFFFAOYSA-N	1.6×10^4 2.3×10^3 7.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C14O3PCHO $\text{C}_7\text{H}_{10}\text{O}_4$ GNODSIBUYMXKGR-UHFFFAOYSA-N	1.5×10^4 2.1×10^3 3.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1014OOH $\text{C}_{10}\text{H}_{18}\text{O}_5$ REYZAYCUIYNPLJ-UHFFFAOYSA-N	5.3×10^5 8.3×10^4 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCALBOC $\text{C}_{15}\text{H}_{24}\text{O}_3$ FEPYZLRQFOQWRK-UHFFFAOYSA-N	2.1×10^1 3.0×10^1 8.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CHOOMCO2H $\text{C}_3\text{H}_6\text{O}_4$ CBNAABWGSNQFTA-UHFFFAOYSA-N	4.7×10^5 1.9×10^5 8.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1014OH $\text{C}_{10}\text{H}_{18}\text{O}_4$ IJPJFXOOJHUBTK-UHFFFAOYSA-N	1.9×10^4 2.1×10^5 9.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C152OH $\text{C}_{15}\text{H}_{26}\text{O}_5$ XZXFZFFZSKVDT-UHFFFAOYSA-N	2.3×10^7 1.0×10^8 1.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C152OOH $\text{C}_{15}\text{H}_{26}\text{O}_6$ PKQOWOPWICZSPN-UHFFFAOYSA-N	2.0×10^9 2.2×10^8 5.1×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C23O3CHO $\text{C}_4\text{H}_4\text{O}_4$ RULCSXTUAHNYHJ-UHFFFAOYSA-N	1.3×10^3 7.3×10^3 6.2×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MCOCOMOOH $\text{C}_4\text{H}_6\text{O}_5$ BJTKGFWDIAZUGI-UHFFFAOYSA-N	1.6×10^6 2.5×10^5 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MCOCOMOX $\text{C}_4\text{H}_6\text{O}_3$ CWKLZLBVOJRSOM-UHFFFAOYSA-N	2.1×10^1 3.0×10^1 4.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PRNFORMOOH $\text{C}_4\text{H}_6\text{O}_5$ LIFMXPSJWIBAGH-UHFFFAOYSA-N	2.2×10^6 5.4×10^3 2.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PRNFORM $\text{C}_4\text{H}_6\text{O}_3$ WNVAJGCMEDTLIE-UHFFFAOYSA-N	2.5×10^1 1.5×10^2 3.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACCOCOMOOH $\text{C}_5\text{H}_6\text{O}_6$ WKJHUBLAYZIBAJ-UHFFFAOYSA-N	6.8×10^7 3.2×10^6 1.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACECOCOCH3 $\text{C}_5\text{H}_6\text{O}_4$ OBTVATRSWTWNGS-UHFFFAOYSA-N	8.9×10^2 9.1×10^3 8.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACEPROPONE $\text{C}_5\text{H}_8\text{O}_3$ DBERHVIZRVGDFO-UHFFFAOYSA-N	1.7×10^1 1.8×10^2 8.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACPRONEOOH $\text{C}_5\text{H}_8\text{O}_5$ FOWIMBLOPIOWII-UHFFFAOYSA-N	1.5×10^6 5.5×10^3 2.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C23O3CCO3H $\text{C}_5\text{H}_6\text{O}_6$ SPYAIQASSDQEIX-UHFFFAOYSA-N	1.6×10^7 5.5×10^5 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C23O3MCOOH $\text{C}_5\text{H}_8\text{O}_5$ RVGUYYZMHBKRG-UHFFFAOYSA-N	1.5×10^6 6.6×10^4 6.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PRNOCOMOHH $\text{C}_5\text{H}_8\text{O}_5$ GJTAOZDAMDVHTP-UHFFFAOYSA-N	1.3×10^6 2.2×10^5 8.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACBUOAOHH $\text{C}_6\text{H}_{10}\text{O}_5$ BDHJVYCZNHBETI-UHFFFAOYSA-N	1.2×10^6 1.1×10^5 3.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACBUONBOHH $\text{C}_6\text{H}_{10}\text{O}_5$ RISONYRIGLPILV-UHFFFAOYSA-N	1.2×10^6 2.5×10^3 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACCOCOC2H5 $\text{C}_6\text{H}_8\text{O}_4$ WZGYRWNUCYXCFD-UHFFFAOYSA-N	6.9×10^2 4.7×10^3 3.8×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACCOCOEHH $\text{C}_6\text{H}_8\text{O}_6$ RKPSGJVLERUIIG-UHFFFAOYSA-N	6.0×10^7 1.5×10^6 2.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACOPRONE $\text{C}_6\text{H}_8\text{O}_4$ RYLHMXPMTMYTTF-UHFFFAOYSA-N	6.9×10^2 1.6×10^4 2.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACEBUTBONE $\text{C}_6\text{H}_{10}\text{O}_3$ LHGJWCYBYIICPP-UHFFFAOYSA-N	1.4×10^1 8.1×10^1 4.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACEBUTONE $\text{C}_6\text{H}_{10}\text{O}_3$ NWCYECXHIYEBJE-UHFFFAOYSA-N	1.4×10^1 1.8×10^2 5.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACOMCOMHH $\text{C}_6\text{H}_8\text{O}_6$ NKXSSYAJYGYQPN-UHFFFAOYSA-N	5.3×10^7 5.4×10^6 4.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C23O3ECOHH $\text{C}_6\text{H}_{10}\text{O}_5$ NLYPTRYHUBHKKI-UHFFFAOYSA-N	1.2×10^6 3.0×10^4 4.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C23O3EHO $\text{C}_6\text{H}_8\text{O}_4$ AIDIMUPPUNPUTI-UHFFFAOYSA-N	6.9×10^2 4.6×10^3 3.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C23O3MCO3H $\text{C}_6\text{H}_8\text{O}_6$ FIPISRZHVPPVNA-UHFFFAOYSA-N	1.5×10^7 1.1×10^5 9.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6O4KETOOH $\text{C}_6\text{H}_6\text{O}_7$ LLKUMVBDCSCXDR-UHFFFAOYSA-N	3.6×10^{10} 3.8×10^8 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6OTKETCO $\text{C}_6\text{H}_6\text{O}_5$ GAPVBMQBWAUBHC-UHFFFAOYSA-N	5.5×10^5 1.0×10^6 3.2×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6OTKETOOH $\text{C}_6\text{H}_8\text{O}_6$ USMDUVUWRKXQG-UHFFFAOYSA-N	7.8×10^8 8.3×10^5 6.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6OTRIKET $\text{C}_6\text{H}_8\text{O}_4$ XAHWCAXZWOTSBC-UHFFFAOYSA-N	1.0×10^4 2.4×10^4 5.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO356OCOOH $\text{C}_6\text{H}_8\text{O}_6$ MVKXXKVCXUKLOS-UHFFFAOYSA-N	6.0×10^7 4.5×10^6 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:SBUACCOOH $\text{C}_6\text{H}_{10}\text{O}_5$ DTGNYNGASXJUMP-UHFFFAOYSA-N	8.1×10^5 5.3×10^2 1.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:SBUACEONE $\text{C}_6\text{H}_{10}\text{O}_3$ ZKPTYCJWRHHBOW-UHFFFAOYSA-N	1.6×10^1 3.3×10^1 2.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOX2COMOOH $\text{C}_7\text{H}_{12}\text{O}_5$ YCDXONIQHOVSSF-UHFFFAOYSA-N	9.1×10^5 2.1×10^4 3.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXCOCOME $\text{C}_7\text{H}_{12}\text{O}_3$ ZAZUOXBHFXAWMD-UHFFFAOYSA-N	1.2×10^1 6.3 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C23O3ECO3H $\text{C}_7\text{H}_{10}\text{O}_6$ FWWKIPVVGIEQRB-UHFFFAOYSA-N	1.4×10^7 5.1×10^4 8.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MC6OTKTOOH $\text{C}_7\text{H}_{10}\text{O}_6$ DJTBKMNUYULRIV-UHFFFAOYSA-N	4.5×10^8 9.3×10^4 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MC6OTRIKET $\text{C}_7\text{H}_{10}\text{O}_4$ FJYCWCSCXDGURV-UHFFFAOYSA-N	9.6×10^3 5.9×10^3 2.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PRCOOPRONE $\text{C}_7\text{H}_{12}\text{O}_3$ AIJLJYUDTAJRDN-UHFFFAOYSA-N	1.2×10^1 5.0×10^1 3.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PRNOCOPOOH $\text{C}_7\text{H}_{12}\text{O}_5$ RGEURRORAZXRIV-UHFFFAOYSA-N	9.1×10^5 6.8×10^5 1.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1013CO $\text{C}_{10}\text{H}_{16}\text{O}_3$ DPRGOCIPALHGLN-UHFFFAOYSA-N	1.6×10^1 8.3×10^1 6.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BZFUCO $\text{C}_4\text{H}_4\text{O}_4$ MFFNSLKCUZEAFI-UHFFFAOYSA-N	1.2×10^4 4.2×10^6 1.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MALNHYOHCO $\text{C}_4\text{H}_2\text{O}_5$ DBWAPECJPVXLJZ-UHFFFAOYSA-N	2.6×10^7 1.0×10^9 1.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACPRONEOH $\text{C}_5\text{H}_8\text{O}_4$ LBOLMEABDOYQGX-UHFFFAOYSA-N	2.5×10^3 1.3×10^4 7.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C23O3MOH $\text{C}_5\text{H}_8\text{O}_4$ WHFDSTOTVFOUIH-UHFFFAOYSA-N	4.8×10^4 2.0×10^4 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACBUONAOH $\text{C}_6\text{H}_{10}\text{O}_4$ UGJVDYQVVBKWL-UHFFFAOYSA-N	4.5×10^4 5.1×10^4 2.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACBUONBOH $\text{C}_6\text{H}_{10}\text{O}_4$ GYQPXJWBTDNGC-UHFFFAOYSA-N	2.3×10^3 6.8×10^3 7.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C23O3EOH $\text{C}_6\text{H}_{10}\text{O}_4$ BVDDSYZMRAYIJ-UHFFFAOYSA-N	4.5×10^4 1.1×10^4 2.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6OTKETOH $\text{C}_6\text{H}_8\text{O}_5$ NOUUUBJIFPBZMZ-UHFFFAOYSA-N	4.4×10^4 1.5×10^6 2.0×10^6 6.9×10^2	16000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:EBFUCO $\text{C}_6\text{H}_8\text{O}_4$ QFGGPABGKQEYQI-UHFFFAOYSA-N	1.0×10^4 5.0×10^6 7.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:SBUACCOH $\text{C}_6\text{H}_{10}\text{O}_4$ SUDJMTXSVVFNQ-UHFFFAOYSA-N	1.4×10^3 4.5×10^3 5.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPBFUCO $\text{C}_7\text{H}_{10}\text{O}_4$ NHSFIZKDULUUEP-UHFFFAOYSA-N	9.6×10^3 4.6×10^6 6.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MC6OTKETOH $\text{C}_7\text{H}_{10}\text{O}_5$ GQVIXHCRVNFYGI-UHFFFAOYSA-N	8.3×10^5 7.1×10^5 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBFUCO $\text{C}_7\text{H}_{10}\text{O}_4$ PKKIVTPUHZVJRM-UHFFFAOYSA-N	8.0×10^3 3.6×10^6 7.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C23O3CCHO $\text{C}_5\text{H}_6\text{O}_4$ JQZIMULKJBYVEJ-UHFFFAOYSA-N	1.5×10^4 2.1×10^4 1.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C23O3MCHO $\text{C}_6\text{H}_8\text{O}_4$ KNKMVXKCHLTCEX-UHFFFAOYSA-N	1.4×10^4 6.0×10^3 8.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5OCO3M $\text{C}_6\text{H}_8\text{O}_4$ MFFVRQLCBBYBQSQ-UHFFFAOYSA-N	1.4×10^4 5.6×10^3 4.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C23O3ECHO $\text{C}_7\text{H}_{10}\text{O}_4$ RCPFVJGRKWBWYKE-UHFFFAOYSA-N	1.1×10^4 3.2×10^3 4.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1014CO $\text{C}_{10}\text{H}_{16}\text{O}_4$ MPJVRMHYAPYGFU-UHFFFAOYSA-N	4.6×10^3 2.0×10^4 4.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCLKBOC $\text{C}_{14}\text{H}_{22}\text{O}_4$ YETGIZICMMLUOK-UHFFFAOYSA-N	7.8×10^3 3.6×10^4 5.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C148CO $\text{C}_{14}\text{H}_{20}\text{O}_5$ WKRISJACIFSSJ-UHFFFAOYSA-N	5.8×10^6 3.5×10^5 1.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C148OOH $\text{C}_{14}\text{H}_{22}\text{O}_6$ QNGFZXSUHFZFIE-UHFFFAOYSA-N	6.8×10^8 3.0×10^6 4.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C148OH $\text{C}_{14}\text{H}_{22}\text{O}_5$ LXDPLKVHKWYPKP-UHFFFAOYSA-N	1.3×10^6 7.6×10^6 9.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:ACETC2CO2H $\text{C}_5\text{H}_8\text{O}_4$ RFEXARYJXBYPLD-UHFFFAOYSA-N	2.9×10^3 4.8×10^4 6.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C24O3CCO2H $\text{C}_5\text{H}_6\text{O}_5$ HSSKPURIBYAXCO-UHFFFAOYSA-N	1.6×10^5 3.5×10^6 7.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPRACBCO2H $\text{C}_5\text{H}_8\text{O}_4$ WTLNOANVTIKPEE-UHFFFAOYSA-N	3.5×10^3 6.9×10^3 5.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTBEALCO2H $\text{C}_5\text{H}_8\text{O}_4$ BXXOFUQIACXFIW-UHFFFAOYSA-N	2.8×10^3 2.1×10^3 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1013CO2H $\text{C}_{11}\text{H}_{18}\text{O}_4$ QWGCLZMSSSTR LX-UHFFFAOYSA-N	3.0×10^3 3.1×10^4 5.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO14O3CO2H $\text{C}_4\text{H}_4\text{O}_5$ OPFWUCMVKDVVTF-UHFFFAOYSA-N	3.3×10^6 5.4×10^4 1.7×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C23O3CCO2H $\text{C}_5\text{H}_6\text{O}_5$ WRKCXTWVOWDGBE-UHFFFAOYSA-N	2.3×10^6 9.1×10^6 1.7×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C23O3MCO2H $\text{C}_6\text{H}_8\text{O}_5$ OGSBZWITKXVLIV-UHFFFAOYSA-N	2.0×10^6 1.6×10^6 9.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C23O3ECO2H $\text{C}_7\text{H}_{10}\text{O}_5$ OEONINCNUUTEPU-UHFFFAOYSA-N	1.7×10^6 6.0×10^5 2.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

A3.9 Ethers (ROR)

Table A3.9: Ethers (ROR)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) [$\frac{\text{mol}}{\text{m}^3 \text{ Pa}}$]	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dimethyl ether CH ₃ OCH ₃ [115-10-6] LCGLNKUTAGEVQW-UHFFFAOYSA-N	9.9 × 10 ⁻³	4900	Duchowicz et al. (2020)	V	187
	1.7 × 10 ⁻³		HSDB (2015)	V	
	7.6 × 10 ⁻²		Mackay et al. (2006c)	V	
	1.3 × 10 ⁻¹		Mackay et al. (1993)	V	
	9.9 × 10 ⁻³		Hine and Mookerjee (1975)	V	
	9.8 × 10 ⁻³		Hine and Weimar (1965)	R	
	1.0 × 10 ⁻²		Bagno et al. (1991)	T	475
	1.5 × 10 ⁻²		Yaws (2003)	X	238, 28
	6.5 × 10 ⁻³		Hayer et al. (2022)	Q	20
	5.1 × 10 ⁻²		Duchowicz et al. (2020)	Q	
	3.0 × 10 ⁻³		Wang et al. (2017)	Q	81, 239
	3.0 × 10 ⁻²		Wang et al. (2017)	Q	81, 240
	1.1 × 10 ⁻²		Wang et al. (2017)	Q	81, 241
	7.1 × 10 ⁻³		Gharagheizi et al. (2012)	Q	
	1.5 × 10 ⁻²		Gharagheizi et al. (2010)	Q	247
	1.8 × 10 ⁻²		Hilal et al. (2008)	Q	
	1.4 × 10 ⁻²		Modarresi et al. (2007)	Q	68
7.5 × 10 ⁻³	Yaffe et al. (2003)	Q	249, 250		
8.4 × 10 ⁻³	Katritzky et al. (1998)	Q			
2.2 × 10 ⁻³	Nirmalakhandan et al. (1997)	Q			
5.3 × 10 ⁻²	Russell et al. (1992)	Q	360		
1.2 × 10 ⁻²	Suzuki et al. (1992)	Q	233		
1.5 × 10 ⁻²	Yaws (1999)	?	21, 28		
6.2 × 10 ⁻³	Abraham and Weathersby (1994)	?	21		
9.9 × 10 ⁻³	Abraham et al. (1990)	?			
ethyl methyl ether C ₂ H ₅ OCH ₃ [540-67-0] XOBKSJJDNFUZF-UHFFFAOYSA-N	8.2 × 10 ⁻³		Duchowicz et al. (2020)	V	187
	1.4 × 10 ⁻²		Bagno et al. (1991)	T	475
	1.9 × 10 ⁻²		Duchowicz et al. (2020)	Q	
	1.5 × 10 ⁻²		HSDB (2015)	Q	100
	1.5 × 10 ⁻²		Hilal et al. (2008)	Q	
	3.0 × 10 ⁻²		English and Carroll (2001)	Q	231, 232
	9.7 × 10 ⁻³		Katritzky et al. (1998)	Q	
	1.9 × 10 ⁻³		Nirmalakhandan et al. (1997)	Q	
8.9 × 10 ⁻³	Saxena and Hildemann (1996)	E	403		
1.8 × 10 ⁻²	Yaws (1999)	?	21		
diethyl ether C ₂ H ₅ OC ₂ H ₅ [60-29-7] RTZKZFJDLAIYFH-UHFFFAOYSA-N	9.9 × 10 ⁻³	5800	Burkholder et al. (2019)	L	1
	2.0 × 10 ⁻²	5800	Burkholder et al. (2015)	L	
	9.9 × 10 ⁻³	5800	Brockbank (2013)	L	1
	5.0 × 10 ⁻³		Steward et al. (1973)	L	14
	9.6 × 10 ⁻³	5000	Allott et al. (1973)	L	
	1.1 × 10 ⁻²	6600	Hiatt (2013)	M	
9.5 × 10 ⁻²		Helburn et al. (2008)	M		

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.0×10^{-2}	5700	Ondo and Dohnal (2007)	M	1
	1.1×10^{-2}		Nielsen et al. (1994)	M	
	3.3×10^{-3}		Yu (1992)	M	12
	7.0×10^{-3}	3900	Lamarche and Droste (1989)	M	347
	6.3×10^{-3}		Guitart et al. (1989)	M	14
	1.3×10^{-2}	7400	Bachofen and Farhi (1971)	M	
	6.3×10^{-3}		Brody et al. (1971)	M	14
	7.8×10^{-3}		Signer et al. (1969)	M	
	5.1×10^{-3}		Eger et al. (1963)	M	14
	1.1×10^{-2}		Mackay et al. (2006c)	V	
	1.0×10^{-2}	5800	Fukuchi et al. (2002)	V	
	1.1×10^{-2}		Mackay et al. (1993)	V	
	8.7×10^{-3}		Hwang et al. (1992)	V	
	1.1×10^{-2}		Hine and Weimar (1965)	V	
	1.1×10^{-2}		Butler and Ramchandani (1935)	V	
	6.0×10^{-3}	5700	Bagno et al. (1991)	T	475
	1.2×10^{-2}		Yaws (2003)	X	238
	4.3×10^{-3}		Keshavarz et al. (2022)	Q	
	6.8×10^{-3}		Duchowicz et al. (2020)	Q	185
	2.1×10^{-3}		Wang et al. (2017)	Q	81, 239
	1.6×10^{-2}		Wang et al. (2017)	Q	81, 240
	2.2×10^{-3}		Wang et al. (2017)	Q	81, 241
	7.7×10^{-3}		Li et al. (2014)	Q	242
	1.3×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	1.1×10^{-2}		Gharagheizi et al. (2010)	Q	247
	7.0×10^{-3}		Hilal et al. (2008)	Q	
	1.3×10^{-2}		Modarresi et al. (2007)	Q	68
		5300	Kühne et al. (2005)	Q	
	8.6×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	2.4×10^{-2}		English and Carroll (2001)	Q	231, 232
	1.2×10^{-2}		Katritzky et al. (1998)	Q	
	1.7×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	4.6×10^{-2}		Russell et al. (1992)	Q	280
	7.3×10^{-3}		Suzuki et al. (1992)	Q	233
	8.0×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		5700	Kühne et al. (2005)	?	
	1.2×10^{-2}		Yaws (1999)	?	21
	5.8×10^{-3}		Abraham and Weathersby (1994)	?	21
	7.7×10^{-3}		Hoff et al. (1993)	?	21
	6.0×10^{-3}		Abraham et al. (1990)	?	

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
diethyl ether-d10 $\text{C}_2\text{D}_5\text{OC}_2\text{D}_5$ [2679-89-2] RTZKZFJDLAIYFH-MWUKXHIBSA-N	1.3×10^{-2}	6500	Hiatt (2013)	M	
methyl propyl ether $\text{CH}_3\text{OC}_3\text{H}_7$ [557-17-5] VNKYTQGIUYNRMV-UHFFFAOYSA-N	6.6×10^{-3} 6.7×10^{-3} 6.7×10^{-3} 6.9×10^{-3} 2.0×10^{-2} 5.2×10^{-3} 6.2×10^{-3} 1.6×10^{-2} 6.2×10^{-3} 8.9×10^{-3} 1.1×10^{-2} 6.9×10^{-3} 1.1×10^{-2} 1.5×10^{-3} 7.3×10^{-3} 6.5×10^{-3} 6.9×10^{-3}		Duchowicz et al. (2020) Meylan and Howard (1991) Hine and Mookerjee (1975) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Yaffe et al. (2003) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Suzuki et al. (1992) Meylan and Howard (1991) Yaws (1999)	V V V X Q Q Q Q Q Q Q Q Q Q Q Q Q ?	187 238 272, 244 245 246 247 249, 250 233 21
methyl 2-propyl ether $\text{CH}_3\text{OC}_3\text{H}_7$ (methyl isopropyl ether) [598-53-8] RMGHERXMTMUMMV-UHFFFAOYSA-N	1.1×10^{-2} 1.2×10^{-2} 1.2×10^{-2} 1.1×10^{-2} 7.1×10^{-3} 7.8×10^{-3} 1.4×10^{-2} 6.2×10^{-3} 1.2×10^{-2} 6.2×10^{-3} 1.2×10^{-2} 8.2×10^{-3} 1.2×10^{-2} 1.1×10^{-2} 6.5×10^{-3} 1.1×10^{-2}		Duchowicz et al. (2020) Hine and Mookerjee (1975) Yaws (2003) Yaws (2003) Dupeux et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Yaffe et al. (2003) Katritzky et al. (1998) Suzuki et al. (1992) Yaws (1999)	V V X X Q Q Q Q Q Q Q Q Q Q Q Q ?	187 259 238 260 243, 244 245 246 247 249, 250 233 21
divinyl ether $\text{C}_4\text{H}_6\text{O}$ [109-93-3] QYKIQEUNHZKYBP-UHFFFAOYSA-N	5.4×10^{-4} 5.4×10^{-4} 1.2×10^{-3} 5.6×10^{-4} 7.3×10^{-2} 7.8×10^{-3} 3.9×10^{-4}		Steward et al. (1973) Allott et al. (1973) Duchowicz et al. (2020) Yaws (2003) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	L L V X Q Q Q	14 14 187 238, 14 243, 244 245

Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.5×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	6.0×10^{-4}		Gharagheizi et al. (2010)	Q	247
	3.8×10^{-4}		Hilal et al. (2008)	Q	
	2.0×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	5.8×10^{-4}		Abraham and Weathersby (1994)	?	21
methyl butyl ether $\text{C}_5\text{H}_{12}\text{O}$ [628-28-4] CXBDYQVECUFKRK-UHFFFAOYSA-N	6.6×10^{-3}	6100	Brockbank (2013)	L	1, 520
	5.5×10^{-3}		Duchowicz et al. (2020)	V	187
	4.4×10^{-3}		Amoore and Buttery (1978)	V	
	7.1×10^{-3}		Yaws (2003)	X	238
	2.1×10^{-2}		Duchowicz et al. (2020)	Q	
	4.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	5.3×10^{-3}		Gharagheizi et al. (2010)	Q	247
	9.6×10^{-3}		Modarresi et al. (2007)	Q	68
	5.6×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	1.1×10^{-2}		Katritzky et al. (1998)	Q	
2-methoxybutane $\text{C}_5\text{H}_{12}\text{O}$ (methyl <i>sec</i> -butyl ether) [6795-87-5] FVNIMHIOIXPIQT-UHFFFAOYSA-N	6.7×10^{-3}		Duchowicz et al. (2020)	V	187
	7.1×10^{-3}		Yaws (2003)	X	238
	8.1×10^{-3}		Duchowicz et al. (2020)	Q	
	7.3×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	7.2×10^{-3}		Gharagheizi et al. (2010)	Q	247
	6.2×10^{-3}		Hilal et al. (2008)	Q	
	1.6×10^{-2}		Modarresi et al. (2007)	Q	68
	8.6×10^{-3}		Yaws (1999)	?	21
methyl isobutyl ether $\text{C}_5\text{H}_{12}\text{O}$ [625-44-5] ZYVYEJXMYBUCMN-UHFFFAOYSA-N	4.3×10^{-3}	6700	Brockbank (2013)	L	
	4.5×10^{-3}		Duchowicz et al. (2020)	V	187
	7.2×10^{-3}		Yaws (2003)	X	238
	8.1×10^{-3}		Duchowicz et al. (2020)	Q	
	2.3×10^{-3}		Gharagheizi et al. (2012)	Q	
	6.9×10^{-3}		Gharagheizi et al. (2010)	Q	247
	7.1×10^{-3}		Modarresi et al. (2007)	Q	68
	5.6×10^{-3}		Yaffe et al. (2003)	Q	249, 273
	1.2×10^{-2}		Katritzky et al. (1998)	Q	
	8.6×10^{-3}		Yaws (1999)	?	21

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
methyl <i>tert</i> -butyl ether	1.2×10^{-2}	5100	Schwardt et al. (2021)	L	1
CH ₃ OC(CH ₃) ₃ (MTBE)	1.3×10^{-2}	5900	Brockbank (2013)	L	1
[1634-04-4]	1.7×10^{-2}	9100	Hiatt (2013)	M	
BZLVMXJERCGZMT-UHFFFAOYSA-N	2.4×10^{-2}	18000	Zhang et al. (2013)	M	326
	3.2×10^{-2}		Zhang et al. (2013)	M	327
	1.9×10^{-2}	5300	Hwang et al. (2010)	M	33, 521, 11
	1.1×10^{-2}	4800	Sieg et al. (2009)	M	328
	1.1×10^{-2}	4400	Falabella and Teja (2008)	M	11, 340
	1.5×10^{-2}	5900	Böhme et al. (2008)	M	
	1.2×10^{-2}	5100	Haimi et al. (2006)	M	522
	1.2×10^{-2}	5000	Arp and Schmidt (2004)	M	523
	1.4×10^{-2}	4500	Fischer et al. (2004)	M	
	7.2×10^{-3}	3200	Bierwagen and Keller (2001)	M	
	1.7×10^{-2}		Miller and Stuart (2000)	M	73
	2.3×10^{-2}		Park et al. (1997)	M	
	1.9×10^{-2}	15000	Robbins et al. (1993)	M	524
	1.4×10^{-2}		Mackay et al. (2006c)	V	
	1.0×10^{-1}	3700	Fukuchi et al. (2002)	V	
	1.6×10^{-2}		Park et al. (1997)	V	
	1.4×10^{-2}		Mackay et al. (1993)	V	
	2.0×10^{-2}		Hwang et al. (1992)	V	
	1.7×10^{-2}		Guthrie (1973)	V	
	1.7×10^{-2}		Bagno et al. (1991)	T	475
	1.8×10^{-2}		Yaws (2003)	X	259
	1.0×10^{-2}		Dupeux et al. (2022)	Q	260
	5.7×10^{-3}		Keshavarz et al. (2022)	Q	
	3.5×10^{-3}		Duchowicz et al. (2020)	Q	185
	1.3×10^{-3}		Wang et al. (2017)	Q	81, 239
	6.0×10^{-3}		Wang et al. (2017)	Q	81, 240
	1.5×10^{-2}		Wang et al. (2017)	Q	81, 241
	2.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	3.9×10^{-3}		Hilal et al. (2008)	Q	
	1.3×10^{-2}		Modarresi et al. (2007)	Q	68
		6300	Kühne et al. (2005)	Q	
	1.8×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	1.4×10^{-2}		English and Carroll (2001)	Q	231, 232
	1.1×10^{-2}		Katritzky et al. (1998)	Q	
	8.6×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	4.3×10^{-3}		Suzuki et al. (1992)	Q	233
	1.7×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		6000	Kühne et al. (2005)	?	
	1.8×10^{-2}		Yaws (1999)	?	21

Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethyl propyl ether $\text{C}_2\text{H}_5\text{OC}_3\text{H}_7$ [628-32-0] NVJUHMYXKUMQA-UHFFFAOYSA-N	8.7×10^{-3}		Duchowicz et al. (2020)	V	187
	8.6×10^{-3}		Hine and Mookerjee (1975)	V	
	8.6×10^{-3}		Butler and Ramchandani (1935)	V	
	6.4×10^{-3}		Yaws (2003)	X	238
	7.7×10^{-3}		Howard and Meylan (1997)	X	448
	7.0×10^{-3}		Duchowicz et al. (2020)	Q	
	8.2×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	7.0×10^{-3}		Gharagheizi et al. (2010)	Q	247
	7.9×10^{-3}		Hilal et al. (2008)	Q	
	1.4×10^{-2}		Modarresi et al. (2007)	Q	68
	8.6×10^{-3}		Yaffe et al. (2003)	Q	249, 250
ethyl isopropyl ether $\text{C}_5\text{H}_{12}\text{O}$ [625-54-7] XSJVVZAETSXBKU-UHFFFAOYSA-N	1.2×10^{-2}		Katritzky et al. (1998)	Q	
	5.7×10^{-3}		Suzuki et al. (1992)	Q	233
	7.9×10^{-3}		Yaws (1999)	?	21
ethyl isopropyl ether $\text{C}_5\text{H}_{12}\text{O}$ [625-54-7] XSJVVZAETSXBKU-UHFFFAOYSA-N	8.1×10^{-3}		Yaws (2003)	X	238
	2.0×10^{-2}		Gharagheizi et al. (2012)	Q	
	9.1×10^{-3}		Gharagheizi et al. (2010)	Q	247
2,2-dimethoxypropane $\text{C}_5\text{H}_{12}\text{O}_2$ [77-76-9] HEWZVZIVELJPQZ-UHFFFAOYSA-N	1.4×10^{-1}		Ebert et al. (2023)	?	317
methyl 1,2-dimethylpropyl ether $\text{C}_6\text{H}_{14}\text{O}$ [62016-49-3] JPUDLQKLSRSGN-UHFFFAOYSA-N	4.6×10^{-3}		Yaws (2003)	X	238
	3.8×10^{-3}		Gharagheizi et al. (2012)	Q	
	5.7×10^{-3}		Gharagheizi et al. (2010)	Q	247
methyl 1-ethylpropyl ether $\text{C}_6\text{H}_{14}\text{O}$ [36839-67-5] CQRFEDVNTJTKFU-UHFFFAOYSA-N	4.4×10^{-3}		Yaws (2003)	X	238
	4.3×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.2×10^{-3}		Gharagheizi et al. (2010)	Q	247
methyl 1-methylbutyl ether $\text{C}_6\text{H}_{14}\text{O}$ [6795-88-6] XSAJCGUYMQTAHL-UHFFFAOYSA-N	4.2×10^{-3}		Yaws (2003)	X	238
	6.9×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.0×10^{-3}		Gharagheizi et al. (2010)	Q	247
methyl 2,2-dimethylpropyl ether $\text{C}_6\text{H}_{14}\text{O}$ [1118-00-9] JILHZKWLEAKYRC-UHFFFAOYSA-N	4.5×10^{-3}		Yaws (2003)	X	238
	1.2×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.1×10^{-3}		Gharagheizi et al. (2010)	Q	247

Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methyl 2-methylbutyl ether $\text{C}_6\text{H}_{14}\text{O}$ [62016-48-2] XGLHRCWEOMNVKS-UHFFFAOYSA-N	4.3×10^{-3}		Yaws (2003)	X	238
	2.1×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-3}		Gharagheizi et al. (2010)	Q	247
methyl 3-methylbutyl ether $\text{C}_6\text{H}_{14}\text{O}$ [626-91-5] ZQAYBCWERYRAMF-UHFFFAOYSA-N	4.3×10^{-3}		Yaws (2003)	X	238
	3.1×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-3}		Gharagheizi et al. (2010)	Q	247
methyl pentyl ether $\text{C}_6\text{H}_{14}\text{O}$ [628-80-8] DBUJFULDVAZULB-UHFFFAOYSA-N	3.8×10^{-3}		Yaws (2003)	X	238
	3.9×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.0×10^{-3}		Gharagheizi et al. (2010)	Q	247
2-methoxy-2-methylbutane $\text{C}_6\text{H}_{14}\text{O}$ (<i>tert</i> -amyl methyl ether) [994-05-8] HVZJRWJGKQPSFL-UHFFFAOYSA-N	9.7×10^{-3}	6600	Brockbank (2013)	L	1
	5.3×10^{-2}	9400	Hwang et al. (2010)	M	521, 11
	1.0×10^{-2}	7000	Haimi et al. (2006)	M	525
	8.6×10^{-3}	6500	Arp and Schmidt (2004)	M	
	5.2×10^{-3}		Miller and Stuart (2000)	M	73
	1.0×10^{-2}		Dohnal and Hovorka (1999)	M	
	7.0×10^{-3}		Park et al. (1997)	M	
	8.1×10^{-3}		Park et al. (1997)	V	
	4.2×10^{-3}		Yaws (2003)	X	238
	3.9×10^{-3}		Yaws (2003)	X	238
	4.7×10^{-2}		Keshavarz et al. (2022)	Q	
	3.6×10^{-3}		Duchowicz et al. (2020)	Q	300
	1.3×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.8×10^{-3}		Gharagheizi et al. (2010)	Q	247
	3.8×10^{-3}		Gharagheizi et al. (2010)	Q	247
	6600	Kühne et al. (2005)	Q		
7.5×10^{-3}		Duchowicz et al. (2020)	?	186, 21	
	6900	Kühne et al. (2005)	?		
5.4×10^{-3}		Yaws (1999)	?	21	
5.0×10^{-3}	7600	Pankow et al. (1996)	?		
1-ethoxy-butane $\text{C}_6\text{H}_{14}\text{O}$ (ethyl butyl ether) [628-81-9] PZHIWRCQKBBTOW-UHFFFAOYSA-N	7.6×10^{-3}	5700	Brockbank (2013)	L	1
	6.4×10^{-3}		Miller and Stuart (2000)	M	73
	7.8×10^{-3}		Mackay et al. (2006c)	V	
	7.8×10^{-3}		Mackay et al. (1993)	V	
	4.0×10^{-3}		Yaws (2003)	X	238
	6.7×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.0×10^{-3}		Gharagheizi et al. (2010)	Q	247
	5900	Kühne et al. (2005)	Q		
	5000	Kühne et al. (2005)	?		

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethyl isobutyl ether $\text{C}_6\text{H}_{14}\text{O}$ [627-02-1] RQUBQBFVDOLUKC-UHFFFAOYSA-N	4.9×10^{-3} 3.5×10^{-3} 4.9×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
ethyl <i>sec</i> -butyl ether $\text{C}_6\text{H}_{14}\text{O}$ [2679-87-0] VSCUCHUDCLERMY-UHFFFAOYSA-N	4.9×10^{-3} 1.1×10^{-2} 5.3×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
ethyl <i>tert</i> -butyl ether $\text{C}_2\text{H}_5\text{OC}(\text{CH}_3)_3$ (ETBE) [637-92-3] NUMQCACRALPSHD-UHFFFAOYSA-N	7.2×10^{-3} 1.2×10^{-1} 6.3×10^{-3} 4.4×10^{-3} 6.4×10^{-3} 6.1×10^{-3} 4.2×10^{-3} 5.2×10^{-3} 7.8×10^{-3} 1.2×10^{-3} 1.1×10^{-3} 4.1×10^{-3} 1.5×10^{-2} 2.9×10^{-2} 5.2×10^{-3} 1.2×10^{-2} 6.0×10^{-3} 3.7×10^{-3}	6900 13000 6600 4300 7300 6500	Brockbank (2013) Hwang et al. (2010) Sieg et al. (2009) Falabella and Teja (2008) Haimi et al. (2006) Arp and Schmidt (2004) Miller and Stuart (2000) Yaws (2003) Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Katritzky et al. (1998) Duchowicz et al. (2020) Pankow et al. (1996)	L M M M M M X Q Q Q Q Q Q Q Q Q Q Q ?	521, 11 328 11, 340 526 73 238 300 81, 239 81, 240 81, 241 247 186, 21
dipropyl ether $\text{C}_3\text{H}_7\text{OC}_3\text{H}_7$ [111-43-3] POLCUAVZOMRGSN-UHFFFAOYSA-N	2.9×10^{-3} 3.0×10^{-3} 2.9×10^{-3} 2.2×10^{-3} 3.9×10^{-3} 3.9×10^{-3} 5.7×10^{-3} 2.9×10^{-3} 2.8×10^{-3} 4.5×10^{-3} 4.5×10^{-3} 1.2×10^{-3} 7.8×10^{-3} 7.2×10^{-3} 4.4×10^{-3} 3.9×10^{-3} 7.8×10^{-3} 3.9×10^{-3}	6400 9100	Brockbank (2013) Li and Carr (1993) Li et al. (1993) Hartkopf and Karger (1973) Mackay et al. (2006c) Mackay et al. (1993) Hwang et al. (1992) Hine and Mookerjee (1975) Butler and Ramchandani (1935) Yaws (2003) Yaws (2003) Dupeux et al. (2022) Keshavarz et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	L M M M V V V V V X X Q Q Q Q Q Q Q Q	1 259 238 260 185 243, 244 245 246

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.1×10^{-3}		Gharagheizi et al. (2010)	Q	247
	6.0×10^{-3}		Hilal et al. (2008)	Q	
	7.5×10^{-3}	5900	Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	
	4.5×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	1.1×10^{-2}		Katritzky et al. (1998)	Q	
	1.0×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	4.3×10^{-3}		Suzuki et al. (1992)	Q	233
	4.5×10^{-3}	7300	Duchowicz et al. (2020)	?	186, 21
			Kühne et al. (2005)	?	
	4.5×10^{-3}		Yaws (1999)	?	21
	1.9×10^{-3}		Hoff et al. (1993)	?	21
	4.5×10^{-3}		Yaws and Yang (1992)	?	21
	2.9×10^{-3}		Abraham et al. (1990)	?	
diisopropyl ether $\text{C}_3\text{H}_7\text{OC}_3\text{H}_7$ [108-20-3] ZAFNJMIOTHYJRJ-UHFFFAOYSA-N	4.5×10^{-3}	6600	Brockbank (2013)	L	1
	1.5×10^{-2}	8400	Hwang et al. (2010)	M	521, 11
	3.9×10^{-3}	6400	Arp and Schmidt (2004)	M	
	4.3×10^{-3}		Miller and Stuart (2000)	M	73
	4.7×10^{-3}		Dohnal and Hovorka (1999)	M	
	4.8×10^{-3}		Nielsen et al. (1994)	M	
	4.2×10^{-3}		Li and Carr (1993)	M	
	4.4×10^{-3}		Li et al. (1993)	M	
	2.8×10^{-3}		Guitart et al. (1989)	M	14
	4.3×10^{-3}		HSDB (2015)	V	
	3.9×10^{-3}		Mackay et al. (2006c)	V	
	4.8×10^{-3}	6200	Fukuchi et al. (2002)	V	
	3.1×10^{-3}	6400	Pankow et al. (1996)	V	
	3.9×10^{-3}		Mackay et al. (1993)	V	
	9.9×10^{-4}		Hine and Mookerjee (1975)	V	
	9.8×10^{-4}		Hine and Weimar (1965)	V	
	5.7×10^{-3}		Yaws (2003)	X	259
	5.6×10^{-3}		Yaws (2003)	X	238
	5.7×10^{-3}		Dupeux et al. (2022)	Q	260
	7.8×10^{-3}		Keshavarz et al. (2022)	Q	
	1.1×10^{-3}		Duchowicz et al. (2020)	Q	
	1.8×10^{-3}		Wang et al. (2017)	Q	81, 239
	6.2×10^{-3}		Wang et al. (2017)	Q	81, 240
	1.2×10^{-2}		Wang et al. (2017)	Q	81, 241
	2.2×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	5.5×10^{-3}		Gharagheizi et al. (2010)	Q	247
	3.7×10^{-3}		Hilal et al. (2008)	Q	
	9.6×10^{-3}		Modarresi et al. (2007)	Q	68

Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
		6600	Kühne et al. (2005)	Q	
	4.5×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	1.2×10^{-2}		Katritzky et al. (1998)	Q	
	8.0×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	3.5×10^{-3}		Suzuki et al. (1992)	Q	233
	3.9×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		7200	Kühne et al. (2005)	?	
	5.6×10^{-3}		Yaws (1999)	?	21
	5.7×10^{-3}		Yaws and Yang (1992)	?	21
	9.9×10^{-4}		Abraham et al. (1990)	?	
propyl isopropyl ether $C_6H_{14}O$ [627-08-7] JIEJJGMNDWIGBJ-UHFFFAOYSA-N	5.0×10^{-3}		Yaws (2003)	X	238
	1.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	5.3×10^{-3}		Gharagheizi et al. (2010)	Q	247
	6.3×10^{-3}		Modarresi et al. (2007)	Q	68
	1.2×10^{-2}		Katritzky et al. (1998)	Q	
2-ethoxy-2-methylbutane $C_7H_{16}O$ (<i>tert</i> -amyl ethyl ether) [919-94-8] KFRVYYGHSPXSZ-UHFFFAOYSA-N	5.0×10^{-3}	7400	Brockbank (2013)	L	
	4.8×10^{-3}	7600	Haimi et al. (2006)	M	527
	5.2×10^{-4}		Duchowicz et al. (2020)	V	187
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	2.5×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	2.4×10^{-3}		Hilal et al. (2008)	Q	
	1.1×10^{-2}		Modarresi et al. (2007)	Q	68
<i>tert</i> -butyl isopropyl ether $C_7H_{16}O$ [17348-59-3] HNFSPSWQNZVCTB-UHFFFAOYSA-N	6.6×10^{-4}		Yaws (1999)	?	21
dipropylene glycol monomethyl ether $C_7H_{16}O_3$ [34590-94-8] WGYZMNBZFHRYX-UHFFFAOYSA-N	8.6×10^3		Bartelt-Hunt et al. (2008)	?	21
dibutyl ether $C_4H_9OC_4H_9$ [142-96-1] DURPTKYDGMDSBL-UHFFFAOYSA-N	2.1×10^{-3}	6700	Brockbank (2013)	L	
	7.2×10^{-3}	10000	Hwang et al. (2010)	M	521, 11
	2.2×10^{-3}		Li and Carr (1993)	M	
	1.3×10^{-3}		Li et al. (1993)	M	
	2.1×10^{-3}		Ioffe et al. (1984)	M	
	2.1×10^{-3}		Mackay et al. (2006c)	V	
	2.1×10^{-3}		Mackay et al. (1993)	V	
	1.6×10^{-3}		Pierotti et al. (1959)	X	416

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.4×10^{-2}		Keshavarz et al. (2022)	Q	
	7.4×10^{-3}		Duchowicz et al. (2020)	Q	
	1.6×10^{-3}		Li et al. (2014)	Q	242
	2.8×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	3.1×10^{-3}		Hilal et al. (2008)	Q	
	6.1×10^{-3}		Modarresi et al. (2007)	Q	68
		6600	Kühne et al. (2005)	Q	
	1.8×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	9.9×10^{-3}		Katritzky et al. (1998)	Q	
	6.4×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	2.2×10^{-3}		Russell et al. (1992)	Q	280
	2.5×10^{-3}		Suzuki et al. (1992)	Q	233
	1.6×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		7000	Kühne et al. (2005)	?	
	1.8×10^{-2}		Yaws (1999)	?	21
	1.6×10^{-3}		Abraham et al. (1990)	?	
diisobutyl ether $\text{C}_8\text{H}_{18}\text{O}$ [628-55-7] SZNYWUWQFZLLT-UHFFFAOYSA-N	3.7×10^{-3}		Hilal et al. (2008)	Q	
di-sec-butyl ether $\text{C}_8\text{H}_{18}\text{O}$ [6863-58-7] HHBZZTKMMLDNDN-UHFFFAOYSA-N	1.8×10^{-3}		Yaws (2003)	X	259
	1.8×10^{-3}		Yaws (2003)	X	238
	1.0×10^{-3}		Dupeux et al. (2022)	Q	260
	8.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.7×10^{-3}		Gharagheizi et al. (2010)	Q	247
	2.8×10^{-3}		Yaws (1999)	?	21
di-tert-butyl ether $\text{C}_8\text{H}_{18}\text{O}$ [6163-66-2] AQEFLFZSWDEAIP-UHFFFAOYSA-N	2.1×10^{-3}		Yaws (2003)	X	238
	1.1×10^{-3}		Gharagheizi et al. (2010)	Q	247
	3.0×10^{-3}		Yaws (1999)	?	21
2-methoxy-2,4,4-trimethylpentane $\text{C}_9\text{H}_{20}\text{O}$ (methyl tert-octyl ether) [62108-41-2] IKZVAPMTXDXWMX-UHFFFAOYSA-N	1.9×10^{-3}		Ebert et al. (2023)	?	528
2-methoxy-2-methylheptane $\text{C}_9\text{H}_{20}\text{O}$ [76589-16-7] KJRACWZCOVHBQU-UHFFFAOYSA-N	1.9×10^{-3}	8100	Haimi et al. (2006)	M	529

Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-ethoxy-2,4,4-trimethylpentane $\text{C}_{10}\text{H}_{22}\text{O}$ (ethyl tert-octyl ether) [187103-12-4] JGPJRBWLBUGAQN-UHFFFAOYSA-N	7.7×10^{-4}	6900	Haimi et al. (2006)	M	530
1,1'-oxybis(pentane) $\text{C}_{10}\text{H}_{22}\text{O}$ (dipentyl ether) [693-65-2] AOPDRZXCEAKHHW-UHFFFAOYSA-N	3.5×10^{-4} 3.5×10^{-4} 4.5×10^{-4} 4.3×10^{-3} 4.3×10^{-4}		Yaws (2003) Yaws (2003) Dupeux et al. (2022) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X X Q Q	259 238 260 247
	2.7×10^{-3} 1.0×10^{-3}		Hilal et al. (2008) Yaws (1999) Brockbank (2013)	Q ? W	21 531
1,1'-oxybis(3-methylbutane) $\text{C}_{10}\text{H}_{22}\text{O}$ (diisopentyl ether) [544-01-4] AQZGPSLYZOOYQP-UHFFFAOYSA-N	6.8×10^{-3} 6.6×10^{-3} 1.1×10^{-3} 1.2×10^{-3} 4.9×10^{-3} 1.2×10^{-3} 3.3×10^{-3} 4.8×10^{-3}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q Q Q Q	187 243, 244 245 246 68
1,1'-oxybis(hexane) $\text{C}_{12}\text{H}_{26}\text{O}$ (dihexyl ether) [112-58-3] BPIUIOXAFBGMNB-UHFFFAOYSA-N	2.9×10^{-4} 5.6×10^{-3} 1.7×10^{-4} 1.8×10^{-3} 3.0×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999) Brockbank (2013)	X Q Q Q ? W	238 247 21 532
1-ethoxy-3,7-dimethyloctane $\text{C}_{12}\text{H}_{26}\text{O}$ [22810-10-2] HCHHIPCZJSRFRT-UHFFFAOYSA-N	6.7×10^{-4} 5.3×10^{-3} 1.3×10^{-3} 2.5×10^{-4}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
diheptyl ether $\text{C}_{14}\text{H}_{30}\text{O}$ [629-64-1] UJEGHEMJVNQWOJ-UHFFFAOYSA-N	2.8×10^{-5} 8.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
dioctyl ether $\text{C}_{16}\text{H}_{34}\text{O}$ [629-82-3] NKJOXAZJBOMXID-UHFFFAOYSA-N	1.3×10^{-4} 6.7×10^{-5} 8.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2010) Yaws (1999)	X Q ?	238 247 21

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
methoxycyclohexane $C_7H_{14}O$ [931-56-6] GHDIHPNJQVDFBL-UHFFFAOYSA-N	3.1×10^{-2}		Hilal et al. (2008)	Q	
methyl cedryl ether $C_{16}H_{28}O$ [19870-74-7] HRGPYCVTDOECMG-WALBABNVSA-N	2.5×10^{-3} 2.4×10^{-3} 7.7×10^{-3} 1.2×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
dimethoxymethane $CH_3OCH_2OCH_3$ (methylal) [109-87-5] NKDDWNXOKDWJAK-UHFFFAOYSA-N	6.1×10^{-2} 6.3×10^{-2} 6.1×10^{-2} 5.7×10^{-2} 1.6×10^{-2} 4.6×10^{-1} 7.1×10^{-2} 3.6×10^{-1} 6.5×10^{-2} 1.2×10^{-1} 1.6×10^{-1} 2.0×10^{-1} 2.3×10^{-1} 6.9×10^{-2} 5.7×10^{-2} 6.9×10^{-2}	4700 4800	Brockbank (2013) Ondo and Dohnal (2007) HSDB (2015) Pierotti et al. (1959) Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020) Yaws (1999)	L M V X Q Q Q Q Q Q Q Q Q Q ? ?	1 416 185 81, 239 81, 240 81, 241 243, 244 245 246 68 186, 21 21, 12
trimethoxymethane $HC(OCH_3)_3$ [149-73-5] PYOKUURKVVELLB-UHFFFAOYSA-N	6.9×10^{-1}		Guthrie (1973)	V	
diethoxymethane $C_5H_{12}O_2$ [462-95-3] KLKFAASOGCDTDT-UHFFFAOYSA-N	1.5×10^{-1} 7.5×10^{-2} 7.8×10^{-2} 1.6×10^{-1} 9.9×10^{-2} 7.2×10^{-2}		Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Modarresi et al. (2007)	V Q Q Q Q Q	187 243, 244 245 246 68
1,1-diethoxyethane $(C_2H_5O)_2CHCH_3$ (acetal) [105-57-7] DHKHKXVYLBOIT-UHFFFAOYSA-N	1.0×10^{-1} 1.0×10^{-1} 1.0×10^{-1} 1.2×10^{-1} 3.2×10^{-2} 5.7×10^{-2} 6.9×10^{-2} 1.1×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Hine and Mookerjee (1975) Abney (2021) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yaws (1999)	V V V Q Q Q Q ?	187 401 68 21

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2-diethoxyethane $\text{C}_2\text{H}_5\text{OC}_2\text{H}_4\text{OC}_2\text{H}_5$ [629-14-1] LZDKZFUFMNSQCJ-UHFFFAOYSA-N	1.6×10^{-1}		Duchowicz et al. (2020)	V	187
	1.6×10^{-1}		HSDB (2015)	V	
	1.6×10^{-1}		Hine and Mookerjee (1975)	V	
	1.2×10^{-1}		Howard and Meylan (1997)	X	448
	8.3×10^{-2}		Duchowicz et al. (2020)	Q	
	3.9×10^{-1}		Hilal et al. (2008)	Q	
1,1,1-trimethoxyethane $\text{CH}_3\text{C}(\text{OCH}_3)_3$ [1445-45-0] HDPNBNXLDFELL-UHFFFAOYSA-N	2.1×10^{-1}		Modarresi et al. (2007)	Q	68
	6.4×10^{-1}		Guthrie (1973)	V	
1,2-dimethoxyethane $\text{C}_4\text{H}_{10}\text{O}_2$ [110-71-4] XTHFKEDIFFGKHM-UHFFFAOYSA-N	1.3	7300	Brockbank (2013)	L	1, 533
	2.1		O'Farrell and Waghorne (2010)	M	
	1.4	7200	Ondo and Dohnal (2007)	M	1
	1.4	7100	Cabani et al. (1978)	T	
	9.0		HSDB (2015)	Q	100
3-oxa-1-hexanol $\text{C}_5\text{H}_{12}\text{O}_2$ (2-propoxyethanol) [2807-30-9] YEYKMWJDLWJFOA-UHFFFAOYSA-N	5.3×10^{-1}		Hilal et al. (2008)	Q	
	2.0×10^1	8400	Cabani et al. (1978)	T	
	6.6×10^2		HSDB (2015)	Q	100
	2.0×10^1		Raventos-Duran et al. (2010)	Q	243, 244
	9.9		Raventos-Duran et al. (2010)	Q	245
3-oxa-1-heptanol $\text{C}_6\text{H}_{14}\text{O}_2$ (2-butoxyethanol; butyl cellosolve) [111-76-2] POAOYUHQDCAZBD-UHFFFAOYSA-N	1.2×10^2		Raventos-Duran et al. (2010)	Q	246
	1.0×10^1		Hilal et al. (2008)	Q	
	5.8		Nirmalakhandan et al. (1997)	Q	
	1.3×10^1	8300	Brockbank (2013)	L	
	3.5	7700	Hiatt (2013)	M	
	1.3×10^1	8300	Kim et al. (2000)	M	33
	2.7		Johanson and Dynésius (1988)	M	14
	1.6×10^1	8900	Cabani et al. (1978)	T	
	1.7×10^1		Keshavarz et al. (2022)	Q	
	7.4		Duchowicz et al. (2020)	Q	185
	5.4		Wang et al. (2017)	Q	81, 239
	1.9×10^1		Wang et al. (2017)	Q	81, 240
	3.2		Wang et al. (2017)	Q	81, 241
	1.6×10^1		Raventos-Duran et al. (2010)	Q	272, 244
7.8		Raventos-Duran et al. (2010)	Q	245	
9.9×10^1		Raventos-Duran et al. (2010)	Q	246	
7.7		Hilal et al. (2008)	Q		
1.9×10^1		Modarresi et al. (2007)	Q	68	
4.5		Nirmalakhandan et al. (1997)	Q		
6.2		Duchowicz et al. (2020)	?	186, 21	
2.8×10^1		Yaws (1999)	?	21, 12	

Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methoxy-2-propanol $\text{C}_4\text{H}_{10}\text{O}_2$ [107-98-2] ARXJGSRGQADJSQ-UHFFFAOYSA-N	4.8		Johanson and Dynésius (1988)	M	14
	1.1×10^1		Hilal et al. (2008)	C	
	9.2		Keshavarz et al. (2022)	Q	
	6.7		Duchowicz et al. (2020)	Q	300
	8.3		Wang et al. (2017)	Q	81, 239
	4.7×10^1		Wang et al. (2017)	Q	81, 240
	4.9		Wang et al. (2017)	Q	81, 241
	2.5×10^1		Raventos-Duran et al. (2010)	Q	243, 244
	2.0×10^1		Raventos-Duran et al. (2010)	Q	245
	1.6×10^2		Raventos-Duran et al. (2010)	Q	246
	1.2×10^1		Hilal et al. (2008)	Q	
	2.8×10^1		Modarresi et al. (2007)	Q	68
	1.1×10^1		Yaffe et al. (2003)	Q	249, 250
3.5		Katritzky et al. (1998)	Q		
1.1×10^1		Duchowicz et al. (2020)	?	186, 21	
4-methyl-3-oxa-1-pentanol $\text{C}_5\text{H}_{12}\text{O}_2$ (2-isopropoxyethanol) [109-59-1] HCGFUIQPSOCUHI-UHFFFAOYSA-N	4.8		Johanson and Dynésius (1988)	M	14
	1.2×10^1		Keshavarz et al. (2022)	Q	
	2.6		Duchowicz et al. (2020)	Q	185
	2.0×10^1		Raventos-Duran et al. (2010)	Q	272, 244
	7.8		Raventos-Duran et al. (2010)	Q	245
	1.2×10^2		Raventos-Duran et al. (2010)	Q	246
	7.9		Hilal et al. (2008)	Q	
	2.7×10^1		Modarresi et al. (2007)	Q	68
1.1×10^1		Duchowicz et al. (2020)	?	186, 21	
1,2-dibutoxyethane $\text{C}_{10}\text{H}_{22}\text{O}_2$ [112-48-1] GDXXHBFHOEYVPED-UHFFFAOYSA-N	9.9×10^{-1}		HSDB (2015)	V	
	1.4×10^{-1}		Hilal et al. (2008)	Q	
	1.1×10^{-1}		Modarresi et al. (2007)	Q	68
3,6-dioxa-1-decanol $\text{C}_8\text{H}_{18}\text{O}_3$ (butyl carbitol) [112-34-5] OAYXUHPQHDDZ-UHFFFAOYSA-N	1.4×10^3		Kim et al. (2000)	M	
diethylene glycol dibutyl ether $\text{C}_{12}\text{H}_{26}\text{O}_3$ [112-73-2] KZVBBTJMSWGK-UHFFFAOYSA-N	2.5	13000	Brockbank (2013)	L	
	3.9		Duchowicz et al. (2020)	V	187
	6.1		Yaws (2003)	X	238, 12
	1.3		Duchowicz et al. (2020)	Q	
	6.0		Gharagheizi et al. (2010)	Q	247
	3.5		Hilal et al. (2008)	Q	
	1.5		Modarresi et al. (2007)	Q	68
4.0		Yaws (1999)	?	21, 12	

Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methyl vinyl ether $\text{C}_3\text{H}_6\text{O}$ [107-25-5] XJRBAMWJDBPFIM-UHFFFAOYSA-N	1.5×10^{-3} 9.9×10^{-3} 6.2×10^{-4} 1.6×10^{-3}		HSDB (2015) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	V Q Q Q	 243, 244 245 246
ethyl vinyl ether $\text{C}_4\text{H}_8\text{O}$ [109-92-2] FJKIXWOMBXYWOQ-UHFFFAOYSA-N	1.8×10^{-3} 2.3×10^{-2} 6.2×10^{-3} 3.9×10^{-4} 1.2×10^{-3}		Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	V Q Q Q Q	 187 243, 244 245 246
propyl vinyl ether $\text{C}_5\text{H}_{10}\text{O}$ [764-47-6] OVGRCEFMXPHEBL-UHFFFAOYSA-N	3.1×10^{-3}	4800	Hwang et al. (2010)	M	521, 11
allyl glycidyl ether $\text{C}_6\text{H}_{10}\text{O}_2$ [106-92-3] LSWYGACWGAICNM-UHFFFAOYSA-N	2.1		Ebert et al. (2023)	?	317
butyl vinyl ether $\text{C}_6\text{H}_{12}\text{O}$ [111-34-2] UZKWTJUDCOPSNM-UHFFFAOYSA-N	4.6×10^{-3} 4.5×10^{-3} 7.3×10^{-4} 2.5×10^{-2} 3.9×10^{-3} 2.0×10^{-4} 7.8×10^{-4} 2.5×10^{-3}		Duchowicz et al. (2020) HSDB (2015) Dupeux et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Modarresi et al. (2007)	V V Q Q Q Q Q Q	 187 260 243, 244 245 246 68
isobutyl vinyl ether $\text{C}_6\text{H}_{12}\text{O}$ [109-53-5] OZCMOJQQLBXBKI-UHFFFAOYSA-N	3.9×10^{-3} 2.5×10^{-4} 7.8×10^{-4} 1.9×10^{-4} 2.5×10^{-3}		Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	Q Q Q Q Q	 243, 244 245 246 68
benzyl methyl ether $\text{C}_8\text{H}_{10}\text{O}$ [538-86-3] GQKZBCPTCWJTAS-UHFFFAOYSA-N	1.1×10^{-1} 1.3×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	 187
benzyl ethyl ether $\text{C}_9\text{H}_{12}\text{O}$ [539-30-0] AXPZDYVDTMMLNB-UHFFFAOYSA-N	6.7×10^{-2}		Dupeux et al. (2022)	Q	260

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methoxybenzene	2.9×10^{-2}	4200	Brockbank (2013)	L	
$\text{C}_6\text{H}_5\text{OCH}_3$	2.9×10^{-2}	4200	Brockbank et al. (2013)	M	
(anisole)	2.6×10^{-2}	4800	Dewulf et al. (1999)	M	
[100-66-3]	3.2×10^{-2}		Li and Carr (1993)	M	
RDOXTESZEPMUJZ-UHFFFAOYSA-N	2.0×10^{-2}		Duchowicz et al. (2020)	V	187
	3.1×10^{-2}		Mackay et al. (2006c)	V	
	4.0×10^{-2}		Mackay et al. (1993)	V	
	2.3×10^{-3}		Hine and Mookerjee (1975)	V	
	2.3×10^{-3}		Hine and Weimar (1965)	R	
	2.7×10^{-3}		Yaws (2003)	X	259
	2.7×10^{-3}		Yaws (2003)	X	238
	6.9×10^{-2}		Schüürmann (2000)	C	21
	1.9×10^{-2}		Dupeux et al. (2022)	Q	260
	1.2×10^{-1}		Duchowicz et al. (2020)	Q	
	2.3×10^{-3}		HSDB (2015)	Q	100
	1.9×10^{-2}		Li et al. (2014)	Q	242
	1.3×10^{-1}		Gharagheizi et al. (2010)	Q	247
	9.0×10^{-3}		Hilal et al. (2008)	Q	
	3.3×10^{-2}		Modarresi et al. (2007)	Q	68
		4500	Kühne et al. (2005)	Q	
	8.6×10^{-3}		Yao et al. (2002)	Q	230
	1.2×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	2.3×10^{-3}		Suzuki et al. (1992)	Q	233
		4300	Kühne et al. (2005)	?	
	2.7×10^{-3}		Yaws (1999)	?	21
	2.5×10^{-2}		Abraham et al. (1990)	?	
ethoxybenzene	1.7×10^{-2}		Li and Carr (1993)	M	
$\text{C}_8\text{H}_{10}\text{O}$	2.2×10^{-2}		Duchowicz et al. (2020)	V	187
(phenetole)	2.2×10^{-2}		HSDB (2015)	V	
[103-73-1]	2.3×10^{-2}		Mackay et al. (2006c)	V	
DLRJIFUOBPOJNS-UHFFFAOYSA-N	4.4×10^{-2}		Duchowicz et al. (2020)	Q	
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	6.5×10^{-3}		Hilal et al. (2008)	Q	
	2.9×10^{-2}		Modarresi et al. (2007)	Q	68
	2.6×10^{-1}		Katritzky et al. (1998)	Q	
	1.0×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	1.7×10^{-2}		Abraham et al. (1990)	?	
1,2-dimethoxybenzene		5100	Kühne et al. (2005)	Q	
$\text{C}_8\text{H}_{10}\text{O}_2$		2400	Kühne et al. (2005)	?	
[91-16-7]					
ABDKAPXRBAPSQN-UHFFFAOYSA-N					

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-phenoxyethanol $\text{C}_8\text{H}_{10}\text{O}_2$ [122-99-6] QCDWFXQBSFUVSP-UHFFFAOYSA-N	2.1×10^2 2.0×10^2 4.0×10^1 3.4×10^1 1.4×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q	187 68
2-(phenylmethoxy)-ethanol $\text{C}_9\text{H}_{12}\text{O}_2$ [622-08-2] CUZKCNWZBXLAJX-UHFFFAOYSA-N	8.2×10^1 4.4×10^1 1.6×10^3 1.6×10^2 3.1×10^3 1.5×10^2 7.0×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q Q Q Q	187 243, 244 245 246 68
1,2,3-trimethoxybenzene $\text{C}_9\text{H}_{12}\text{O}_3$ [634-36-6] CRUILBNAQILVHZ-UHFFFAOYSA-N	3.6		Schüürmann (2000)	V	
1-methoxy-4-(1-propenyl)-benzene $\text{C}_{10}\text{H}_{12}\text{O}$ (anethole) [104-46-1] RUVINXPYWBROJD-UHFFFAOYSA-N	9.9×10^{-2} 1.0×10^{-1} 3.7×10^{-2} 1.4×10^{-1} 2.0×10^{-2} 1.0×10^{-1}	6200	van Roon et al. (2005) Yaws (2003) Dupeux et al. (2022) HSDB (2015) Hilal et al. (2008) Yaws (1999)	V X Q Q Q ?	259 260 100 21
2-methoxy-4-(2-propenyl)-phenol $\text{C}_{10}\text{H}_{12}\text{O}_2$ (eugenol) [97-53-0] RRAFCDWBNXTKKO-UHFFFAOYSA-N	9.2 5.0 6.9 5.1 7.2 3.9 3.5×10^{-1} 2.0×10^1 5.7	9700	McFall et al. (2020) Duchowicz et al. (2020) Martins et al. (2017) HSDB (2015) van Roon et al. (2005) Dupeux et al. (2022) Abney (2021) Duchowicz et al. (2020) McFall et al. (2020)	M V V V V Q Q Q Q	187 316 260 401 476
1,2-dimethoxy-4-(2-propenyl)-benzene $\text{C}_{11}\text{H}_{14}\text{O}_2$ [93-15-2] ZYEMGPYFIJGTP-UHFFFAOYSA-N	1.8 1.8 1.0 3.6 1.9×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q	187 68

Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
diphenyl ether $C_{12}H_{10}O$ [101-84-8] USIUVYZYUHIAEV-UHFFFAOYSA-N	1.9×10^{-2} 3.5×10^{-2} 3.5×10^{-2} 3.7×10^{-2} 1.1×10^{-1} 3.7×10^{-2} 1.8×10^{-2} 2.9×10^{-1} 1.9×10^{-2} 1.7×10^{-2} 1.7×10^{-1} 1.9×10^{-2}		Brockbank (2013) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Kurz and Ballschmiter (1999) Mackay et al. (1993) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaws (1999)	L V V V V V X Q Q Q Q ?	187 238 68 21
(phenoxymethyl)-oxirane $C_9H_{10}O_2$ [122-60-1] FQYUMYWMJTYZTK-UHFFFAOYSA-N	1.2×10^1 1.2×10^1 4.8 6.1×10^{-1} 1.9		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q	187 68
1-dodecyl-4-phenoxybenzene $C_{24}H_{34}O$ [119345-02-7] XSAHYEQPUFJGKW-UHFFFAOYSA-N	3.4×10^{-3} 1.4×10^{-3} 1.7×10^{-2} 7.7×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2,2,4-trimethyl-4-(4-(4-(2,4,4-trimethylpentan-2-yl)phenoxy)phenyl)pentane $C_{28}H_{42}O$ [61702-88-3] AJDONJVWDSZZQF-UHFFFAOYSA-N	1.3×10^{-3} 1.2×10^{-3} 5.4×10^{-2} 6.9×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
etofenprox $C_{25}H_{28}O_3$ [80844-07-1] YREQHYQNNWYQCJ-UHFFFAOYSA-N	7.4×10^1		Maniere et al. (2011)	?	166
di- <i>tert</i> -butyl <i>sec</i> -butylidene diperoxide $C_{12}H_{26}O_4$ [2167-23-9] HQOVXPHOJANJBR-UHFFFAOYSA-N	1.2×10^{-2} 6.1×10^{-5} 1.6×10^{-2} 1.1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
peroxide, 1,1-dimethylethyl 1-methyl-1-phenylethyl $C_{13}H_{20}O_2$ [3457-61-2] BIISIZOQPWZPPS-UHFFFAOYSA-N	1.4×10^{-2} 4.8×10^{-3} 1.6×10^{-2} 1.9×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
di- <i>tert</i> -butyl 1,1,4,4-tetramethyltetramethylene diperoxide C ₁₆ H ₃₄ O ₄ [78-63-7] DMWVYCCGQCPJEA-UHFFFAOYSA-N	3.9 × 10 ⁻³ 7.9 × 10 ⁻⁴ 1.3 × 10 ⁻¹ 3.4 × 10 ⁻¹		Zhang et al. (2010)	Q	288, 289
1,4-bis(1- <i>tert</i> -butylperoxy-1- methyl-ethyl)benzene C ₂₀ H ₃₄ O ₄ [2781-00-2] GWQOYRSARAWVTC-UHFFFAOYSA-N	1.0 × 10 ⁻¹ 1.8 × 10 ⁻² 2.9 × 10 ⁻¹ 8.6		Zhang et al. (2010)	Q	288, 289
MCM:CH ₃ OCH ₂ OOH C ₂ H ₆ O ₃ CDXAGPPPWKCPRI-UHFFFAOYSA-N	2.2 × 10 ² 6.9 × 10 ¹ 7.1 × 10 ¹		Wang et al. (2017)	Q	81, 239
MCM:ETHOXOOH C ₂ H ₄ O ₃ NOEKFNMWGHEGBN-UHFFFAOYSA-N	7.1 × 10 ² 1.7 × 10 ² 1.6 × 10 ²		Wang et al. (2017)	Q	81, 239
MCM:DMMAOOH C ₃ H ₈ O ₄ SHLFZQKLPTTSZ-UHFFFAOYSA-N	5.1 × 10 ³ 3.0 × 10 ² 1.2 × 10 ¹		Wang et al. (2017)	Q	81, 239
MCM:DMMBOOH C ₃ H ₈ O ₄ HODDSHZVZWLHR-UHFFFAOYSA-N	5.5 × 10 ³ 5.6 × 10 ¹ 2.2 × 10 ²		Wang et al. (2017)	Q	81, 239
MCM:ETOMEOOH C ₃ H ₈ O ₃ NZBMKAZNWPZJND-UHFFFAOYSA-N	1.7 × 10 ² 3.9 × 10 ¹ 6.9 × 10 ¹		Wang et al. (2017)	Q	81, 239
MCM:MEMOXYCO ₃ H C ₃ H ₆ O ₄ PWWCDEMRYRBWOJ-UHFFFAOYSA-N	2.6 × 10 ³ 7.1 × 10 ¹ 1.1 × 10 ¹		Wang et al. (2017)	Q	81, 239
MCM:DIETETOOH C ₄ H ₁₀ O ₃ CXWWPQGYBJCHJL-UHFFFAOYSA-N	1.7 × 10 ² 1.3 × 10 ¹ 4.1 × 10 ¹		Wang et al. (2017)	Q	81, 239
MCM:ETOC ₂ OOH C ₄ H ₁₀ O ₃ NYVGIYPKZJSYSP-UHFFFAOYSA-N	1.6 × 10 ² 8.1 × 10 ¹ 6.8 × 10 ¹		Wang et al. (2017)	Q	81, 239
MCM:ETOME _{CO} ₃ H C ₄ H ₈ O ₄ ULYBJOMJQUHMOL-UHFFFAOYSA-N	2.1 × 10 ³ 3.4 × 10 ¹ 4.8		Wang et al. (2017)	Q	81, 239

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:IPRMETOOH $\text{C}_4\text{H}_{10}\text{O}_3$ PSBSELFEZHDPSTA-UHFFFAOYSA-N	1.1×10^2 4.5 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXMOOH $\text{C}_5\text{H}_{12}\text{O}_3$ DCHWALHTYQHXTG-UHFFFAOYSA-N	1.3×10^2 2.0×10^1 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EIPEOOH $\text{C}_5\text{H}_{12}\text{O}_3$ ZZXLAMSYBUVKJS-UHFFFAOYSA-N	8.9×10^1 3.0 1.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPROC21OOH $\text{C}_5\text{H}_{12}\text{O}_3$ VGMUBGNCFVOQDX-UHFFFAOYSA-N	1.7×10^2 6.6 2.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTBEAOOH $\text{C}_5\text{H}_{12}\text{O}_3$ BGZKVDIFKPQYHL-UHFFFAOYSA-N	8.9×10^1 8.5 6.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTBEBCO3H $\text{C}_5\text{H}_{10}\text{O}_4$ NGYXBYFCPPVOQA-UHFFFAOYSA-N	1.3×10^3 4.7 3.4×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTBEBOOH $\text{C}_5\text{H}_{12}\text{O}_3$ FPTBRWWJTBOWHN-UHFFFAOYSA-N	8.9×10^1 2.5×10^1 2.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXMCO3H $\text{C}_6\text{H}_{12}\text{O}_4$ BMXLBBYCODRNIJ-UHFFFAOYSA-N	1.5×10^3 1.7×10^1 8.3×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DIIPRETOOH $\text{C}_6\text{H}_{14}\text{O}_3$ PFVPTWUDXVSVAC-UHFFFAOYSA-N	8.3×10^1 1.6 2.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETBEACO3H $\text{C}_6\text{H}_{12}\text{O}_4$ UAVAAIVEDVDYSQ-UHFFFAOYSA-N	1.1×10^3 3.4 3.1×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETBEAOOH $\text{C}_6\text{H}_{14}\text{O}_3$ ITRUGVUCIYLYDK-UHFFFAOYSA-N	8.3×10^1 1.7×10^1 1.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETBEBOOH $\text{C}_6\text{H}_{14}\text{O}_3$ VOZHKKMLSSYDIG-UHFFFAOYSA-N	8.3×10^1 2.5 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETBECCO3H $\text{C}_6\text{H}_{12}\text{O}_4$ AELSWALKLVZVPO-UHFFFAOYSA-N	1.1×10^3 8.9 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:ETBECOOH $\text{C}_6\text{H}_{14}\text{O}_3$ WJMPPRRRRBMJID-UHFFFAOYSA-N	8.3×10^1 2.0×10^1 5.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPROMC2OOH $\text{C}_6\text{H}_{14}\text{O}_3$ JCIUPJDJCBRYHD-UHFFFAOYSA-N	1.4×10^2 2.2×10^1 2.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPROMCCO3H $\text{C}_6\text{H}_{12}\text{O}_4$ SFJQIQZNOBLTBZ-UHFFFAOYSA-N	1.8×10^3 7.8 7.6×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCSOZ $\text{C}_{15}\text{H}_{24}\text{O}_3$ DXZCAIRIBLPJLG-UHFFFAOYSA-N	9.1 2.0×10^{-1} 7.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CH3OCH2OH $\text{C}_2\text{H}_6\text{O}_2$ VHWYCFISAQVCCP-UHFFFAOYSA-N	8.1 5.4×10^1 3.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMMAOH $\text{C}_3\text{H}_8\text{O}_3$ YANOHILBFNXRFM-UHFFFAOYSA-N	1.7×10^2 4.1×10^2 1.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMMBOH $\text{C}_3\text{H}_8\text{O}_3$ IIGJYLXJNYBXEO-UHFFFAOYSA-N	2.0×10^2 4.6×10^1 9.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETOMEOH $\text{C}_3\text{H}_8\text{O}_2$ RRLWYLINGKISHN-UHFFFAOYSA-N	6.8 3.0×10^1 3.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MO2EOLA2OH $\text{C}_3\text{H}_8\text{O}_3$ CSCSROFYRUZJH-UHFFFAOYSA-N	9.6×10^3 9.6×10^3 4.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MO2EOLAOOH $\text{C}_3\text{H}_8\text{O}_4$ PFSIOEPXGRVTPO-UHFFFAOYSA-N	8.1×10^5 2.8×10^4 6.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MO2EOLB2OH $\text{C}_3\text{H}_8\text{O}_3$ ONSWVOSXVUHESJ-UHFFFAOYSA-N	2.3×10^4 2.0×10^4 4.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MO2EOLBOOH $\text{C}_3\text{H}_8\text{O}_4$ VULCDXDIAONDTM-UHFFFAOYSA-N	6.0×10^5 1.4×10^5 2.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DIETETOH $\text{C}_4\text{H}_{10}\text{O}_2$ CAFAOQIVXSSFSY-UHFFFAOYSA-N	6.0 1.7×10^1 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:EOX2ETA2OH $\text{C}_4\text{H}_{10}\text{O}_3$ WWWBRUMYFUDEJQ-UHFFFAOYSA-N	8.0×10^3 6.6×10^3 4.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EOX2ETB2OH $\text{C}_4\text{H}_{10}\text{O}_3$ RZYMVMZJVMXDRP-UHFFFAOYSA-N	2.1×10^4 8.9×10^3 2.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EOX2OLAOOH $\text{C}_4\text{H}_{10}\text{O}_4$ OSAXOMWTXDBXFG-UHFFFAOYSA-N	6.3×10^5 1.7×10^4 4.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EOX2OLBOOH $\text{C}_4\text{H}_{10}\text{O}_4$ IWDPKCKJRWMAAT-UHFFFAOYSA-N	6.3×10^5 6.2×10^4 1.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2C3OCOH $\text{C}_4\text{H}_{10}\text{O}_3$ OAPWFUZUONIVKV-UHFFFAOYSA-N	2.1×10^4 1.0×10^4 2.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2C3OCOOH $\text{C}_4\text{H}_{10}\text{O}_4$ ZZOFHQOVQLUGOX-UHFFFAOYSA-N	6.3×10^5 1.3×10^5 1.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPRMEETOH $\text{C}_4\text{H}_{10}\text{O}_2$ BFSUQRCKXZXEX-UHFFFAOYSA-N	4.2 9.3 7.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PR2OHHMOOH $\text{C}_4\text{H}_{10}\text{O}_4$ BIISZUJLPYTCKS-UHFFFAOYSA-N	7.6×10^5 1.1×10^4 2.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PROH2MOX $\text{C}_4\text{H}_{10}\text{O}_3$ OEYNWAWWSZUGDU-UHFFFAOYSA-N	8.9×10^3 7.6×10^3 9.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXMOH $\text{C}_5\text{H}_{12}\text{O}_2$ CRHLZRRTZDFDAJ-UHFFFAOYSA-N	4.7 1.5×10^1 1.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EIPEOH $\text{C}_5\text{H}_{12}\text{O}_2$ MGMXTRZFWPWZFH-UHFFFAOYSA-N	3.4 6.3 7.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HIEPOXB $\text{C}_5\text{H}_{10}\text{O}_4$ YTIKZIBPNMOYQX-UHFFFAOYSA-N	1.5×10^8 1.8×10^8 5.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IEACO3H $\text{C}_5\text{H}_8\text{O}_5$ WBOLSVSGSKMCPN-UHFFFAOYSA-N	7.8×10^5 3.6×10^3 1.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:IECCO3H $\text{C}_5\text{H}_8\text{O}_5$ CEWHGLGNIHJU-UHFFFAOYSA-N	7.8×10^5 2.7×10^3 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IEPOXA $\text{C}_5\text{H}_{10}\text{O}_3$ CIDUHKBATDRWPE-UHFFFAOYSA-N	1.6×10^4 9.3×10^4 4.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IEPOXC $\text{C}_5\text{H}_{10}\text{O}_3$ REKLCZSNEUFIBP-UHFFFAOYSA-N	1.6×10^4 4.7×10^4 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPROC21OH $\text{C}_5\text{H}_{12}\text{O}_2$ PWLPTLCMMFJZIU-UHFFFAOYSA-N	5.6 1.0×10^1 9.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTBEOH $\text{C}_5\text{H}_{12}\text{O}_2$ NHNNIMVRQJIZFW-UHFFFAOYSA-N	3.4 7.4 2.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTBEOH $\text{C}_5\text{H}_{12}\text{O}_2$ VMPUAIZSESMILD-UHFFFAOYSA-N	4.8 1.5×10^1 3.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOX2E2OH $\text{C}_6\text{H}_{14}\text{O}_3$ WQHNZXURJISVCT-UHFFFAOYSA-N	5.5×10^3 3.6×10^3 1.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOX2OHAOOH $\text{C}_6\text{H}_{14}\text{O}_4$ XRZMTAXNHOGTME-UHFFFAOYSA-N	4.1×10^5 3.6×10^4 1.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOX2OHBOOH $\text{C}_6\text{H}_{14}\text{O}_4$ LCMMTUJPIXBSDS-UHFFFAOYSA-N	4.6×10^5 8.1×10^3 2.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXOHETOH $\text{C}_6\text{H}_{14}\text{O}_3$ QLKNFVRAYYHDF-UHFFFAOYSA-N	1.5×10^4 6.0×10^3 7.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DIIPRETOH $\text{C}_6\text{H}_{14}\text{O}_2$ FRKCZFUUIQCQPC-UHFFFAOYSA-N	3.2 3.5 4.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETBEOH $\text{C}_6\text{H}_{14}\text{O}_2$ WOSZILCYMCIWFB-UHFFFAOYSA-N	3.7 1.0×10^1 3.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETBEOH $\text{C}_6\text{H}_{14}\text{O}_2$ DUNYNUFVLYAWTI-UHFFFAOYSA-N	3.2 4.1 1.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:ETBECOH $\text{C}_6\text{H}_{14}\text{O}_2$ BDLXTDLGTWNUFM-UHFFFAOYSA-N	3.7 8.5 2.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPROMC2OH $\text{C}_6\text{H}_{14}\text{O}_2$ ZFEKANLLFQEKED-UHFFFAOYSA-N	6.5 1.3×10^1 4.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
1-butoxy-2-propanol $\text{C}_7\text{H}_{16}\text{O}_2$ (MCM:BOX2PROL) [5131-66-8] RWNUSVWFHDHRCJ-UHFFFAOYSA-N	5.0 1.7×10^1 8.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXOHPROL $\text{C}_7\text{H}_{16}\text{O}_3$ ITIQVOJGXCBQB-UHFFFAOYSA-N	1.4×10^4 7.8×10^3 6.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXPOLAOOH $\text{C}_7\text{H}_{16}\text{O}_4$ JGCUFCZSCOGTSN-UHFFFAOYSA-N	3.8×10^5 2.6×10^4 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXPOLBOOH $\text{C}_7\text{H}_{16}\text{O}_4$ AJCGQJRNRRPZGZ-UHFFFAOYSA-N	4.3×10^5 6.0×10^3 9.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXPR2OH $\text{C}_7\text{H}_{16}\text{O}_3$ XKPKIGSYCLTAJO-UHFFFAOYSA-N	5.1×10^3 2.9×10^3 4.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCSOZOH $\text{C}_{15}\text{H}_{26}\text{O}_5$ JQRHKAPCWHNLMS-UHFFFAOYSA-N	1.1×10^7 1.1×10^5 3.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCSOZOOH $\text{C}_{15}\text{H}_{26}\text{O}_6$ VCKYKGDZKOMMJ-UHFFFAOYSA-N	8.5×10^8 1.4×10^5 5.0×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MEMOXYCHO $\text{C}_3\text{H}_6\text{O}_2$ YSEFYOVWKJXNCH-UHFFFAOYSA-N	2.1 2.0×10^1 3.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EOX2ETCHO $\text{C}_4\text{H}_8\text{O}_2$ IAHZBRPNDIVNNR-UHFFFAOYSA-N	2.0 6.9 2.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXC4DIAL $\text{C}_4\text{H}_4\text{O}_3$ IRJHVNZVWOCVLV-UHFFFAOYSA-N	6.5×10^3 7.1×10^3 7.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:EPXDLCO3H $\text{C}_4\text{H}_4\text{O}_5$ OKYIQGCZHSMTGV-UHFFFAOYSA-N	7.1×10^6 9.6×10^4 7.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXMC4DIAL $\text{C}_5\text{H}_6\text{O}_3$ SYCYSIWUSJFZTN-UHFFFAOYSA-N	3.5×10^3 1.2×10^3 7.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXMDLCO3H $\text{C}_5\text{H}_6\text{O}_5$ LLYFBEXLHOFXFI-UHFFFAOYSA-N	3.8×10^6 3.1×10^4 2.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTBEBCHO $\text{C}_5\text{H}_{10}\text{O}_2$ HSCUZOQCNPBST-UHFFFAOYSA-N	1.1 1.5 5.8×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOX2ECHO $\text{C}_6\text{H}_{12}\text{O}_2$ RPLPGIHCAAYKX-UHFFFAOYSA-N	1.2 6.5 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BZEMUCCO3H $\text{C}_6\text{H}_6\text{O}_5$ LTCNUSVDDXPSIF-UHFFFAOYSA-N	2.1×10^7 1.1×10^5 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BZEPOXMUC $\text{C}_6\text{H}_6\text{O}_3$ NQHJMOLWTXQPLS-UHFFFAOYSA-N	1.9×10^4 5.4×10^3 1.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXM2C4DAL $\text{C}_6\text{H}_8\text{O}_3$ QTKFOEFUZGORG-UHFFFAOYSA-N	2.0×10^3 3.0×10^2 4.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXM2DCO3H $\text{C}_6\text{H}_8\text{O}_5$ CFBRPHMFNHCZFU-UHFFFAOYSA-N	2.2×10^6 6.8×10^3 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETBEACHO $\text{C}_6\text{H}_{12}\text{O}_2$ HHIYJPQUMUPZIZ-UHFFFAOYSA-N	9.8×10^{-1} 1.2 4.5×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETBECCHO $\text{C}_6\text{H}_{12}\text{O}_2$ SMUYZOMGNHBYHU-UHFFFAOYSA-N	9.8×10^{-1} 3.5 6.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPROMCCHO $\text{C}_6\text{H}_{12}\text{O}_2$ AAPDVSWBQNMJLJ-UHFFFAOYSA-N	1.6 3.3 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXMEC4DAL $\text{C}_7\text{H}_{10}\text{O}_3$ MOJUYSNCEBTQMW-UHFFFAOYSA-N	1.6×10^3 2.8×10^2 2.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:EPXMEDCO3H $\text{C}_7\text{H}_{10}\text{O}_5$ IBELTJZUJIPVRI-UHFFFAOYSA-N	1.7×10^6 3.7×10^3 5.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYEPOXMUC $\text{C}_8\text{H}_{10}\text{O}_3$ QLTFECLMPRWGQQ-UHFFFAOYSA-N	5.0×10^3 6.8×10^2 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYMUCCO3H $\text{C}_8\text{H}_{10}\text{O}_5$ PBSKNYKKTMDFL-UHFFFAOYSA-N	6.2×10^6 6.6×10^3 8.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OETLMUCO3H $\text{C}_9\text{H}_{12}\text{O}_5$ UVJSWMTUJCHEOZ-UHFFFAOYSA-N	5.0×10^6 4.0×10^3 5.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OETLPOXMUC $\text{C}_9\text{H}_{12}\text{O}_3$ NORSPZZKBNMHEY-UHFFFAOYSA-N	4.6×10^3 4.6×10^2 5.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IEACHO $\text{C}_5\text{H}_8\text{O}_3$ SXTKPSXTIDLQV-UHFFFAOYSA-N	7.1×10^2 4.2×10^3 3.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IECCHO $\text{C}_5\text{H}_8\text{O}_3$ FUNIHJAXNKVQS-UHFFFAOYSA-N	7.1×10^2 1.9×10^3 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BZEMUCOH $\text{C}_6\text{H}_8\text{O}_5$ HYRDKGAOZPVDDL-UHFFFAOYSA-N	1.0×10^9 1.7×10^9 1.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BZEMUCOOH $\text{C}_6\text{H}_8\text{O}_6$ YPGXWAYLBNMEJL-UHFFFAOYSA-N	7.6×10^{10} 1.2×10^9 1.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYMUCOH $\text{C}_8\text{H}_{12}\text{O}_5$ SKTLSFGOHJFJLD-UHFFFAOYSA-N	3.1×10^8 1.3×10^8 9.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYMUCCOOH $\text{C}_8\text{H}_{12}\text{O}_6$ ZBCSCLAPOVYAB-UHFFFAOYSA-N	4.6×10^{11} 2.9×10^8 1.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OETLMUCOH $\text{C}_9\text{H}_{14}\text{O}_5$ BKCWOZADWPGCRT-UHFFFAOYSA-N	2.6×10^8 7.4×10^7 4.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OETLMUCOOH $\text{C}_9\text{H}_{14}\text{O}_6$ OMPONQJDZISYFQ-UHFFFAOYSA-N	4.2×10^{11} 1.7×10^8 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PRONEMOOOH $\text{C}_4\text{H}_8\text{O}_4$ WKDIYCKWLNCFHJ-UHFFFAOYSA-N	1.2×10^5 8.1×10^2 2.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PRONEMOX $\text{C}_4\text{H}_8\text{O}_2$ CUZLJOLBIRPEFB-UHFFFAOYSA-N	1.4 1.4×10^1 8.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXKTMCO3H $\text{C}_6\text{H}_8\text{O}_5$ ABDSVLWFPNKKBV-UHFFFAOYSA-N	2.6×10^6 3.2×10^4 4.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXMKTCO3H $\text{C}_6\text{H}_8\text{O}_5$ CAGQARJHZCESJI-UHFFFAOYSA-N	2.6×10^6 3.2×10^4 1.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXPROBOOH $\text{C}_7\text{H}_{14}\text{O}_4$ YHFJWWLEGMYYFFZ-UHFFFAOYSA-N	7.1×10^4 2.0×10^2 3.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXPRONE $\text{C}_7\text{H}_{14}\text{O}_2$ UYNCDYOFUJEUQN-UHFFFAOYSA-N	8.1×10^{-1} 8.0 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXPROOOH $\text{C}_7\text{H}_{14}\text{O}_4$ YUTHBWBUPOPMPG-UHFFFAOYSA-N	7.1×10^4 6.3×10^3 2.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXEKTCO3H $\text{C}_7\text{H}_{10}\text{O}_5$ PGCJNBAAIEYIA-UHFFFAOYSA-N	2.0×10^6 2.4×10^4 2.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TLEMUCCO3H $\text{C}_7\text{H}_8\text{O}_5$ RISGILSSNRWCFR-UHFFFAOYSA-N	1.4×10^7 2.0×10^5 5.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EBZMUCCO3H $\text{C}_8\text{H}_{10}\text{O}_5$ GTEVSPXWKYUSQE-UHFFFAOYSA-N	1.1×10^7 9.6×10^4 1.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYMUCCO3H $\text{C}_8\text{H}_{10}\text{O}_5$ ROKAXOITEMHIEK-UHFFFAOYSA-N	7.6×10^6 3.6×10^4 3.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYMUCCO3H $\text{C}_8\text{H}_{10}\text{O}_5$ AYUPQGRQZSTAMO-UHFFFAOYSA-N	7.6×10^6 5.5×10^4 1.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPBZMUCCO3H $\text{C}_9\text{H}_{12}\text{O}_5$ SKJBPGYNTSYQCQ-UHFFFAOYSA-N	1.0×10^7 5.6×10^4 9.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:METLMUCO3H $\text{C}_9\text{H}_{12}\text{O}_5$ CXRRYJPLLOUVIM-UHFFFAOYSA-N	6.0×10^6 1.7×10^4 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBZMUCCO3H $\text{C}_9\text{H}_{12}\text{O}_5$ ZGGPGQBINYKWGU-UHFFFAOYSA-N	9.8×10^6 5.4×10^4 1.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PETLMUCO3H $\text{C}_9\text{H}_{12}\text{O}_5$ KWWJCAVGGMMMRV-UHFFFAOYSA-N	6.0×10^6 2.6×10^4 7.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM123OXMUC $\text{C}_9\text{H}_{12}\text{O}_3$ XYHNNFZVTWOCNN-UHFFFAOYSA-N	4.2×10^3 3.9×10^3 1.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124MUO3H $\text{C}_9\text{H}_{12}\text{O}_5$ FTWAFKXUKWKAJ-UHFFFAOYSA-N	4.2×10^6 1.2×10^4 2.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM135MUO3H $\text{C}_9\text{H}_{12}\text{O}_5$ JNFPQQOSCDIIK-UHFFFAOYSA-N	5.3×10^6 3.4×10^4 6.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMEBMUO3H $\text{C}_{10}\text{H}_{14}\text{O}_5$ JWBQDZWURHDWCA-UHFFFAOYSA-N	4.1×10^6 1.7×10^4 1.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DETLMUO3H $\text{C}_{11}\text{H}_{16}\text{O}_5$ QEEAHFHJZRPBGG-UHFFFAOYSA-N	3.6×10^6 1.1×10^4 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCKSOZ $\text{C}_{14}\text{H}_{22}\text{O}_4$ JTZKRSQXPBULRM-UHFFFAOYSA-N	3.7×10^3 1.4×10^2 1.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PRONEMOXOH $\text{C}_4\text{H}_8\text{O}_3$ RETWRLMOZHRKHU-UHFFFAOYSA-N	2.4×10^2 1.4×10^3 6.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXPRONBOH $\text{C}_7\text{H}_{14}\text{O}_3$ ANPLAICHKIQBVP-UHFFFAOYSA-N	1.2×10^2 3.2×10^2 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXPRONOH $\text{C}_7\text{H}_{14}\text{O}_3$ NQJNHGUTJISDHM-UHFFFAOYSA-N	2.7×10^3 1.0×10^4 9.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM123MUCCO $\text{C}_9\text{H}_{12}\text{O}_5$ ZVWGUKJQFRZUIG-UHFFFAOYSA-N	2.6×10^7 4.1×10^7 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:TM123MUCOH $\text{C}_9\text{H}_{14}\text{O}_5$ JUUFKUYJQYFRGA-UHFFFAOYSA-N	2.6×10^8 3.7×10^8 1.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM123MUOOH $\text{C}_9\text{H}_{14}\text{O}_6$ LLVDHGQYZCXGKH-UHFFFAOYSA-N	1.7×10^{10} 2.7×10^8 1.9×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXALMKT $\text{C}_6\text{H}_8\text{O}_3$ QIJMAVIYYVSLPO-UHFFFAOYSA-N	2.1×10^3 9.8×10^2 4.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXMALKT $\text{C}_6\text{H}_8\text{O}_3$ MWBGBWUOLRJCDU-UHFFFAOYSA-N	2.1×10^3 9.8×10^2 3.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXEALKT $\text{C}_7\text{H}_{10}\text{O}_3$ HQSBJPSKMKUTIT-UHFFFAOYSA-N	2.0×10^3 1.0×10^3 9.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EBZPOXMUC $\text{C}_8\text{H}_{10}\text{O}_3$ UTCVUMOGNJSPDS-UHFFFAOYSA-N	1.0×10^4 9.1×10^3 6.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYEPOXMUC $\text{C}_8\text{H}_{10}\text{O}_3$ VLMKIGFKBHEGBU-UHFFFAOYSA-N	6.2×10^3 3.5×10^3 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYEPOXMUC $\text{C}_8\text{H}_{10}\text{O}_3$ LGKLIBFTBUCZPW-UHFFFAOYSA-N	6.2×10^3 5.4×10^3 1.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPBZPOXMUC $\text{C}_9\text{H}_{12}\text{O}_3$ NUCYHGVQTCVYLO-UHFFFAOYSA-N	9.6×10^3 6.6×10^3 4.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:METLPOXMUC $\text{C}_9\text{H}_{12}\text{O}_3$ SWHMTTAAIKVELRE-UHFFFAOYSA-N	5.5×10^3 1.9×10^3 4.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBZPOXMUC $\text{C}_9\text{H}_{12}\text{O}_3$ AHKQGNMGHQLOPP-UHFFFAOYSA-N	8.0×10^3 6.0×10^3 3.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PETLPOXMUC $\text{C}_9\text{H}_{12}\text{O}_3$ UTBNMXYREJYVNVQ-UHFFFAOYSA-N	5.5×10^3 3.0×10^3 6.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124OXMUC $\text{C}_9\text{H}_{12}\text{O}_3$ HFTMUUPKJAPohl-UHFFFAOYSA-N	3.4×10^3 1.3×10^3 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:TM135OXMUC $\text{C}_9\text{H}_{12}\text{O}_3$ JFCWARPMSNNZLY-UHFFFAOYSA-N	4.2×10^3 3.7×10^3 3.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMEBPOXMUC $\text{C}_{10}\text{H}_{14}\text{O}_3$ VGOICOHXBXPGRQT-UHFFFAOYSA-N	3.7×10^3 2.0×10^3 1.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DETLPOXMUC $\text{C}_{11}\text{H}_{16}\text{O}_3$ VPGNNECRJBEQEI-UHFFFAOYSA-N	3.0×10^3 1.4×10^3 6.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BZEMUCCO $\text{C}_6\text{H}_6\text{O}_5$ KQXCODNTIAPVKL-UHFFFAOYSA-N	1.0×10^8 1.1×10^8 3.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TLEMUCCO $\text{C}_7\text{H}_8\text{O}_5$ AJWOUZMMNQLKHW-UHFFFAOYSA-N	3.7×10^8 1.7×10^7 3.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TLEMUCOH $\text{C}_7\text{H}_{10}\text{O}_5$ WPTVRQIFDQMAMS-UHFFFAOYSA-N	6.8×10^8 1.5×10^9 5.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TLEMUCOOH $\text{C}_7\text{H}_{10}\text{O}_6$ DVPKQTIPCHKXBD-UHFFFAOYSA-N	1.0×10^{12} 4.8×10^9 4.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EBZMUCCO $\text{C}_8\text{H}_{10}\text{O}_5$ MYHWFJZUBUHIGJ-UHFFFAOYSA-N	3.5×10^8 7.6×10^6 2.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EBZMUCOH $\text{C}_8\text{H}_{12}\text{O}_5$ VKTUBYIQTACODT-UHFFFAOYSA-N	5.6×10^8 1.0×10^9 3.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EBZMUCOOH $\text{C}_8\text{H}_{12}\text{O}_6$ KWCWZCSJYJCAS-UHFFFAOYSA-N	9.1×10^{11} 3.3×10^9 8.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYMUCCO $\text{C}_8\text{H}_{10}\text{O}_5$ KJOIECUJZBFUMR-UHFFFAOYSA-N	2.1×10^8 3.3×10^6 9.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYMUCOH $\text{C}_8\text{H}_{12}\text{O}_5$ UZLLCOIUEBQPHF-UHFFFAOYSA-N	3.9×10^8 3.9×10^8 4.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYMUCCOOH $\text{C}_8\text{H}_{12}\text{O}_6$ ZYWDOJNDZBPDDO-UHFFFAOYSA-N	5.6×10^{11} 1.2×10^9 8.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:OXYMUCCO $\text{C}_8\text{H}_{10}\text{O}_5$ RJHLIQPRSGXWHC-UHFFFAOYSA-N	1.7×10^8 1.9×10^6 2.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYMUCCO $\text{C}_8\text{H}_{10}\text{O}_5$ UICQALDYFNTPHO-UHFFFAOYSA-N	2.1×10^8 4.9×10^6 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYMUCOH $\text{C}_8\text{H}_{12}\text{O}_5$ MIBKDAKBVPRIGB-UHFFFAOYSA-N	3.9×10^8 5.1×10^8 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYMUCCOOH $\text{C}_8\text{H}_{12}\text{O}_6$ GSJPDWDRXFYTPMH-UHFFFAOYSA-N	5.6×10^{11} 1.6×10^9 2.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPBZMUCCO $\text{C}_9\text{H}_{12}\text{O}_5$ XOMPDNKHXMMXOK-UHFFFAOYSA-N	3.2×10^8 1.3×10^7 5.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPBZMUCOH $\text{C}_9\text{H}_{14}\text{O}_5$ AKVRVUIGBHJRNQ-UHFFFAOYSA-N	5.3×10^8 6.5×10^8 2.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPBZMUCCOOH $\text{C}_9\text{H}_{14}\text{O}_6$ LSOCHQKLDXALN-UHFFFAOYSA-N	8.5×10^{11} 2.1×10^9 1.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:METLMUCCO $\text{C}_9\text{H}_{12}\text{O}_5$ ZRMCSOCJQIXUEX-UHFFFAOYSA-N	1.9×10^8 3.7×10^6 5.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:METLMUCOH $\text{C}_9\text{H}_{14}\text{O}_5$ ARJLZFCPXRPKBS-UHFFFAOYSA-N	3.0×10^8 1.8×10^8 1.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:METLMUCCOOH $\text{C}_9\text{H}_{14}\text{O}_6$ UXABECSPQFCGIJ-UHFFFAOYSA-N	5.0×10^{11} 6.0×10^8 2.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OETLMUCCO $\text{C}_9\text{H}_{12}\text{O}_5$ JSKKVRLLVSVGZ-UHFFFAOYSA-N	1.6×10^8 2.0×10^6 9.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBZMUCCO $\text{C}_9\text{H}_{12}\text{O}_5$ FCRYPGHUONBQCX-UHFFFAOYSA-N	2.7×10^8 1.1×10^7 9.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBZMUCOH $\text{C}_9\text{H}_{14}\text{O}_5$ VYXNVIKZUYSSA-UHFFFAOYSA-N	4.4×10^8 5.8×10^8 1.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PBZMUCCOOH $\text{C}_9\text{H}_{14}\text{O}_6$ FCKGMMNUJIAHAV-UHFFFAOYSA-N	7.3×10^{11} 2.0×10^9 5.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PETLMUCCO $\text{C}_9\text{H}_{12}\text{O}_5$ RORTYMWKJCCJQU-UHFFFAOYSA-N	1.9×10^8 5.9×10^6 6.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PETLMUCOH $\text{C}_9\text{H}_{14}\text{O}_5$ ZLOWXLKYIJYQIH-UHFFFAOYSA-N	3.0×10^8 2.5×10^8 8.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PETLMUCCOOH $\text{C}_9\text{H}_{14}\text{O}_6$ RSNULGXAYPPPGL-UHFFFAOYSA-N	5.0×10^{11} 8.1×10^8 3.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124MUCCO $\text{C}_9\text{H}_{12}\text{O}_5$ DQECTOJLTKBSTJ-UHFFFAOYSA-N	2.1×10^7 9.8×10^6 1.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124MUCOH $\text{C}_9\text{H}_{14}\text{O}_5$ KPYCPCVRGFCQPX-UHFFFAOYSA-N	2.1×10^8 1.0×10^8 7.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124MUOOH $\text{C}_9\text{H}_{14}\text{O}_6$ DQFPDDPNMNSRMG-UHFFFAOYSA-N	1.4×10^{10} 6.8×10^7 3.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM135MUOH $\text{C}_9\text{H}_{14}\text{O}_5$ CZQCDAJVG DGQTR-UHFFFAOYSA-N	2.1×10^8 2.4×10^8 1.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM135MUOOH $\text{C}_9\text{H}_{14}\text{O}_6$ FIFCCDBMOKNVLN-UHFFFAOYSA-N	1.4×10^{10} 1.2×10^8 2.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMEBMUOH $\text{C}_{10}\text{H}_{16}\text{O}_5$ MURMIEBRJYKLPQ-UHFFFAOYSA-N	1.7×10^8 1.3×10^8 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMEBMUOOH $\text{C}_{10}\text{H}_{16}\text{O}_6$ QHUZCFCKANZAOE-UHFFFAOYSA-N	1.2×10^{10} 6.2×10^7 3.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DETLMUOH $\text{C}_{11}\text{H}_{18}\text{O}_5$ BLCXZNPOSIAMRZ-UHFFFAOYSA-N	1.4×10^8 8.5×10^7 5.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DETLMUOOH $\text{C}_{11}\text{H}_{18}\text{O}_6$ ZGRWZBBDFVAIEE-UHFFFAOYSA-N	9.8×10^9 4.2×10^7 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:ETOME2H $\text{C}_4\text{H}_8\text{O}_3$ YZGQDNOIGFBYKF-UHFFFAOYSA-N	2.8×10^2 3.6×10^2 7.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTBEB2H $\text{C}_5\text{H}_{10}\text{O}_3$ BKBZJRHYSZQA-UHFFFAOYSA-N	1.6×10^2 3.9×10^1 8.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXM2H $\text{C}_6\text{H}_{12}\text{O}_3$ AJQOASGWDCBKCJ-UHFFFAOYSA-N	1.8×10^2 1.2×10^2 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXDL2H $\text{C}_4\text{H}_4\text{O}_4$ BIFCJMYQXQSHFE-UHFFFAOYSA-N	9.3×10^5 1.5×10^5 5.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXMDL2H $\text{C}_5\text{H}_6\text{O}_4$ HNJRQDPCPFMZIJ-UHFFFAOYSA-N	5.4×10^5 5.9×10^4 2.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BZEMU2H $\text{C}_6\text{H}_6\text{O}_4$ YYDFWEKDUXDLMC-UHFFFAOYSA-N	2.5×10^6 4.8×10^5 3.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXM2D2H $\text{C}_6\text{H}_8\text{O}_4$ TVFMSHFDVSCCSQ-UHFFFAOYSA-N	2.9×10^5 2.6×10^4 6.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXMED2H $\text{C}_7\text{H}_{10}\text{O}_4$ CTYOPZSWGBYACX-UHFFFAOYSA-N	2.3×10^5 1.5×10^4 5.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYMU2H $\text{C}_8\text{H}_{10}\text{O}_4$ CDVXJWVOWNWWPU-UHFFFAOYSA-N	7.6×10^5 8.1×10^4 7.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OETLM2H $\text{C}_9\text{H}_{12}\text{O}_4$ UVQOKFRFLASUOJ-UHFFFAOYSA-N	6.8×10^5 5.1×10^4 3.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXKTM2H $\text{C}_6\text{H}_8\text{O}_4$ BXVKGWFSHJVVPB-UHFFFAOYSA-N	3.1×10^5 5.3×10^4 6.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXMKT2H $\text{C}_6\text{H}_8\text{O}_4$ FTLSPZDBESPPRR-UHFFFAOYSA-N	3.1×10^5 1.1×10^5 3.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXEKT2H $\text{C}_7\text{H}_{10}\text{O}_4$ XBMXXNQKRKRRRJ-UHFFFAOYSA-N	2.8×10^5 1.8×10^5 5.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:TLEMUCCO2H $\text{C}_7\text{H}_8\text{O}_4$ YZQFSRDEODCLRC-UHFFFAOYSA-N	1.7×10^6 8.3×10^5 1.3×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EBZMUCCO2H $\text{C}_8\text{H}_{10}\text{O}_4$ BSMJHSATRRVHTI-UHFFFAOYSA-N	1.5×10^6 5.0×10^5 6.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYMUCCO2H $\text{C}_8\text{H}_{10}\text{O}_4$ BMJHPUYAWBLOER-UHFFFAOYSA-N	9.1×10^5 4.2×10^5 3.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYMUCCO2H $\text{C}_8\text{H}_{10}\text{O}_4$ FMBYVAMRNZYNGO-UHFFFAOYSA-N	9.1×10^5 2.9×10^5 8.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPBZMUCCO2H $\text{C}_9\text{H}_{12}\text{O}_4$ LXYULRJMRUJREP-UHFFFAOYSA-N	1.4×10^6 3.2×10^5 2.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:METLMUCO2H $\text{C}_9\text{H}_{12}\text{O}_4$ TZAADSLPRMCSBM-UHFFFAOYSA-N	8.0×10^5 2.1×10^5 1.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBZMUCCO2H $\text{C}_9\text{H}_{12}\text{O}_4$ MSVJIRWCUIJEXSY-UHFFFAOYSA-N	1.2×10^6 3.0×10^5 2.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PETLMUCO2H $\text{C}_9\text{H}_{12}\text{O}_4$ YZGPSCFZKHZHEQ-UHFFFAOYSA-N	8.0×10^5 1.4×10^5 2.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124MUO2H $\text{C}_9\text{H}_{12}\text{O}_4$ VDBMALGYQLXWML-UHFFFAOYSA-N	4.9×10^5 1.4×10^5 4.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM135MUO2H $\text{C}_9\text{H}_{12}\text{O}_4$ RLMHTEATULORAU-UHFFFAOYSA-N	6.2×10^5 3.8×10^5 2.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMEBMUO2H $\text{C}_{10}\text{H}_{14}\text{O}_4$ GTDCDBIZJUTJP-UHFFFAOYSA-N	5.4×10^5 2.0×10^5 1.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DETLMUO2H $\text{C}_{11}\text{H}_{16}\text{O}_4$ FTAMRHAZJCWKNK-UHFFFAOYSA-N	4.5×10^5 1.4×10^5 5.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMCOOH $\text{C}_3\text{H}_6\text{O}_5$ ISFGCMQHKVEPTP-UHFFFAOYSA-N	2.0×10^4 3.7×10^3 1.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MMF $\text{C}_3\text{H}_6\text{O}_3$ VKWJMTLAAJULGF-UHFFFAOYSA-N	1.2 2.1 1.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MMFOOH $\text{C}_3\text{H}_6\text{O}_5$ AAAZTRZXKHTMLL-UHFFFAOYSA-N	9.8×10^4 5.6×10^2 9.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMCOH $\text{C}_3\text{H}_6\text{O}_4$ YGONDLTUXBUQH-UHFFFAOYSA-N	7.4×10^2 7.4×10^2 6.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MMFOH $\text{C}_3\text{H}_6\text{O}_4$ GDDJZBRTXIGGHV-UHFFFAOYSA-N	3.6×10^3 1.5×10^2 4.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
GOLIG1 $\text{C}_4\text{H}_6\text{O}_5$ LEKXYOUPWKVTGM-UHFFFAOYSA-N	1.5×10^{12}	19000	Wieser et al. (2023)	Q	439
GOLIG2 $\text{C}_4\text{H}_8\text{O}_6$ GWSRJJGBNXJVPO-UHFFFAOYSA-N	1.5×10^{15}	24000	Wieser et al. (2023)	Q	439
GOLIG3 $\text{C}_4\text{H}_{10}\text{O}_7$ ADECTKUVLJSMDK-UHFFFAOYSA-N	3.8×10^{18}	29000	Wieser et al. (2023)	Q	439
MGLYFB $\text{C}_6\text{H}_{10}\text{O}_6$ UCPBJDKPOQEXSQ-UHFFFAOYSA-N	7.1×10^8	23000	Wieser et al. (2023)	Q	439
MGLYOXDA $\text{C}_6\text{H}_{10}\text{O}_5$ QMSLRDMQAWWKIZ-UHFFFAOYSA-N	2.0×10^8	16000	Wieser et al. (2023)	Q	439
MGLYOXDB $\text{C}_6\text{H}_{12}\text{O}_6$ IUHMFBAUOLAFM-UHFFFAOYSA-N	1.5×10^{13}	22000	Wieser et al. (2023)	Q	439

A3.10 Heterocycles with oxygen

Table A3.10: Heterocycles with oxygen

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
β -propiolactone $\text{C}_3\text{H}_4\text{O}_2$ [57-57-8] VEZXCJBBBCKRPI-UHFFFAOYSA-N	1.3×10^1		Ebert et al. (2023)	?	317
2-methyl-1,3-dioxolane $\text{C}_4\text{H}_8\text{O}_2$ [497-26-7] HTWIZMNMWTYQRN-UHFFFAOYSA-N	7.9×10^{-1}		Ebert et al. (2023)	?	317
DIEPOXO3 $\text{C}_5\text{H}_8\text{O}_3$ QGQUFAZKBSHWQB-UHFFFAOYSA-N	1.3×10^3	14000	Wieser et al. (2023)	Q	439
IEPOXO4 $\text{C}_5\text{H}_8\text{O}_3$ DNQIATHBSKHPLN-UHFFFAOYSA-N	2.1×10^4	14000	Wieser et al. (2023)	Q	439
2,2-dimethyl-1,3-dioxolane $\text{C}_5\text{H}_{10}\text{O}_2$ [2916-31-6] SIJBDWPVNAYVGY-UHFFFAOYSA-N	4.8×10^{-1}		Ebert et al. (2023)	?	317
METHFDIOL $\text{C}_5\text{H}_{10}\text{O}_3$ UNAIYOXCADSMR-UHFFFAOYSA-N	9.0×10^5	11000	Wieser et al. (2023)	Q	439
3,4-dihydro-2-methoxy-2H-pyran $\text{C}_6\text{H}_{10}\text{O}_2$ [4454-05-1] XCYWUZHUTJDTGS-UHFFFAOYSA-N	9.7×10^{-2}		Ebert et al. (2023)	?	317
maltol $\text{C}_6\text{H}_6\text{O}_3$ [118-71-8] XPCTZQVDEJYUGT-UHFFFAOYSA-N	7.3×10^2		Abraham et al. (2019)	Q	
2-methylfuran $\text{C}_5\text{H}_6\text{O}$ [534-22-5] VQKFNUFAXTZWDK-UHFFFAOYSA-N	1.5×10^{-3}	4100	Wieland et al. (2015)	M	534
3-methylfuran $\text{C}_5\text{H}_6\text{O}$ [930-27-8] KJRRQXYWFQKJIP-UHFFFAOYSA-N	3.2×10^{-3}		Wu et al. (2022a)	Q	415

Table A3.10: Heterocycles with oxygen (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-furanmethanol $\text{C}_5\text{H}_6\text{O}_2$ (furfuryl alcohol) [98-00-0] XPFVYQJUAUNWIW-UHFFFAOYSA-N	1.3×10^2 1.2×10^2 2.5×10^1 2.2×10^1 2.4×10^1 5.3×10^1 6.2×10^1 3.9×10^1 4.9×10^1 3.4×10^1 4.8×10^1 4.8×10^2 1.1×10^2		Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Dupeux et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Katritzky et al. (1998) Yaws (1999)	V V X Q Q Q Q Q Q Q Q Q ?	187 259 260 272, 244 245 246 68 21, 12
tetrahydropyran-2-methanol $\text{C}_6\text{H}_{12}\text{O}_2$ [100-72-1] ROTONRWJLXYJBD-UHFFFAOYSA-N	6.5×10^2 5.2×10^1 6.2×10^1 3.1×10^2 2.0×10^3 9.0×10^1 8.5×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q Q Q Q	187 272, 244 245 246 68
oxirane $\text{C}_2\text{H}_4\text{O}$ (ethylene oxide) [75-21-8] IAYPIBMAFNFSPL-UHFFFAOYSA-N	5.8×10^{-2} 8.3×10^{-2} 8.6×10^{-2} 5.0×10^{-2} 6.0×10^{-2} 1.4×10^{-1} 9.3×10^{-3} 5.9×10^{-2} 6.0×10^{-2} 3.9×10^{-2} 2.9×10^{-2} 6.7×10^{-2} 1.0×10^{-2} 6.7×10^{-2} 4.1×10^{-2}	3200	Conway et al. (1983) Lide and Frederikse (1995) Mackay et al. (1993) Hwang et al. (1992) Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998) Duchowicz et al. (2020) Yaws (1999)	M V V V Q Q Q Q Q Q Q Q Q ? ?	 81, 239 81, 240 81, 241 68 249, 250 186, 21 21
1,2-epoxypropane $\text{C}_3\text{H}_6\text{O}$ (1,2-propylene oxide) [75-56-9] GOOHAUXETOMSMU-UHFFFAOYSA-N	1.4×10^{-1} 1.4×10^{-1} 1.2×10^{-1} 1.2×10^{-1} 1.2×10^{-1} 1.7×10^{-1} 5.2×10^{-2} 5.1×10^{-2} 6.3×10^{-2}	3500	Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Lide and Frederikse (1995) Mackay et al. (1993) Yaws (2003) Goldstein (1982) Goldstein (1982) Duchowicz et al. (2020)	V V V V V X X X Q	187 238, 12 448 299

Table A3.10: Heterocycles with oxygen (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^{-1}		Gharagheizi et al. (2010)	Q	247
	1.7×10^{-2}		Hilal et al. (2008)	Q	
	1.5×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	1.3×10^{-2}		Katritzky et al. (1998)	Q	
	1.4×10^{-1}		Yaws (1999)	?	21, 12
phenyloxirane $\text{C}_8\text{H}_8\text{O}$ (styrene oxide) [96-09-3] AWMVMTVKBNGEAK-UHFFFAOYSA-N	6.2×10^{-1}		HSDB (2015)	V	
	5.8×10^{-1}		Mackay et al. (2006c)	V	
	5.8×10^{-1}		Mackay et al. (1993)	V	
	6.2×10^{-1}		Meylan and Howard (1991)	V	
	2.5×10^{-1}		Hilal et al. (2008)	Q	
	5.5×10^{-1}		Modarresi et al. (2007)	Q	68
	1.0		Meylan and Howard (1991)	Q	
oxacyclopentadiene $\text{C}_4\text{H}_4\text{O}$ (furan; furfuran) [110-00-9] YLQBMQCUIZJEEH-UHFFFAOYSA-N	1.8×10^{-3}		HSDB (2015)	V	
	1.8×10^{-3}		Mackay et al. (2006c)	V	
	1.8×10^{-3}		Mackay et al. (1993)	V	
	1.8×10^{-3}		Yaws (2003)	X	259
	1.8×10^{-3}		Yaws (2003)	X	238
	2.2×10^{-3}		Dupeux et al. (2022)	Q	260
	4.6×10^{-3}		Hayer et al. (2022)	Q	20
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	2.0×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	1.9×10^{-3}		Gharagheizi et al. (2010)	Q	247
	2.3×10^{-3}		Hilal et al. (2008)	Q	
	1.9×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	4.3×10^{-3}		Yao et al. (2002)	Q	230
	1.2×10^{-2}		Katritzky et al. (1998)	Q	
	1.8×10^{-3}		Yaws (1999)	?	21
	1.8×10^{-3}		Yaws and Yang (1992)	?	21
dibenzofuran $\text{C}_{12}\text{H}_8\text{O}$ (2,2'-biphenylene oxide) [132-64-9] TXCDCKCNAJMEE-UHFFFAOYSA-N	7.4×10^{-2}	5800	Brockbank (2013)	L	
	4.6×10^{-2}		Duchowicz et al. (2020)	V	187
	4.7×10^{-2}		HSDB (2015)	V	
	7.1×10^{-2}		Mackay et al. (2006b)	V	
	7.2×10^{-2}		Govers and Krop (1998)	V	
	9.1×10^{-2}		Mackay et al. (1992b)	X	366
	8.9×10^{-3}		Yaws (2003)	X	238
	2.8×10^{-1}		Duchowicz et al. (2020)	Q	
	9.0×10^{-2}		Gharagheizi et al. (2010)	Q	247
	8.2×10^{-2}		Saçan et al. (2005)	Q	
	4.7×10^{-2}		Govers and Krop (1998)	Q	

Table A3.10: Heterocycles with oxygen (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
		4000	Kühne et al. (2005)	Q	
	1.5×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	1.3×10^{-1}		English and Carroll (2001)	Q	231, 232
	2.4×10^{-2}		Katritzky et al. (1998)	Q	
	1.3×10^{-1}		Suzuki et al. (1992)	Q	233
	1.4×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		3200	Kühne et al. (2005)	?	
	1.9×10^{-1}		Yaws (1999)	?	21, 12
	1.4×10^{-1}		Abraham et al. (1990)	?	
tetrahydrofuran-d8 $\text{C}_4\text{D}_8\text{O}$ (THF-d8) [1693-74-9] WYURNTSHIVDZCO-SVYQBANQSA-N	2.3×10^{-1}	8000	Hiatt (2013)	M	
2-methyltetrahydrofuran $\text{CH}_3\text{C}_4\text{H}_7\text{O}$ [96-47-9] JWUJQDFVADABEY-UHFFFAOYSA-N	1.5×10^{-3}		Mackay et al. (1993)	V	
	1.1×10^{-1}	6200	Cabani et al. (1971b)	T	
	1.5×10^{-1}		Keshavarz et al. (2022)	Q	
	5.3×10^{-2}		Duchowicz et al. (2020)	Q	
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	6.1×10^{-2}		Hilal et al. (2008)	Q	
	1.7×10^{-2}		Modarresi et al. (2007)	Q	68
		4400	Kühne et al. (2005)	Q	
	1.0×10^{-1}		English and Carroll (2001)	Q	231, 261
	2.4×10^{-2}		Katritzky et al. (1998)	Q	
	9.0×10^{-2}		Suzuki et al. (1992)	Q	233
	1.1×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		5400	Kühne et al. (2005)	?	
2,5-dimethyltetrahydrofuran $(\text{CH}_3)_2\text{C}_4\text{H}_6\text{O}$ [1003-38-9] OXMIDRBAFOEQT-UHFFFAOYSA-N	5.5×10^{-2}	6800	Cabani et al. (1971b)	T	
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	272, 244
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	3.1×10^{-2}		Hilal et al. (2008)	Q	
	2.5×10^{-2}		Modarresi et al. (2007)	Q	68
	7.9×10^{-2}		English and Carroll (2001)	Q	231, 232
tetrahydropyran $\text{C}_5\text{H}_{10}\text{O}$ (THP) [142-68-7] DHXVGJBLRPWPCS-UHFFFAOYSA-N	8.1×10^{-2}	5800	Brockbank (2013)	L	1
	8.3×10^{-2}	5900	Ondo and Dohnal (2007)	M	1
	1.0×10^{-1}		Mackay et al. (2006c)	V	
	1.0×10^{-1}		Mackay et al. (1993)	V	
	7.8×10^{-2}	5900	Cabani et al. (1971b)	T	
	1.5×10^{-1}		Keshavarz et al. (2022)	Q	
	1.4×10^{-1}		Duchowicz et al. (2020)	Q	
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244

Table A3.10: Heterocycles with oxygen (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	1.1×10^{-1}		Hilal et al. (2008)	Q	
	6.9×10^{-2}		Modarresi et al. (2007)	Q	68
	7.9×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	2.0×10^{-1}		English and Carroll (2001)	Q	231, 275
	2.6×10^{-2}		Katritzky et al. (1998)	Q	
	9.9×10^{-2}		Suzuki et al. (1992)	Q	233
	7.9×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	7.9×10^{-2}		Abraham et al. (1990)	?	
3-methyltetrahydropyran $C_6H_{12}O$ [26093-63-0] UJQZTMFRMLEYQN-UHFFFAOYSA-N		4700	Kühne et al. (2005)	Q	
		5300	Kühne et al. (2005)	?	
3,4-dihydro-2H-pyran C_5H_8O [110-87-2] BUDQDWGNQVEFAC-UHFFFAOYSA-N		3500	Kühne et al. (2005)	Q	
		3600	Kühne et al. (2005)	?	
1,3-dioxolane $C_3H_6O_2$ [646-06-0] WNXJIVFYUVYPPR-UHFFFAOYSA-N	4.3×10^{-1}	4800	Ondo and Dohnal (2007)	M	1
	4.0×10^{-1}	4800	Cabani et al. (1971b)	T	
	8.1×10^{-2}		Keshavarz et al. (2022)	Q	
	2.1		Duchowicz et al. (2020)	Q	185
	1.5		Hilal et al. (2008)	Q	
	2.2×10^{-1}		Modarresi et al. (2007)	Q	68
	4.0×10^{-1}		Duchowicz et al. (2020)	?	186, 21
1,3-dioxane $C_4H_8O_2$ [505-22-6] VDFVNEFVBPFDSB-UHFFFAOYSA-N	1.8		O'Farrell and Waghorne (2010)	M	
	2.1		Hilal et al. (2008)	Q	
1,4-dioxane $C_4H_8O_2$ (dioxane) [123-91-1] RYHBNJHYFVUHQT-UHFFFAOYSA-N	1.8	5800	Brockbank (2013)	L	1
	2.3	6600	Hiatt (2013)	M	
	2.0	5800	Ondo and Dohnal (2007)	M	1
	2.0		Welke et al. (1998)	M	
	1.4	5100	Kolb et al. (1992)	M	278
	2.1		Park et al. (1987)	M	
	4.4		Ioffe et al. (1984)	M	81
	1.4		Friant and Suffet (1979)	M	38
	2.2		Rohrschneider (1973)	M	
	1.9		Hwang et al. (1992)	V	
	1.1		Amoore and Buttery (1978)	V	
	2.0	5800	Cabani et al. (1971b)	T	
	1.1		Hayer et al. (2022)	Q	20
	1.1×10^{-1}		Keshavarz et al. (2022)	Q	
	2.8		Duchowicz et al. (2020)	Q	185

Table A3.10: Heterocycles with oxygen (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^1		Raventos-Duran et al. (2010)	Q	245
	1.6		Raventos-Duran et al. (2010)	Q	246
	3.3		Hilal et al. (2008)	Q	
	1.3		Modarresi et al. (2007)	Q	68
		5200	Kühne et al. (2005)	Q	
	1.5		English and Carroll (2001)	Q	231, 232
	8.2×10^{-1}		Russell et al. (1992)	Q	280
	2.1		Duchowicz et al. (2020)	?	186, 21
		6100	Kühne et al. (2005)	?	
	1.8		Yaws (1999)	?	21
	2.0		Betterton (1992)	?	535
	2.2		Betterton (1992)	?	536
	1.4		Yaws and Yang (1992)	?	21
1,4-dioxane-d8 $C_4D_8O_2$ (dioxane-d8) [17647-74-4] RYHBNJHYFVUHQ-TSVYQBANQSA-N	2.8	6800	Hiatt (2013)	M	
trioxane $C_3H_6O_3$ [110-88-3] BGJSXRVXTHVRSN-UHFFFAOYSA-N	9.6×10^{-1} 2.7		Yaws (2003) Dupeux et al. (2022)	X Q	259 260
4-methyl-1,3-dioxolan-2-one $C_4H_6O_3$ (propylene carbonate) [108-32-7] RUQJZAUFBMNUDX-UHFFFAOYSA-N	2.9×10^2 2.9×10^2 1.6×10^{-1} 1.4×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Abraham et al. (1990)	V V Q ?	187
1,3,3-trimethyl-2-oxabicyclo[2.2.2]octane $C_{10}H_{18}O$ (eucalyptol; 1,8-cineole) [470-82-6] WEEGYLXZBRQIMU-UHFFFAOYSA-N	5.9×10^{-2} 1.2×10^{-1} 9.0×10^{-2} 7.5×10^{-2} 7.4×10^{-2} 7.8×10^{-2} 5.3×10^{-3} 2.2×10^{-2} 1.3×10^{-1}		Kish et al. (2013) Amoore and Buttery (1978) Duchowicz et al. (2020) Copolovici and Niinemets (2005) Niinemets and Reichstein (2002) Amoore and Buttery (1978) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	M M V V V V Q Q Q	187 68
limonene oxide $C_{10}H_{16}O$ [1195-92-2] CCEFMUBVSUDRLG-UHFFFAOYSA-N	5.6×10^{-2} 5.5×10^{-2} 2.7×10^{-2} 4.8×10^{-2}	4600	Fichan et al. (1999) Duchowicz et al. (2020) van Roon et al. (2005) Duchowicz et al. (2020)	M V V Q	187

Table A3.10: Heterocycles with oxygen (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
dibenzo[<i>b, e</i>][1,4]dioxin $\text{C}_{12}\text{H}_8\text{O}_2$ (dibenzo- <i>p</i> -dioxin) [262-12-4] NFBOHOGPQUYFRF-UHFFFAOYSA-N	8.9×10^{-2}		Duchowicz et al. (2020)	V	187	
	9.0×10^{-2}		HSDB (2015)	V		
	8.5×10^{-2}		Mackay et al. (2006b)	V		
	9.5×10^{-3}		Saçan et al. (2005)	V		
	8.5×10^{-2}		Govers and Krop (1998)	V		
	8.1×10^{-2}		Shiu et al. (1988)	V		
	2.0		Duchowicz et al. (2020)	Q		
	2.7×10^{-2}		Saçan et al. (2005)	Q		
	6.3×10^{-2}		Wang and Wong (2002)	Q		537
9.1×10^{-2}		Govers and Krop (1998)	Q			
piperonal $\text{C}_8\text{H}_6\text{O}_3$ [120-57-0] SATCULPHIDQDRE-UHFFFAOYSA-N	1.8×10^1		Duchowicz et al. (2020)	V	187	
	1.8×10^1		HSDB (2015)	V		
	1.6×10^2		Duchowicz et al. (2020)	Q		
	4.1×10^2		Hilal et al. (2008)	Q		
	1.1×10^1		Modarresi et al. (2007)	Q		68
paraldehyde $\text{C}_6\text{H}_{12}\text{O}_3$ [123-63-7] SQYNKIJPMEDEG-UHFFFAOYSA-N	5.8×10^{-1}		Duchowicz et al. (2020)	V	187	
	2.5×10^{-1}		HSDB (2015)	V		
	4.7		Duchowicz et al. (2020)	Q		
	3.6×10^{-1}		Hilal et al. (2008)	Q		
	2.1		Modarresi et al. (2007)	Q		68
	6.4×10^{-1}		Yaws (1999)	?		21, 38
benzofuran $\text{C}_8\text{H}_6\text{O}$ [271-89-6] IANQTJJSKSUMEQM-UHFFFAOYSA-N	1.9×10^{-2}		HSDB (2015)	Q	100	
	1.9×10^{-2}		Hilal et al. (2008)	Q		
γ -nonalactone $\text{C}_9\text{H}_{16}\text{O}_2$ [104-61-0] OALYTRUKMRCXNH-UHFFFAOYSA-N	1.8×10^{-1}		Hertel and Sommer (2006)	Q	417	
xanthene $\text{C}_{13}\text{H}_{10}\text{O}$ [92-83-1] GJCOSYZMQJWQCA-UHFFFAOYSA-N	1.3×10^{-1}		Abraham et al. (2019)	Q		
1,5,5,9-tetramethyl-13-oxatricyclo(8.3.0.0(4,9))tridecane $\text{C}_{16}\text{H}_{28}\text{O}$ (ambroxan) [3738-00-9] YPZUZOLGGMJZJO-UHFFFAOYSA-N	2.0×10^{-2}		Zhang et al. (2010)	Q	288, 289	
	2.9×10^{-1}		Zhang et al. (2010)	Q		
	6.5×10^{-2}		Zhang et al. (2010)	Q		
	1.1×10^{-3}		Zhang et al. (2010)	Q		
			Zhang et al. (2010)	Q		

Table A3.10: Heterocycles with oxygen (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylcyclopenta[g]-2-benzopyran $C_{18}H_{26}O$ [1222-05-5] ONKNPOPIGWHAQC-UHFFFAOYSA-N	7.6×10^{-2} 7.5×10^{-2} 8.2 8.4×10^{-2} 9.9×10^{-3}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V Q Q Q Q	 288, 289 288, 290 288, 291 288, 292
cinmethylin $C_{18}H_{26}O_2$ [87818-31-3] QMTNOLKHSWIGBE-FGTMMUONSA-N	1.3×10^1		Ebert et al. (2023)	?	319
milbemycin A4 $C_{32}H_{46}O_7$ (milbemectin A4) [51596-11-3] VOZIAWLUULBIPN-LRBNAKOISA-N	7.7×10^6		Ebert et al. (2023)	?	319

A3.11 Oxidized terpenoids

Table A3.11: Oxidized terpenoids

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(1S-endo)-1,7,7-trimethyl- bicyclo[2.2.1]heptan-2-ol $\text{C}_{10}\text{H}_{18}\text{O}$ (1S-endo(-)-borneol) [464-45-9] DTGKSKDOIYIVQL-QXFUBDJGSA-N	4.5×10^{-1} 7.2×10^{-1} 4.0×10^{-1}		Fichan et al. (1999) Duchowicz et al. (2020) Duchowicz et al. (2020)	M V Q	 187
(1R)-1,3,3- trimethylbicyclo[2.2.1]heptan-2-ol $\text{C}_{10}\text{H}_{18}\text{O}$ (endo(+)-fenchyl alcohol) [2217-02-9] IAIHUHQCLTYTSF-OYNCUSHFSA-N	3.6×10^{-1} 3.6×10^{-1} 4.0×10^{-1}		Fichan et al. (1999) Duchowicz et al. (2020) Duchowicz et al. (2020)	M V Q	 187
2-(4-methyl-3-cyclohexen-1-yl)-2- propanol $\text{C}_{10}\text{H}_{18}\text{O}$ (α -terpineol) [98-55-5] WUOACPNHFRMFPN-UHFFFAOYSA-N	4.4 4.1 6.0×10^{-1} 4.2 7.4×10^{-1} 6.5 3.6 8.2×10^{-1}	2200 4800 5400	Copolovici and Niinemets (2005) Copolovici and Niinemets (2005) van Roon et al. (2005) Niinemets and Reichstein (2002) Li et al. (1998) Dupeux et al. (2022) Hilal et al. (2008) Modarresi et al. (2007)	M V V V V Q Q Q	 260 68
1,2-dimethyl-3-(1-methylethenyl)- cyclopentanol $\text{C}_{10}\text{H}_{18}\text{O}$ (plinol) [72402-00-7] ZRVPDCMGGOSDKG-UHFFFAOYSA-N	5.3×10^{-1} 4.0×10^{-1} 3.4×10^{-1} 1.2 1.6	17000	Duchowicz et al. (2020) Li et al. (1998) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q	187 68
1-methyl-4-(1-methylethyl)-7- oxabicyclo[2.2.1]heptane $\text{C}_{10}\text{H}_{18}\text{O}$ (1,4-cineole) [470-67-7] RFFOTVCVTJUTAD-UHFFFAOYSA-N	3.9×10^{-2} 7.4×10^{-2} 1.4×10^{-1}	4000	Helburn et al. (2008) Copolovici and Niinemets (2005) van Roon et al. (2005)	M V V	
1,7,7-trimethyl- bicyclo[2.2.1]heptan-2-one $\text{C}_{10}\text{H}_{16}\text{O}$ (camphor) [76-22-2] DSSYKIVIOFKYAU-UHFFFAOYSA-N	1.2×10^{-1} 1.2×10^{-1} 1.1 5.4×10^{-1} 8.2×10^{-1} 2.3×10^{-2} 3.5×10^{-1}	4800	Duchowicz et al. (2020) HSDB (2015) Copolovici and Niinemets (2005) van Roon et al. (2005) Niinemets and Reichstein (2002) Duchowicz et al. (2020) Modarresi et al. (2007)	V V V V Q Q	187 68

Table A3.11: Oxidized terpenoids (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,7,7-trimethyl-3-oxatricyclo[4.1.1.0(2,4)]octane $C_{10}H_{16}O$ (-)- α -pinene oxide [1686-14-2] NQFUSWIGRKFHAK-UHFFFAOYSA-N	2.3×10^{-2} 2.3×10^{-2} 2.4×10^{-2} 5.4×10^{-2} 2.2×10^{-2}		Fichan et al. (1999) Duchowicz et al. (2020) Copolovici and Niinemets (2005) van Roon et al. (2005) Duchowicz et al. (2020)	M V V V Q	187
5-methyl-2-(1-methylethylidene)-cyclohexanone $C_{10}H_{16}O$ (pulegone) [89-82-7] NZGWDASTMWDZIW-UHFFFAOYSA-N	2.8×10^{-1} 1.7×10^{-1}	5300	van Roon et al. (2005) HSDB (2015)	V Q	100
exo-2-[(1,7,7-trimethylbicyclo[2.2.1]hept-2-yl)-oxy]ethanol $C_{12}H_{22}O_2$ (arbanol) [7070-15-7] IWWCSDGEIDYEJV-JBLDHEPKSA-N	1.0	4100	Li et al. (1998)	V	
bornyl acetate $C_{12}H_{20}O_2$ [5655-61-8] KGEKLUUHTZCSIP-SCVCMEIPSA-N	3.8×10^{-4}	1700	Copolovici and Niinemets (2015)	M	
β -ionone $C_{13}H_{20}O$ [79-77-6] PSQYTAPXSHCGMF-BQYQJAHWSA-N	1.2 1.2×10^{-1} 1.5×10^{-2} 6.6×10^{-3}		Fichan et al. (1999) Duchowicz et al. (2020) Abney (2021) Duchowicz et al. (2020)	M V Q Q	187 401
nerolidol $C_{15}H_{26}O$ [7212-44-4] FQTLCLSUCSAZDY-UHFFFAOYSA-N	3.2×10^{-4}	4300	Copolovici and Niinemets (2015)	M	

A3.12 Miscellaneous

Table A3.12: Miscellaneous

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
oxoethanoic acid OHCCOOH (glyoxylic acid) [298-12-4] HHLFWLYXYJOTON-UHFFFAOYSA-N	1.1×10^2 1.1×10^2 1.1×10^2 1.1×10^2 1.3×10^4 1.5×10^1 6.9×10^1 3.3×10^3 7.8×10^4 2.5×10^8 3.1×10^3 8.9×10^1	4800 4800 4800 4800	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Ip et al. (2009) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Saxena and Hildemann (1996) Warneck (2005)	L L L M Q Q Q Q Q Q Q E ?	462 462 81, 239 81, 240 81, 241 100 243, 244 245 246 403 538
hydroxyethanoic acid HOCH ₂ COOH (glycolic acid) [79-14-1] AEMRFAOFKGBASW-UHFFFAOYSA-N	2.8×10^2 2.8×10^2 2.8×10^2 2.8×10^2 1.9×10^3 1.4×10^5 5.3×10^4 1.2×10^3 3.1×10^4 1.2×10^2	4000 4000 4000 4000	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Ip et al. (2009) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	L L L M Q Q Q Q Q Q	462, 539 462, 540 81, 239 81, 240 81, 241 243, 244 245 246
2-hydroxyethanal HOCH ₂ CHO (hydroxyacetaldehyde; glycolaldehyde) [141-46-8] WGCNASOHLSPBMP-UHFFFAOYSA-N	3.9×10^2 3.9×10^2 4.1×10^2 9.9×10^2 2.9×10^2 1.8×10^1 1.3×10^1 1.1×10^2 4.2 3.1×10^1 7.8×10^3 9.9×10^{-1} 6.5×10^2 2.4×10^2 4.1×10^2	4600 4600 4600	Burkholder et al. (2019) Burkholder et al. (2015) Betterton and Hoffmann (1988) Lee and Zhou (1993) Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Duchowicz et al. (2020) Kühne et al. (2005)	L L M C Q Q Q Q Q Q Q Q Q Q Q Q ?	462 462 462 88 300 81, 239 81, 240 81, 241 272, 244 245 246 68 186, 21 ?

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
propanonal	3.5×10^1	7500	Burkholder et al. (2019)	L	462
CH ₃ COCHO	3.5×10^1	7500	Burkholder et al. (2015)	L	462
(methylglyoxal; pyruvaldehyde)	3.2×10^2		Zhou and Mopper (1990)	M	71
[78-98-8]	3.4×10^1	7500	Betterton and Hoffmann (1988)	M	462
AIJULSRZWUXGPQ-UHFFFAOYSA-N	3.7×10^2		Lee and Zhou (1993)	C	88
	5.4×10^1		Wang et al. (2017)	Q	81, 239
	1.3×10^1		Wang et al. (2017)	Q	81, 240
	2.9×10^{-2}		Wang et al. (2017)	Q	81, 241
	6.2×10^2		Raventos-Duran et al. (2010)	Q	272, 244
	4.9×10^2		Raventos-Duran et al. (2010)	Q	245
	3.9×10^1		Raventos-Duran et al. (2010)	Q	246
	1.4×10^1		Modarresi et al. (2007)	Q	68
		6200	Kühne et al. (2005)	Q	
	8.2		Katritzky et al. (1998)	Q	
		7600	Kühne et al. (2005)	?	
2-oxopropanoic acid	3.1×10^3	5100	Burkholder et al. (2019)	L	
CH ₃ COCOOH	3.1×10^3	5100	Burkholder et al. (2015)	L	
(pyruvic acid)	3.1×10^3	5100	Sander et al. (2011)	L	
[127-17-3]	3.1×10^3	5100	Sander et al. (2006)	L	
LCTONWCANYUPML-UHFFFAOYSA-N	3.0×10^3	5300	Staudinger and Roberts (2001)	L	
	3.1×10^3	5100	Khan et al. (1995)	M	
	3.1×10^3		Khan et al. (1992)	M	
	3.1×10^3	5200	Khan and Brimblecombe (1992)	M	
	2.2×10^4		Keshavarz et al. (2022)	Q	
	2.3×10^2		Duchowicz et al. (2020)	Q	185
	7.8×10^3		Wang et al. (2017)	Q	81, 239
	5.0×10^1		Wang et al. (2017)	Q	81, 240
	1.9×10^1		Wang et al. (2017)	Q	81, 241
	1.6×10^3		Raventos-Duran et al. (2010)	Q	243, 244
	2.0×10^6		Raventos-Duran et al. (2010)	Q	245
	4.9×10^3		Raventos-Duran et al. (2010)	Q	246
	2.6×10^3		Hilal et al. (2008)	Q	
	2.6×10^3		Modarresi et al. (2007)	Q	68
		5600	Kühne et al. (2005)	Q	
	3.1×10^3		Duchowicz et al. (2020)	?	186, 21
		5300	Kühne et al. (2005)	?	
3-oxopropanoic acid	1.0×10^4		Wang et al. (2017)	Q	81, 239
OHCC ₂ COOH	1.2×10^4		Wang et al. (2017)	Q	81, 240
[926-61-4]	1.7×10^4		Wang et al. (2017)	Q	81, 241
OAKURXIZZOAYBC-UHFFFAOYSA-N	6.9×10^1		Saxena and Hildemann (1996)	E	403

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-hydroxypropanoic acid CH ₃ CHOHCOOH (lactic acid) [50-21-5] JVTAAEKCZFNVCJ-UHFFFAOYSA-N	1.2×10^2 1.2×10^2 1.1×10^3 9.9×10^2 9.9×10^3 9.9×10^1 6.9×10^5		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Saxena and Hildemann (1996)	V V Q Q Q Q E	187 243, 244 245 246 403
glycidaldehyde C ₃ H ₄ O ₂ [765-34-4] IWYRWIUNAVNPE-UHFFFAOYSA-N	1.9×10^1		HSDB (2015)	Q	100
trimethylene oxide C ₃ H ₆ O (1,3-epoxypropane; 1,3-propylene oxide; oxetane) [503-30-0] AHHWIHXENZJRFJ-UHFFFAOYSA-N	4.0×10^{-1} 3.9×10^{-1} 1.2×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
2,3-dihydroxypropanal C ₃ H ₆ O ₃ (glyceraldehyde) [367-47-5] MNQZXJOMYWMBOU-UHFFFAOYSA-N	1.4×10^4 2.6×10^4 8.1×10^2 2.0×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Saxena and Hildemann (1996)	Q Q Q E	81, 239 81, 240 81, 241 403
dihydroxyacetone C ₃ H ₆ O ₃ [96-26-4] RXKJFZQQPQGTFL-UHFFFAOYSA-N	1.8×10^6 5.5×10^3 3.8×10^3 5.0×10^3		HSDB (2015) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	V Q Q Q	 81, 239 81, 240 81, 241
2-methoxyethanol C ₃ H ₈ O ₂ (methyl cellosolve) [109-86-4] XNWFZJHXBZDAG-UHFFFAOYSA-N	4.4 2.2×10^{-4} 1.4×10^1 3.7×10^1 6.8 1.4×10^1 8.9 5.4×10^1 1.3×10^1 3.1×10^1 2.0×10^1 2.5×10^2 2.1×10^1 4.0×10^1 1.5×10^1 3.0×10^1	7500 -730 7300	Hiatt (2013) Ashworth et al. (1988) Johanson and Dynésius (1988) Cabani et al. (1978) Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	M M M T Q Q Q Q Q Q Q Q Q Q Q Q Q ?	 14 185 81, 239 81, 240 81, 241 243, 244 245 246 68 186, 21

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-oxobutanoic acid OHC(CH ₂) ₂ COOH [692-29-5] UIUJIQZEACWQSV-UHFFFAOYSA-N	8.3×10^3 3.2×10^5 2.1×10^4 4.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Saxena and Hildemann (1996)	Q Q Q E	81, 239 81, 240 81, 241 403
2,3-dihydroxybutanedioic acid HOOCCHOHCHOHCOOH (tartaric acid) [87-69-4] FEWJPZIEWOKRBE-JCYAYHJZSA-N	4.9×10^{15} 4.9×10^{15} 1.3×10^{13} 5.1×10^{10} 1.3×10^{13} 9.9×10^{15}		Burkholder et al. (2019) Burkholder et al. (2015) Compernelle and Müller (2014a) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Saxena and Hildemann (1996)	L L V X Q Q E	542 238, 12 247 403
3-oxapentane-1,5-diol HO(CH ₂) ₂ O(CH ₂) ₂ OH (diethylene glycol) [111-46-6] MTHSVFCYNBDYFN-UHFFFAOYSA-N	3.3×10^4 3.3×10^4 9.0×10^3 2.5×10^3 1.6×10^3 1.7×10^3 4.9×10^3 7.7×10^3 3.8×10^4 2.4×10^4 2.2×10^4 2.0×10^7 3.3×10^4		Yaws (2003) Yaws (2003) Dupeux et al. (2022) Olsen et al. (2016) Olsen et al. (2016) Olsen et al. (2016) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yao et al. (2002) Saxena and Hildemann (1996) Yaws (1999)	X X Q Q Q Q Q Q Q Q Q E ?	259 238 260 427 428 429 100 247 247 230 403 21
hydroxybutanedioic acid HOOCCH ₂ CHOHCOOH (malic acid) [6915-15-7] BJEPYKJPYRNKOW-UHFFFAOYSA-N	2.7×10^8 1.7×10^9 1.2×10^7 5.3×10^8 1.4×10^9 2.0×10^{11}		Compernelle and Müller (2014a) Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Saxena and Hildemann (1996)	V X Q Q Q E	238, 374 100 247 403
2-ethoxyethanol C ₄ H ₁₀ O ₂ [110-80-5] ZNQVEEAIQZEUHB-UHFFFAOYSA-N	8.9 3.3×10^1 2.8×10^1 9.2 5.8 7.4 3.4×10^1 9.8 2.5×10^1 1.2×10^1 1.6×10^2 1.6×10^1 3.2×10^1 7.5	8000	Johanson and Dynésius (1988) Abraham et al. (1994a) Cabani et al. (1978) Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Nirmalakhandan et al. (1997)	M R T Q Q Q Q Q Q Q Q Q Q Q	14 300 81, 239 81, 240 81, 241 243, 244 245 246 68

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.1×10^1		Duchowicz et al. (2020)	?	186, 21
	1.9×10^1		Yaws (1999)	?	21, 12
2-methoxy-1-propanol $\text{C}_4\text{H}_{10}\text{O}_2$ [1589-47-5] YTFFPATQICAQN-UHFFFAOYSA-N	5.5×10^2		HSDB (2015)	Q	100
1,1-dimethoxyethane $\text{C}_4\text{H}_{10}\text{O}_2$ [534-15-6] SPEUIVXLLWOEMJ-UHFFFAOYSA-N	1.5×10^{-1}		HSDB (2015)	Q	100
4-methylene-2-oxetanone $\text{C}_4\text{H}_4\text{O}_2$ (acetyl ketene) [674-82-8] WASQWSOJHCZDFK-UHFFFAOYSA-N	1.6×10^{-2}		HSDB (2015)	Q	100
2(5H)-furanone $\text{C}_4\text{H}_4\text{O}_2$ [497-23-4] VIHAEDVKXSOUAT-UHFFFAOYSA-N	3.5×10^{-1}		Wang et al. (2017)	Q	81, 239
	3.6×10^2		Wang et al. (2017)	Q	81, 240
	1.4×10^3		Wang et al. (2017)	Q	81, 241
	1.0		HSDB (2015)	Q	100
2,2'-bioxirane $\text{C}_4\text{H}_6\text{O}_2$ [1464-53-5] ZFIVKAOQEXOYFY-UHFFFAOYSA-N	2.8×10^2		HSDB (2015)	Q	100
γ -butyrolactone $\text{C}_4\text{H}_6\text{O}_2$ [96-48-0] YEJRWHAVMIAJKC-UHFFFAOYSA-N	1.9×10^2		Duchowicz et al. (2020)	V	187
	1.9×10^2		HSDB (2015)	V	
	6.5×10^1		Dupeux et al. (2022)	Q	260
	1.2		Duchowicz et al. (2020)	Q	
ethyloxirane $\text{C}_4\text{H}_8\text{O}$ (1,2-epoxybutane) [106-88-7] RBACIKXCRWGCBB-UHFFFAOYSA-N	5.5×10^{-2}		Duchowicz et al. (2020)	V	187
	5.5×10^{-2}		HSDB (2015)	V	
	6.9×10^{-2}		Duchowicz et al. (2020)	Q	
2,3-epoxy-2-methyl-1,4-butanediol $\text{C}_5\text{H}_{10}\text{O}_3$ (IEPOX) FLVAIUBQNOKHB-UHFFFAOYSA-N	5.0×10^4		Wang et al. (2017)	Q	81, 239
	1.3×10^5		Wang et al. (2017)	Q	81, 240
	3.2×10^4		Wang et al. (2017)	Q	81, 241
	2.7×10^4		Pye et al. (2013)	Q	494
			Chan et al. (2010)	Q	543
	1.3×10^6		Eddingsaas et al. (2010)	Q	544
	1.9×10^5		Vasilakos et al. (2021)	E	545
	3.0×10^5		Woo and McNeill (2015)	?	468

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MEDICO1CO $\text{C}_5\text{H}_8\text{O}_4$ RRXXDUUNVWXRFN-UHFFFAOYSA-N	2.5×10^7	12000	Wieser et al. (2023)	Q	439
MEDICO4CO $\text{C}_5\text{H}_8\text{O}_4$ GXKSWJOBVXKANI-UHFFFAOYSA-N	3.1×10^6	12000	Wieser et al. (2023)	Q	439
METRICO $\text{C}_5\text{H}_{10}\text{O}_4$ LCGBCDAYKOJPSO-UHFFFAOYSA-N	7.3×10^6	12000	Wieser et al. (2023)	Q	439
2,3-epoxy-6-oxo-heptenal $\text{C}_7\text{H}_8\text{O}_3$ (MCM:TLEPOXMUC) YHZQHUOBDYTWMQ-UHFFFAOYSA-N	1.1×10^4 1.4×10^4 2.8×10^3 2.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) McNeill et al. (2012)	Q Q Q Q	81, 239 81, 240 81, 241
3-hydroxy-2-butanone $\text{C}_4\text{H}_8\text{O}_2$ (acetoin) [513-86-0] ROWKJAVDOGWPAT-UHFFFAOYSA-N	3.1 5.7×10^{-1} 7.8 1.1×10^2 1.2×10^1 9.9×10^{-1}		Wu et al. (2022b) Straver and de Loos (2005) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	M M Q Q Q Q	546 81, 239 81, 240 81, 241 100
2-(vinylloxy)ethanol $\text{C}_4\text{H}_8\text{O}_2$ (ethylene glycol monovinyl ether) [764-48-7] VUIWJRYTWUGOOF-UHFFFAOYSA-N	3.9×10^1		HSDB (2015)	Q	100
2-methyloxetane $\text{C}_4\text{H}_8\text{O}$ [2167-39-7] FZIIIDOXPOKBP-UHFFFAOYSA-N	1.2×10^{-1}		HSDB (2015)	Q	100
5-oxopentanoic acid $\text{OHC}(\text{CH}_2)_3\text{COOH}$ [5746-02-1] VBKPPDYGFUZOAJ-UHFFFAOYSA-N	3.9×10^1		Saxena and Hildemann (1996)	E	403
2-oxopentanedioic acid $\text{HOOC}(\text{CH}_2)_2\text{COCOOH}$ (α -keto glutaric acid) [328-50-7] KPGXRSRHYNQIFN-UHFFFAOYSA-N	9.9×10^6		Saxena and Hildemann (1996)	E	403

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tetrahydro-2-furanmethanol $\text{C}_5\text{H}_{10}\text{O}_2$ (tetrahydrofurfuryl alcohol) [97-99-4] BSYVTEYKTMVBMK-UHFFFAOYSA-N	4.4×10^1 1.7×10^2 2.4×10^3		Yaws (2003) Dupeux et al. (2022) HSDB (2015)	X Q Q	259 260 100
xylose $\text{C}_5\text{H}_{10}\text{O}_5$ [58-86-6] PYMYPHUHKUWMLA-VPENINKCSA-N	8.2×10^3		HSDB (2015)	Q	100
2-(2-methoxyethoxy)ethanol $\text{C}_5\text{H}_{12}\text{O}_3$ (diethylene glycol monomethyl ether) [111-77-3] SBASXUCJHJRPEV-UHFFFAOYSA-N	6.2×10^5		HSDB (2015)	Q	100
3,6-dioxaoctane-1,8-diol $\text{HO}(\text{CH}_2\text{CH}_2\text{O})_3\text{H}$ (triethylene glycol) [112-27-6] ZIBGPFATKBEMQZ-UHFFFAOYSA-N	1.1×10^4 5.9×10^3 6.7×10^3 3.1×10^5 8.9×10^9		Olsen et al. (2016) Olsen et al. (2016) Olsen et al. (2016) HSDB (2015) Saxena and Hildemann (1996)	Q Q Q Q E	427 428 429 100 403
2-oxepanone $\text{C}_6\text{H}_{10}\text{O}_2$ (caprolactone) [502-44-3] PAPBSGBWRJIAAV-UHFFFAOYSA-N	5.5×10^{-2}		HSDB (2015)	Q	100
glycidyl ether $\text{C}_6\text{H}_{10}\text{O}_3$ (diglycidyl ether) [2238-07-5] GYZLOYUZLJXAJU-UHFFFAOYSA-N	7.6×10^2		HSDB (2015)	Q	100
4-hydroxy-4-methyl-2-pentanone $\text{C}_6\text{H}_{12}\text{O}_2$ (diacetone alcohol) [123-42-2] SWXVUIWOUIDPGS-UHFFFAOYSA-N	3.8×10^1 1.3×10^1 3.1×10^2 7.4×10^{-2} 7.6×10^1 8.0×10^2 6.8×10^1 2.3×10^3		Duchowicz et al. (2020) Yaws (2003) Dupeux et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	V X Q Q Q Q Q Q	187 259 260 81, 239 81, 240 81, 241 547
1-propoxy-2-propanol $\text{C}_6\text{H}_{14}\text{O}_2$ [1569-01-3] FENFUOGYJVOCRY-UHFFFAOYSA-N	2.9×10^2		HSDB (2015)	Q	547

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-(2-ethoxyethoxy)ethanol $\text{C}_6\text{H}_{14}\text{O}_3$ (diethylene glycol monoethyl ether) [111-90-0] XXJWXESWEXIICW-UHFFFAOYSA-N	4.4×10^2 4.5×10^2 9.0×10^2 6.4×10^1		Duchowicz et al. (2020) HSDB (2015) Dupeux et al. (2022) Duchowicz et al. (2020)	V V Q Q	187 260
2,5,8-trioxanonane $\text{C}_6\text{H}_{14}\text{O}_3$ (diglyme) [111-96-6] SBZXBUIDTXKZTM-UHFFFAOYSA-N	1.9×10^1 1.9×10^1 6.2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
oxydipropanol $\text{C}_6\text{H}_{14}\text{O}_3$ (dipropylene glycol) [25265-71-8] SZXQTJUDPRGNJN-UHFFFAOYSA-N	1.8×10^3		HSDB (2015)	V	
<i>p</i> -benzoquinone $\text{C}_6\text{H}_4\text{O}_2$ (1,4-benzoquinone) [106-51-4] AZQWKYJCGOJGHM-UHFFFAOYSA-N	2.1×10^{-2} 5.1 1.7×10^4 2.3×10^1 2.1×10^{-2} 7.7		HSDB (2015) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Yaffe et al. (2003) Katritzky et al. (1998)	V Q Q Q Q Q	81, 239 81, 240 81, 241 249, 250
5-hydroxymethylfurfural $\text{C}_6\text{H}_6\text{O}_3$ (5-hydroxymethyl-2-furfuraldehyde) [67-47-0] NOEGNKMFVQHS LB-UHFFFAOYSA-N	1.8×10^4		HSDB (2015)	Q	100
5-hydroxy-2-(hydroxymethyl)-4H-pyran-4-one $\text{C}_6\text{H}_6\text{O}_4$ (kojic acid) [501-30-4] BEJNERDRQOWKJM-UHFFFAOYSA-N	4.1×10^1		HSDB (2015)	Q	100
2-hydroxy-1,2,3-propanetricarboxylic acid $\text{C}_6\text{H}_8\text{O}_7$ (citric acid) [77-92-9] KRKNYBCHXYNGOX-UHFFFAOYSA-N	3.1×10^{15} 3.1×10^{15} 7.6×10^{12} 4.8×10^{11} 7.9×10^{12} 3.0×10^{16}		Burkholder et al. (2019) Burkholder et al. (2015) Compernelle and Müller (2014a) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Saxena and Hildemann (1996)	L L V X Q Q E	548 238, 12 247 403

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(butoxymethyl)oxirane $C_7H_{14}O_2$ (n-butyl glycidyl ether) [2426-08-6] YSUQLAYJZDEMOT-UHFFFAOYSA-N	4.0×10^{-1} 3.9×10^{-1} 8.9×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
1-(1,1-dimethylethoxy)-2-propanol $C_7H_{16}O_2$ (propylene glycol mono-t-butyl ether) [57018-52-7] GQCZPFJGIXHZMB-UHFFFAOYSA-N	2.1		HSDB (2015)	V	
2-[2-(2-methoxyethoxy)ethoxy]ethanol $C_7H_{16}O_4$ (triethylene glycol monomethyl ether) [112-35-6] JLGLQAWTXXGVEM-UHFFFAOYSA-N	2.8×10^8		HSDB (2015)	Q	100
2-methyl- <i>p</i> -benzoquinone $C_7H_6O_2$ [553-97-9] VTWDFNFVLAELH-UHFFFAOYSA-N	3.1 6.9×10^3 2.1×10^1 5.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	Q Q Q Q	81, 239 81, 240 81, 241 100
patulin $C_7H_6O_4$ [149-29-1] ZRWPUFFVAOMMNM-UHFFFAOYSA-N	9.0×10^4		HSDB (2015)	Q	100
1-hydroxy-3-methoxybenzene $C_7H_8O_2$ (3-methoxyphenol) [150-19-6] ASHGTJPOSUFTGB-UHFFFAOYSA-N	1.7×10^2 1.7×10^2 4.7×10^2 2.0×10^2 2.5×10^2 3.1×10^2 1.3×10^2 6.4×10^1 5.0×10^2 1.7×10^2		Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	R Q Q Q Q Q Q Q Q ?	300 243, 244 245 246 68 2186, 21
mequinol $C_7H_8O_2$ (4-methoxyphenol) [150-76-5] NWWWVBRKAWDGAB-UHFFFAOYSA-N	6.9×10^{-1} 1.9×10^1 6.9×10^{-1} 2.0		Yaws (2003) HSDB (2015) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	238, 14 100 247 21, 14

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-hydroxy-2-methoxybenzene $\text{C}_7\text{H}_8\text{O}_2$ (guaiacol; 2-methoxyphenol) [90-05-1] LHGVFZTZFXWLCP-UHFFFAOYSA-N	8.6		McFall et al. (2020)	M	
	9.0	7900	Wieland et al. (2015)	M	549
	7.7		Sagebiel et al. (1992)	M	
	9.1	7600	Sagebiel et al. (1992)	M	
	9.6		Mackay et al. (2006c)	V	
	7.7		Sagebiel et al. (1992)	V	
	4.1×10^1		Leuenberger et al. (1985)	V	418
	5.0		Abraham et al. (1994a)	R	
	1.1×10^1		Keshavarz et al. (2022)	Q	
	5.6×10^{-1}		Abney (2021)	Q	401
	8.7		Duchowicz et al. (2020)	Q	300
	8.2		McFall et al. (2020)	Q	476
	5.2		Hilal et al. (2008)	Q	
	7.7		Modarresi et al. (2007)	Q	68
		6700	Kühne et al. (2005)	Q	
	1.2×10^1	English and Carroll (2001)	Q	231, 275	
	6.4×10^1	Katritzky et al. (1998)	Q		
	5.1×10^2	Nirmalakhandan et al. (1997)	Q		
	8.2	Duchowicz et al. (2020)	?	186, 21	
		7800	Kühne et al. (2005)	?	
	3.3×10^{-1}		Yaws (1999)	?	21, 14
1,4-dimethoxybenzene $\text{C}_8\text{H}_{10}\text{O}_2$ (hydroquinone dimethyl ether) [150-78-7] OHBQPCCCRFSCAX-UHFFFAOYSA-N	2.8×10^{-3}		HSDB (2015)	Q	100
4-methyl-2-methoxyphenol $\text{C}_8\text{H}_{10}\text{O}_2$ [93-51-6] PETRWTHZSKVLRE-UHFFFAOYSA-N	7.7		Sagebiel et al. (1992)	M	
	7.1	7400	Sagebiel et al. (1992)	M	
	1.0×10^1		Sagebiel et al. (1992)	V	
	1.6×10^1		Keshavarz et al. (2022)	Q	
	5.2		Duchowicz et al. (2020)	Q	
	3.1×10^1		Raventos-Duran et al. (2010)	Q	272, 244
	3.1		Raventos-Duran et al. (2010)	Q	245
	2.5×10^2		Raventos-Duran et al. (2010)	Q	246
	5.2		Hilal et al. (2008)	Q	
	2.5		Modarresi et al. (2007)	Q	68
		7100	Kühne et al. (2005)	Q	
	7.3		Yaffe et al. (2003)	Q	249, 250
6.2×10^1		Katritzky et al. (1998)	Q		
7.4		Duchowicz et al. (2020)	?	186, 21	
	7900		Kühne et al. (2005)	?	

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tyrosol $\text{C}_8\text{H}_{10}\text{O}_2$ (4-hydroxybenzeneethanol) [501-94-0] YCCILVSKPBXVIP-UHFFFAOYSA-N	3.5×10^5		McFall et al. (2020)	Q	476
1,3-dimethoxy-2-hydroxybenzene $\text{C}_8\text{H}_{10}\text{O}_3$ (2,6-dimethoxyphenol) [91-10-1] KLIDCXVFGNNTM-UHFFFAOYSA-N	3.7×10^1 5.0×10^1 1.2×10^2 1.6×10^1 1.2 7.8×10^2 4.9×10^2 4.9×10^3 3.5×10^2 1.1×10^2 4.3×10^1	6700 7300 7600	Sagebiel et al. (1992) Sagebiel et al. (1992) Sagebiel et al. (1992) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Duchowicz et al. (2020) Kühne et al. (2005)	M M V Q Q Q Q Q Q Q Q ? ?	 272, 244 245 246 68 186, 21
hexahydro-1,3-isobenzofurandione $\text{C}_8\text{H}_{10}\text{O}_3$ (hexahydrophthalic anhydride) [85-42-7] MUTGBJKUEZFXGO-UHFFFAOYSA-N	4.7×10^{-1}		HSDB (2015)	Q	100
vanillyl alcohol $\text{C}_8\text{H}_{10}\text{O}_3$ [498-00-0] ZENOXNGFMSCLLL-UHFFFAOYSA-N	9.6×10^4 2.0×10^5		McFall et al. (2020) McFall et al. (2020)	M Q	476
1-methoxy-4-methylbenzene $\text{C}_8\text{H}_{10}\text{O}$ [104-93-8] CHLICZRVGXGXEOD-UHFFFAOYSA-N	2.1×10^{-3}		HSDB (2015)	Q	100
dimethoxane $\text{C}_8\text{H}_{14}\text{O}_4$ [828-00-2] PHMNXPYGVPEQSJ-UHFFFAOYSA-N	8.0×10^1		HSDB (2015)	Q	100
RO5R5 $\text{C}_8\text{H}_{14}\text{O}_4$ MESHXYGXEHAFHE-UHFFFAOYSA-N	1.3×10^5	17000	Wieser et al. (2023)	Q	439
5-hydroxy-2-octanone $\text{C}_8\text{H}_{16}\text{O}_2$ (C82CO5OH) KZPPEBIAPHLFQD-UHFFFAOYSA-N	1.6×10^3	11000	Wieser et al. (2023)	Q	439

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
metaldehyde $\text{C}_8\text{H}_{16}\text{O}_4$ [108-62-3] GKKDCARASOJPNG-UHFFFAOYSA-N	1.9×10^{-1} 2.9×10^{-1}		HSDB (2015) Maniere et al. (2011)	V ?	12, 166
diethyl carbitol $\text{C}_8\text{H}_{18}\text{O}_3$ (diethylene glycol diethyl ether) [112-36-7] RRQYJINTUHWNHU-UHFFFAOYSA-N	8.9×10^1 9.0×10^1 9.6×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
2-[2-(2-ethoxyethoxy)ethoxy]ethanol $\text{C}_8\text{H}_{18}\text{O}_4$ (triethylene glycol monoethyl ether) [112-50-5] WFSMVVDJSNMRAR-UHFFFAOYSA-N	2.1×10^8		HSDB (2015)	Q	100
tetraethylene glycol $\text{C}_8\text{H}_{18}\text{O}_5$ [112-60-7] UWHCKJMYHZGTIT-UHFFFAOYSA-N	1.8×10^{13}		HSDB (2015)	Q	100
vanillin $\text{C}_8\text{H}_8\text{O}_3$ [121-33-5] MWOOGQJBHIARFG-UHFFFAOYSA-N	1.7×10^3 4.6×10^3 4.7×10^3 1.3×10^3 1.3×10^3 1.8×10^3 1.8×10^3 1.8×10^3 4.0×10^3 2.8×10^2 4.9×10^3 3.1×10^2 1.2×10^5 1.3×10^3	6800	Brockbank (2013) Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Yaws (2003) Dupeux et al. (2022) Dupeux et al. (2022) Abney (2021) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010)	L V V X X Q Q Q Q Q Q Q Q Q	1 187 259 238 260 260 401 243, 244 245 246 247
ethylparaben $\text{C}_9\text{H}_{10}\text{O}_3$ [120-47-8] NUVBSKCKDOMJSU-UHFFFAOYSA-N	2.1×10^3		HSDB (2015)	Q	100
ethyl vanillin $\text{C}_9\text{H}_{10}\text{O}_3$ [121-32-4] CBOQJANXLMLOSS-UHFFFAOYSA-N	1.2×10^4		HSDB (2015)	V	

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-phenoxypropan-2-ol $\text{C}_9\text{H}_{12}\text{O}_2$ (propylene glycol phenyl ether) [770-35-4] IBLKWZIFZMJFL-UHFFFAOYSA-N	3.4×10^2		HSDB (2015)	V	
triacetin $\text{C}_9\text{H}_{14}\text{O}_6$ [102-76-1] URAYPUMNDPQOKB-UHFFFAOYSA-N	8.0×10^2 8.2×10^2 2.7×10^2 2.0×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Raventos-Duran et al. (2010)	V V Q Q	187 243, 244
2,5-diacetylacetone $\text{C}_9\text{H}_{10}\text{O}_4$ [102-76-1] URAYPUMNDPQOKB-UHFFFAOYSA-N	2.5×10^2 6.2×10^3		Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	Q Q Q	245 246
tripropylene glycol $\text{C}_9\text{H}_{20}\text{O}_4$ [24800-44-0] LCZVSXRMJUNFX-UHFFFAOYSA-N	3.0×10^9		HSDB (2015)	Q	100
coumarin $\text{C}_9\text{H}_6\text{O}_2$ [91-64-5] ZYGHJZDHTFUPRJ-UHFFFAOYSA-N	9.9×10^1 1.0×10^2 1.3×10^2 5.1		Duchowicz et al. (2020) HSDB (2015) Dupeux et al. (2022) Duchowicz et al. (2020)	V V Q Q	187 260
4-ethylguaiacol $\text{C}_9\text{H}_{12}\text{O}_2$ (4-ethyl-2-methoxyphenol) [2785-89-9] CHWNEIVBYREQRF-UHFFFAOYSA-N	5.5		McFall et al. (2020)	Q	476
4-methylsyringol $\text{C}_9\text{H}_{12}\text{O}_3$ [6638-05-7] ZFBNNQJNZBLLS-UHFFFAOYSA-N	3.8×10^1		McFall et al. (2020)	Q	476
acetovanillone $\text{C}_9\text{H}_{10}\text{O}_3$ (apocynin) [498-02-2] DFYRUELUNQRZTB-UHFFFAOYSA-N	6.3×10^3		McFall et al. (2020)	Q	476
syringaldehyde $\text{C}_9\text{H}_{10}\text{O}_4$ [134-96-3] KCDXJAYRVLXPFO-UHFFFAOYSA-N	3.7×10^5		McFall et al. (2020)	Q	476
5-(1-propenyl)-1,3-benzodioxole $\text{C}_{10}\text{H}_{10}\text{O}_2$ (isosafrole) [120-58-1] VHVOLFBRBFDOSH-UHFFFAOYSA-N	2.7×10^{-4}		HSDB (2015)	Q	100

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
safrole $\text{C}_{10}\text{H}_{10}\text{O}_2$ [94-59-7] ZMQAAUBTXCXRIC-UHFFFAOYSA-N	1.1		HSDB (2015)	Q	100
5-propyl-1,3-benzodioxole $\text{C}_{10}\text{H}_{12}\text{O}_2$ (dihydrosafrole) [94-58-6] MYEIDJPOUKASEC-UHFFFAOYSA-N	8.2×10^{-1}		HSDB (2015)	Q	100
2-methoxy-4-(1-propenyl)phenol $\text{C}_{10}\text{H}_{12}\text{O}_2$ (isoeugenol) [97-54-1] BJIOGJUNALELMI-UHFFFAOYSA-N	2.7 1.7×10^1		HSDB (2015) McFall et al. (2020)	V Q	476
<i>p</i> -cresyl glycidyl ether $\text{C}_{10}\text{H}_{12}\text{O}_2$ [26447-14-3] CUFXMPWHOWYNSO-UHFFFAOYSA-N	1.3×10^1		HSDB (2015)	Q	100
4-(4-hydroxyphenyl)-2-butanone $\text{C}_{10}\text{H}_{12}\text{O}_2$ (raspberry ketone) [5471-51-2] NJGBTKGETPDVIK-UHFFFAOYSA-N	1.8×10^4		HSDB (2015)	Q	449
guaifenesin $\text{C}_{10}\text{H}_{14}\text{O}_4$ [93-14-1] HSRJKNPTNIJEKV-UHFFFAOYSA-N	2.2×10^5		HSDB (2015)	Q	100
RO5R4O2H $\text{C}_{10}\text{H}_{18}\text{O}_7$ YORZXZYHORHTRW-UHFFFAOYSA-N	3.6×10^{10}	24000	Wieser et al. (2023)	Q	439
levomenthol $\text{C}_{10}\text{H}_{20}\text{O}$ (<i>L</i> -menthol) [2216-51-5] NOOLISFMXDJSKH-AEJSXWLSA-N	6.6×10^{-1}		HSDB (2015)	Q	100
diethylene glycol hexyl ether $\text{C}_{10}\text{H}_{22}\text{O}_3$ [112-59-4] GZMAAYIALGURDQ-UHFFFAOYSA-N	5.7×10^2 5.8×10^2 1.0×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-[2-(2-butoxyethoxy)ethoxy]ethanol $\text{C}_{10}\text{H}_{22}\text{O}_4$ (triethylene glycol monobutyl ether) [143-22-6] COBPKKZHLDDMTB-UHFFFAOYSA-N	1.0×10^8		HSDB (2015)	Q	100
4-propylguaiacol $\text{C}_{10}\text{H}_{14}\text{O}_2$ (2-methoxy-4-propylphenol) [2785-87-7] PXIKRTCSSLJURC-UHFFFAOYSA-N	4.3 4.2		McFall et al. (2020) McFall et al. (2020)	M Q	476
vanillyl ethyl ether $\text{C}_{10}\text{H}_{14}\text{O}_3$ (4-(ethoxymethyl)-2-methoxyphenol) [13184-86-6] KOCVACNWDMSLBM-UHFFFAOYSA-N	4.1×10^2 4.8×10^2		McFall et al. (2020) McFall et al. (2020)	M Q	476
4-ethylsyringol $\text{C}_{10}\text{H}_{14}\text{O}_3$ [14059-92-8] PJWDIHUFLXQRFF-UHFFFAOYSA-N	3.0×10^1		McFall et al. (2020)	Q	476
guaiacylacetone $\text{C}_{10}\text{H}_{12}\text{O}_3$ (1-(4-hydroxy-3-methoxyphenyl)-2-propanone) [2503-46-0] LFVCJQWZGDLHSD-UHFFFAOYSA-N	1.2×10^4 1.1×10^4		McFall et al. (2020) McFall et al. (2020)	M Q	476
acetosyringone $\text{C}_{10}\text{H}_{12}\text{O}_4$ [2478-38-8] OJOBTAOGJIWAGB-UHFFFAOYSA-N	5.0×10^5		McFall et al. (2020)	Q	476
coniferylaldehyde $\text{C}_{10}\text{H}_{10}\text{O}_3$ [458-36-6] UCZOBXQKIUMJDZ-UHFFFAOYSA-N	4.4×10^4		McFall et al. (2020)	Q	476
4-methoxy-6-(2-propenyl)-1,3-benzodioxole $\text{C}_{11}\text{H}_{12}\text{O}_3$ (myristicin) [607-91-0] BNWJOHGLIBDBOB-UHFFFAOYSA-N	1.8×10^1		HSDB (2015)	Q	100

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
butylparaben $\text{C}_{11}\text{H}_{14}\text{O}_3$ [94-26-8] QFOHBWFCKVYLES-UHFFFAOYSA-N	1.2×10^3		HSDB (2015)	Q	100
2- <i>tert</i> -butyl-4-methoxyphenol $\text{C}_{11}\text{H}_{16}\text{O}_2$ (butylated hydroxyanisole) [25013-16-5] MRBKEAMVRSLOPH-UHFFFAOYSA-N	8.4		HSDB (2015)	Q	100
3-hydroxy-2-naphthalenecarboxylic acid $\text{C}_{11}\text{H}_8\text{O}_3$ [92-70-6] ALKYHXVLJMQRLQ-UHFFFAOYSA-N	7.0×10^3		HSDB (2015)	Q	100
	7.2×10^3		Zhang et al. (2010)	Q	288, 289
	1.2×10^4		Zhang et al. (2010)	Q	288, 290
	3.8×10^5		Zhang et al. (2010)	Q	288, 291
	8.2×10^3		Zhang et al. (2010)	Q	288, 292
4-propylsyringol $\text{C}_{11}\text{H}_{16}\text{O}_3$ [6766-82-1] YHEWWEXPVKCVFY-UHFFFAOYSA-N	2.2×10^1		McFall et al. (2020)	Q	476
zingerone $\text{C}_{11}\text{H}_{14}\text{O}_3$ (vanillylacetone) [122-48-5] OJYLAHXKWMRDGS-UHFFFAOYSA-N	1.2×10^4 8.4×10^3		McFall et al. (2020) McFall et al. (2020)	M Q	476
allylsyringol $\text{C}_{11}\text{H}_{14}\text{O}_3$ [5438-54-0] IYIVYBWBUPWAWU-UHFFFAOYSA-N	6.3×10^2		McFall et al. (2020)	Q	476
4-propenylsyringol $\text{C}_{11}\text{H}_{14}\text{O}_3$ [6635-22-9] YFHOHYAUMDHSBX-UHFFFAOYSA-N	1.1×10^3		McFall et al. (2020)	Q	476
propionylsyringol $\text{C}_{11}\text{H}_{14}\text{O}_4$ [5650-43-1] CXCPJZXJNRBTGF-UHFFFAOYSA-N	3.8×10^5		McFall et al. (2020)	Q	476
sinapylaldehyde $\text{C}_{11}\text{H}_{12}\text{O}_4$ [4206-58-0] CDICDSOGTRCHMG-ONEGZZNKSA-N	3.1×10^6		McFall et al. (2020)	Q	476

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
arbutin $\text{C}_{12}\text{H}_{16}\text{O}_7$ [497-76-7] BJRNKVDFDLYUGJ-RMPHRYRLSA-N	8.2×10^{13}		HSDB (2015)	Q	100
butopyronoxyl $\text{C}_{12}\text{H}_{18}\text{O}_4$ (indalone) [532-34-3] OKIJSNGRQAOIGZ-UHFFFAOYSA-N	2.1×10^2		HSDB (2015)	Q	100
diethylene glycol bis(methacrylate) $\text{C}_{12}\text{H}_{18}\text{O}_5$ [2358-84-1] XFCMNSHQOZQILR-UHFFFAOYSA-N	1.2×10^4		HSDB (2015)	Q	100
dikegulac $\text{C}_{12}\text{H}_{18}\text{O}_7$ [18467-77-1] FWCBATIDXGJRMF-FLNNQWLSA-N	5.2×10^{10}		HSDB (2015)	Q	100
propofol $\text{C}_{12}\text{H}_{18}\text{O}$ [2078-54-8] OLBCVFGFOZPWHH-UHFFFAOYSA-N	4.7		HSDB (2015)	Q	100
lactitol $\text{C}_{12}\text{H}_{24}\text{O}_{11}$ [585-86-4] VQHSOMBJVWLPSR-JVCRWLNRSA-N	1.2×10^{16}		HSDB (2015)	Q	100
maltitol $\text{C}_{12}\text{H}_{24}\text{O}_{11}$ [585-88-6] VQHSOMBJVWLPSR-WUJBLJFYSA-N	2.3×10^{15}		HSDB (2015)	Q	100
naphthalic anhydride $\text{C}_{12}\text{H}_6\text{O}_3$ [81-84-5] GRSMWKLPSNHDHA-UHFFFAOYSA-N	1.6×10^1		HSDB (2015)	Q	100
methoxsalen $\text{C}_{12}\text{H}_8\text{O}_4$ (8-methoxypsoralen) [298-81-7] QXKHYNVANLEOEG-UHFFFAOYSA-N	2.5×10^2		HSDB (2015)	Q	100
syringylacetone $\text{C}_{12}\text{H}_{16}\text{O}_4$ [112468-41-4] NULBEPOZYDYWOV-UHFFFAOYSA-N	1.2×10^6 5.7×10^4		McFall et al. (2020) McFall et al. (2020)	M Q	476

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
butyrylsyringol $\text{C}_{12}\text{H}_{16}\text{O}_4$ [69271-91-6] QFHXMVPZYMTCS-UHFFFAOYSA-N	2.9×10^5		McFall et al. (2020)	Q	476
bisphenol F $\text{C}_{13}\text{H}_{12}\text{O}_2$ [620-92-8] PXKLMJQFEQBVL-D-UHFFFAOYSA-N	1.9×10^6		HSDB (2015)	Q	449
ibuprofen $\text{C}_{13}\text{H}_{18}\text{O}_2$ [15687-27-1] HEFNNWSXXWATRW-UHFFFAOYSA-N	6.6×10^1 2.0×10^2		HSDB (2015) Abraham et al. (2019)	V Q	
trinexapac-ethyl $\text{C}_{13}\text{H}_{16}\text{O}_5$ [95266-40-3] RVKCCVTZORVGD-QXMHVHEDSA-N	5.1 7.6×10^5 1.9×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	187 166
benzoyl peroxide $\text{C}_{14}\text{H}_{10}\text{O}_4$ [94-36-0] OMPJBNCRMGITSC-UHFFFAOYSA-N	2.8 2.8 1.1×10^2 4.1×10^2 4.3×10^3		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
oxybenzone $\text{C}_{14}\text{H}_{12}\text{O}_3$ (2-hydroxy-4-methoxybenzophenone) [131-57-7] DXGLGDHPHMLXJC-UHFFFAOYSA-N	6.6×10^2		HSDB (2015)	Q	100
resveratrol $\text{C}_{14}\text{H}_{12}\text{O}_3$ [501-36-0] LUKBXSAWLPMSZ-OWOJBTEDSA-N	7.0×10^{10}		HSDB (2015)	Q	449
pindone $\text{C}_{14}\text{H}_{14}\text{O}_3$ [83-26-1] RZKYEQDPDZUERB-UHFFFAOYSA-N	1.1×10^6		HSDB (2015)	Q	100
1,1'-[oxybis(methylene)]bisbenzene $\text{C}_{14}\text{H}_{14}\text{O}$ (dibenzyl ether) [103-50-4] MHDVGSVTJDSBDK-UHFFFAOYSA-N	1.5 3.7×10^{-1} 3.1×10^{-1} 1.2×10^2 3.6		Duchowicz et al. (2020) Dupeux et al. (2022) Duchowicz et al. (2020) HSDB (2015) Modarresi et al. (2007)	V Q Q Q Q	187 260 100 68

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
butanoic acid, 3,3-bis((1,1-dimethylethyl)dioxy)-, ethyl ester C ₁₄ H ₂₈ O ₆ [55794-20-2] HARQWLDROVMFJE-UHFFFAOYSA-N	5.0 7.0 × 10 ⁻³ 1.3 × 10 ² 2.4 × 10 ²		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	288, 289 288, 290 288, 291 288, 292
1-hydroxy-9,10-anthracenedione C ₁₄ H ₈ O ₃ (1-hydroxyanthraquinone) [129-43-1] BTLXPCBPYBNQNR-UHFFFAOYSA-N	1.4 × 10 ³ 1.4 × 10 ³ 3.5 × 10 ³		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
danthron C ₁₄ H ₈ O ₄ (1,8-dihydroxyanthraquinone) [117-10-2] QBPFLLULOKWLNW-UHFFFAOYSA-N	1.8 × 10 ⁵		HSDB (2015)	Q	100
bisphenol A C ₁₅ H ₁₆ O ₂ [80-05-7] IISBACLAFKSPIT-UHFFFAOYSA-N	2.5 × 10 ⁵		HSDB (2015)	V	
atractylenolide III C ₁₅ H ₂₀ O ₃ [73030-71-4] FBMORZZOJSDNRQ-GLQYFDAESA-N	1.0 × 10 ³		HSDB (2015)	Q	100
deoxynivalenol C ₁₅ H ₂₀ O ₆ [51481-10-8] LINOMUASTDIRTM-WHNKEALZSA-N	4.9 × 10 ⁸		HSDB (2015)	Q	449
nivalenol C ₁₅ H ₂₀ O ₇ [23282-20-4] UKOTXHQERFPCBU-UHFFFAOYSA-N	1.4 × 10 ¹⁰		HSDB (2015)	Q	100
tributyryn C ₁₅ H ₂₆ O ₆ [60-01-5] UYXTWWCETRIEDR-UHFFFAOYSA-N	1.0 × 10 ³		HSDB (2015)	Q	100
diosmetin C ₁₆ H ₁₂ O ₆ [520-34-3] MBNGWHIJMBWFHU-UHFFFAOYSA-N	3.3 × 10 ¹²		HSDB (2015)	Q	449

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
shikonin $\text{C}_{16}\text{H}_{16}\text{O}_5$ [517-89-5] NEZONWMXZKDMKF-SNVBAGLBSA-N	1.2×10^9		HSDB (2015)	Q	449
2,2-bis(4-hydroxyphenyl)butane $\text{C}_{16}\text{H}_{18}\text{O}_2$ (bisphenol B) [77-40-7] HTVITOHKHWFJKO-UHFFFAOYSA-N	8.2×10^5		HSDB (2015)	Q	449
ethyl 3,3-bis(<i>tert</i> -amylperoxy)butyrate $\text{C}_{16}\text{H}_{32}\text{O}_6$ [67567-23-1] NICWAKGKDIAMOD-UHFFFAOYSA-N	2.9 3.7×10^{-3} 3.0×10^1 1.5×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
aflatoxin B1 $\text{C}_{17}\text{H}_{12}\text{O}_6$ [1162-65-8] OOIQSTLJSLGHID-UHFFFAOYSA-N	7.0×10^7		HSDB (2015)	Q	100
aflatoxin G1 $\text{C}_{17}\text{H}_{12}\text{O}_7$ [1165-39-5] XWIYFDMXXLINPU-UHFFFAOYSA-N	2.0×10^7		HSDB (2015)	Q	100
aflatoxin B2 $\text{C}_{17}\text{H}_{14}\text{O}_6$ [7220-81-7] WWSYXEZEXMQWHT-UHFFFAOYSA-N	3.3×10^9		HSDB (2015)	Q	100
aflatoxin G2 $\text{C}_{17}\text{H}_{14}\text{O}_7$ [7241-98-7] WPCVRWVBBXIRMA-UHFFFAOYSA-N	9.0×10^8		HSDB (2015)	Q	100
bisphenol C $\text{C}_{17}\text{H}_{20}\text{O}_2$ [79-97-0] YMTYZTXUZLQUSF-UHFFFAOYSA-N	9.0×10^5		HSDB (2015)	Q	449
PR-toxin $\text{C}_{17}\text{H}_{20}\text{O}_6$ [56299-00-4] GSPFUBNBRPVALJ-VIEAGMIOA-N	1.6×10^8		HSDB (2015)	Q	100
fusarenon X $\text{C}_{17}\text{H}_{22}\text{O}_8$ [23255-69-8] XGCUCFKWVWVWVW-UHFFFAOYSA-N	2.1×10^{11}		HSDB (2015)	Q	100

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dihydrotanshinone I $\text{C}_{18}\text{H}_{14}\text{O}_3$ [87205-99-0] HARGZZNYNSYSGJ-JTQLQIEISA-N	7.6×10^4		HSDB (2015)	Q	100
diethylstilbestrol $\text{C}_{18}\text{H}_{20}\text{O}_2$ [56-53-1] RGLYKWWBQGJZGM-ISLYRVAYSA-N	1.7×10^2		HSDB (2015)	Q	100
laminarin $\text{C}_{18}\text{H}_{32}\text{O}_{16}$ [9008-22-4] DBTMGCOVALSLOR-AWHOAGYSA-N	$> 2.9 \times 10^6$		Maniere et al. (2011)	?	73, 166
estrone $\text{C}_{18}\text{H}_{22}\text{O}_2$ [53-16-7] DNXHEGUUPJUMQT-UHFFFAOYSA-N	2.6×10^4		HSDB (2015)	Q	100
estradiol $\text{C}_{18}\text{H}_{24}\text{O}_2$ [50-28-2] VOXZDWNVPVJITMN-AWDGRILASA-N	2.7×10^5		HSDB (2015)	Q	100
estriol $\text{C}_{18}\text{H}_{24}\text{O}_3$ [50-27-1] PROQIPRRNZUXQM-PVGHWSTSA-N	7.6×10^6		HSDB (2015)	Q	100
nandrolone $\text{C}_{18}\text{H}_{26}\text{O}_2$ [434-22-0] NPAGDVCDWIYMMC-SVXFNXITSA-N	3.7×10^3		HSDB (2015)	Q	100
diufenolan $\text{C}_{18}\text{H}_{20}\text{O}_4$ [63837-33-2] ZDOOQPFYGHZVF-UHFFFAOYSA-N	1.5×10^2 1.2×10^3 1.5×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020) MacBean (2012a)	V Q ?	187
dicumarol $\text{C}_{19}\text{H}_{12}\text{O}_6$ [66-76-2] DOBMPNYZJYQDGZ-UHFFFAOYSA-N	7.0×10^7		HSDB (2015)	Q	100
coumatetralyl $\text{C}_{19}\text{H}_{16}\text{O}_3$ [5836-29-3] ULSLJYXHZDTLQK-UHFFFAOYSA-N	1.7×10^8		HSDB (2015)	V	

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
warfarin $\text{C}_{19}\text{H}_{16}\text{O}_4$ [81-81-2] PJVVWTKQMONHTI-UHFFFAOYSA-N	3.7×10^4 3.6×10^2		HSDB (2015) Mackay et al. (2006d)	V V	
tanshinone II $\text{C}_{19}\text{H}_{18}\text{O}_3$ [568-72-9] HYXITZLLTYIPOF-UHFFFAOYSA-N	2.0×10^3		HSDB (2015)	Q	100
gibberellic acid $\text{C}_{19}\text{H}_{22}\text{O}_6$ [77-06-5] IXORZMNAPKEEDV-UHFFFAOYSA-N	6.2×10^9 1.3×10^6		HSDB (2015) Maniere et al. (2011)	Q ?	100 166
prallethrin $\text{C}_{19}\text{H}_{24}\text{O}_3$ [23031-36-9] SMKRKQBMYOFFMU-UHFFFAOYSA-N	6.2		HSDB (2015)	V	
testolactone $\text{C}_{19}\text{H}_{24}\text{O}_3$ [968-93-4] BPEWUONYVDABNZ-LHXSAFEUSA-N	1.6×10^2		HSDB (2015)	Q	100
androstenedione $\text{C}_{19}\text{H}_{26}\text{O}_2$ [63-05-8] AEMFNILZOJDQLW-JRCHKSGSSA-N	2.7×10^2		HSDB (2015)	Q	100
diacetoxyscirpenol $\text{C}_{19}\text{H}_{26}\text{O}_7$ [2270-40-8] AUGQEEEXBDZWUJY-UHFFFAOYSA-N	1.0×10^{11}		HSDB (2015)	Q	449
testosterone $\text{C}_{19}\text{H}_{28}\text{O}_2$ [58-22-0] MUMGGOZAMZWBJJ-JZJKZLICSA-N	2.8×10^3		HSDB (2015)	Q	100
5α -androst-16-en-4-one $\text{C}_{19}\text{H}_{28}\text{O}$ (androstenone) [18339-16-7] HFVMLYAGWXSTQI-QYXZOKGRSA-N	3.4×10^{-2}		Amoore and Buttery (1978)	M	
oxandrolone $\text{C}_{19}\text{H}_{30}\text{O}_3$ [53-39-4] QSLJIVKCVHQPLV-WPMSWULFSA-N	4.3×10^2		HSDB (2015)	Q	100

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
piperonyl butoxide $\text{C}_{19}\text{H}_{30}\text{O}_5$ [51-03-6] FIPWRIJSWJWJAI-UHFFFAOYSA-N	1.1×10^5		HSDB (2015)	Q	100
methoprene $\text{C}_{19}\text{H}_{34}\text{O}_3$ [40596-69-8] NFGXHKASABOEWE-LDRANXPESA-N	1.4		HSDB (2015)	V	
fluorescein $\text{C}_{20}\text{H}_{12}\text{O}_5$ [2321-07-5] GNBHRKFJIUUOQI-UHFFFAOYSA-N	1.1×10^{11}		HSDB (2015)	Q	100
phenolphthalein $\text{C}_{20}\text{H}_{14}\text{O}_4$ [77-09-8] KJFMBFZCATUALV-UHFFFAOYSA-N	1.1×10^{10}		HSDB (2015)	Q	100
avobenzone $\text{C}_{20}\text{H}_{22}\text{O}_3$ [70356-09-1] XNEFYCZVKIDDMS-UHFFFAOYSA-N	4.9×10^4		HSDB (2015)	Q	449
ethinyl estradiol $\text{C}_{20}\text{H}_{24}\text{O}_2$ [57-63-6] BFPYWIDHMRZLRN-UHFFFAOYSA-N	1.2×10^6		HSDB (2015)	Q	100
norethynodrel $\text{C}_{20}\text{H}_{26}\text{O}_2$ [68-23-5] ICTXHFFSOAJUMG-CEVCPLMDSA-N	7.6×10^3		HSDB (2015)	Q	100
norethindrone $\text{C}_{20}\text{H}_{26}\text{O}$ [68-22-4] VIKNJXKGJWUCNN-BROHZWGRSA-N	1.7×10^4		HSDB (2015)	Q	100
methandrostenolone $\text{C}_{20}\text{H}_{28}\text{O}_2$ [72-63-9] XWALNWXMLVGSFR-NSDIEPNESA-N	4.5×10^3		HSDB (2015)	Q	100
cinerin I $\text{C}_{20}\text{H}_{28}\text{O}_3$ [25402-06-6] FMTFEIJHMMQUJI-FPLPWBNSA-N	1.0×10^1		HSDB (2015)	Q	100

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
17-methyltestosterone $\text{C}_{20}\text{H}_{30}\text{O}_2$ [58-18-4] GCKMFJBGXUYNAG-NSDIEPNESA-N	2.1×10^3		HSDB (2015)	Q	100
drostanolone $\text{C}_{20}\text{H}_{32}\text{O}_2$ (dromostanolone) [58-19-5] IKXILDNPCZPPRV-UHFFFAOYSA-N	1.2×10^3		HSDB (2015)	Q	100
curcumin $\text{C}_{21}\text{H}_{20}\text{O}_6$ [458-37-7] VFLDPWHFBUODDF-FCXRPNKRSA-N	1.4×10^{16}		HSDB (2015)	Q	100
bisphenol A diglycidyl ether $\text{C}_{21}\text{H}_{24}\text{O}_4$ [1675-54-3] LCFVJGUPQDGYKZ-UHFFFAOYSA-N	2.2×10^5		HSDB (2015)	Q	100
mestranol $\text{C}_{21}\text{H}_{26}\text{O}_2$ [72-33-3] IMSSROKUHAOUJS-ALAWOQLPSA-N	2.2×10^3		HSDB (2015)	Q	100
prednisone $\text{C}_{21}\text{H}_{26}\text{O}_5$ [53-03-2] XOFYZVNMUHLCC-NUBBXXJISA-N	3.5×10^4		HSDB (2015)	Q	100
norgestrel $\text{C}_{21}\text{H}_{28}\text{O}_2$ [6533-00-2] WWYNJERNGUHSAO-ZUHHCLADSA-N	1.3×10^4		HSDB (2015)	Q	100
levonorgestrel $\text{C}_{21}\text{H}_{28}\text{O}_2$ [797-63-7] WWYNJERNGUHSAO-XUDSTZEESA-N	1.3×10^4		HSDB (2015)	Q	100
pyrethrin I $\text{C}_{21}\text{H}_{28}\text{O}_3$ [121-21-1] ROVGZAWFACYGSP-CMDGGOBGSA-N	1.3×10^1 2.2×10^{-1} 8.4×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
cinerin II $\text{C}_{21}\text{H}_{28}\text{O}_5$ [121-20-0] SHCRDCOTRILILT-WOBDGSLYSA-N	1.1×10^4		HSDB (2015)	Q	100

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
prednisolone $\text{C}_{21}\text{H}_{28}\text{O}_5$ [50-24-8] OIGNJSKXLXVLSL-UHFFFAOYSA-N	3.7×10^2		HSDB (2015)	Q	100
dronabinol $\text{C}_{21}\text{H}_{30}\text{O}_2$ (delta 9-tetrahydrocannabinol) [1972-08-3] CYQFCXCEBYINGO-UHFFFAOYSA-N	4.1×10^1		HSDB (2015)	Q	100
progesterone $\text{C}_{21}\text{H}_{30}\text{O}_2$ [57-83-0] RJKFOVLPORLFTN-UHFFFAOYSA-N	1.5×10^2		HSDB (2015)	Q	100
hydrocortisone $\text{C}_{21}\text{H}_{30}\text{O}_5$ [50-23-7] JYGXADMDFJGBT-NDNUHCHRSA-N	1.7×10^2		HSDB (2015)	Q	100
calusterone $\text{C}_{21}\text{H}_{32}\text{O}_2$ [17021-26-0] IVFYLRMMHVYGJH-UHFFFAOYSA-N	1.6×10^3		HSDB (2015)	Q	100
oxymetholone $\text{C}_{21}\text{H}_{32}\text{O}_3$ [434-07-1] ICMWWNHDUZJFDW-RCXBLOTCSA-N	6.6×10^3		HSDB (2015)	Q	100
resmethrin $\text{C}_{22}\text{H}_{26}\text{O}_3$ [10453-86-8] VEMKTZHVVJILDY-UHFFFAOYSA-N	4.7×10^{-2} 7.6×10^1 2.2×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
pyrethrin II $\text{C}_{22}\text{H}_{28}\text{O}_5$ [121-29-9] VJFUPGQZSXIULQ-VKTM SVCMSA-N	4.5×10^2 4.5×10^2 3.8×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
methylprednisolone $\text{C}_{22}\text{H}_{30}\text{O}_5$ [83-43-2] VHRSUDSXCMQTMA-UHFFFAOYSA-N	2.7×10^2		HSDB (2015)	Q	100
medroxyprogesterone $\text{C}_{22}\text{H}_{32}\text{O}_3$ [520-85-4] FRQMUZJSZHSGN-HBNHAYAOSA-N	7.6×10^2		HSDB (2015)	Q	100

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dimethirimol $\text{C}_{23}\text{H}_{24}\text{O}_5$ [5221-53-4] V NK CZ J K G J A E O C W - W X U K J I T C S A - N	$>2.3 \times 10^{10}$		MacBean (2012a)	?	
rotenone $\text{C}_{23}\text{H}_{22}\text{O}_6$ [83-79-4] J U V I O Z P C N V V Q F O - U H F F F A O Y S A - N	8.8×10^7		HSDB (2015)	Q	100
phenothrin $\text{C}_{23}\text{H}_{26}\text{O}_3$ [26002-80-2] S B N F W Q Z L D J G R L K - U H F F F A O Y S A - N	1.5		MacBean (2012b)	X	352
spiromesifen $\text{C}_{23}\text{H}_{30}\text{O}_4$ [283594-90-1] G O L X N E S Z Z P U P J E - U H F F F A O Y S A - N	1.8×10^{-2}		HSDB (2015)	V	
digoxigenin $\text{C}_{23}\text{H}_{34}\text{O}_5$ [1672-46-4] S H I B S T M R C D J X L N - K C Z C N T N E S A - N	4.3×10^5		HSDB (2015)	Q	100
annatto $\text{C}_{24}\text{H}_{28}\text{O}_4$ [1393-63-1] Z V K O A S A V G L E T C T - L R R S N B N M S A - N	1.5×10^{11}		HSDB (2015)	Q	100
acequinocyl $\text{C}_{24}\text{H}_{32}\text{O}_4$ [57960-19-7] Q D R X W C A V U N H O G A - U H F F F A O Y S A - N	1.0×10^1 1.0×10^1		HSDB (2015) Maniere et al. (2011)	V ?	242, 166
T-2 mycotoxin $\text{C}_{24}\text{H}_{34}\text{O}_9$ [21259-20-1] S S H H Y B P A M C L K R H - U H F F F A O Y S A - N	1.8×10^{12}		HSDB (2015)	Q	100
milk thistle extract $\text{C}_{25}\text{H}_{22}\text{O}_{10}$ [84604-20-6] S E B F K M X J B C U C A I - V G H N R K B Z S A - N	6.2×10^{17}		HSDB (2015)	Q	100
simvastatin $\text{C}_{25}\text{H}_{38}\text{O}_5$ [79902-63-9] R Y M Z Z M V N J R M U D D - U H F F F A O Y S A - N	3.5×10^4		HSDB (2015)	Q	100

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
calcitriol $\text{C}_{27}\text{H}_{44}\text{O}_3$ (1,25-dihydroxycholecalciferol) [32222-06-3] GMRQFYUYWCNGIN-NKMMMWOESA-N	3.2×10^1		HSDB (2015)	Q	100
paricalcitol $\text{C}_{27}\text{H}_{44}\text{O}_3$ [131918-61-1] BPKAHTKRCLCHEA-UBFJEZKGSAN	2.6×10^1		HSDB (2015)	Q	100
cholecalciferol $\text{C}_{27}\text{H}_{44}\text{O}$ [67-97-0] QYSXJUF SXHHAJI-SMGPGMQOSAN	4.3×10^{-2}		HSDB (2015)	Q	100
cholesterol $\text{C}_{27}\text{H}_{46}\text{O}$ [57-88-5] HVYWMOMLDIMFJA-VUDDUNTSA-N	5.8×10^{-2}		HSDB (2015)	Q	100
ergosterol $\text{C}_{28}\text{H}_{44}\text{O}$ [57-87-4] DNVPQKQSNYMLRS-CVGROQQCSAN	6.2×10^{-2}		HSDB (2015)	Q	100
dihydrotachysterol $\text{C}_{28}\text{H}_{46}\text{O}$ [67-96-9] DTSXXSAWQHPLEF-GFVAUXBKSA-N	2.7×10^{-2}		HSDB (2015)	Q	100
etoposide $\text{C}_{29}\text{H}_{32}\text{O}_{13}$ [33419-42-0] VJJPU SNTGOMMGY-KWGS HVRSAN	5.8×10^{24}		HSDB (2015)	Q	100
stigmaterol $\text{C}_{29}\text{H}_{48}\text{O}$ [83-48-7] HCXVJBMSMIARIN-BASBAMEESAN	3.8×10^{-2}		HSDB (2015)	Q	100
pseudohypericin $\text{C}_{30}\text{H}_{16}\text{O}_9$ [55954-61-5] YXBUQQDFTYOHQI-UHFFFAOYSAN	5.5×10^{23}		HSDB (2015)	Q	100
gossypol $\text{C}_{30}\text{H}_{30}\text{O}_8$ [303-45-7] QBKSWRVVCFD DOT-UHFFFAOYSAN	4.3×10^{22}		HSDB (2015)	Q	100

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
maslinic acid $\text{C}_{30}\text{H}_{48}\text{O}_4$ [4373-41-5] MDZKJHQSJHYOHJ-LLICELPBSA-N	2.8×10^5		HSDB (2015)	Q	449
milbemectin $\text{C}_{31}\text{H}_{44}\text{O}_7$ [51596-10-2] ZLBGSRMUSVULIE-GSMJGMFJSA-N	6.5×10^2 3.9×10^2		Maniere et al. (2011) Maniere et al. (2011)	? ?	242, 166 242, 166
difenacoum $\text{C}_{31}\text{H}_{24}\text{O}_3$ [56073-07-5] FVQITOLYMWVFU-UHFFFAOYSA-N	7.0×10^6		HSDB (2015)	Q	449
nonoxynol 9 $\text{C}_{33}\text{H}_{60}\text{O}_{10}$ [26571-11-9] FBWNMEQMRUMQSO-UHFFFAOYSA-N	1.8×10^{16}		HSDB (2015)	Q	100
azadirachtin $\text{C}_{35}\text{H}_{44}\text{O}_{16}$ [11141-17-6] FTNJWQUOZFUQJ-GWTPYEISA-N	3.5×10^{19}		HSDB (2015)	V	
monensin $\text{C}_{36}\text{H}_{62}\text{O}_{11}$ [17090-79-8] GAOZTHIDHYLHMS-LXKLZWMJSA-N	4.9×10^{18}		HSDB (2015)	Q	100
gossypure $\text{C}_{36}\text{H}_{64}\text{O}_4$ [50933-33-0] BXJHOKLLMOYSRQ-QOXWLJPHSA-N	6.6×10^{-2}		HSDB (2015)	V	
capsanthin $\text{C}_{40}\text{H}_{56}\text{O}_3$ [465-42-9] VYIRVAXUEZSDNC-RDJLEWNRSA-N	3.4×10^2		HSDB (2015)	Q	100
heptamaloxyloglucan $\text{C}_{40}\text{H}_{70}\text{O}_{33}$ [870721-81-6] RAUDYOTTYNEJP-RQESCVSBSA-N	4.2×10^{13}		Maniere et al. (2011)	?	12, 166
digitoxin $\text{C}_{41}\text{H}_{64}\text{O}_{13}$ [71-63-6] WDJUZGPOPHTGOT-UCKSZOHFSA-N	7.6×10^{19}		HSDB (2015)	Q	100

Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
digoxin $\text{C}_{41}\text{H}_{64}\text{O}_{14}$ [20830-75-5] LTMHDMANZUZIPE-PUGKRICDSA-N	2.1×10^{21}		HSDB (2015)	Q	100
pyrethrum $\text{C}_{43}\text{H}_{56}\text{O}_8$ [8003-34-7] VXSIXFKKSNRRO-YWUDCVDHSA-N	1.5×10^1 1.4×10^4 1.3×10^1		HSDB (2015) Maniere et al. (2011) Maniere et al. (2011)	Q ? ?	100 166 166
punicalagin $\text{C}_{48}\text{H}_{28}\text{O}_{30}$ [65995-63-3] SKNLUADAGHCXKF-UHFFFAOYSA-N	5.5×10^{10}		HSDB (2015)	Q	100
abamectin $\text{C}_{48}\text{H}_{72}\text{O}_{14}$ [71751-41-2] RRZXIRBKKLTSOM-IGNCFFBFSAN	7.0×10^3 $> 3.7 \times 10^2$		HSDB (2015) Maniere et al. (2011)	V ?	12, 166
notoginsenoside R1 $\text{C}_{48}\text{H}_{84}\text{O}_{18}$ [80418-24-2] ZBXDHDDTAIOMHK-UWGJVVBKGSAN	6.6×10^{25}		HSDB (2015)	Q	100
triolein $\text{C}_{57}\text{H}_{104}\text{O}_6$ [122-32-7] PHYFQTYBJUILEZ-IUPFWZBJSAN	1.0×10^{-2}		HSDB (2015)	Q	449
tristearin $\text{C}_{57}\text{H}_{110}\text{O}_6$ [555-43-1] DCXXMTOCNZCJGO-UHFFFAOYSA-N	7.0×10^{-3}		HSDB (2015)	Q	100

A4 Organic species with nitrogen (N)

A4.1 Amines (C, H, N)

Table A4.1: Amines (C, H, N)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cyanamide CH ₂ N ₂ [420-04-2] XZMCDZFZZKTWFGF-UHFFFAOYSA-N	3.7×10^4		HSDB (2015)	V	
methylhydrazine CH ₆ N ₂ [60-34-4] HDZGCSFEDULWCS-UHFFFAOYSA-N	3.3		HSDB (2015)	V	
methanamine CH ₃ NH ₂ (methylamine) [74-89-5] BAVYZALUXZFZLV-UHFFFAOYSA-N	8.9×10^{-1}	2600	Burkholder et al. (2019)	L	
	8.9×10^{-1}		Burkholder et al. (2015)	L	
	3.5×10^{-1}		Wilhelm et al. (1977)	L	
	8.9×10^{-1}		Christie and Crisp (1967)	M	
	1.1		Yaws (2003)	X	238
	7.4×10^{-1}		Keshavarz et al. (2022)	Q	
	6.2		Duchowicz et al. (2020)	Q	
	1.1		Gharagheizi et al. (2010)	Q	247
	1.2		Hilal et al. (2008)	Q	
	2.3		Modarresi et al. (2007)	Q	68
		5000	Kühne et al. (2005)	Q	
	9.2×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	1.1		English and Carroll (2001)	Q	231, 232
	6.1×10^{-1}		Katritzky et al. (1998)	Q	
	5.6×10^{-1}		Nirmalakhandan et al. (1997)	Q	
8.9×10^{-1}		Duchowicz et al. (2020)	?	186, 21	
8.9×10^{-1}		Mackay et al. (2006d)	?		
	3200	Kühne et al. (2005)	?		
8.8×10^{-1}		Abraham et al. (1990)	?		
	5400	Abraham (1984)	?	21	
1.4		Bone et al. (1983)	?	66	
ethanamine C ₂ H ₅ NH ₂ (ethylamine) [75-04-7] QUSNBJAOCOMFDIB-UHFFFAOYSA-N	8.0×10^{-1}	3600	Burkholder et al. (2019)	L	
	8.0×10^{-1}		Burkholder et al. (2015)	L	
	8.4×10^{-1}		Brockbank (2013)	L	
	3.5×10^{-1}		Wilhelm et al. (1977)	L	
	8.0×10^{-1}		Christie and Crisp (1967)	M	
	9.9×10^{-1}		Butler and Ramchandani (1935)	M	
	3.0×10^{-1}		Hwang et al. (1992)	V	
	1.0		Keshavarz et al. (2022)	Q	
	2.2		Duchowicz et al. (2020)	Q	300
	9.7×10^{-1}		Li et al. (2014)	Q	242
	7.9×10^{-1}		Hilal et al. (2008)	Q	
1.7		Modarresi et al. (2007)	Q	68	

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.3×10^{-1}		Yao et al. (2002)	Q	230
	9.5×10^{-1}		English and Carroll (2001)	Q	231, 232
	4.7×10^{-1}		Katritzky et al. (1998)	Q	
	4.6×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	2.4		Russell et al. (1992)	Q	280
	1.3		Suzuki et al. (1992)	Q	233
	8.0×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	9.9×10^{-1}		Mackay et al. (2006d)	?	
	3.8×10^{-1}		Yaws (1999)	?	21, 12
	8.0×10^{-1}		Abraham et al. (1990)	?	
		6500	Abraham (1984)	?	21
1H-1,2,4-triazole $\text{C}_2\text{H}_3\text{N}_3$ [288-88-0] NSPMIYGKQJPBQR-UHFFFAOYSA-N	6.6		HSDB (2015)	Q	100
dicyandiamide $\text{C}_2\text{H}_4\text{N}_4$ (cyanoguanidine) [461-58-5] QGBSISYHAICWAH-UHFFFAOYSA-N	4.3×10^4		HSDB (2015)	Q	100
ethylenimine $\text{C}_2\text{H}_5\text{N}$ [151-56-4] NOWKCMXCCJGMRR-UHFFFAOYSA-N	8.2×10^{-1}		Duchowicz et al. (2020)	V	187
	8.2×10^{-1}		HSDB (2015)	V	
	2.9×10^1		Duchowicz et al. (2020)	Q	
1,2-dimethylhydrazine $\text{C}_2\text{H}_8\text{N}_2$ [540-73-8] DIIIISSCIXVANO-UHFFFAOYSA-N	1.8		HSDB (2015)	V	
1,1-dimethylhydrazine $\text{C}_2\text{H}_8\text{N}_2$ [57-14-7] RHUYHJGZVWXEHW-UHFFFAOYSA-N	7.6×10^{-1}		HSDB (2015)	V	
1-propanamine $\text{C}_3\text{H}_7\text{NH}_2$ (propylamine) [107-10-8] WGYKZJWCGVVSQN-UHFFFAOYSA-N	6.6×10^{-1}		Burkholder et al. (2019)	L	
	6.6×10^{-1}		Burkholder et al. (2015)	L	
	6.7×10^{-1}		Brockbank (2013)	L	
	5.6×10^{-1}	6400	Leng et al. (2015a)	M	
	5.0×10^{-1}		Altschuh et al. (1999)	M	
	6.6×10^{-1}		Christie and Crisp (1967)	M	
	7.8×10^{-1}		Butler and Ramchandani (1935)	M	
	6.6×10^{-1}	6700	Plyasunov et al. (2001)	T	
	1.4		Keshavarz et al. (2022)	Q	
	2.3		Duchowicz et al. (2020)	Q	185
	4.8×10^{-1}		Hilal et al. (2008)	Q	

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.1		Modarresi et al. (2007)	Q	68
	6.7×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	2.6×10^{-1}		Yao et al. (2002)	Q	230
	5.2×10^{-1}		Katritzky et al. (1998)	Q	
	3.6×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.6		Russell et al. (1992)	Q	280
	1.0		Suzuki et al. (1992)	Q	233
	6.7×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	7.8×10^{-1}		Mackay et al. (2006d)	?	
	3.9×10^{-1}		Yaws (1999)	?	21
	6.7×10^{-1}		Abraham et al. (1990)	?	
		6700	Abraham (1984)	?	21
2-propanamine $\text{C}_3\text{H}_9\text{N}$ (isopropylamine) [75-31-0] JJWLVOIRVHMVIS-UHFFFAOYSA-N	2.2×10^{-1}		Duchowicz et al. (2020)	V	187
	2.2×10^{-1}		Hilal et al. (2008)	C	
	8.9×10^{-1}		Duchowicz et al. (2020)	Q	
	2.1×10^{-1}		Hilal et al. (2008)	Q	
	2.4		Modarresi et al. (2007)	Q	68
	2.3×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	1.6×10^{-1}		Yao et al. (2002)	Q	230
	3.1×10^{-1}		Katritzky et al. (1998)	Q	
	1.3×10^{-1}		Yaws (1999)	?	21, 12
propanedinitrile $\text{C}_3\text{H}_2\text{N}_2$ (malononitrile) [109-77-3] CUONGYYJJVDODC-UHFFFAOYSA-N	7.5×10^1		Duchowicz et al. (2020)	V	187
	2.0×10^1		Duchowicz et al. (2020)	Q	
	7.8×10^2		HSDB (2015)	Q	100
	2.0×10^1		Gharagheizi et al. (2012)	Q	
	6.3×10^1		Yaws (1999)	?	21, 12
2-methylaziridine $\text{C}_3\text{H}_7\text{N}$ [75-55-8] OZDGMOKSFPLSE-UHFFFAOYSA-N	9.9×10^{-1}		Duchowicz et al. (2020)	V	187
	1.2×10^1		Duchowicz et al. (2020)	Q	
	1.2		Yaffe et al. (2003)	Q	249, 250
	1.5		Katritzky et al. (1998)	Q	
1,2-diaminopropane $\text{C}_3\text{H}_{10}\text{N}_2$ [78-90-0] AOHJOMMDDJHIJH-UHFFFAOYSA-N	1.4×10^3	7400	Nguyen (2013)	M	11
1-butanamine $\text{C}_4\text{H}_9\text{NH}_2$ (butylamine) [109-73-9] HQABUPZFAYXKJW-UHFFFAOYSA-N	5.6×10^{-1}		Burkholder et al. (2019)	L	
	5.6×10^{-1}		Burkholder et al. (2015)	L	
	5.4×10^{-1}		Brockbank (2013)	L	
	5.6×10^{-1}		Altschuh et al. (1999)	M	
	5.2×10^{-1}		Rytting et al. (1978)	M	
	5.6×10^{-1}		Christie and Crisp (1967)	M	
	6.5×10^{-1}		Butler and Ramchandani (1935)	M	
	2.2×10^{-1}		Hwang et al. (1992)	V	
	4.5×10^{-1}		Amoore and Buttery (1978)	V	
	3.7×10^{-1}		Yaws (2003)	X	259

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.6×10^{-1}		Yaws (2003)	X	238
	2.1×10^{-1}		Dupeux et al. (2022)	Q	260
	1.2×10^{-1}		Keshavarz et al. (2022)	Q	
	2.3		Duchowicz et al. (2020)	Q	300
	6.5×10^{-1}		Li et al. (2014)	Q	242
	4.0×10^{-1}		Gharagheizi et al. (2010)	Q	247
	2.9×10^{-1}		Hilal et al. (2008)	Q	
	1.5		Modarresi et al. (2007)	Q	68
	5.2×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	2.4×10^{-1}		Yao et al. (2002)	Q	230
	7.3×10^{-1}		English and Carroll (2001)	Q	231, 232
	4.0×10^{-1}		Katritzky et al. (1998)	Q	
	2.8×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.1		Russell et al. (1992)	Q	280
	7.9×10^{-1}		Suzuki et al. (1992)	Q	233
	5.7×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	6.6×10^{-1}		Mackay et al. (2006d)	?	
	2.2×10^{-1}		Yaws (1999)	?	21
	5.2×10^{-1}		Abraham et al. (1990)	?	
		7100	Abraham (1984)	?	21
2-butanamine $\text{C}_4\text{H}_{11}\text{N}$ (<i>sec</i> -butylamine) [13952-84-6] BHRZNVHARXXAHW-UHFFFAOYSA-N	4.0×10^{-1}	7700	Kish et al. (2013)	M	550
	6.5×10^{-2}		Duchowicz et al. (2020)	V	187
	6.5×10^{-2}		Hilal et al. (2008)	C	
	9.1×10^{-1}		Duchowicz et al. (2020)	Q	
	1.6×10^{-1}		Hilal et al. (2008)	Q	
	1.7		Modarresi et al. (2007)	Q	68
	2.2×10^{-1}		Katritzky et al. (1998)	Q	
2-methyl-1-propanamine $\text{C}_4\text{H}_{11}\text{N}$ (<i>isobutylamine</i>) [78-81-9] KDSNLYIMUZNERS-UHFFFAOYSA-N	7.3×10^{-1}		Duchowicz et al. (2020)	V	187
	7.2×10^{-1}		Hilal et al. (2008)	C	
	9.1×10^{-1}		Duchowicz et al. (2020)	Q	
	2.4×10^{-1}		Hilal et al. (2008)	Q	
	2.0		Modarresi et al. (2007)	Q	68
	5.2×10^{-1}		Yaffe et al. (2003)	Q	249, 273
	1.5×10^{-1}		Yao et al. (2002)	Q	230, 268
	3.9×10^{-1}		Katritzky et al. (1998)	Q	
	4.4×10^{-1}		Yaws (1999)	?	21, 12
2-methyl-2-propanamine $\text{C}_4\text{H}_{11}\text{N}$ (<i>tert</i> -butylamine) [75-64-9] YBRBMKDOPFTVDT-UHFFFAOYSA-N	2.8×10^{-1}		Duchowicz et al. (2020)	V	187
	2.8×10^{-1}		Hilal et al. (2008)	C	
	4.0×10^{-1}		Duchowicz et al. (2020)	Q	
	5.0×10^{-2}		Hilal et al. (2008)	Q	
	1.0×10^{-1}		Modarresi et al. (2007)	Q	68
	2.9×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	2.1×10^{-1}		Katritzky et al. (1998)	Q	

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dimethylethylamine $\text{C}_4\text{H}_{11}\text{N}$ [598-56-1] DAZXVJBJRMWXJP-UHFFFAOYSA-N	1.1×10^{-1} 9.0×10^{-2} 1.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2-propylguanidine $\text{C}_4\text{H}_{11}\text{N}_3$ [462-25-9] BWMDMTSXSXYSP-UHFFFAOYSA-N	4.1×10^4		Ebert et al. (2023)	?	367
1,2-diethylhydrazine $\text{C}_4\text{H}_{12}\text{N}_2$ [1615-80-1] YCBOYOYVDOUXLH-UHFFFAOYSA-N	8.2×10^1		HSDB (2015)	Q	100
N-(2-aminoethyl)-1,2-ethanediamine $\text{C}_4\text{H}_{13}\text{N}_3$ (diethylenetriamine) [111-40-0] RPNUMPOLZDHAAY-UHFFFAOYSA-N	9.9×10^8		HSDB (2015)	Q	100
butanedinitrile $\text{C}_4\text{H}_4\text{N}_2$ [110-61-2] IAHFWCOBPZCAEA-UHFFFAOYSA-N	8.7×10^2 1.5×10^3 1.5×10^3 4.0×10^3 2.6×10^1 3.9×10^3	7000	Plyasunov et al. (2006) Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2010)	L V V X Q Q	187 238, 12 247
2-methyl-1H-imidazole $\text{C}_4\text{H}_6\text{N}_2$ [693-98-1] LXBGSDVWAMZHDD-UHFFFAOYSA-N	8.1×10^2 1.8×10^3 1.1×10^3 2.2		Du et al. (2017) Du et al. (2017) Du et al. (2017) HSDB (2015)	M Q Q Q	480 551 100
4-methyl-1H-imidazole $\text{C}_4\text{H}_6\text{N}_2$ [822-36-6] XLSZMDLNRCVEIJ-UHFFFAOYSA-N	2.4		HSDB (2015)	Q	100
N-methyl-1,3-propanediamine $\text{C}_4\text{H}_{12}\text{N}_2$ (3-(methylamino)propylamine) [6291-84-5] QHJABUZHJRJTCAU-UHFFFAOYSA-N	1.4×10^3 2.1×10^3	7600 8800	Nguyen (2013) Kim et al. (2008)	M M	11 552

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-pentanamine $\text{C}_5\text{H}_{11}\text{NH}_2$ (1-pentylamine) [110-58-7] DPBLXKKOBLCELK-UHFFFAOYSA-N	4.3×10^{-1} 4.0×10^{-1} 3.1×10^{-1} 4.0×10^{-1} 1.7×10^{-1}		Brockbank (2013) Rytting et al. (1978) Amoore and Buttery (1978) Christie and Crisp (1967) Keshavarz et al. (2022)	L M M M Q	
	2.4 1.6×10^{-1} 1.2 4.0×10^{-1} 5.6×10^{-1} 4.0×10^{-1} 2.2×10^{-1} 7.2×10^{-1} 1.5×10^{-1} 4.1×10^{-1} 4.0×10^{-1}		Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Russell et al. (1992) Suzuki et al. (1992) Duchowicz et al. (2020) Abraham et al. (1990) Abraham (1984)	Q Q Q Q Q Q Q Q Q ? ? ?	300 68 249, 250 231, 261 360 233 186, 21 21
3-methyl-1-butanamine $\text{C}_5\text{H}_{13}\text{N}$ [107-85-7] BMFVGAAISNGQNM-UHFFFAOYSA-N	3.2×10^{-1} 3.1×10^{-1} 2.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2010) Hilal et al. (2008)	X Q Q	238 247
1,2-dimethylpropylamine $\text{C}_5\text{H}_{13}\text{N}$ [598-74-3] JOZZAIIIGWFLONA-UHFFFAOYSA-N	4.0×10^{-1} 3.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
dimethylpropylamine $\text{C}_5\text{H}_{13}\text{N}$ [926-63-6] ZUHZZVMEUAUWHY-UHFFFAOYSA-N	7.9×10^{-2} 5.3×10^{-2} 9.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
dimethylisopropylamine $\text{C}_5\text{H}_{13}\text{N}$ [996-35-0] VMOWKUTXPNTEN-UHFFFAOYSA-N	7.9×10^{-2} 1.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
ethylpropylamine $\text{C}_5\text{H}_{13}\text{N}$ [20193-20-8] XCVNDBIXFPGMIW-UHFFFAOYSA-N	1.7×10^{-1} 1.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
ethylisopropylamine $\text{C}_5\text{H}_{13}\text{N}$ [19961-27-4] RIVIDPPYRINTH-UHFFFAOYSA-N	1.8×10^{-1} 1.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methyldiethylamine $\text{C}_5\text{H}_{13}\text{N}$ [616-39-7] GNVRJGIVDSQCOP-UHFFFAOYSA-N	7.9×10^{-2}		Yaws (2003)	X	238
	1.1×10^{-1}		Gharagheizi et al. (2010)	Q	247
2-methylpiperazine $\text{C}_5\text{H}_{12}\text{N}_2$ [109-07-9] JOMNTHCQHJPVAZ-UHFFFAOYSA-N	5.0×10^3	9200	Nguyen (2013)	M	11
1-hexanamine $\text{C}_6\text{H}_{13}\text{NH}_2$ (hexylamine) [111-26-2] BMVXCPBXGZKUPN-UHFFFAOYSA-N	3.5×10^{-1}		Brockbank (2013)	L	
	3.2×10^{-1}		Rytting et al. (1978)	M	
	3.7×10^{-1}		Christie and Crisp (1967)	M	
	1.0×10^{-1}		Yaws (2003)	X	238
	2.3×10^{-1}		Keshavarz et al. (2022)	Q	
	2.4		Duchowicz et al. (2020)	Q	185
	1.4×10^{-1}		Gharagheizi et al. (2010)	Q	247
	3.7×10^{-1}		Hilal et al. (2008)	Q	
	1.0		Modarresi et al. (2007)	Q	68
	3.2×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	9.2×10^{-2}		Yao et al. (2002)	Q	230, 268
	4.3×10^{-1}		English and Carroll (2001)	Q	231, 275
	3.3×10^{-1}		Katritzky et al. (1998)	Q	
	1.8×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	3.4×10^{-1}		Russell et al. (1992)	Q	280
4.6×10^{-1}		Suzuki et al. (1992)	Q	233	
3.7×10^{-1}		Duchowicz et al. (2020)	?	186, 21	
1.0×10^{-1}		Yaws (1999)	?	21	
3.2×10^{-1}		Abraham et al. (1990)	?		
		7900	Abraham (1984)	?	21
2-hexanamine $\text{C}_6\text{H}_{15}\text{N}$ [5329-79-3] WGBBUURBHXLGFM-UHFFFAOYSA-N	1.9×10^{-1}		Yaws (2003)	X	238
	1.5×10^{-1}		Gharagheizi et al. (2010)	Q	247
3-hexanamine $\text{C}_6\text{H}_{15}\text{N}$ [16751-58-9] HQLZFBUAULNEGP-UHFFFAOYSA-N	1.8×10^{-1}		Yaws (2003)	X	238
	1.5×10^{-1}		Gharagheizi et al. (2010)	Q	247
1-amino-2-methylpentane $\text{C}_6\text{H}_{15}\text{N}$ [13364-16-4] WNDXRJBYZOSNQO-UHFFFAOYSA-N	2.0×10^{-1}		Yaws (2003)	X	238
	1.8×10^{-1}		Gharagheizi et al. (2010)	Q	247

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-amino-3-methylpentane $\text{C}_6\text{H}_{15}\text{N}$ [42245-37-4] JLAUIBFZZUVOBB-UHFFFAOYSA-N	2.0×10^{-1} 1.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
1-amino-4-methylpentane $\text{C}_6\text{H}_{15}\text{N}$ [5344-20-7] QVIAMKXOQGCYCV-UHFFFAOYSA-N	2.0×10^{-1} 1.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
2-amino-3-methylpentane $\text{C}_6\text{H}_{15}\text{N}$ [35399-81-6] ZFAGOADKDXXTSV-UHFFFAOYSA-N	1.7×10^{-1} 2.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
2-amino-4-methylpentane $\text{C}_6\text{H}_{15}\text{N}$ [108-09-8] UNBMPKNKYKDYCG-UHFFFAOYSA-N	2.3×10^{-1} 2.3×10^{-1} 3.6×10^{-1} 2.0×10^{-1} 3.2×10^{-1}		Yaws (2003) Keshavarz et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2010) Duchowicz et al. (2020)	X Q Q Q ?	238 185 247 186, 21
3-amino-2-methylpentane $\text{C}_6\text{H}_{15}\text{N}$ [54287-41-1] JYNQKCFJPEXSL-UHFFFAOYSA-N	1.7×10^{-1} 2.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
1-amino-2-ethylbutane $\text{C}_6\text{H}_{15}\text{N}$ [617-79-8] MGWAGIQQTULHGU-UHFFFAOYSA-N	1.8×10^{-1} 1.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
1-amino-2,2-dimethylbutane $\text{C}_6\text{H}_{15}\text{N}$ [41781-17-3] PZVPOYBHOPRJNP-UHFFFAOYSA-N	2.1×10^{-1} 2.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
1-amino-2,3-dimethylbutane $\text{C}_6\text{H}_{15}\text{N}$ [66553-05-7] GBMSZXWHMSSBGP-UHFFFAOYSA-N	2.5×10^{-1} 2.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
1-amino-3,3-dimethylbutane $\text{C}_6\text{H}_{15}\text{N}$ [15673-00-4] GPWHFPWZAPYNO-UHFFFAOYSA-N	1.6×10^{-1} 2.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
2-amino-3,3-dimethylbutane $\text{C}_6\text{H}_{15}\text{N}$ [3850-30-4] DXSUORGKJZADET-UHFFFAOYSA-N	2.4×10^{-1} 2.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dimethylbutylamine $\text{C}_6\text{H}_{15}\text{N}$ [927-62-8] DJEQZVQFEPKLOY-UHFFFAOYSA-N	8.9×10^{-2} 4.8×10^{-2} 6.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
dimethyl- <i>sec</i> -butylamine $\text{C}_6\text{H}_{15}\text{N}$ [921-04-0] USSPHSVODLAWSA-UHFFFAOYSA-N	1.0×10^{-1} 1.2×10^{-1} 8.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
dimethyl- <i>tert</i> -butylamine $\text{C}_6\text{H}_{15}\text{N}$ [918-02-5] OXQMIXBVXHWDPX-UHFFFAOYSA-N	1.0×10^{-1} 9.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
ethylbutylamine $\text{C}_6\text{H}_{15}\text{N}$ [13360-63-9] QHCCDDQKNUYGNC-UHFFFAOYSA-N	1.3×10^{-1} 1.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
ethylisobutylamine $\text{C}_6\text{H}_{15}\text{N}$ [13205-60-2] FNLUJDLKYOWMMF-UHFFFAOYSA-N	1.5×10^{-1} 1.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
ethyl- <i>sec</i> -butylamine $\text{C}_6\text{H}_{15}\text{N}$ [21035-44-9] KFYKZKISJBGVMR-UHFFFAOYSA-N	1.5×10^{-1} 1.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
methyl-1,1-dimethylpropylamine $\text{C}_6\text{H}_{15}\text{N}$ [2978-64-5] BUJFTKPQXSIZFX-UHFFFAOYSA-N	1.1×10^{-1} 1.8×10^{-1} 1.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
methyl-1,2-dimethylpropylamine $\text{C}_6\text{H}_{15}\text{N}$ [34317-39-0] LJLWVVCWBURGCC-UHFFFAOYSA-N	1.2×10^{-1} 5.9×10^{-2} 1.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
methyl-2,2-dimethylpropylamine $\text{C}_6\text{H}_{15}\text{N}$ [26153-91-3] UQGXHNDRCRTZAC-UHFFFAOYSA-N	1.1×10^{-1} 1.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
methyl-1-methylbutylamine $\text{C}_6\text{H}_{15}\text{N}$ [51932-19-5] IPBXLJFBVNLKFE-UHFFFAOYSA-N	1.2×10^{-1} 8.7×10^{-2} 1.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methylethylpropylamine $C_6H_{15}N$ [4458-32-6] SMBYUOXUISCLCF-UHFFFAOYSA-N	1.1×10^{-1}		Yaws (2003)	X	238
	1.0×10^{-1}		Gharagheizi et al. (2012)	Q	
	8.2×10^{-2}		Gharagheizi et al. (2010)	Q	247
methylethylisopropylamine $C_6H_{15}N$ [39198-07-7] UTLDDSNRFHWERZ-UHFFFAOYSA-N	1.1×10^{-1}		Yaws (2003)	X	238
	9.8×10^{-2}		Gharagheizi et al. (2010)	Q	247
methylpentylamine $C_6H_{15}N$ [25419-06-1] UOIWOHLIGKIYFE-UHFFFAOYSA-N	1.2×10^{-1}		Yaws (2003)	X	238
	1.1×10^{-1}		Gharagheizi et al. (2010)	Q	247
propylisopropylamine $C_6H_{15}N$ [21968-17-2] VLSTXUUYLIALPB-UHFFFAOYSA-N	1.4×10^{-1}		Yaws (2003)	X	238
	1.3×10^{-1}		Gharagheizi et al. (2010)	Q	247
1,6-hexanediamine $C_6H_{16}N_2$ (hexamethylenediamine) [124-09-4] NAQMVNRVTILPCV-UHFFFAOYSA-N	1.0×10^3	5000	Nguyen (2013)	M	11
	3.1×10^3		HSDB (2015)	Q	100
N,N'-methanetetraylbis-2-propanamine $C_7H_{14}N_2$ (1,3-diisopropylcarbodiimide) [693-13-0] BDNKZNFMDZQMI-UHFFFAOYSA-N	9.9×10^{-3}		HSDB (2015)	Q	449
4-methyl-2-hexanamine $C_7H_{17}N$ [105-41-9] YAHRDLICUYEDAU-UHFFFAOYSA-N	2.3×10^{-1}		HSDB (2015)	Q	449
1-heptanamine $C_7H_{17}N$ (1-heptylamine) [111-68-2] WJYIASZWHGOTOU-UHFFFAOYSA-N	2.8×10^{-1}		Brockbank (2013)	L	
	2.4×10^{-1}		Rytting et al. (1978)	M	
	8.0×10^{-2}		Yaws (2003)	X	238
	8.3×10^{-2}		Gharagheizi et al. (2010)	Q	247
	4.5×10^{-1}		Hilal et al. (2008)	Q	
	9.6×10^{-1}		Modarresi et al. (2007)	Q	68
	2.1×10^{-1}		Yaffe et al. (2003)	Q	249, 273
	3.3×10^{-1}		English and Carroll (2001)	Q	231, 232
1.4×10^{-1}		Nirmalakhandan et al. (1997)	Q		
2.4×10^{-1}		Abraham et al. (1990)	?		

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
diethylisopropylamine $C_7H_{17}N$ [6006-15-1] ULWOJODHECIZAU-UHFFFAOYSA-N	7.7×10^{-2} 8.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
diethylpropylamine $C_7H_{17}N$ [4458-31-5] PQZTVWVYCLIIJY-UHFFFAOYSA-N	7.7×10^{-2} 1.5×10^{-1} 7.3×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
dimethyl-1,1-dimethylpropylamine $C_7H_{17}N$ [57757-60-5] CUHMMDPUXJFCNB-UHFFFAOYSA-N	6.3×10^{-2} 6.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
dimethyl-1,2-dimethylpropylamine $C_7H_{17}N$ [66225-38-5] FWBCYOHCBOARU-UHFFFAOYSA-N	6.9×10^{-2} 5.7×10^{-2} 7.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
dimethyl-2,2-dimethylpropylamine $C_7H_{17}N$ [10076-31-0] FUIRUFXAVIHAQB-UHFFFAOYSA-N	6.3×10^{-2} 1.8×10^{-2} 5.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
dimethyl-2-methylbutylamine $C_7H_{17}N$ [66225-39-6] BHMZPPHMJQHCHQ-UHFFFAOYSA-N	7.1×10^{-2} 2.4×10^{-2} 6.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
dimethyl-3-methylbutylamine $C_7H_{17}N$ [2315-43-7] KOOQJINBDNZUTB-UHFFFAOYSA-N	7.2×10^{-2} 3.5×10^{-2} 5.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
dimethylpentylamine $C_7H_{17}N$ [26153-88-8] IDFANOPDMXWIOP-UHFFFAOYSA-N	5.3×10^{-2} 4.1×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
dimethyl-2-pentylamine $C_7H_{17}N$ [57303-85-2] LSTZYJQJHGEVKH-UHFFFAOYSA-N	7.7×10^{-2} 6.6×10^{-2} 6.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
dimethyl-3-pentylamine $C_7H_{17}N$ [18636-94-7] SUEKSPIQGIMSQM-UHFFFAOYSA-N	7.0×10^{-2} 5.5×10^{-2} 6.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethylpentylamine $C_7H_{17}N$ [17839-26-8] ICVFPLUSMYSIFO-UHFFFAOYSA-N	8.6×10^{-2} 5.6×10^{-2} 9.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
methyldiisopropylamine $C_7H_{17}N$ [10342-97-9] ISRXMEYARGEVIU-UHFFFAOYSA-N	7.1×10^{-2} 7.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
methyldipropylamine $C_7H_{17}N$ [3405-42-3] UVBMZKBIZUWTLV-UHFFFAOYSA-N	7.5×10^{-2} 5.1×10^{-2} 6.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
methylethylbutylamine $C_7H_{17}N$ [66225-40-9] WOLFCKKMHUVEPN-UHFFFAOYSA-N	7.2×10^{-2} 8.2×10^{-2} 6.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
methylethylisobutylamine $C_7H_{17}N$ [60247-14-5] QQWXQKMQVASVXCI-UHFFFAOYSA-N	7.8×10^{-2} 4.3×10^{-2} 6.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
methylethyl-sec-butylamine $C_7H_{17}N$ [66225-41-0] HAFZSBASGRZPLA-UHFFFAOYSA-N	8.2×10^{-2} 7.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
methylethyl-tert-butylamine $C_7H_{17}N$ [52841-28-8] BWWLCYLGZIWOKH-UHFFFAOYSA-N	7.0×10^{-2} 7.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
methylhexylamine $C_7H_{17}N$ [35161-70-7] XJINZNWPEQMMBV-UHFFFAOYSA-N	8.3×10^{-2} 3.5×10^{-2} 8.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
methylpropylisopropylamine $C_7H_{17}N$ [66225-42-1] OYQDUCLFZSKBCZ-UHFFFAOYSA-N	7.3×10^{-2} 1.6×10^{-1} 7.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
1-octanamine $\text{C}_8\text{H}_{19}\text{N}$ (octylamine) [111-86-4] IOQPZZOEVFPZRBK-UHFFFAOYSA-N	2.2×10^{-1} 1.9×10^{-1} 1.2×10^{-2} 2.4 1.9×10^{-2} 4.3×10^{-1}		Brockbank (2013) Rytting et al. (1978) Duchowicz et al. (2020) Duchowicz et al. (2020) Gharagheizi et al. (2012) Hilal et al. (2008)	L M V Q Q Q	
		7400	Kühne et al. (2005) Yaffe et al. (2003) English and Carroll (2001)	Q Q Q	249, 250 231, 232
	2.1×10^{-1} 2.5×10^{-1} 1.1×10^{-1} 1.2×10^{-2} 1.9×10^{-1}		Nirmalakhandan et al. (1997) Kühne et al. (2005) Yaws (1999) Abraham et al. (1990)	Q ? ? ?	21
2-ethyl-1-hexanamine $\text{C}_8\text{H}_{19}\text{N}$ (2-ethylhexylamine) [104-75-6] LTHNHFOGQMKPOV-UHFFFAOYSA-N	1.0×10^{-1} 9.4×10^{-1} 3.7×10^{-1} 9.7×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q	187
		7400 7400	Kühne et al. (2005) Kühne et al. (2005)	Q ?	68
diethylbutylamine $\text{C}_8\text{H}_{19}\text{N}$ [4444-68-2] ORSUTASIQKBEFU-UHFFFAOYSA-N	5.2×10^{-2} 1.2×10^{-1} 5.3×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
dimethylhexylamine $\text{C}_8\text{H}_{19}\text{N}$ [4385-04-0] QMHNQZGXPNCMCO-UHFFFAOYSA-N	3.4×10^{-2} 3.1×10^{-2} 3.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
ethylhexylamine $\text{C}_8\text{H}_{19}\text{N}$ [20352-67-4] WSTNFGAKGUERTC-UHFFFAOYSA-N	6.2×10^{-2} 4.5×10^{-2} 7.3×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
methylheptylamine $\text{C}_8\text{H}_{19}\text{N}$ [36343-05-2] LTGYRKOQQQWWAF-UHFFFAOYSA-N	6.2×10^{-2} 2.6×10^{-2} 7.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
2,2'-azobis-(2-methylpropanenitrile) $\text{C}_8\text{H}_{12}\text{N}_4$ [78-67-1] OZAIFHULBGXAKX-UHFFFAOYSA-N	2.4 8.0×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
diethylpentylamine $\text{C}_9\text{H}_{21}\text{N}$ [2162-91-6] YZULHOOBWDXEOT-UHFFFAOYSA-N	4.0×10^{-2} 8.6×10^{-2} 4.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
dimethylheptylamine $\text{C}_9\text{H}_{21}\text{N}$ [5277-11-2] LSICDRUYCNGRIF-UHFFFAOYSA-N	2.5×10^{-2} 2.7×10^{-2} 3.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
ethylheptylamine $\text{C}_9\text{H}_{21}\text{N}$ [66793-76-8] IUZZLNVABCISOI-UHFFFAOYSA-N	5.2×10^{-2} 5.3×10^{-2} 6.3×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
methyloctylamine $\text{C}_9\text{H}_{21}\text{N}$ [2439-54-5] SEGJNMCIMOLEDM-UHFFFAOYSA-N	5.4×10^{-2} 3.0×10^{-2} 6.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
nonylamine $\text{C}_9\text{H}_{21}\text{N}$ [112-20-9] FJDUDHYHRVPMJZ-UHFFFAOYSA-N	5.9×10^{-2} 2.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
diethylhexylamine $\text{C}_{10}\text{H}_{23}\text{N}$ [44979-90-0] XHDKYWMKOLURNK-UHFFFAOYSA-N	3.3×10^{-2} 6.7×10^{-2} 3.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
dimethyloctylamine $\text{C}_{10}\text{H}_{23}\text{N}$ [7378-99-6] UQKAOOAFEFCDGT-UHFFFAOYSA-N	2.0×10^{-2} 4.5×10^{-2} 2.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
dipentylamine $\text{C}_{10}\text{H}_{23}\text{N}$ [2050-92-2] JACMPVXHEARCOB-UHFFFAOYSA-N	5.3×10^{-2} 4.4×10^{-2} 6.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
ethyloctylamine $\text{C}_{10}\text{H}_{23}\text{N}$ [4088-36-2] SDQCOADWEMMSGK-UHFFFAOYSA-N	5.2×10^{-2} 6.2×10^{-2} 6.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
methylnonylamine $\text{C}_{10}\text{H}_{23}\text{N}$ [39093-27-1] OZIXTIPURXIEMB-UHFFFAOYSA-N	5.6×10^{-2} 2.2×10^{-2} 6.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
diethylheptylamine $\text{C}_{11}\text{H}_{25}\text{N}$ [26981-81-7] YUCNJBRLIZNMO-UHFFFAOYSA-N	2.3×10^{-2} 1.1×10^{-1} 2.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
dimethylnonylamine $\text{C}_{11}\text{H}_{25}\text{N}$ [17373-27-2] AMAADDMFZSZCNT-UHFFFAOYSA-N	1.5×10^{-2} 3.7×10^{-2} 2.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
diethyloctylamine $\text{C}_{12}\text{H}_{27}\text{N}$ [4088-37-3] BVUGARXRRGZONH-UHFFFAOYSA-N	2.3×10^{-2} 2.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
dihexylamine $\text{C}_{12}\text{H}_{27}\text{N}$ [143-16-8] PXSRABJBYMFT-UHFFFAOYSA-N	1.3×10^{-1} 8.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
dimethyldecylamine $\text{C}_{12}\text{H}_{27}\text{N}$ [1120-24-7] YWWNNLPSZSEZN-UHFFFAOYSA-N	1.6×10^{-2} 4.3×10^{-2} 2.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
methylundecylamine $\text{C}_{12}\text{H}_{27}\text{N}$ [66553-53-5] JCFBKCQLFMABE-UHFFFAOYSA-N	1.3×10^{-1} 8.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
diethylnonylamine $\text{C}_{13}\text{H}_{29}\text{N}$ [45124-35-4] IBTOMDSHMLGUHA-UHFFFAOYSA-N	3.1×10^{-2} 1.2×10^{-1} 2.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
dimethylundecylamine $\text{C}_{13}\text{H}_{29}\text{N}$ [17373-28-3] MMWFTWUMBYZIRZ-UHFFFAOYSA-N	2.7×10^{-2} 4.6×10^{-2} 2.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
ethylundecylamine $\text{C}_{13}\text{H}_{29}\text{N}$ [59570-04-6] LKV BHKWFYHK TSM-UHFFFAOYSA-N	1.4×10^{-1} 1.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
methyldodecylamine $\text{C}_{13}\text{H}_{29}\text{N}$ [7311-30-0] OMEMQVZNTDHENJ-UHFFFAOYSA-N	1.5×10^{-1} 1.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
diethyldecylamine $\text{C}_{14}\text{H}_{31}\text{N}$ [6308-94-7] UFFQZCPLBHYOFV-UHFFFAOYSA-N	4.2×10^{-2} 3.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
diheptylamine $\text{C}_{14}\text{H}_{31}\text{N}$ [2470-68-0] NJWMENBYMFZACG-UHFFFAOYSA-N	1.7×10^{-1} 2.7×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
ethyl dodecylamine $\text{C}_{14}\text{H}_{31}\text{N}$ [35902-57-9] LWIPGCTWFZCIKX-UHFFFAOYSA-N	1.8×10^{-1} 2.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
methyltridecylamine $\text{C}_{14}\text{H}_{31}\text{N}$ [45165-81-9] XMRPIOZXPHTSCE-UHFFFAOYSA-N	2.0×10^{-1} 2.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	238 247
tripentylamine $\text{C}_{15}\text{H}_{33}\text{N}$ [621-77-2] OOHAUGDGCWURIT-UHFFFAOYSA-N	6.7×10^{-2} 3.1×10^{-2} 7.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	238 247
1-tridecanamine $\text{C}_{13}\text{H}_{29}\text{N}$ [2869-34-3] ABVVEAHYODGCLZ-UHFFFAOYSA-N	9.0×10^{-2}		Altschuh et al. (1999)	M	
dimethylamine $(\text{CH}_3)_2\text{NH}$ [124-40-3] ROSDSFDQCJNGOL-UHFFFAOYSA-N	5.5×10^{-1} 5.5×10^{-1} 6.2×10^{-1} 3.0×10^{-1} 5.6×10^{-1} 5.8×10^{-1} 6.8×10^{-2} 1.8 5.6×10^{-1} 6.0×10^{-1} 8.0×10^{-1} 6.7×10^{-1} 4.7×10^{-1} 5.4×10^{-1} 3.7×10^{-1} 8.0×10^{-1} 5.6×10^{-1} 5.6×10^{-1} 5.7×10^{-1}	4000 6400	Burkholder et al. (2019) Burkholder et al. (2015) Brockbank (2013) Wilhelm et al. (1977) Christie and Crisp (1967) Bagno et al. (1991) Keshavarz et al. (2022) Duchowicz et al. (2020) Li et al. (2014) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Russell et al. (1992) Suzuki et al. (1992) Duchowicz et al. (2020) Mackay et al. (2006d) Abraham et al. (1990)	L L L L M T Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	475 185 242 249, 273 280 405, 233 186, 21

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
diethylamine (C_2H_5) ₂ NH [109-89-7] HPNMFZURTQLUMO-UHFFFAOYSA-N	3.8×10^{-1}		Burkholder et al. (2019)	L	
	3.8×10^{-1}		Burkholder et al. (2015)	L	
	3.7×10^{-1}		Brockbank (2013)	L	
	3.9×10^{-1}		Christie and Crisp (1967)	M	
	4.1×10^{-1}	7700	Bagno et al. (1991)	T	475
	2.9×10^{-1}		Yaws (2003)	X	259
	1.3	10000	Goldstein (1982)	X	299
	5.2×10^{-2}		Dupeux et al. (2022)	Q	260
	1.2×10^{-1}		Keshavarz et al. (2022)	Q	
	2.1×10^{-1}		Duchowicz et al. (2020)	Q	
	1.8×10^{-1}		Hilal et al. (2008)	Q	
	2.5×10^{-1}		Modarresi et al. (2007)	Q	68
	5.2×10^{-1}		Yaffe et al. (2003)	Q	249, 273
	2.5×10^{-1}		Yao et al. (2002)	Q	230
	3.1×10^{-1}		English and Carroll (2001)	Q	231, 232
	1.5×10^{-1}		Katritzky et al. (1998)	Q	
	1.5×10^{-1}		Russell et al. (1992)	Q	360
	4.7×10^{-1}		Suzuki et al. (1992)	Q	233
	3.9×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	3.8×10^{-1}		Mackay et al. (2006d)	?	
	1.4×10^{-1}		Yaws (1999)	?	21
	1.5×10^{-1}		Yaws and Yang (1992)	?	21
	3.9×10^{-1}		Abraham et al. (1990)	?	
dipropylamine (C_3H_7) ₂ NH [142-84-7] WEHWNAOGRSTTBQ-UHFFFAOYSA-N	2.0×10^{-1}		Burkholder et al. (2019)	L	
	2.0×10^{-1}		Burkholder et al. (2015)	L	
	2.1×10^{-1}		Brockbank (2013)	L	
	1.2×10^{-1}	8900	Leng et al. (2015a)	M	
	1.9×10^{-1}		Christie and Crisp (1967)	M	
	2.3×10^{-1}		Keshavarz et al. (2022)	Q	
	2.2×10^{-1}		Duchowicz et al. (2020)	Q	
	7.0×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-1}		Hilal et al. (2008)	Q	
	2.7×10^{-1}		Modarresi et al. (2007)	Q	68
		6900	Kühne et al. (2005)	Q	
	2.1×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	9.6×10^{-2}		Yao et al. (2002)	Q	230
	1.9×10^{-1}		English and Carroll (2001)	Q	231, 261
	1.1×10^{-1}		Katritzky et al. (1998)	Q	
	2.3×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	2.8×10^{-1}		Suzuki et al. (1992)	Q	233
	1.9×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		8100	Kühne et al. (2005)	?	
	1.1×10^{-1}		Yaws (1999)	?	21, 553
	1.9×10^{-1}		Abraham et al. (1990)	?	
			Betterton (1992)	W	554

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N-methylpropanamine $\text{C}_4\text{H}_{11}\text{N}$ [627-35-0] GVWISOJSERXQBM-UHFFFAOYSA-N	1.9×10^{-1}		Hilal et al. (2008)	Q	
N-methyl-2-propanamine $\text{C}_4\text{H}_{11}\text{N}$ [4747-21-1] XHFGWHUWQXTGAT-UHFFFAOYSA-N	1.6×10^{-1} 1.4×10^{-1}		Gharagheizi et al. (2012) Hilal et al. (2008)	Q Q	
N-(1-methylethyl)-2-propanamine $\text{C}_6\text{H}_{15}\text{N}$ (diisopropylamine) [108-18-9] UAOMVDZJSHZZME-UHFFFAOYSA-N	1.0×10^{-1} 1.3×10^{-1} 3.3×10^{-2} 1.4×10^{-1} 6.2×10^{-2} 4.1×10^{-1}	6900	Duchowicz et al. (2020) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Yaffe et al. (2003) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Kühne et al. (2005) Abraham et al. (1990)	V X Q Q Q Q Q Q Q Q ? ?	187 238 247 68 249, 250 231, 275
N,N-dipropyl-1-propanamine $\text{C}_9\text{H}_{21}\text{N}$ (tripropylamine) [102-69-2] YFTHZRP MJXBUME-UHFFFAOYSA-N	2.6×10^{-2} 2.6×10^{-2} 2.6×10^{-2} 2.6×10^{-2} 5.1×10^{-2} 3.6×10^{-2} 4.4×10^{-2} 6.7×10^{-2} 1.3×10^{-2} 2.7×10^{-2} 2.1×10^{-2} 4.2×10^{-2} 2.6×10^{-2}	8600	Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Hilal et al. (2008) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Yao et al. (2002) Katritzky et al. (1998) Yaws (1999)	V V X C Q Q Q Q Q Q Q Q ? ?	187 238 247 68 249, 250 230 21
N-methyl-1-butanamine $\text{C}_5\text{H}_{13}\text{N}$ (N-methylbutylamine) [110-68-9] QCQGXLOEWLIDC-UHFFFAOYSA-N	1.3×10^{-1} 5.7×10^{-2} 1.4×10^{-1} 1.1×10^{-1}	6600 5000	Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Kühne et al. (2005) Kühne et al. (2005)	X Q Q Q Q ?	238 247

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
dibutylamine (C ₄ H ₉) ₂ NH [111-92-2] JQVDAXLFBXTEQA-UHFFFAOYSA-N	1.3×10^{-1}		Brockbank (2013)	L	
	1.0		Altschuh et al. (1999)	M	
	1.1×10^{-1}		Christie and Crisp (1967)	M	
	1.2×10^{-1}		Mackay et al. (2006d)	V	
	1.2×10^{-1}		Mackay et al. (1995)	V	
	7.0×10^{-2}		Yaws (2003)	X	238
	4.1×10^{-1}		Keshavarz et al. (2022)	Q	
	2.2×10^{-1}		Duchowicz et al. (2020)	Q	300
	4.5×10^{-2}		Gharagheizi et al. (2012)	Q	
	7.6×10^{-2}		Gharagheizi et al. (2010)	Q	247
	2.4×10^{-1}		Hilal et al. (2008)	Q	
	1.4×10^{-1}		Modarresi et al. (2007)	Q	68
			7600 Kühne et al. (2005)	Q	
			9.7×10^{-2} Yaffe et al. (2003)	Q	249, 250
			6.2×10^{-2} Yao et al. (2002)	Q	230
			1.2×10^{-1} English and Carroll (2001)	Q	231, 232
			8.8×10^{-2} Katritzky et al. (1998)	Q	
		1.4×10^{-1} Nirmalakhandan et al. (1997)	Q		
		1.6×10^{-1} Suzuki et al. (1992)	Q	233	
		1.1×10^{-1} Duchowicz et al. (2020)	?	186, 21	
		7400 Kühne et al. (2005)	?		
		7.0×10^{-2} Yaws (1999)	?	21	
		9.7×10^{-2} Abraham et al. (1990)	?		
diisobutylamine C ₈ H ₁₉ N [110-96-3] NJBRCRXCAPCODGX-UHFFFAOYSA-N	1.8×10^{-2}		Duchowicz et al. (2020)	V	187
	4.3×10^{-2}		Yaws (2003)	X	238
	3.4×10^{-2}		Duchowicz et al. (2020)	Q	
	6.2×10^{-2}		Gharagheizi et al. (2010)	Q	247
	1.5×10^{-1}		Modarresi et al. (2007)	Q	68
			7600 Kühne et al. (2005)	Q	
			1.8×10^{-2} Yaffe et al. (2003)	Q	249, 250
		1.5×10^{-2} Katritzky et al. (1998)	Q		
		7300 Kühne et al. (2005)	?		
bis-(1-methylpropyl)-amine C ₈ H ₁₉ N (di-sec-butylamine) [626-23-3] OBYVIBDTCAXSN-UHFFFAOYSA-N		7600	Kühne et al. (2005)	Q	
		7000	Kühne et al. (2005)	?	
tetraethylenepentamine C ₈ H ₂₃ N ₅ [112-57-2] FAGUFWYHJQFNVR-UHFFFAOYSA-N	3.3×10^{14}		HSDB (2015)	Q	100

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.1×10^{-1}		Yaffe et al. (2003)	Q	249, 273
	7.8×10^{-2}		Yao et al. (2002)	Q	230
	1.3×10^{-1}		English and Carroll (2001)	Q	231, 232
	8.8×10^{-2}		Katritzky et al. (1998)	Q	
	3.3×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	3.1×10^{-2}		Russell et al. (1992)	Q	280
	6.1×10^{-2}		Suzuki et al. (1992)	Q	233
	6.6×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		9000	Kühne et al. (2005)	?	
	8.5×10^{-2}		Yaws (1999)	?	21
	9.2×10^{-2}		Abraham et al. (1990)	?	
tributylamine $\text{C}_{12}\text{H}_{27}\text{N}$ [102-82-9] IMFACGCPASFAPR-UHFFFAOYSA-N	3.7×10^{-1}	8700	Brockbank (2013)	L	
	4.0×10^{-1}		Altschuh et al. (1999)	M	
	6.2×10^{-2}		Duchowicz et al. (2020)	V	187
	4.0×10^{-5}		Mackay et al. (2006d)	V	
	4.0×10^{-5}		Mackay et al. (1995)	V	
	4.9×10^{-2}		Yaws (2003)	X	238
	5.2×10^{-2}		Duchowicz et al. (2020)	Q	
	2.9×10^{-2}		Gharagheizi et al. (2010)	Q	247
		8700	Kühne et al. (2005)	Q	
		7500	Kühne et al. (2005)	?	
	6.1×10^{-2}		Yaws (1999)	?	21
N,N-dimethyl-1-dodecanamine $\text{C}_{14}\text{H}_{31}\text{N}$ [112-18-5] YWFWDNVOPHGMX-UHFFFAOYSA-N	>4.0		Altschuh et al. (1999)	M	
	4.6×10^{-2}		Yaws (2003)	X	238
	2.0×10^{-3}		HSDB (2015)	Q	100
	4.9×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.5×10^{-2}		Gharagheizi et al. (2010)	Q	247
ethylenediamine $\text{H}_2\text{NCH}_2\text{CH}_2\text{NH}_2$ [107-15-3] PIICEJLVQHRZGT-UHFFFAOYSA-N	1.8×10^3	6700	Nguyen (2013)	M	11
	5.8×10^3		Westheimer and Ingraham (1956)	M	
	1.5×10^2	9200	Cabani et al. (1978)	T	
	6.7×10^3		Keshavarz et al. (2022)	Q	
	2.2×10^3		Duchowicz et al. (2020)	Q	
	5.6×10^3		Hilal et al. (2008)	Q	
	1.4×10^4		Modarresi et al. (2007)	Q	68
	6.2×10^2		Yao et al. (2002)	Q	230
	5.7×10^3		Duchowicz et al. (2020)	?	186, 21
	2.3×10^2		Yaws (1999)	?	21, 12
2-propen-1-amine $\text{C}_3\text{H}_7\text{N}$ (allylamine) [107-11-9] VVJKKWFAADXJK-UHFFFAOYSA-N	1.0	5400	Leng et al. (2015a)	M	
	5.4×10^{-1}		Duchowicz et al. (2020)	V	187
	5.4×10^{-1}		HSDB (2015)	V	
	5.4×10^{-1}		Hilal et al. (2008)	C	
	7.7		Duchowicz et al. (2020)	Q	
	2.4		Hilal et al. (2008)	Q	
	4.4		Modarresi et al. (2007)	Q	68

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
di-2-propenylamine $\text{C}_6\text{H}_{11}\text{N}$ (diallylamine) [124-02-7] DYUWTXWIYMHQBS-UHFFFAOYSA-N	3.3×10^{-1} 3.3×10^{-1} 2.6		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
		7200	Kühne et al. (2005)	Q	
		8000	Kühne et al. (2005)	?	
hexamethyleneimine $(\text{CH}_2)_6\text{NH}$ [111-49-9] ZSIQJIWKELUFRJ-UHFFFAOYSA-N	1.6 1.0 1.3×10^1 6.4 3.5×10^{-1} 1.2 4.3×10^{-1} 1.6	8200	Cabani et al. (1971a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Suzuki et al. (1992) Meylan and Howard (1991) Duchowicz et al. (2020)	T Q Q Q Q Q Q ?	185 68 233 186, 21
cyclohexanamine $\text{C}_6\text{H}_{13}\text{N}$ (cyclohexylamine) [108-91-8] PAFZNILMFXTMIY-UHFFFAOYSA-N	2.2 2.4 2.2 9.4×10^{-1} 3.3 7.3 6.7×10^{-1} 4.2 9.5×10^{-1} 1.2 2.4 9.5×10^{-1}	7500 7800	Brockbank (2013) Altschuh et al. (1999) Bernauer et al. (2006) Amoore and Buttery (1978) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhandan et al. (1997) Duchowicz et al. (2020) Abraham et al. (1990)	L M V V Q Q Q Q Q Q ? ?	1 1 300 68 231, 232 186, 21
3-methylcyclohexylamine $\text{C}_7\text{H}_{15}\text{N}$ [6850-35-7] JYDYHSHPBZRPV-UHFFFAOYSA-N	1.1		Hilal et al. (2008)	Q	
N-ethylcyclohexanamine $\text{C}_8\text{H}_{17}\text{N}$ (N-ethylcyclohexylamine) [5459-93-8] AGVKXDPPPSLISR-UHFFFAOYSA-N		7200 6500	Kühne et al. (2005) Kühne et al. (2005)	Q ?	
N,N-dimethylcyclohexylamine $\text{C}_8\text{H}_{17}\text{N}$ [98-94-2] SVYKKECYCPFKGB-UHFFFAOYSA-N	4.2×10^{-1} 4.1×10^{-1} 1.4 5.1×10^{-1} 8.5×10^{-2} 4.2×10^{-1}		Altschuh et al. (1999) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Duchowicz et al. (2020) Kühne et al. (2005)	M Q Q Q Q Q ? ?	300 68 186, 21
		7000			
		8500			

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hexamethylenetetramine $\text{C}_6\text{H}_{12}\text{N}_4$ [100-97-0] VKYKSIONXSXAKP-UHFFFAOYSA-N	6.2×10^3 6.1×10^{-5} 5.8×10^5 9.2×10^2 5.4×10^7 1.3×10^4 5.8×10^3		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q Q Q Q	 288, 289 288, 290 288, 291 288, 292 68
1-decanamine $\text{C}_{10}\text{H}_{23}\text{N}$ [2016-57-1] MHZGKXUYDGKKIU-UHFFFAOYSA-N	2.6×10^{-1} 1.5×10^{-1} 2.4		Duchowicz et al. (2020) Yaws et al. (2001) Duchowicz et al. (2020)	V X Q	187 352
N-cyclohexylcyclohexanamine $\text{C}_{12}\text{H}_{23}\text{N}$ (dicyclohexylamine) [101-83-7] XBPCUCUWBYBCDP-UHFFFAOYSA-N	1.8×10^{-1}		HSDB (2015)	Q	100
1-dodecanamine $\text{C}_{12}\text{H}_{27}\text{N}$ [124-22-1] JRBPAEWTRLWTQC-UHFFFAOYSA-N	3.7×10^{-2}		HSDB (2015)	Q	100
1-octadecanamine $\text{C}_{18}\text{H}_{39}\text{N}$ [124-30-1] REYJPSVUYRZGE-UHFFFAOYSA-N	1.0×10^{-2}		HSDB (2015)	Q	100
N,N-dioctyl-1-octanamine $\text{C}_{24}\text{H}_{51}\text{N}$ (tri-N-octylamine) [1116-76-3] XTAZYLNFDRKIHJ-UHFFFAOYSA-N	7.0×10^{-4}		HSDB (2015)	Q	100
aminobenzene $\text{C}_6\text{H}_7\text{N}$ (aniline) [62-53-3] PAYRUJLWNCNPSJ-UHFFFAOYSA-N	4.9 4.4 5.2 1.2 5.0 1.1 4.4 4.6 6.0 6.0 7.1×10^{-5} 6.0 5.5 3.4 5.8	6800 6500	Brockbank (2013) Chao et al. (2017) Altschuh et al. (1999) Heal et al. (1995) Jayasinghe et al. (1992) Dallos et al. (1983) Chao et al. (2017) Bernauer et al. (2006) Mackay et al. (2006d) Schüttirmann (2000) Lide and Frederikse (1995) Mackay et al. (1995) Hwang et al. (1992) Yoshida et al. (1983) Yaws (2003)	L M M M M M V V V V V V V V X	1 375 555 1 259

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.1×10^{-5}		Howard (1989)	X	366
	5.7		Yaws (2003)	X	238
	8.2×10^{-2}		Howard (1989)	X	414
	2.4		Dupeux et al. (2022)	Q	260
	3.3		Keshavarz et al. (2022)	Q	
	5.1		Duchowicz et al. (2020)	Q	300
	1.8×10^1		Gharagheizi et al. (2012)	Q	
	5.5		Gharagheizi et al. (2010)	Q	247
	5.1		Hilal et al. (2008)	Q	
	4.2		Modarresi et al. (2007)	Q	68
		6200	Kühne et al. (2005)	Q	
	4.8		Yaffe et al. (2003)	Q	249, 250
	2.4		Yao et al. (2002)	Q	230
	3.0		Katritzky et al. (1998)	Q	
	4.9		Duchowicz et al. (2020)	?	186, 21
	8.2×10^{-2}		Mackay et al. (2006d)	?	
		7100	Kühne et al. (2005)	?	
	5.8		Yaws (1999)	?	21
	4.3		Abraham et al. (1990)	?	
benzylamine $\text{C}_7\text{H}_9\text{N}$ [100-46-9] WGQKYBSKWIADB-V-UHFFFAOYSA-N	7.1×10^{-1}		Yao et al. (2002)	Q	230
	3.4×10^{-1}		Yaws (1999)	?	21
2-methylbenzenamine $\text{C}_7\text{H}_9\text{N}$ (2-methylaniline; <i>o</i> -toluidine) [95-53-4] RNVCVTLRINQCPJ-UHFFFAOYSA-N	4.8	7100	Brockbank (2013)	L	
	3.0		Chao et al. (2017)	M	
	5.0		Altschuh et al. (1999)	M	
	4.0		Chao et al. (2017)	V	
	1.1×10^1		Mackay et al. (2006d)	V	
	4.1		Schüürmann (2000)	V	
	1.1×10^1		Mackay et al. (1995)	V	
	1.1×10^1		Mackay et al. (1995)	V	
	3.4		Yoshida et al. (1983)	V	
	4.6		Abraham et al. (1994a)	R	
	4.1		Yaws (2003)	X	238
	3.0×10^{-1}		Keshavarz et al. (2022)	Q	
	2.7		Duchowicz et al. (2020)	Q	300
	3.3		Gharagheizi et al. (2012)	Q	
	4.4		Gharagheizi et al. (2010)	Q	247
	3.1		Hilal et al. (2008)	Q	
	1.0		Modarresi et al. (2007)	Q	68
	1.6		Yao et al. (2002)	Q	230
	4.0		English and Carroll (2001)	Q	231, 232
	4.4		Katritzky et al. (1998)	Q	
	2.0		Nirmalakhandan et al. (1997)	Q	
	5.0		Duchowicz et al. (2020)	?	186, 21
	4.1		Yaws (1999)	?	21

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
3-methylbenzenamine C_7H_9N (3-methylaniline; <i>m</i> -toluidine) [108-44-1] JJYPMNFTHPTTDI-UHFFFAOYSA-N	5.6	7200	Brockbank (2013)	L		
	3.2		Chao et al. (2017)	M		
	5.9		Altschuh et al. (1999)	M		
	3.9		Chao et al. (2017)	V		
	3.9		Mackay et al. (2006d)	V		
	3.9		Mackay et al. (1995)	V		
	5.1		Yaws (2003)	X	238, 12	
	4.5		Keshavarz et al. (2022)	Q		
	2.7		Duchowicz et al. (2020)	Q	300	
	4.7		Gharagheizi et al. (2012)	Q		
	4.4		Gharagheizi et al. (2010)	Q	247	
	4.8		Hilal et al. (2008)	Q		
	3.9		Modarresi et al. (2007)	Q	68	
	1.5		Yao et al. (2002)	Q	230	
6.4	Katritzky et al. (1998)	Q				
5.9	Duchowicz et al. (2020)	?	186, 12			
3.5	Yaws (1999)	?	21, 12			
4-methylbenzenamine C_7H_9N (4-methylaniline; <i>p</i> -toluidine) [106-49-0] RZXMPFPFUUCRFN-UHFFFAOYSA-N	2.9	4400	Brockbank (2013)	L		
	4.4		Chao et al. (2017)	M		
	1.3×10^1		Altschuh et al. (1999)	M		
	4.4		Jayasinghe et al. (1992)	M		
	1.5		Mackay et al. (2006d)	V		
	1.5		Mackay et al. (1995)	V		
	1.6		Yoshida et al. (1983)	V		
	5.0		Abraham et al. (1994a)	R		
	4.5		Keshavarz et al. (2022)	Q		
	2.7		Duchowicz et al. (2020)	Q		
	3.9		Gharagheizi et al. (2012)	Q		
	5.3		Hilal et al. (2008)	Q		
	5.0		Modarresi et al. (2007)	Q	68	
	4.0		English and Carroll (2001)	Q	231, 232	
6.1	Katritzky et al. (1998)	Q				
2.0	Nirmalakhandan et al. (1997)	Q				
4.9	Duchowicz et al. (2020)	?	186, 21			
2-ethylaniline $C_8H_{11}N$ (<i>o</i> -ethylaniline) [578-54-1] MLPVBWIRCKMJV-UHFFFAOYSA-N	2.6	7300	Brockbank (2013)	L	1, 556	
	2.7		HSDB (2015)	Q	100	
			7200	Kühne et al. (2005)	Q	
			7500	Kühne et al. (2005)	?	
4-ethylaniline $C_8H_{11}N$ (<i>p</i> -ethylaniline) [589-16-2] HRXZRAXKKNUKRF-UHFFFAOYSA-N	3.1	6900	Mackay et al. (2006d)	V		
	3.1		Mackay et al. (1995)	V		
			8100	Kühne et al. (2005)	Q	
				Kühne et al. (2005)	?	

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4-dimethylbenzenamine $\text{C}_8\text{H}_{11}\text{N}$ (2,4-dimethylaniline; 2,4-xylylidine) [95-68-1] CZZZABOKJQXEBO-UHFFFAOYSA-N	2.8 2.4 1.4×10^{-1} 2.4 3.9	7700 7200 7400	Brockbank (2013) Mackay et al. (2006d) Schüürmann (2000) Mackay et al. (1995) HSDB (2015) Kühne et al. (2005) Kühne et al. (2005)	L V V V Q Q ?	1 100
3,4-dimethylbenzenamine $\text{C}_8\text{H}_{11}\text{N}$ (3,4-dimethylaniline; 3,4-xylylidine) [95-64-7] DOLQYFPDPKQSS-UHFFFAOYSA-N	5.3 6.0 1.4 6.7 1.6 9.0 5.3	 	Jayasinghe et al. (1992) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Katritzky et al. (1998) Duchowicz et al. (2020)	M Q Q Q Q Q ?	 68 186, 21
2,5-dimethylbenzenamine $\text{C}_8\text{H}_{11}\text{N}$ (2,5-dimethylaniline; 2,5-xylylidine) [95-78-3] VOWZNBNDMFLQGM-UHFFFAOYSA-N	2.3 1.4 3.9 7.7×10^{-1}	 7200 7700	Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015) Modarresi et al. (2007) Kühne et al. (2005) Kühne et al. (2005)	V Q Q Q Q ?	187 100 68
2,6-dimethylbenzenamine $\text{C}_8\text{H}_{11}\text{N}$ (2,6-dimethylaniline; 2,6-xylylidine) [87-62-7] UFFBMTHBGFGIHF-UHFFFAOYSA-N	3.9 3.9 5.8×10^{-2} 5.8×10^{-2} 2.7 2.9×10^{-1} 3.3 1.7×10^1 2.1 4.2 1.4	 7500 7600	Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Mackay et al. (1995) Abraham et al. (1994a) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Kühne et al. (2005)	V V V V R Q Q Q Q Q Q Q ?	187 68 231, 232
2,4,5-trimethylbenzenamine $\text{C}_9\text{H}_{13}\text{N}$ (2,4,5-trimethylaniline) [137-17-7] BMIPMKQAAJKBKP-UHFFFAOYSA-N	3.9 5.5×10^{-1} 7.3×10^{-1} 6.0 3.5×10^{-1} 4.0	 	Jayasinghe et al. (1992) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	M Q Q Q Q ?	 185 68 186, 21
2-(1-methylethyl)-benzenamine $\text{C}_9\text{H}_{13}\text{N}$ (2-isopropylaniline) [643-28-7] YKOLZVXSPGIIBJ-UHFFFAOYSA-N		7500 6400	Kühne et al. (2005) Kühne et al. (2005)	Q ?	

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,6-diethylbenzenamine $\text{C}_{10}\text{H}_{15}\text{N}$ (2,6-diethylaniline) [579-66-8] FOYHNROGBXVLLX-UHFFFAOYSA-N	8.8 9.0 3.0×10^{-1} 9.0×10^{-1} 6.8 8.8 5.0 8.8		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998) Yaws (1999)	V V Q Q Q Q Q ?	187 68 249, 250 21, 404
1,2-benzenediamine $\text{C}_6\text{H}_8\text{N}_2$ (<i>o</i> -phenylenediamine) [95-54-5] GEYOCULIXLDCMW-UHFFFAOYSA-N	1.4×10^3 1.4×10^3 7.6×10^1 1.0×10^2 2.9×10^3 1.2×10^2 1.0×10^2 1.2×10^3		Duchowicz et al. (2020) HSDB (2015) Schüürmann (2000) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008)	V V V X Q Q Q Q	187 238, 557 247
1,3-benzenediamine $\text{C}_6\text{H}_8\text{N}_2$ (<i>m</i> -phenylenediamine) [108-45-2] WZCQRUWWHSTZEM-UHFFFAOYSA-N	7.9×10^3 7.6×10^3 1.3×10^4 6.9×10^3 2.8×10^3 2.8×10^2 2.2×10^3 1.1×10^5 3.7×10^4		Duchowicz et al. (2020) HSDB (2015) Schüürmann (2000) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V V V X Q Q Q Q Q	187 238 247 68
1,4-benzenediamine $\text{C}_6\text{H}_8\text{N}_2$ (<i>p</i> -phenylenediamine) [106-50-3] CBCKQZAAMUWICA-UHFFFAOYSA-N	7.1×10^2 1.5×10^4 1.7×10^2 2.2×10^3		Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q Q	238, 80 100 247
2-methyl-1,3-benzenediamine $\text{C}_7\text{H}_{10}\text{N}_2$ [823-40-5] RLYCRLGLCUXUPO-UHFFFAOYSA-N	1.3×10^4		HSDB (2015)	Q	100
2-methyl-1,4-benzenediamine $\text{C}_7\text{H}_{10}\text{N}_2$ [95-70-5] OBCSAIDCZQSFQH-UHFFFAOYSA-N	1.3×10^4		HSDB (2015)	Q	100
3-methyl-1,2-benzenediamine $\text{C}_7\text{H}_{10}\text{N}_2$ (2,3-diaminotoluene) [2687-25-4] AXNUJYHFQHQZBE-UHFFFAOYSA-N	1.0×10^4		HSDB (2015)	Q	100

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methyl-1,3-benzenediamine $C_7H_{10}N_2$ (toluene-2,4-diamine) [95-80-7] VOZKAJLKRJDJLL-UHFFFAOYSA-N	1.0×10^4		HSDB (2015)	Q	100
3,5-diaminotoluene $C_7H_{10}N_2$ [108-71-4] LVNDUJYMLJDECN-UHFFFAOYSA-N	1.3×10^4		HSDB (2015)	Q	547
phenylhydrazine $C_6H_8N_2$ [100-63-0] HKOOXMFOWEVEGF-UHFFFAOYSA-N	2.2×10^3 3.4×10^2 9.6 6.9×10^2 8.3×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q	187 68
(methylamino)-benzene C_7H_9N (N-methylaniline) [100-61-8] AFBPFSWMIHJQDM-UHFFFAOYSA-N	8.7×10^{-1} 8.7×10^{-1} 1.1 3.0×10^{-1} 3.7 1.5 5.7×10^{-1} 6.1×10^{-1} 2.0 7.3×10^{-1} 4.5 2.7 1.1 8.7×10^{-1}		HSDB (2015) Schüürmann (2000) Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Yao et al. (2002) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Duchowicz et al. (2020) Yaws (1999)	V V R Q Q Q Q Q Q Q Q Q ? ?	 300 68 249, 273 230 231, 232 186, 21 21
(ethylamino)-benzene $C_8H_{11}N$ (N-ethylaniline) [103-69-5] OJGMBLNIHDZDGS-UHFFFAOYSA-N	8.1×10^{-1} 1.0 4.1×10^{-1} 1.3 6.2×10^{-1} 7.0×10^{-1} 9.5×10^{-1} 6.1×10^{-1} 3.1 1.0	7900 7100 7600	Brockbank (2013) Altschuh et al. (1999) Keshavarz et al. (2022) Duchowicz et al. (2020) HSDB (2015) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Yaffe et al. (2003) Katritzky et al. (1998) Duchowicz et al. (2020) Kühne et al. (2005)	L M Q Q Q Q Q Q Q Q ? ?	1, 558 185 100 68 249, 250 186, 21

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(dimethylamino)-benzene $\text{C}_8\text{H}_{11}\text{N}$ (N,N-dimethylaniline) [121-69-7] JLTDJTHDQAWBAV-UHFFFAOYSA-N	1.7×10^{-1} 8.5×10^{-2} 8.5×10^{-2} 1.3×10^{-1} 1.6×10^{-1}		HSDB (2015) Mackay et al. (2006d) Mackay et al. (1995) Meylan and Howard (1991) Yoshida et al. (1983)	V V V V V	
	9.9×10^{-2} 1.0×10^{-1}	6900	Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005)	Q Q Q	68
	1.4×10^{-1} 2.5 2.4 1.1		Yaffe et al. (2003) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Meylan and Howard (1991)	Q Q Q Q	249, 250
	9.7×10^{-2} 1.4×10^{-1}	6300	Kühne et al. (2005) Yaws (1999) Abraham et al. (1990)	? ? ?	21
benzeneethanamine $\text{C}_8\text{H}_{11}\text{N}$ (2-phenylethylamine) [64-04-0] BHHGXPLMPWCGHP-UHFFFAOYSA-N	1.2×10^1		HSDB (2015)	Q	100
2,3-dimethylbenzenamine $\text{C}_8\text{H}_{11}\text{N}$ (2,3-xylylidine) [87-59-2] VVAKEQGKZKNKUSU-UHFFFAOYSA-N	3.9		HSDB (2015)	Q	100
3,5-dimethylbenzenamine $\text{C}_8\text{H}_{11}\text{N}$ [108-69-0] MKARNSWMMBGSHX-UHFFFAOYSA-N	3.9		HSDB (2015)	Q	100
dimethylaniline $\text{C}_8\text{H}_{11}\text{N}$ (xylylidine) [1300-73-8] CDULGHZNHURECF-UHFFFAOYSA-N	3.9		HSDB (2015)	Q	100
phenelzine $\text{C}_8\text{H}_{12}\text{N}_2$ [51-71-8] RMUCZJUITONUFY-UHFFFAOYSA-N	2.9×10^3		HSDB (2015)	Q	100
N,N-dimethyl-1,4-benzenediamine $\text{C}_8\text{H}_{12}\text{N}_2$ [99-98-9] BZORFPDSXLZWFJ-UHFFFAOYSA-N	3.3×10^2		HSDB (2015)	Q	100

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4,6-trimethylbenzenamine $\text{C}_9\text{H}_{13}\text{N}$ (2,4,6-trimethylaniline) [88-05-1] KWVPRPSXBZNOHS-UHFFFAOYSA-N	3.7		HSDB (2015)	Q	100
N-ethyl-3-methylbenzenamine $\text{C}_9\text{H}_{13}\text{N}$ [102-27-2] GUYMMHOQXYZMJQ-UHFFFAOYSA-N	1.6		HSDB (2015)	Q	100
N-(1-methylethyl)benzenamine $\text{C}_9\text{H}_{13}\text{N}$ [768-52-5] FRCFWPVMFJMNDP-UHFFFAOYSA-N	1.3		HSDB (2015)	Q	100
2-ethyl-6-methylbenzenamine $\text{C}_9\text{H}_{13}\text{N}$ [24549-06-2] JVKJNCIILLRP-UHFFFAOYSA-N	3.2 2.1 1.0 8.4×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
N,N-dimethylbenzylamine $\text{C}_9\text{H}_{13}\text{N}$ [103-83-3] XXBDWLFCJWSEKW-UHFFFAOYSA-N		7700 7700	Kühne et al. (2005) Kühne et al. (2005)	Q ?	
N,N,4-trimethylbenzenamine $\text{C}_9\text{H}_{13}\text{N}$ [99-97-8] GYVGXEWAQAAJEU-UHFFFAOYSA-N	2.0×10^{-1} 1.1×10^{-1} 1.4×10^{-1} 4.0×10^{-2}		Duchowicz et al. (2020) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q	187 68
N,N'-di- <i>tert</i> -butylethylenediamine $\text{C}_{10}\text{H}_{24}\text{N}_2$ [4062-60-6] KGHYGBGIWLNFAV-UHFFFAOYSA-N	3.6×10^2 2.3 9.9×10^{-1} 1.2×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
(diethylamino)-benzene $\text{C}_{10}\text{H}_{15}\text{N}$ (N,N-diethylaniline) [91-66-7] GGSUCNLOZRCGPQ-UHFFFAOYSA-N	6.7×10^{-2} 5.1×10^{-2} 5.2×10^{-2} 4.6×10^{-1} 4.6×10^{-1} 2.4×10^{-2} 9.9×10^{-2} 6.0×10^{-2}	6700	Brockbank (2013) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Mackay et al. (1995) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Katritzky et al. (1998) Kühne et al. (2005) Yaws (1999)	L V V V V Q Q Q Q Q Q ?	187 68 21, 559

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note			
1-naphthylamine $\text{C}_{10}\text{H}_9\text{N}$ [134-32-7] RUFPHBVGCFCYCNW-UHFFFAOYSA-N	1.6×10^2		Altschuh et al. (1999)	M				
	2.1×10^1		HSDB (2015)	V				
	8.8×10^1		Abraham et al. (1994a)	R				
	6.2×10^2		Keshavarz et al. (2022)	Q				
	2.0×10^1		Duchowicz et al. (2020)	Q	185			
	3.0×10^1		Hilal et al. (2008)	Q				
	8.3×10^1		Modarresi et al. (2007)	Q	68			
	1.2×10^2		English and Carroll (2001)	Q	231, 232			
2-naphthylamine $\text{C}_{10}\text{H}_9\text{N}$ [91-59-8] JBIJLHTVPXGSAM-UHFFFAOYSA-N	4.6×10^2		Nirmalakhandan et al. (1997)	Q				
	8.9×10^1		Duchowicz et al. (2020)	?	186, 21			
	1.2×10^2		Abraham et al. (1994a)	R				
	1.2×10^2		Keshavarz et al. (2022)	Q				
	2.0×10^1		Duchowicz et al. (2020)	Q	300			
	8.0×10^1		Hilal et al. (2008)	Q				
	1.0×10^2		Modarresi et al. (2007)	Q	68			
	1.2×10^2		English and Carroll (2001)	Q	231, 275			
1,5-naphthalenediamine $\text{C}_{10}\text{H}_{10}\text{N}_2$ [2243-62-1] KQSABULTKYLFEV-UHFFFAOYSA-N	4.5×10^2		Nirmalakhandan et al. (1997)	Q				
	1.2×10^2		Duchowicz et al. (2020)	?	186, 21			
	1.2×10^2		HSDB (2015)	?	421			
	1.5×10^5		HSDB (2015)	Q	100			
	phentermine $\text{C}_{10}\text{H}_{15}\text{N}$ [122-09-8] DHHVAGZRURJKS-UHFFFAOYSA-N	7.0		HSDB (2015)	Q	100		
		N,N-diethyl-1,4-benzenediamine $\text{C}_{10}\text{H}_{16}\text{N}_2$ [93-05-0] QNGVNLMMEQUVQK-UHFFFAOYSA-N	1.9×10^2		HSDB (2015)	Q	100	
			3,5-diethyltoluene-2,6-diamine $\text{C}_{11}\text{H}_{18}\text{N}_2$ [2095-01-4] RQEOBXYYEPMCPJ-UHFFFAOYSA-N	6.2×10^3		Zhang et al. (2010)	Q	288, 289
				6.9×10^3		Zhang et al. (2010)	Q	288, 290
6.1×10^1				Zhang et al. (2010)	Q	288, 291		
2.1×10^2		Zhang et al. (2010)		Q	288, 292			
2,4-diethyl-6-methylbenzene-1,3-diamine $\text{C}_{11}\text{H}_{18}\text{N}_2$ [2095-02-5] PISLZQACAJMAIO-UHFFFAOYSA-N	6.2×10^3		Zhang et al. (2010)	Q	288, 289			
	7.0×10^3		Zhang et al. (2010)	Q	288, 290			
	6.2×10^1		Zhang et al. (2010)	Q	288, 291			
	2.1×10^2		Zhang et al. (2010)	Q	288, 292			

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
diphenylamine $C_{12}H_{11}N$ [122-39-4] DMBHHRLKUKUOEG-UHFFFAOYSA-N	3.7 3.7 2.9×10^1 2.9×10^1		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Mackay et al. (1995)	V V V V	187
	3.5 1.5 3.5 4.1×10^1 1.5 3.0 9.4		Meylan and Howard (1991) Yaws (2003) Howard et al. (1991) Duchowicz et al. (2020) Gharagheizi et al. (2010) Hilal et al. (2008) Meylan and Howard (1991)	V X X Q Q Q Q	238, 12 414 247
benzidine $C_{12}H_{12}N_2$ [92-87-5] HFACYLZERDEVSX-UHFFFAOYSA-N	2.2×10^6 2.6×10^5 2.2×10^6 2.5×10^1 1.9×10^5		Mackay et al. (2006d) Lide and Frederikse (1995) Mackay et al. (1995) Mackay et al. (1995) HSDB (2015)	V V V C Q	100
1,1-diphenylhydrazine $C_{12}H_{12}N_2$ [530-50-7] YHYKLKNNBYLTQY-UHFFFAOYSA-N	2.4×10^2		HSDB (2015)	Q	100
1,2-diphenylhydrazine $C_{12}H_{12}N_2$ (N,N'-bianiline) [122-66-7] YBQZXXMEJHZYMB-UHFFFAOYSA-N	2.1×10^1 2.1×10^1 2.9×10^3 2.3×10^2		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Mackay et al. (1995) Duchowicz et al. (2020)	V V V V Q	187 560
4-(phenylazo)-benzenamine $C_{12}H_{11}N_3$ (4-aminoazobenzene) [60-09-3] QPQKUYVSJWQSDY-UHFFFAOYSA-N	1.1×10^5 9.3×10^2 1.9×10^3 3.2×10^3 7.3×10^5 3.4×10^2		HSDB (2015) Gharagheizi et al. (2012) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
azobenzene $C_{12}H_{10}N_2$ [103-33-3] DMLAVOWQYNRWQ-UHFFFAOYSA-N	7.3×10^{-1} 7.0×10^{-1} 2.6		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
2-aminobiphenyl $C_{12}H_{11}N$ [90-41-5] TWBPWPBGQWFSJ-UHFFFAOYSA-N	6.6×10^1		HSDB (2015)	Q	100

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-aminobiphenyl $\text{C}_{12}\text{H}_{11}\text{N}$ [92-67-1] DMVOXQPQNTYEKQ-UHFFFAOYSA-N	6.6×10^1		HSDB (2015)	Q	100
N-phenyl-1,4-benzenediamine $\text{C}_{12}\text{H}_{12}\text{N}_2$ (<i>p</i> -aminodiphenylamine) [101-54-2] ATGUVKESASEFFO-UHFFFAOYSA-N	1.5×10^3 2.7×10^4 5.9×10^2 3.6×10^3		Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q Q	238 100 247
2-fluorenamine $\text{C}_{13}\text{H}_{11}\text{N}$ [153-78-6] CFRFHWQYWJMEJN-UHFFFAOYSA-N	2.7×10^2		HSDB (2015)	Q	547
4,4'-methylenebisbenzenamine $\text{C}_{13}\text{H}_{14}\text{N}_2$ [101-77-9] YBRVSVVVWCFQMG-UHFFFAOYSA-N	1.9×10^5		HSDB (2015)	V	
2-anthracenaminate $\text{C}_{14}\text{H}_{11}\text{N}$ [613-13-8] YCSBALJAGZKWWF-UHFFFAOYSA-N	3.3×10^1		HSDB (2015)	Q	547
3,3'-dimethylbenzidine $\text{C}_{14}\text{H}_{16}\text{N}_2$ [119-93-7] NUIURNJTPRWVAP-UHFFFAOYSA-N	1.6×10^5		HSDB (2015)	Q	449
N,N-dimethyl-4-(phenylazo)- benzenamine $\text{C}_{14}\text{H}_{15}\text{N}_3$ [60-11-7] JCYPECIVGRXBMO-UHFFFAOYSA-N	1.4×10^3 4.2×10^1 4.1×10^1 8.2×10^1 1.0×10^1		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V Q Q Q Q	288, 289 288, 290 288, 291 288, 292
<i>o</i> -aminoazotoluene $\text{C}_{14}\text{H}_{15}\text{N}_3$ [97-56-3] PFRYFZZSECNQOL-UHFFFAOYSA-N	3.1×10^2 3.8×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
N-ethyl-N- phenylbenzenemethanamine $\text{C}_{15}\text{H}_{17}\text{N}$ [92-59-1] HSZCJVZRHXPICIA-UHFFFAOYSA-N	1.1 1.1 4.6×10^{-1} 6.7		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N-(1-methylethyl)-N'-phenyl-1,4-benzenediamine $\text{C}_{15}\text{H}_{18}\text{N}_2$ (4-(iso-propylamino)diphenylamine) [101-72-4] OUBMGJOQLXMSNT-UHFFFAOYSA-N	7.0×10^3		HSDB (2015)	Q	100
4,4'-methylene-bis-(N-methylaniline) $\text{C}_{15}\text{H}_{18}\text{N}_2$ [1807-55-2] ZMVMYBGDGLCHV-UHFFFAOYSA-N	3.4×10^4		HSDB (2015)	Q	100
C.I. Food Yellow 10 $\text{C}_{16}\text{H}_{13}\text{N}_3$ [85-84-7] KLCDQSGLLRINHY-UHFFFAOYSA-N	1.9×10^4		HSDB (2015)	Q	100
3,3',5,5'-tetramethylbenzidine $\text{C}_{16}\text{H}_{20}\text{N}_2$ [54827-17-7] UAIUNKRWKOVEES-UHFFFAOYSA-N	1.3×10^5		HSDB (2015)	Q	100
N-phenyl-1-naphthalenamine $\text{C}_{16}\text{H}_{13}\text{N}$ [90-30-2] XQVWYOYUZDUNRW-UHFFFAOYSA-N	7.0×10^1 9.7×10^1 4.6×10^1 1.2×10^1 2.8×10^2		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V Q Q Q Q	288, 289 288, 290 288, 291 288, 292
yellow OB $\text{C}_{17}\text{H}_{15}\text{N}_3$ [131-79-3] BWLVSUUKOQICP-FMQUCBEESA-N	1.8×10^4		HSDB (2015)	Q	100
auramine $\text{C}_{17}\text{H}_{21}\text{N}_3$ [492-80-8] JPIYZTWMUGTEHX-UHFFFAOYSA-N	1.2×10^2		HSDB (2015)	V	
benzphetamine $\text{C}_{17}\text{H}_{21}\text{N}$ [156-08-1] YXKTVDXDRQTKV-UHFFFAOYSA-N	2.3×10^1		HSDB (2015)	Q	100

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,4'-methylenebis(N,N-dimethylbenzenamine) $C_{17}H_{22}N_2$ (bis(p-dimethylamino)phenylmethane) [101-61-1] JNRLEMMIVRBKJE-UHFFFAOYSA-N	8.2×10^1		HSDB (2015)	Q	100
phencyclidine $C_{17}H_{25}N$ [77-10-1] JTJMJGYZQZDUJJ-UHFFFAOYSA-N	1.8		HSDB (2015)	Q	100
N,N'-diphenyl-1,4-benzenediamine $C_{18}H_{16}N_2$ [74-31-7] UTGQNNCQYDRXCH-UHFFFAOYSA-N	4.7×10^4		HSDB (2015)	Q	100
N-(1,3-dimethylbutyl)-N'-phenyl-1,4-phenylenediamine $C_{18}H_{24}N_2$ [793-24-8] ZZMVLMMVFYMGSMY-UHFFFAOYSA-N	2.9×10^3		Zhang et al. (2010)	Q	288, 289
	3.9×10^2		Zhang et al. (2010)	Q	288, 290
	3.9×10^1		Zhang et al. (2010)	Q	288, 291
	2.3×10^3		Zhang et al. (2010)	Q	288, 292
amitraz $C_{19}H_{23}N_3$ [33089-61-1] QXAITBQSYVNVQDR-UHFFFAOYSA-N	1.0		MacBean (2012b)	X	352
	1.3		Keshavarz et al. (2022)	Q	
	1.4×10^2		Duchowicz et al. (2020)	Q	
	2.1×10^1		Modarresi et al. (2007)	Q	68
	1.0		Duchowicz et al. (2020)	?	186, 21
N,N'-bis(1-ethyl-3-methylpentyl)-1,4-benzenediamine $C_{22}H_{40}N_2$ [139-60-6] JUHXTONDLXIGGK-UHFFFAOYSA-N	5.8×10^1		Zhang et al. (2010)	Q	288, 289
	5.8		Zhang et al. (2010)	Q	288, 290
	1.8		Zhang et al. (2010)	Q	288, 291
	1.9×10^1		Zhang et al. (2010)	Q	288, 292
<i>p,p'</i> -benzylidenebis(N,N-dimethylaniline) $C_{23}H_{26}N_2$ (leucomalachite green) [129-73-7] WZKXBGJNNCGHIC-UHFFFAOYSA-N	1.0×10^3		HSDB (2015)	Q	100
N-phenyl-N-(2,4,4-trimethyl-2-pentanyl)-1-naphthalenamine $C_{24}H_{29}N$ [51772-35-1] SNWVRVDHQRBFBG-UHFFFAOYSA-N	6.4×10^{-1}		Zhang et al. (2010)	Q	288, 289
	9.7×10^{-1}		Zhang et al. (2010)	Q	288, 290
	9.0×10^{-1}		Zhang et al. (2010)	Q	288, 291
	1.1×10^1		Zhang et al. (2010)	Q	288, 292

Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tris(2-ethylhexyl)amine $\text{C}_{24}\text{H}_{51}\text{N}$ [1860-26-0] BZUDVELGTZDOIG-UHFFFAOYSA-N	7.0×10^{-4} 1.2×10^{-2} 6.1×10^{-6} 3.7×10^{-4}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
4,4',4''-methylidyne-tris(N,N-dimethylbenzenamine) $\text{C}_{25}\text{H}_{31}\text{N}_3$ (Leucocrystal violet) [603-48-5] OAZWDJGLIYNMU-UHFFFAOYSA-N	6.4×10^4 3.1×10^4 3.5×10^2 1.1×10^6		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
N-phenylbenzenamide $\text{C}_{30}\text{H}_{47}\text{N}$ [68608-79-7] FSPSHPMYFQHGQD-UHFFFAOYSA-N	8.2×10^{-2} 4.7×10^{-1} 1.5×10^{-1} 2.9×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
4,4',4''-methanetriyltris(N,N-diethylaniline) $\text{C}_{31}\text{H}_{43}\text{N}_3$ [68814-02-8] HOGMPEULJBVHLZ-UHFFFAOYSA-N	9.0×10^4 7.0×10^5 1.7×10^3 1.5×10^6		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

A4.2 Heterocycles with nitrogen (C, H, N)

Table A4.2: Heterocycles with nitrogen (C, H, N)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
amitrole $\text{C}_2\text{H}_4\text{N}_4$ [61-82-5] KLSJWNVTNUYHDU-UHFFFAOYSA-N	4.5×10^7 4.5×10^7 6.1×10^9 1.5×10^3		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	187
azetidine $\text{C}_3\text{H}_7\text{N}$ [503-29-7] HONIICLYMWZJFZ-UHFFFAOYSA-N	4.8		Ebert et al. (2023)	?	367
imidazole $\text{C}_3\text{H}_4\text{N}_2$ [288-32-4] RAXXELZNTBOGNW-UHFFFAOYSA-N	3.3×10^3 2.1×10^3 3.1×10^3		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	480 551
1,3,5-triazine-2,4,6-triamine $\text{C}_3\text{H}_6\text{N}_6$ [108-78-1] JDSHMPZPIAZGSV-UHFFFAOYSA-N	5.5×10^8 5.2×10^7 6.7×10^8 5.8×10^9 8.4×10^8		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V Q Q Q Q	288, 289 288, 290 288, 291 288, 292
pyrrolidine $\text{C}_4\text{H}_8\text{NH}$ [123-75-1] RWRDLPLDKQPQOW-UHFFFAOYSA-N	4.2 4.2 1.8 1.3×10^1 6.0 5.3×10^{-1} 4.1 8.4×10^{-1} 2.0 4.1	7600	Amoore and Buttery (1978) Cabani et al. (1971a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998) Suzuki et al. (1992) Duchowicz et al. (2020)	V T Q Q Q Q Q Q Q ?	300 68 249, 250 233 186, 21
1-pyrroline $\text{C}_4\text{H}_7\text{N}$ [5724-81-2] ZVJHJDDKYZXRJI-UHFFFAOYSA-N	1.6		Amoore and Buttery (1978)	M	
3-pyrroline $\text{C}_4\text{H}_7\text{N}$ [109-96-6] JVQIKJMSUIMUDI-UHFFFAOYSA-N	4.9		Amoore and Buttery (1978)	V	
1,4-diazacyclohexane (piperazine) [110-85-0] GLUUGHFHGXGJENI-UHFFFAOYSA-N	4.5×10^3 1.0×10^2	7400 11000	Nguyen (2013) Cabani et al. (1975a)	M T	11

Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pyrrole $\text{C}_4\text{H}_5\text{N}$ (1H-pyrrole) [109-97-7] KAESVJOAVNADME-UHFFFAOYSA-N	5.5×10^{-1} 6.1×10^{-1} 6.1×10^{-1} 1.8 4.1		Hawthorne et al. (1985) Mackay et al. (2006d) Mackay et al. (1995) Keshavarz et al. (2022) Duchowicz et al. (2020)	M V V Q Q	
	7.2×10^{-1} 8.6×10^{-1} 5.4×10^{-1} 4.2 5.5×10^{-1}		Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998) Duchowicz et al. (2020)	Q Q Q Q ?	185 68 249, 250 186, 21
1-methyl-1H-imidazole $\text{C}_4\text{H}_6\text{N}_2$ [616-47-7] MCTWTZJPVLRJOU-UHFFFAOYSA-N	6.9×10^1 3.4×10^2 8.9×10^1 1.1×10^2		Du et al. (2017) Du et al. (2017) Du et al. (2017) Hilal et al. (2008)	M Q Q Q	480 551
1,3-diazine $\text{C}_4\text{H}_4\text{N}_2$ [289-95-2] CZPWVGJYEJSRLH-UHFFFAOYSA-N	1.0×10^1		Hilal et al. (2008)	Q	
N-methylpyrrolidine $\text{C}_4\text{H}_8\text{NCH}_3$ [120-94-5] AVFZOVWCLRSYKC-UHFFFAOYSA-N	3.3×10^{-1} 1.7×10^{-1} 1.2 2.2×10^{-1} 5.6×10^{-2} 3.2×10^{-1} 3.3×10^{-1}	7600	Cabani et al. (1971a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Suzuki et al. (1992) Duchowicz et al. (2020)	T Q Q Q Q Q ?	185 68 233 186, 21
piperidine $\text{C}_5\text{H}_{10}\text{NH}$ [110-89-4] NQRYJNQNLNOLGT-UHFFFAOYSA-N	2.8 2.0 2.2 2.5 1.3×10^1 7.3 1.0 7.2×10^{-1} 6.7×10^{-1} 1.5 2.2	7900 7900	Bernauer and Dohnal (2009) Amoore and Buttery (1978) Cabani et al. (1971a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Katritzky et al. (1998) Russell et al. (1992) Suzuki et al. (1992) Duchowicz et al. (2020)	M V T Q Q Q Q Q Q Q ?	300 68 280 233 186, 21
2-ethylimidazole $\text{C}_5\text{H}_8\text{N}_2$ [1072-62-4] PQAMFDRRWURCFQ-UHFFFAOYSA-N	7.6×10^2 1.4×10^4 8.2×10^2		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	480 551

Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pyridine-d5 C ₅ D ₅ N [7291-22-7] JUJWROOIHCBZHMGRALIUCGRSA-N	4.2	10000	Hiatt (2013)	M	
4-aminopyridine C ₅ H ₆ N ₂ [504-24-5] NUKYPUAOHBNCPY-UHFFFAOYSA-N	4.3 × 10 ⁴		HSDB (2015)	V	
2-aminopyridine C ₅ H ₆ N ₂ [504-29-0] ICSNLGPSRYBMBD-UHFFFAOYSA-N	3.9 × 10 ³		HSDB (2015)	Q	100
2-methylpyrazine C ₄ N ₂ H ₃ CH ₃ [109-08-0] CAWHJQAVHZEVTJ-UHFFFAOYSA-N	4.5 4.9 6.8 × 10 ⁻¹ 4.8 4.9 1.6 × 10 ² 3.1 1.2 4.5		Buttery et al. (1971) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Russell et al. (1992) Duchowicz et al. (2020)	M Q Q Q Q Q Q Q Q ?	185 68 280 186, 21
adenine C ₅ H ₅ N ₅ [73-24-5] GFFGJBXGBJISGV-UHFFFAOYSA-N	1.3 × 10 ⁹ 5.3 × 10 ⁵		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
9-methyladenine C ₆ H ₇ N ₅ [700-00-5] WRXCXOUDSPTXNX-UHFFFAOYSA-N	3.9 × 10 ⁶		Ebert et al. (2023)	?	367
N-methylpiperidine C ₅ H ₁₀ NCH ₃ [626-67-5] PAMIQIKDUOTOBW-UHFFFAOYSA-N	2.4 × 10 ⁻¹ 2.9 × 10 ⁻¹ 2.3 × 10 ⁻¹ 1.2 4.8 × 10 ⁻¹ 1.3 × 10 ⁻¹ 3.0 × 10 ⁻¹ 2.9 × 10 ⁻¹ 2.2 × 10 ⁻¹ 9.9 × 10 ⁻² 2.5 × 10 ⁻¹ 2.9 × 10 ⁻¹	7900 6300 6600	Abraham et al. (1994a) Cabani et al. (1971a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Russell et al. (1992) Suzuki et al. (1992) Duchowicz et al. (2020) Kühne et al. (2005)	R T Q Q Q Q Q Q Q Q Q ? ?	68 231, 232 280 233 186, 21

Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
triethylenediamine $\text{C}_6\text{H}_{12}\text{N}_2$ [280-57-9] IMNIMPAHZVJRPE-UHFFFAOYSA-N	3.1×10^3 8.9×10^2 2.2×10^3		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	480 551
2-ethyl-4-methylimidazole $\text{C}_6\text{H}_{10}\text{N}_2$ [931-36-2] ULKLGIFJWFIQFF-UHFFFAOYSA-N	2.8×10^2 1.4×10^3 3.1×10^2		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	480 551
3-(aminomethyl)pyridine $\text{C}_6\text{H}_8\text{N}_2$ [3731-52-0] HDOUGSFASVGDSC-UHFFFAOYSA-N	4.3×10^2 5.0×10^2 3.7×10^2		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	480 551
N,N'-dimethylpiperazine $\text{C}_6\text{H}_{14}\text{N}_2$ (1,4-dimethylpiperazine) [106-58-1] RXYPXQSKLGGKOL-UHFFFAOYSA-N	2.0×10^2 1.4×10^2	11000 11000	Nguyen (2013) Cabani et al. (1975a)	M T	11
cyromazine $\text{C}_6\text{H}_{10}\text{N}_6$ [66215-27-8] LVQDKIWDGQRHTE-UHFFFAOYSA-N	1.7×10^8 1.7×10^8 1.3×10^8		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
1H-benzotriazole $\text{C}_6\text{H}_5\text{N}_3$ (1,2,3-benzotriazole) [95-14-7] QRUDEWIWKLJBPS-UHFFFAOYSA-N	3.1×10^1		HSDB (2015)	V	
1-piperazineethanamine $\text{C}_6\text{H}_{15}\text{N}_3$ (N-(2-aminoethyl)piperazine) [140-31-8] IMUDHTPIFIBORV-UHFFFAOYSA-N	1.5×10^7		HSDB (2015)	Q	100
2-methylpyridine $\text{C}_5\text{H}_4\text{NCH}_3$ (2-picoline; α -picoline) [109-06-8] BSKHPKMHTQYZBB-UHFFFAOYSA-N	9.8×10^{-1} 9.9×10^{-1} 1.1 8.0×10^{-2} 4.1×10^{-1} 1.2 1.0 1.0 1.4×10^2 2.1 1.3	6300 6400 6400	Brockbank (2013) Andon et al. (1954) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Yaffe et al. (2003) Yao et al. (2002) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997)	L M Q Q Q Q Q Q Q Q Q	338 68 249, 250 230 231, 232

Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	8.8×10^{-1}		Suzuki et al. (1992)	Q	233
	9.9×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	9.9×10^{-1}	6300	Mackay et al. (2006d)	?	
			Kühne et al. (2005)	?	
	9.9×10^{-1}		Yaws (1999)	?	21
	3.4×10^{-1}		Yaws and Yang (1992)	?	21
	9.9×10^{-1}		Abraham et al. (1990)	?	
			Staudinger and Roberts (2001)	W	562
3-methylpyridine $\text{C}_5\text{H}_4\text{NCH}_3$ (3-picoline; β -picoline) [108-99-6] ITQTTZVARXURQS-UHFFFAOYSA-N	1.2	6400	Brockbank (2013)	L	
	4.2×10^{-1}		Chaintreau et al. (1995)	M	
	1.3	6300	Andon et al. (1954)	M	338
	1.1		Keshavarz et al. (2022)	Q	
	8.0×10^{-2}		Duchowicz et al. (2020)	Q	300
	8.8×10^{-1}		Hilal et al. (2008)	Q	
	8.5×10^{-1}	6400	Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	
	1.0		Yaffe et al. (2003)	Q	249, 273
	1.3		Yao et al. (2002)	Q	230, 268
	9.5×10^{-1}		English and Carroll (2001)	Q	231, 232
	2.3		Katritzky et al. (1998)	Q	
	1.3		Nirmalakhandan et al. (1997)	Q	
	8.8×10^{-1}		Suzuki et al. (1992)	Q	233
	1.3		Duchowicz et al. (2020)	?	186, 21
	1.3	6300	Mackay et al. (2006d)	?	
			Kühne et al. (2005)	?	
	1.4		Yaws (1999)	?	21
	5.4×10^{-1}		Yaws and Yang (1992)	?	21
	1.3		Abraham et al. (1990)	?	
			Staudinger and Roberts (2001)	W	562
4-methylpyridine $\text{C}_5\text{H}_4\text{NCH}_3$ [108-89-4] FKNQCJSGGFJEIZ-UHFFFAOYSA-N	1.6	6500	Brockbank (2013)	L	
	1.7	6500	Andon et al. (1954)	M	338
	1.1		Keshavarz et al. (2022)	Q	
	8.0×10^{-2}		Duchowicz et al. (2020)	Q	185
	1.6		Li et al. (2014)	Q	242
	9.0×10^{-1}		Hilal et al. (2008)	Q	
	8.6×10^{-1}	6400	Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	
	1.2		Yaffe et al. (2003)	Q	249, 273
	1.2		Yao et al. (2002)	Q	230
	1.1		English and Carroll (2001)	Q	231, 232
	2.4		Katritzky et al. (1998)	Q	
	1.3		Nirmalakhandan et al. (1997)	Q	
	2.1		Russell et al. (1992)	Q	280
	8.8×10^{-1}		Suzuki et al. (1992)	Q	233
	1.6		Duchowicz et al. (2020)	?	186, 21
	1.7		Mackay et al. (2006d)	?	

Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
		6500	Kühne et al. (2005)	?	
	1.7		Yaws (1999)	?	21, 12
	1.6		Abraham et al. (1990)	?	
	1.4		Arnett and Chawla (1979)	?	561
			Staudinger and Roberts (2001)	W	562
3-cyanopyridine $C_6H_4N_2$ [100-54-9] GZPHSAQLYPIAIN-UHFFFAOYSA-N	3.6×10^1 1.9×10^1 5.4 3.6×10^1 1.6×10^1 1.1×10^1 6.9×10^1 1.2×10^2 3.6×10^1		Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) HSDB (2015) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhanda et al. (1997) Duchowicz et al. (2020)	R Q Q Q Q Q Q Q ?	100 68 231, 232 186, 21
4-cyanopyridine $C_6H_4N_2$ [100-48-1] GPHQHTOMRSGBNZ-UHFFFAOYSA-N	1.1×10^1 1.9×10^1 5.4 1.7×10^1 1.0×10^1 1.2×10^2 1.1×10^1		Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Nirmalakhanda et al. (1997) Duchowicz et al. (2020)	R Q Q Q Q Q ?	68 186, 21
2-ethylpyrazine $C_4N_2H_3(C_2H_5)$ [13925-00-3] KVFIJWMDBAGDP-UHFFFAOYSA-N	4.0 6.5 7.3×10^{-1} 2.7 3.4 2.7 4.0		Buttery et al. (1971) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Nirmalakhanda et al. (1997) Duchowicz et al. (2020)	M Q Q Q Q Q ?	185 68 186, 21
2,5-dimethylpyrazine $C_6H_8N_2$ [123-32-0] LGZUOKDVTBMCMX-UHFFFAOYSA-N	7.1 5.5 5.5 6.4		Marin et al. (1999) Druaux et al. (1998) Marin et al. (1999) Marin et al. (1999)	M M V Q	
2,6-dimethylpyrazine $C_6H_8N_2$ (3,5-dimethylpyrazine) [108-50-9] HJFZAYHYIWGLNL-UHFFFAOYSA-N	9.8×10^{-1}		Chaintreau et al. (1995)	M	
N-ethylpiperidine $C_7H_{15}N$ (1-ethylpiperidine) [766-09-6] HTLVHNRZJPSMI-UHFFFAOYSA-N	3.9×10^{-1}	6600 6600	Hilal et al. (2008) Kühne et al. (2005) Kühne et al. (2005)	Q Q ?	

Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1H-benzimidazole $C_7H_6N_2$ [51-17-2] HYZJCKYKOHVJF-UHFFFAOYSA-N	2.7×10^1		HSDB (2015)	Q	100
2-ethenylpyridine C_7H_7N (2-vinylpyridine) [100-69-6] KGIGUEBEKRSTEW-UHFFFAOYSA-N	7.0×10^{-1} 2.8×10^{-1} 2.7		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015)	V Q Q	187 187 100
4-ethenylpyridine C_7H_7N (4-vinylpyridine) [100-43-6] KFDVPUJYSDEJTH-UHFFFAOYSA-N	1.2 2.8×10^{-1} 3.1		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015)	V Q Q	187 187 100
2-ethylpyridine $C_5H_4NC_2H_5$ [100-71-0] NRGGMCI BEHEAIL-UHFFFAOYSA-N	6.0×10^{-1} 1.5 8.2×10^{-2} 2.9×10^{-1} 6.5×10^{-1} 6.1×10^{-1} 2.4 1.1 1.4 6.0×10^{-1} 6.0×10^{-1}	6700 6700 7900	Andon et al. (1954) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Yaffe et al. (2003) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Suzuki et al. (1992) Duchowicz et al. (2020) Kühne et al. (2005) Abraham et al. (1990) Staudinger and Roberts (2001)	M Q Q Q Q Q Q Q Q ? ? ? W	338 300 68 249, 250 233 186, 21 562
3-ethylpyridine $C_5H_4NC_2H_5$ [536-78-7] MFEIKQPHQINPRI-UHFFFAOYSA-N	9.5×10^{-1} 1.5 8.2×10^{-2} 6.7×10^{-1} 6.0×10^{-1} 1.0 2.9 1.1 1.4 9.5×10^{-1} 9.5×10^{-1}	6400 6700 6200	Andon et al. (1954) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Suzuki et al. (1992) Duchowicz et al. (2020) Kühne et al. (2005) Abraham et al. (1990) Staudinger and Roberts (2001)	M Q Q Q Q Q Q Q Q ? ? ? W	338 68 231, 232 233 186, 21 562

Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-ethylpyridine $\text{C}_5\text{H}_4\text{NC}_2\text{H}_5$ [536-75-4] VJXRKZJMGVSPX-UHFFFAOYSA-N	1.2	6300	Andon et al. (1954)	M	338
	1.5		Keshavarz et al. (2022)	Q	
	8.2×10^{-2}	6700	Duchowicz et al. (2020)	Q	300
	1.2		Li et al. (2014)	Q	242
	7.0×10^{-1}		Hilal et al. (2008)	Q	
	5.7×10^{-1}		Modarresi et al. (2007)	Q	68
	1.2		Kühne et al. (2005)	Q	
	1.0		Yaffe et al. (2003)	Q	249, 250
	2.9		English and Carroll (2001)	Q	231, 261
	1.1		Katritzky et al. (1998)	Q	
	1.4		Nirmalakhandan et al. (1997)	Q	
	1.2		Suzuki et al. (1992)	Q	233
	1.2	Duchowicz et al. (2020)	?	186, 21	
1.2	6300	Kühne et al. (2005)	?		
1.2	Abraham et al. (1990)	?			
		Staudinger and Roberts (2001)	W	562	
2,3-dimethylpyridine $\text{C}_5\text{H}_3\text{N}(\text{CH}_3)_2$ (2,3-lutidine) [583-61-9] HPYNZHMRTTWTB-UHFFFAOYSA-N	1.4	6900	Andon et al. (1954)	M	338
	1.5		Keshavarz et al. (2022)	Q	
	2.7×10^{-2}	6200	Duchowicz et al. (2020)	Q	185
	6.2×10^{-1}		Hilal et al. (2008)	Q	
	2.1×10^{-1}		Modarresi et al. (2007)	Q	68
	1.2		Kühne et al. (2005)	Q	
	1.6		Yaffe et al. (2003)	Q	249, 273
	3.0		English and Carroll (2001)	Q	231, 275
	9.5×10^{-1}		Katritzky et al. (1998)	Q	
	1.3		Nirmalakhandan et al. (1997)	Q	
	1.4		Suzuki et al. (1992)	Q	233
	1.4		Duchowicz et al. (2020)	?	186, 21
	1.4	Mackay et al. (2006d)	?		
1.4	5800	Kühne et al. (2005)	?		
1.4	Abraham et al. (1990)	?			
		Staudinger and Roberts (2001)	W	562	
2,4-dimethylpyridine $\text{C}_5\text{H}_3\text{N}(\text{CH}_3)_2$ (2,4-lutidine) [108-47-4] JYYNAJVZFGKDEQ-UHFFFAOYSA-N	9.9×10^{-1}	7100	Hawthorne et al. (1985)	M	
	1.5		Andon et al. (1954)	M	338
	1.5	6700	Keshavarz et al. (2022)	Q	
	2.7×10^{-2}		Duchowicz et al. (2020)	Q	
	1.5		Li et al. (2014)	Q	242
	5.1×10^{-1}		Hilal et al. (2008)	Q	
	2.9×10^{-1}		Modarresi et al. (2007)	Q	68
	1.5		Kühne et al. (2005)	Q	
	1.8		Yaffe et al. (2003)	Q	249, 273
	3.1		English and Carroll (2001)	Q	231, 232
	9.2×10^{-1}		Katritzky et al. (1998)	Q	
1.7	Nirmalakhandan et al. (1997)	Q			
1.3	Russell et al. (1992)	Q	280		
		Suzuki et al. (1992)	Q	233	

Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	1.5		Duchowicz et al. (2020)	?	186, 21
	1.5	6400	Mackay et al. (2006d)	?	
			Kühne et al. (2005)	?	
	1.5		Abraham et al. (1990)	?	
			Staudinger and Roberts (2001)	W	562
2,5-dimethylpyridine $C_5H_3N(CH_3)_2$ (2,5-lutidine) [589-93-5] XWKFPIODWVPXLX-UHFFFAOYSA-N	1.1	7000	Andon et al. (1954)	M	338
	1.5		Keshavarz et al. (2022)	Q	
	2.7×10^{-2}		Duchowicz et al. (2020)	Q	300
	5.7×10^{-1}		Hilal et al. (2008)	Q	
	2.1×10^{-1}		Modarresi et al. (2007)	Q	68
		6700	Kühne et al. (2005)	Q	
	1.2		Yaffe et al. (2003)	Q	249, 250
	1.6		English and Carroll (2001)	Q	231, 232
	2.9		Katritzky et al. (1998)	Q	
	9.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.3		Suzuki et al. (1992)	Q	233
	1.2		Meylan and Howard (1991)	Q	
	1.1		Duchowicz et al. (2020)	?	186, 21
		6900	Kühne et al. (2005)	?	
	1.1		Abraham et al. (1990)	?	
			Staudinger and Roberts (2001)	W	562
2,6-dimethylpyridine $C_5H_3N(CH_3)_2$ (2,6-lutidine) [108-48-5] OISVCGZHLKNMSJ-UHFFFAOYSA-N	9.2×10^{-1}	7300	Brockbank (2013)	L	
	6.6×10^{-1}		Hawthorne et al. (1985)	M	
	9.5×10^{-1}	7300	Andon et al. (1954)	M	338
	1.5		Keshavarz et al. (2022)	Q	
	2.7×10^{-2}		Duchowicz et al. (2020)	Q	300
	4.5×10^{-1}		Hilal et al. (2008)	Q	
	6.8×10^{-1}		Modarresi et al. (2007)	Q	68
		6700	Kühne et al. (2005)	Q	
	1.6		English and Carroll (2001)	Q	231, 232
	2.4		Katritzky et al. (1998)	Q	
	9.5×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.3		Suzuki et al. (1992)	Q	233
	9.5×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	9.4×10^{-1}		Mackay et al. (2006d)	?	
		6600	Kühne et al. (2005)	?	
	9.5×10^{-1}		Abraham et al. (1990)	?	
			Staudinger and Roberts (2001)	W	562
3,4-dimethylpyridine $C_5H_3N(CH_3)_2$ (3,4-lutidine) [583-58-4] NURQLCJSMXZBPC-UHFFFAOYSA-N	2.7	6800	Andon et al. (1954)	M	338
	1.5		Keshavarz et al. (2022)	Q	
	2.7×10^{-2}		Duchowicz et al. (2020)	Q	300
	1.3		Hilal et al. (2008)	Q	
	3.8×10^{-1}		Modarresi et al. (2007)	Q	68
		6200	Kühne et al. (2005)	Q	
	2.7		Yaffe et al. (2003)	Q	249, 250

Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.4		English and Carroll (2001)	Q	231, 261
	2.8		Katritzky et al. (1998)	Q	
	9.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.3		Suzuki et al. (1992)	Q	233
	2.7		Duchowicz et al. (2020)	?	186, 21
	2.7	6400	Kühne et al. (2005)	?	
	2.7		Abraham et al. (1990)	?	
			Staudinger and Roberts (2001)	W	562
3,5-dimethylpyridine $\text{C}_5\text{H}_3\text{N}(\text{CH}_3)_2$ (3,5-lutidine) [591-22-0] HWWYDZCSSYKIAD-UHFFFAOYSA-N	1.4	6800	Andon et al. (1954)	M	338
	1.5		Keshavarz et al. (2022)	Q	
	2.7×10^{-2}		Duchowicz et al. (2020)	Q	185
	9.7×10^{-1}		Hilal et al. (2008)	Q	
	5.9×10^{-1}		Modarresi et al. (2007)	Q	68
		6700	Kühne et al. (2005)	Q	
	1.5		Yaffe et al. (2003)	Q	249, 250
	1.2		English and Carroll (2001)	Q	231, 232
	3.3		Katritzky et al. (1998)	Q	
	9.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.3		Suzuki et al. (1992)	Q	233
	1.4		Duchowicz et al. (2020)	?	186, 21
	1.4	6500	Kühne et al. (2005)	?	
	1.4		Abraham et al. (1990)	?	
			Staudinger and Roberts (2001)	W	562
5-ethyl-2-methylpyridine $\text{C}_8\text{H}_{11}\text{N}$ [104-90-5] NTSLROIKFLNUIJ-UHFFFAOYSA-N	5.2×10^{-1}		Duchowicz et al. (2020)	V	187
	5.2×10^{-1}		HSDB (2015)	V	
	2.7×10^{-2}		Duchowicz et al. (2020)	Q	
	8.6×10^{-1}		Zhang et al. (2010)	Q	288, 289
	3.8×10^{-1}		Zhang et al. (2010)	Q	288, 290
	7.0×10^{-1}		Zhang et al. (2010)	Q	288, 291
	6.2×10^{-2}		Zhang et al. (2010)	Q	288, 292
	4.4×10^{-1}		Hilal et al. (2008)	Q	
	1.4×10^{-1}		Modarresi et al. (2007)	Q	68
2,4,6-trimethylpyridine $\text{C}_5\text{H}_2\text{N}(\text{CH}_3)_3$ (2,4,6-collidine) [108-75-8] BWZVCCNYKMEVEX-UHFFFAOYSA-N	1.1		Duchowicz et al. (2020)	V	187
	1.1		HSDB (2015)	V	
	5.7×10^{-2}		Mackay et al. (2006d)	V	
	5.7×10^{-2}		Mackay et al. (1995)	V	
	1.1		Hilal et al. (2008)	C	
	8.9×10^{-3}		Duchowicz et al. (2020)	Q	
	5.4×10^{-1}		Hilal et al. (2008)	Q	
	1.1		Modarresi et al. (2007)	Q	68
		7100	Kühne et al. (2005)	Q	
	2.5		Katritzky et al. (1998)	Q	
		8600	Kühne et al. (2005)	?	

Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
indole $\text{C}_8\text{H}_7\text{N}$ [120-72-9] SIKJAJRHWYJAI-UHFFFAOYSA-N	1.9×10^1 1.9×10^1 7.1 7.1		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Mackay et al. (1995)	V V V V	187
	1.6×10^1 1.6×10^1 1.5×10^1 5.3		Yaws (2003) Yaws (2003) Howard and Meylan (1997) Dupeux et al. (2022)	X X X Q	259 238, 12 448 260
	1.6×10^1 7.0×10^1 1.7×10^1 9.0 9.9		Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999)	Q Q Q Q ?	247 21, 12
2-ethyl-3,5-dimethylpyrazine $\text{C}_8\text{H}_{12}\text{N}_2$ [13925-07-0] JZBCTZLGKSYRSF-UHFFFAOYSA-N	2.9	8500	Wieland et al. (2015)	M	563
2-isobutylpyrazine $\text{C}_4\text{N}_2\text{H}_3\text{C}_4\text{H}_9$ [29460-92-2] YAIMUUJMEBJXAA-UHFFFAOYSA-N	2.0 1.2×10^1 1.4		Buttery et al. (1971) Keshavarz et al. (2022) Nirmalakhandan et al. (1997)	M Q Q	
2-(1-methylpropyl)-pyrazine $\text{C}_8\text{H}_{12}\text{N}_2$ [29460-93-3] NFFQZEXYZVZKNN-UHFFFAOYSA-N	1.6 2.2		Hilal et al. (2008) Modarresi et al. (2007)	Q Q	68
5-ethenyl-2-methylpyridine $\text{C}_8\text{H}_9\text{N}$ [140-76-1] VJOWMORERYNYON-UHFFFAOYSA-N	2.2		HSDB (2015)	Q	100
4-(1,1-dimethylethyl)-pyridine $\text{C}_9\text{H}_{13}\text{N}$ (4- <i>tert</i> -butylpyridine) [3978-81-2] YSHMQTRICHYLGf-UHFFFAOYSA-N	3.9×10^{-1} 7.5×10^{-1} 7.5×10^{-1}	7000	Hilal et al. (2008) Abraham et al. (1990) Arnett and Chawla (1979)	Q ? ?	561
nornicotine $\text{C}_9\text{H}_{12}\text{N}_2$ [494-97-3] MYKUKUCHPMASKF-UHFFFAOYSA-N	7.2×10^3		HSDB (2015)	Q	449
2,4-diamino-6-phenyl-1,3,5-triazine $\text{C}_9\text{H}_9\text{N}_5$ [91-76-9] GZVHEAJQGPRLQ-UHFFFAOYSA-N	2.4×10^5		HSDB (2015)	Q	100

Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N-methylindole <chem>C9H9N</chem> [603-76-9] BLRHMMGNCXNJL-UHFFFAOYSA-N	8.7		Ebert et al. (2023)	?	367
3-methylindole <chem>C9H9N</chem> (skatole) [83-34-1] ZFRKQXVRDFCRJG-UHFFFAOYSA-N	2.9×10^{-5} 4.7	-2500	Wetlaufer et al. (1964) HSDB (2015)	M V	
2,3-diethyl-5-methylpyrazine <chem>C9H14N2</chem> [18138-04-0] PSINWXIDJYEXLO-UHFFFAOYSA-N	8.1×10^{-1}		Roberts and Pollien (1997)	M	
benzo[<i>b</i>]pyridine <chem>C9H7N</chem> (quinoline) [91-22-5] SMWDFEZZVXVCRB-UHFFFAOYSA-N	5.9		Duchowicz et al. (2020)	V	187
	5.8		HSDB (2015)	V	
	3.8×10^1		Mackay et al. (2006d)	V	
	3.8×10^1		Mackay et al. (1995)	V	
	6.0		Meylan and Howard (1991)	V	
	3.9×10^1		Smith and Bomberger (1980)	V	24
	6.4		Abraham et al. (1994a)	R	
	3.7×10^1	5400	Goldstein (1982)	X	299
	9.3×10^{-1}		Duchowicz et al. (2020)	Q	
	5.7×10^1		Gharagheizi et al. (2012)	Q	
	6.4		Hilal et al. (2008)	Q	
	5.8		Modarresi et al. (2007)	Q	68
		7300	Kühne et al. (2005)	Q	
	6.1		Yaffe et al. (2003)	Q	249, 250
	9.0		English and Carroll (2001)	Q	231, 232
benzo[<i>c</i>]pyridine <chem>C9H7N</chem> (isoquinoline) [119-65-3] AWJUIBRHMBBTKR-UHFFFAOYSA-N	3.2×10^{-1}		Katritzky et al. (1998)	Q	
	3.4×10^1		Nirmalakhandan et al. (1997)	Q	
	1.4×10^1		Meylan and Howard (1991)	Q	
		7300	Kühne et al. (2005)	?	
	6.5		Yaws (1999)	?	21, 12
	5.2×10^{-2}		Mackay et al. (2006d)	V	
	5.2×10^{-2}		Mackay et al. (1995)	V	
nicotine <chem>C10H14N2</chem> [54-11-5] SNICXCGAKADSCV-SNVBAGLBSA-N	5.7		Yaws (2003)	X	238, 12
	5.6		Gharagheizi et al. (2010)	Q	247
	9.2		Hilal et al. (2008)	Q	
	3.8		Yaws (1999)	?	21, 12
nicotine <chem>C10H14N2</chem> [54-11-5] SNICXCGAKADSCV-SNVBAGLBSA-N	3.3×10^3		HSDB (2015)	Q	100

Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,2'-bipyridine $C_{10}H_8N_2$ [366-18-7] ROFVEXUMMXZLPA-UHFFFAOYSA-N	1.8×10^4		HSDB (2015)	Q	547
4,4'-bipyridine $C_{10}H_8N_2$ [553-26-4] MWVTWVJZLCBMC-UHFFFAOYSA-N	3.9×10^3 1.7×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
2-methylquinoline $C_{10}H_9N$ [91-63-4] SMUQFGGVLNAIOZ-UHFFFAOYSA-N	1.4×10^1		Ebert et al. (2023)	?	317
4-methylquinoline $C_{10}H_9N$ [491-35-0] MUDSDYNRBDKLGK-UHFFFAOYSA-N	1.3×10^1		HSDB (2015)	Q	100
MEIQX $C_{11}H_{11}N_5$ (2-amino-3,8- dimethylimidazo[4,5- f]quinoxaline) [77500-04-0] DVCCCQNKIYNAKB-UHFFFAOYSA-N	6.2×10^7		HSDB (2015)	Q	100
3-(phenylazo)-2,6-pyridinediamine $C_{11}H_{11}N_5$ (phenazopyridine) [94-78-0] QPFYXYFORQJZEC-UHFFFAOYSA-N	3.0×10^9		HSDB (2015)	Q	100
2-amino-9H-pyrido[2,3-b]indole $C_{11}H_9N_3$ [26148-68-5] FJTNLJLPLJDRM-UHFFFAOYSA-N	2.5×10^8		HSDB (2015)	Q	100
carbazole $C_{12}H_9N$ [86-74-8] UJOBWOGCFQCDNV-UHFFFAOYSA-N	9.4×10^1 9.3×10^1 6.6×10^{-2} 6.6×10^{-2} 6.3×10^{-2} 2.0×10^1 6.3×10^1 1.1×10^2 8.5×10^1	4300 4300	Brockbank (2013) Odabasi et al. (2006) Mackay et al. (2006d) Mackay et al. (1995) Smith and Bomberger (1980) Keshavarz et al. (2022) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	L M V V V Q Q Q ?	24 100 186, 21

Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>o</i> -phenanthroline C ₁₂ H ₈ N ₂ [66-71-7] DGEZNRVGBDHLK-UHFFFAOYSA-N	1.1×10^5 9.9×10^3 1.2×10^5 4.4×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
benzyladenine C ₁₂ H ₁₁ N ₅ [1214-39-7] NWBJYWHLCVSVIJ-UHFFFAOYSA-N	1.1×10^8 1.1×10^{-1}		HSDB (2015) Maniere et al. (2011)	V ?	242, 166
diquat C ₁₂ H ₁₂ N ₂ [2764-72-9] SYJFEGQWDCRVNX-UHFFFAOYSA-N	2.8×10^5		Ebert et al. (2023)	?	319
MEIQ C ₁₂ H ₁₂ N ₄ (2-amino-3,4- dimethylimidazo[4,5- f]quinoxaline) [77094-11-2] GMGWMIJIGUYNAY-UHFFFAOYSA-N	2.5×10^7		HSDB (2015)	Q	100
pyrimethanil C ₁₂ H ₁₃ N ₃ [53112-28-0] ZLIBICFPKPGWIZ-UHFFFAOYSA-N	3.4×10^2 2.8×10^2 2.8×10^2 9.2×10^2 3.9 2.8×10^2	15000	Feigenbrugel and Le Calvé (2021) Duchowicz et al. (2020) Tomlin (1998) Duchowicz et al. (2020) HSDB (2015) Maniere et al. (2011)	M V X Q Q ?	187 564, 12 100 242, 166
paraquat C ₁₂ H ₁₄ N ₂ [4685-14-7] INFDPQAKFNJBF-UHFFFAOYSA-N	$> 2.4 \times 10^8$		HSDB (2015)	V	
N,N-dimethyltryptamine C ₁₂ H ₁₆ N ₂ [61-50-7] DMULVCHRPCFFGV-UHFFFAOYSA-N	1.5×10^4		HSDB (2015)	Q	100
benzo[<i>f</i>]quinoline C ₁₃ H ₉ N [85-02-9] HCAUQPZEWLULFJ-UHFFFAOYSA-N	5.7×10^1 1.0×10^2 1.0×10^2 3.6		Duchowicz et al. (2020) Mackay et al. (2006d) Mackay et al. (1995) Smith and Bomberger (1980) Duchowicz et al. (2020)	V V V V Q	187 560 24

Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,6-bis-(1,1-dimethylethyl)- pyridine $\text{C}_{13}\text{H}_{21}\text{N}$ (2,6-di- <i>tert</i> -butylpyridine) [585-48-8] UWKQJZCTQGMHKD-UHFFFAOYSA-N	8.0×10^{-4}	6900	Arnett and Chawla (1979)	M	561
	2.8×10^{-1}		Arnett and Chawla (1979)	V	565
PHIP $\text{C}_{13}\text{H}_{12}\text{N}_4$ (2-amino-1-methyl-6- phenylimidazo[4,5-b]pyridine) [105650-23-5] UQVKZNNCIIHJZLS-UHFFFAOYSA-N	3.5×10^7		HSDB (2015)	Q	100
N,N'-diphenylguanidine $\text{C}_{13}\text{H}_{13}\text{N}_3$ [102-06-7] OWRCNXZUPFZXOS-UHFFFAOYSA-N	1.4×10^6		HSDB (2015)	Q	100
acridine $\text{C}_{13}\text{H}_9\text{N}$ [260-94-6] DZBUGLKDJFMEHC-UHFFFAOYSA-N	3.3×10^1		Mackay et al. (2006d)	V	
	3.3×10^1		Mackay et al. (1995)	V	
	2.5×10^1		HSDB (2015)	Q	100
phenanthridine $\text{C}_{13}\text{H}_9\text{N}$ [229-87-8] RDOWQLZANAYVLL-UHFFFAOYSA-N	6.0×10^2		Duchowicz et al. (2020)	V	187
	3.6		Duchowicz et al. (2020)	Q	
mepanipyrim $\text{C}_{14}\text{H}_{13}\text{N}_3$ [110235-47-7] CIFWZNRJIBNXRE-UHFFFAOYSA-N	6.0×10^2		Maniere et al. (2011)	?	242, 166
cyprodinil $\text{C}_{14}\text{H}_{15}\text{N}_3$ [121552-61-2] HAORKNGNJCEJBX-UHFFFAOYSA-N	1.2×10^2		Duchowicz et al. (2020)	V	187
	1.2×10^2		HSDB (2015)	V	
	2.9×10^3		Duchowicz et al. (2020)	Q	
imiquimod $\text{C}_{14}\text{H}_{16}\text{N}_4$ [99011-02-6] DOUYETYNHWVLEO-UHFFFAOYSA-N	1.2×10^7		HSDB (2015)	Q	100
ametoctradin $\text{C}_{15}\text{H}_{25}\text{N}_5$ [865318-97-4] GGKQIOFASHYUJZ-UHFFFAOYSA-N	2.4×10^6		Maniere et al. (2011)	?	12, 166

Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ferimzone $\text{C}_{15}\text{H}_{18}\text{N}_4$ [89269-64-7] GOWLARCWZRESHU-UHFFFAOYSA-N	1.6×10^5 2.4×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
benz[c]acridine $\text{C}_{17}\text{H}_{11}\text{N}$ [225-51-4] OAPPEBNXKAKQGS-UHFFFAOYSA-N	3.7×10^2		HSDB (2015)	Q	449
6-pentyl-1,2,3,4,7,8,9,10- octahydrophenanthridine $\text{C}_{18}\text{H}_{27}\text{N}$ [10594-03-3] FNUATPIDZQSFPD-UHFFFAOYSA-N	4.5×10^{-1} 2.0×10^1 6.2 2.2×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2-diphenylmethylpiperidine $\text{C}_{18}\text{H}_{21}\text{N}$ (desoxy pipradrol) [519-74-4] RWTNXJXZVGHMGI-UHFFFAOYSA-N	6.6×10^1		HSDB (2015)	Q	100
fenpropidin $\text{C}_{19}\text{H}_{31}\text{N}$ [67306-00-7] MGNFYQILYUUBS-UHFFFAOYSA-N	7.1×10^2 1.1×10^2 9.9×10^{-2} 9.5×10^{-2} 9.3×10^{-2}	6200	Feigenbrugel and Le Calvé (2021) Duchowicz et al. (2020) Tomlin (1998) Duchowicz et al. (2020) Maniere et al. (2011)	M V X Q ?	33 187 564, 12 166
N,N-bis(2-ethylhexyl)-1H-1,2,4- triazole-1-methanamine $\text{C}_{19}\text{H}_{38}\text{N}_4$ [91273-04-0] AVBBHCMDRGQBNW-UHFFFAOYSA-N	2.9×10^1		Ebert et al. (2023)	?	367
7H-dibenzo[c, g]carbazole $\text{C}_{20}\text{H}_{13}\text{N}$ [194-59-2] STJXCDGCVZHDU-UHFFFAOYSA-N	2.1×10^3 4.0×10^3		Smith and Bomberger (1980) HSDB (2015)	V Q	24 100
porphyrin $\text{C}_{20}\text{H}_{14}\text{N}_4$ (porphin) [101-60-0] RKCAIXNGYQCCAL-YYOYBPFYSA-N	3.9×10^5		Abraham et al. (2019)	Q	
dibenz[a, j]acridine $\text{C}_{21}\text{H}_{13}\text{N}$ [224-42-0] ANUCHZVCBDOPOX-UHFFFAOYSA-N	5.2×10^3		HSDB (2015)	Q	100

Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dibenz[<i>a, h</i>]acridine $\text{C}_{21}\text{H}_{13}\text{N}$ [226-36-8] JNCSIWAONQTVCF-UHFFFAOYSA-N	5.2×10^3		HSDB (2015)	Q	100
1,3,5-tricyclohexylhexahydro- 1,3,5-triazine $\text{C}_{21}\text{H}_{39}\text{N}_3$ [6281-14-7] ZLLRUEJANKJPQE-UHFFFAOYSA-N	1.7×10^{-2}		Zhang et al. (2010)	Q	288, 289
	4.0×10^5		Zhang et al. (2010)	Q	288, 290
	1.2×10^5		Zhang et al. (2010)	Q	288, 291
	1.5×10^4		Zhang et al. (2010)	Q	288, 292

Table A4.3: Nitriles (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.9×10^{-1}		Hine and Weimar (1965)	R	
	2.9×10^{-1}		Gaffney and Senum (1984)	X	391
	4.7×10^{-1}		Hayer et al. (2022)	Q	20
	3.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.0×10^{-1}		Duchowicz et al. (2020)	Q	
	2.9×10^{-1}		Li et al. (2014)	Q	242
	7.7×10^{-1}		Hilal et al. (2008)	Q	
	3.7×10^{-1}		Modarresi et al. (2007)	Q	68
		4200	Kühne et al. (2005)	Q	
	2.9×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	2.9×10^{-1}		English and Carroll (2001)	Q	231, 232
	4.4		Katritzky et al. (1998)	Q	
	2.9×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	3.1×10^{-1}		Suzuki et al. (1992)	Q	233
	2.9×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	3.6×10^{-1}		Mackay et al. (2006d)	?	
		4300	Kühne et al. (2005)	?	
	4.9×10^{-1}		Yaws (1999)	?	21
	4.9×10^{-1}		Yaws and Yang (1992)	?	21
	2.9×10^{-1}		Abraham et al. (1990)	?	
propanenitrile $\text{C}_2\text{H}_5\text{CN}$ (propionitrile) [107-12-0] FVSKHRXBFJPNKK-UHFFFAOYSA-N	3.4×10^{-1}	4500	Brockbank (2013)	L	1
	2.4×10^{-1}	4800	Plyasunov et al. (2006)	L	
	4.3×10^{-1}	6200	Hiatt (2013)	M	
	3.3×10^{-1}	4600	Ji and Evans (2007)	M	
	1.8×10^{-1}		Hovorka et al. (2002)	M	38
	2.5×10^{-1}		Li and Carr (1993)	M	
	1.9×10^{-1}		Hawthorne et al. (1985)	M	
	2.6×10^{-1}		Butler and Ramchandani (1935)	M	
	3.1×10^{-1}		Mackay et al. (2006d)	V	
	3.1×10^{-1}		Mackay et al. (1995)	V	
	1.7×10^{-1}		Howard (1990)	X	414
	3.5×10^{-1}		Keshavarz et al. (2022)	Q	
	1.0×10^{-1}		Duchowicz et al. (2020)	Q	
	5.0×10^{-1}		Hilal et al. (2008)	Q	
	2.6×10^{-1}		Modarresi et al. (2007)	Q	68
	2.9×10^{-1}		English and Carroll (2001)	Q	231, 232
	5.6×10^{-1}		Russell et al. (1992)	Q	280
	2.4×10^{-1}		Suzuki et al. (1992)	Q	233
	2.7×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	2.6×10^{-1}		Mackay et al. (2006d)	?	
	2.9×10^{-1}		Yaws (1999)	?	21
	2.7×10^{-1}		Abraham et al. (1990)	?	

Table A4.3: Nitriles (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
butanenitrile $\text{C}_3\text{H}_7\text{CN}$ (butyronitrile) [109-74-0] KVNRLNFWIYMESJ-UHFFFAOYSA-N	1.8×10^{-1}	5100	Brockbank (2013)	L	1	
	1.8×10^{-1}	5100	Plyasunov et al. (2006)	L		
	2.7×10^{-1}	5100	Ji and Evans (2007)	M		
	1.3×10^{-1}		Ramachandran et al. (1996)	M		
	1.9×10^{-1}		Li and Carr (1993)	M		
	1.4×10^{-1}		Hawthorne et al. (1985)	M		
	1.9×10^{-1}		Butler and Ramchandani (1935)	M		
	1.8×10^{-1}		Yaws (2003)	X	259	
	1.8×10^{-1}		Yaws (2003)	X	238	
	3.7×10^{-1}		Dupeux et al. (2022)	Q	260	
	1.2×10^{-1}		Keshavarz et al. (2022)	Q		
	1.0×10^{-1}		Duchowicz et al. (2020)	Q	185	
	1.8×10^{-1}		Gharagheizi et al. (2010)	Q	247	
	3.5×10^{-1}		Hilal et al. (2008)	Q		
	1.5×10^{-1}		Modarresi et al. (2007)	Q	68	
		4900	Kühne et al. (2005)	Q		
		1.5×10^{-1}	Yaffe et al. (2003)	Q	249, 250	
		5.7×10^{-2}	English and Carroll (2001)	Q	231, 275	
	2-methylpropanenitrile $\text{C}_4\text{H}_7\text{N}$ (isobutyronitrile) [78-82-0] LRDFRRGEGBBSRN-UHFFFAOYSA-N	1.9×10^{-2}		Nirmalakhandan et al. (1997)	Q	
		5.4×10^{-1}		Russell et al. (1992)	Q	280
1.9×10^{-1}			Suzuki et al. (1992)	Q	233	
1.9×10^{-1}			Duchowicz et al. (2020)	?	186, 21	
1.9×10^{-1}			Mackay et al. (2006d)	?		
		4700	Kühne et al. (2005)	?		
1.8×10^{-1}			Yaws (1999)	?	21	
1.9×10^{-1}			Abraham et al. (1990)	?		
		5200	Brockbank (2013)	L		
		4800	Plyasunov et al. (2006)	L		
		9.4×10^{-2}	Li and Carr (1993)	M		
	1.8×10^{-1}	HSDB (2015)	Q	100		
	1.9×10^{-1}	Hilal et al. (2008)	Q			
	4900	Kühne et al. (2005)	Q			
	5100	Kühne et al. (2005)	?			
pentanenitrile $\text{C}_4\text{H}_9\text{CN}$ (butyl cyanide; valeronitrile) [110-59-8] RFFFKMOABOFIDF-UHFFFAOYSA-N	1.6×10^{-1}	6100	Brockbank (2013)	L		
	1.4×10^{-1}	5500	Plyasunov et al. (2006)	L		
	1.4×10^{-1}		Li and Carr (1993)	M		
	1.6×10^{-1}		Amoore and Buttery (1978)	V		
	2.7×10^{-1}		Hilal et al. (2008)	Q		
	1.3×10^{-1}		Modarresi et al. (2007)	Q	68	
	1.5×10^{-1}		Yaffe et al. (2003)	Q	249, 273	
	4.1×10^{-2}		English and Carroll (2001)	Q	231, 232	
	1.5×10^{-2}	Nirmalakhandan et al. (1997)	Q			
	1.5×10^{-1}	Abraham et al. (1990)	?			

Table A4.3: Nitriles (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hexanenitrile $\text{C}_6\text{H}_{11}\text{N}$ [628-73-9] AILKHAQXUAOOFU-UHFFFAOYSA-N	1.2×10^{-1} 2.3×10^{-1}		Plyasunov et al. (2006) Hilal et al. (2008)	L Q	
heptanenitrile $\text{C}_7\text{H}_{13}\text{N}$ [629-08-3] SDAXRHHPNYTELL-UHFFFAOYSA-N	1.6×10^{-1}		Hilal et al. (2008)	Q	
octanenitrile $\text{C}_8\text{H}_{15}\text{N}$ [124-12-9] YSIMAPNUZAVQER-UHFFFAOYSA-N	5.7×10^{-2} 1.3×10^{-1}		Plyasunov et al. (2006) Hilal et al. (2008)	L Q	
nonanenitrile $\text{C}_9\text{H}_{17}\text{N}$ [2243-27-8] PLZZPPHAMDJOSR-UHFFFAOYSA-N	1.0×10^{-1}		Hilal et al. (2008)	Q	
decanenitrile $\text{C}_{10}\text{H}_{19}\text{N}$ [1975-78-6] HBZDPWBWBJMYRY-UHFFFAOYSA-N	8.0×10^{-2}		Hilal et al. (2008)	Q	
undecanenitrile $\text{C}_{11}\text{H}_{21}\text{N}$ [2244-07-7] SZKKNEOUHLFYNA-UHFFFAOYSA-N	6.1×10^{-2}		Hilal et al. (2008)	Q	
cyclohexanecarbonitrile $\text{C}_7\text{H}_{11}\text{N}$ [766-05-2] VBWIZSYFQSOUFQ-UHFFFAOYSA-N	7.3×10^{-1}		Hilal et al. (2008)	Q	
ethanedinitrile C_2N_2 (cyanogen) [460-19-5] JMANVNJQNLATNU-UHFFFAOYSA-N	1.8×10^{-3} 1.8×10^{-3} 1.9×10^{-3} 1.9×10^1 1.8×10^{-3} 2.6×10^{-3} 2.9×10^{-2} 1.9×10^{-3} 1.8×10^{-3}		Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaws (1999) Yaws and Yang (1992)	V V X Q Q Q Q Q ? ?	187 238, 12 247 68 21, 12 21, 12
pentanedinitrile $\text{C}_5\text{H}_6\text{N}_2$ [544-13-8] ZTOMUSMDRMJOTH-UHFFFAOYSA-N	7.8×10^2	7600	Plyasunov et al. (2006)	L	

Table A4.3: Nitriles (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
hexanedinitrile $\text{C}_6\text{H}_8\text{N}_2$ (adiponitrile) [111-69-3] BTGRAWJCKBQKAO-UHFFFAOYSA-N	1.5×10^3 8.2×10^3 8.2×10^3 2.4×10^2 2.4×10^2	8000	Plyasunov et al. (2006) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Mackay et al. (1995)	L V V V V	187
2-methylpentanedinitrile $\text{C}_6\text{H}_8\text{N}_2$ [4553-62-2] FPPLREPCQJZDAQ-UHFFFAOYSA-N	3.3×10^2		HSDB (2015)	Q	100
tetramethylbutanedinitrile $\text{C}_8\text{H}_{12}\text{N}_2$ [3333-52-6] ZVQXQPNJHRNGID-UHFFFAOYSA-N	1.9×10^2		HSDB (2015)	Q	100
2-propenenitrile $\text{C}_3\text{H}_3\text{N}$ (acrylonitrile) [107-13-1] NLHHRLWOUZZQLW-UHFFFAOYSA-N	1.0×10^{-1} 1.2×10^{-1} 7.6×10^{-2} 3.1×10^{-2} 1.3×10^{-1} 8.2×10^{-2} 9.1×10^{-2} 1.3×10^{-1} 9.8×10^{-2} 1.1×10^{-1} 1.1×10^{-1} 1.1×10^{-1} 9.2×10^{-2} 4.3×10^{-1} 2.2×10^{-2} 4.6×10^{-1}	3900 6800 3400 2800 3600 3600	Brockbank (2013) Hiatt (2013) Hovorka et al. (2002) Welke et al. (1998) Mackay et al. (2006d) Fogg and Sangster (2003) Lide and Frederikse (1995) Mackay et al. (1995) Hwang et al. (1992) Goldstein (1982) Mackay et al. (1995) Ryan et al. (1988) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Duchowicz et al. (2020) Mackay et al. (2006d) Kühne et al. (2005) Yaws (1999)	L M M M V V V V V X C C Q Q Q Q Q Q Q Q ?	38 299 185 68 186, 21 21, 12
2-butenenitrile $\text{C}_4\text{H}_5\text{N}$ (crotononitrile) [4786-20-3] NKKMVIVFRUYPLQ-NSCUHMNNSA-N	8.8×10^{-2} 1.5×10^{-1} 2.7×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020) Modarresi et al. (2007)	V Q Q	187 68

Table A4.3: Nitriles (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methylbenzonitrile $\text{C}_8\text{H}_7\text{N}$ (<i>o</i> -tolunitrile) [529-19-1] NWPNXBQSRGKJSB-UHFFFAOYSA-N	7.6×10^{-1}		Schüürmann (2000)	V	
3-methylbenzonitrile $\text{C}_8\text{H}_7\text{N}$ (<i>m</i> -tolunitrile) [620-22-4] BOHCMQZJWOGWTA-UHFFFAOYSA-N	1.7×10^{-1} 3.4×10^{-1} 8.8×10^{-1} 1.8×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
benzeneacetonitrile $\text{C}_8\text{H}_7\text{N}$ (phenylacetonitrile) [140-29-4] SUSQOBLVYHIEX-UHFFFAOYSA-N	1.1 7.0×10^{-2} 1.0×10^1	6800 6200 5100	Brockbank (2013) HSDB (2015) Hilal et al. (2008) Kühne et al. (2005) Kühne et al. (2005)	L V Q Q ?	
1,2-benzenedicarbonitrile $\text{C}_8\text{H}_4\text{N}_2$ [91-15-6] XQZYPMVTSDWCCE-UHFFFAOYSA-N	2.0×10^1		HSDB (2015)	Q	100
3,7-dimethyl-2,6-octadienenitrile $\text{C}_{10}\text{H}_{15}\text{N}$ (geranyl nitrile) [5146-66-7] HLCSDJLATUNSSI-JXMROGBWSA-N	2.9×10^{-2}		Helburn et al. (2008)	M	
2,2'-azobis(2-methylbutyronitrile) $\text{C}_{10}\text{H}_{16}\text{N}_4$ [13472-08-7] AVTLBBWTUPQRAY-UHFFFAOYSA-N	4.5×10^4 9.2×10^1 1.5×10^1 4.4×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

A4.4 Amines, amides, amino acids (C, H, O, N)

Table A4.4: Amines, amides, amino acids (C, H, O, N)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
formamide CH ₃ NO [75-12-7] ZHNUHDYFZUAESO-UHFFFAOYSA-N	7.1×10^3 7.0×10^3 2.3×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
methyl nitrite CH ₃ ONO [624-91-9] BLLFVUPNHCTMSV-UHFFFAOYSA-N	1.5×10^{-1}		HSDB (2015)	Q	100
urea CH ₄ N ₂ O [57-13-6] XSQUKJJJFZCRTK-UHFFFAOYSA-N	5.7×10^6 5.7×10^6 1.0×10^7 1.0×10^7 1.1×10^5		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Mackay et al. (1995) Duchowicz et al. (2020)	V V V V Q	187
ethanolamine HOC ₂ H ₄ NH ₂ [141-43-5] HZAXFHJVJLSVMW-UHFFFAOYSA-N	4.2×10^3 6.0×10^4 1.1×10^4 9.7×10^2	8300 5800	Kim et al. (2008) Bone et al. (1983) Modarresi et al. (2007) Nguyen (2013)	M M Q ?	552 12 68 567, 11
1,1'-azodiformamide C ₂ H ₄ N ₄ O ₂ [123-77-3] XOZUGNYVDXMRKW-UHFFFAOYSA-N	1.2×10^7		HSDB (2015)	V	
ethyl nitrite C ₂ H ₅ ONO [109-95-5] QQZWEECEMNQSTG-UHFFFAOYSA-N	1.1×10^{-1}		HSDB (2015)	Q	100
carbamic acid, methyl ester C ₂ H ₅ NO ₂ [598-55-0] GTCAXTIRRLKXRU-UHFFFAOYSA-N	2.5×10^2		HSDB (2015)	Q	100
acetaldoxime C ₂ H ₅ NO (acetaldehyde oxime) [107-29-9] FZENGILVLUJGJX-UHFFFAOYSA-N	1.7		HSDB (2015)	Q	449

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethanamide $\text{C}_2\text{H}_5\text{NO}$ (acetamide) [60-35-5] DLFVBVJFMPXGRIB-UHFFFAOYSA-N	5.3×10^3 2.8×10^3 2.8×10^3 3.8×10^3 9.0×10^2 2.8×10^3 3.7×10^3 4.2×10^3 5.1×10^3 2.2×10^3 2.2×10^2		Wolfenden (1976) Mackay et al. (2006d) Mackay et al. (1995) Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998)	M V V X Q Q Q Q Q Q Q	238 100 247 68 249, 250
N-methylmethanamide $\text{C}_2\text{H}_5\text{NO}$ (N-methylformamide) [123-39-7] ATHHXGZTWNVVOU-UHFFFAOYSA-N	1.4×10^3 1.4×10^3 1.4×10^3 1.5×10^3 5.0×10^2 4.9×10^2 9.7×10^1 5.6×10^2 1.6×10^2	7200 7200 7200 7600	Burkholder et al. (2019) Burkholder et al. (2015) Brockbank (2013) Bernauer and Dohnal (2008) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	L L L M V V Q Q Q	1 187 68
N-nitrosodimethylamine $\text{C}_2\text{H}_6\text{N}_2\text{O}$ [62-75-9] UMFJAHHVKNCGLG-UHFFFAOYSA-N	3.9 3.9 2.9×10^{-1} 4.1 6.1 5.2 3.0×10^{-1} 9.5 3.6 3.0×10^{-1}	13000 6400	Burkholder et al. (2019) Burkholder et al. (2015) Thompson et al. (2018) Haruta et al. (2011) Klein (1982) Mirvish et al. (1976) Mackay et al. (1995) Hilal et al. (2008) Modarresi et al. (2007) Mackay et al. (2006d)	L L M M M M C Q Q Q ?	12 14 68
methylnitrosourea $\text{C}_2\text{H}_5\text{N}_3\text{O}_2$ [684-93-5] ZRKWMRDKSOPRRS-UHFFFAOYSA-N	$> 1.9 \times 10^2$		Mirvish et al. (1976)	M	14
ethanediamide $\text{C}_2\text{H}_4\text{N}_2\text{O}_2$ [471-46-5] YIKSCQDJHCMVMK-UHFFFAOYSA-N	5.0×10^5 2.2×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
nitrosoazetidine $\text{C}_3\text{H}_6\text{N}_2\text{O}$ [15216-10-1] SNKTZBNDUVWAOZ-UHFFFAOYSA-N	$> 1.9 \times 10^2$		Mirvish et al. (1976)	M	14

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methylnitrosoacetamide $\text{C}_3\text{H}_6\text{N}_2\text{O}_2$ [7417-67-6] FFLFWNRFMZRFKU-UHFFFAOYSA-N	8.6×10^{-2}		Mirvish et al. (1976)	M	14
ethylnitrosocyanamide $\text{C}_3\text{H}_5\text{N}_3\text{O}$ [38434-77-4] LMIMSGCBKHFTDY-UHFFFAOYSA-N	2.6×10^{-1}		Mirvish et al. (1976)	M	14
2-propenamide $\text{C}_3\text{H}_5\text{NO}$ (acrylamide) [79-06-1] HRPVXLWXLXDGHG-UHFFFAOYSA-N	5.8×10^3 5.5×10^3 6.9×10^3 3.1×10^4 6.9×10^3 2.9×10^4 4.1×10^2 7.3×10^2 2.9×10^4 4.1×10^3 7.3×10^3		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Lide and Frederikse (1995) Mackay et al. (1995) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Kühne et al. (2005)	V V V V V X Q Q Q Q Q Q ?	187 238, 38 247 68
methylvinyl nitrosamine $\text{C}_3\text{H}_6\text{N}_2\text{O}$ (N-nitrosomethylvinylamine) [4549-40-0] AWZVYNHQGTZJIH-UHFFFAOYSA-N	2.7		HSDB (2015)	Q	100
urethane $\text{C}_3\text{H}_7\text{NO}_2$ [51-79-6] JOYRKODLDBILNP-UHFFFAOYSA-N	1.5×10^2 1.5×10^2 2.5×10^1 1.1×10^1 6.4×10^1 7.3×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Katritzky et al. (1998)	V V Q Q Q Q	187 68
propanamide $\text{C}_3\text{H}_7\text{NO}$ (propionamide) [79-05-0] QLNJFJADRCOGBJ-UHFFFAOYSA-N	3.3×10^3	8800	Plyasunov et al. (2001)	T	

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N,N-dimethylmethanamide $\text{C}_3\text{H}_7\text{NO}$ (N,N-dimethylformamide) [68-12-2] ZMXDDKWLCZADIW-UHFFFAOYSA-N	1.3×10^2	6600	Burkholder et al. (2019)	L	
	1.3×10^2	6600	Burkholder et al. (2015)	L	
	1.4×10^2	7700	Brockbank (2013)	L	1, 568
	1.6×10^2	7500	Bernauer and Dohnal (2008)	M	1
	2.2×10^2		Abraham et al. (1994a)	R	
	4.5×10^1		Hilal et al. (2008)	Q	
	5.8		Modarresi et al. (2007)	Q	68
	2.6×10^1		Katritzky et al. (1998)	Q	
N-methylacetamide $\text{C}_3\text{H}_7\text{NO}$ [79-16-3] OHLUUHNLEMFGTQ-UHFFFAOYSA-N	2.1×10^3	7600	Burkholder et al. (2019)	L	
	2.1×10^3	7600	Burkholder et al. (2015)	L	
	3.2×10^3	8900	Bernauer and Dohnal (2008)	M	1
	2.3×10^2		Duchowicz et al. (2020)	V	187
	2.3×10^2		HSDB (2015)	V	
	3.8×10^1		Duchowicz et al. (2020)	Q	
	1.4×10^2		Modarresi et al. (2007)	Q	68
N-methyl-N-nitrosoethanamine $\text{C}_3\text{H}_8\text{N}_2\text{O}$ (N-nitrosomethylethylamine) [10595-95-6] RTDCJKARQCRONF-UHFFFAOYSA-N	6.9		HSDB (2015)	Q	449
2-methoxyethanamine $\text{C}_3\text{H}_9\text{NO}$ (2-methoxyethylamine) [109-85-3] ASUDFOJKTJLAIK-UHFFFAOYSA-N	2.5×10^1	7600	Cabani et al. (1978)	T	
2-(methylamino)ethanol $\text{C}_3\text{H}_9\text{NO}$ [109-83-1] OPKOKAMJFNKNAS-UHFFFAOYSA-N	9.0×10^1		HSDB (2015)	V	
1-amino-2-propanol $\text{C}_3\text{H}_9\text{NO}$ [78-96-6] HXKXHQJGJAFBHI-UHFFFAOYSA-N	4.2×10^4		HSDB (2015)	Q	547
2-amino-1-propanol $\text{C}_3\text{H}_9\text{NO}$ (alaninol) [6168-72-5] BKMMTJMCTUHRP-UHFFFAOYSA-N	1.3×10^3	7700	Nguyen (2013)	M	11

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N-nitroso-N-methylurethane $\text{C}_4\text{H}_8\text{N}_2\text{O}_3$ (N-nitroso-N-methylurethane) [615-53-2] CAUBWLYZCDDYEF-UHFFFAOYSA-N	3.9×10^{-1} 1.8 1.8 1.6×10^1 3.2×10^1		Mirvish et al. (1976) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Modarresi et al. (2007)	M V V Q Q	14 187 68
dinitrosopiperazine $\text{C}_4\text{H}_8\text{N}_4\text{O}_2$ [140-79-4] WNSYEWGYAFFSSQ-UHFFFAOYSA-N	$> 1.9 \times 10^2$		Mirvish et al. (1976)	M	14
2-amino-3(methylamino)propionic acid $\text{C}_4\text{H}_{10}\text{N}_2\text{O}_2$ (3-(methylamino)-(DL)-alanine) [16676-91-8] UJVHVMNGOZXSOZ-UHFFFAOYSA-N	2.9×10^7		HSDB (2015)	Q	100
N-nitrosodiethanolamine $\text{C}_4\text{H}_{10}\text{N}_2\text{O}_3$ [1116-54-7] YFCDLVPYFMHRQZ-UHFFFAOYSA-N	2.0×10^6		HSDB (2015)	Q	449
N-nitrosodiethylamine $\text{C}_4\text{H}_{10}\text{N}_2\text{O}$ [55-18-5] WBNQDOYYEUMPFS-UHFFFAOYSA-N	1.2×10^{-2} 5.6 1.4 7.1×10^{-1} 7.5 3.9 2.6 2.7	3800 6300	Thompson et al. (2018) Klein (1982) Mirvish et al. (1976) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	M M M Q Q Q Q Q ?	14 185 68 186, 21
diethanolamine $\text{C}_4\text{H}_{11}\text{NO}_2$ [111-42-2] ZBCBWPMODOFKDW-UHFFFAOYSA-N	3.3×10^3 2.6×10^5 2.5×10^5 1.0×10^4	1300	Nguyen (2013) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	M V V Q	11 187
diglycolamine $\text{C}_4\text{H}_{11}\text{NO}_2$ [929-06-6] GIAFURWZWWWBQT-UHFFFAOYSA-N	6.1×10^3	3700	Nguyen (2013)	M	33, 11
3-methoxy-1-propanamine $\text{C}_4\text{H}_{11}\text{NO}$ (3-methoxypropylamine) [5332-73-0] FAXDZWIWUSWJH-UHFFFAOYSA-N	2.1×10^1 4.8×10^1 4.9×10^1 1.4×10^1	8700	Du et al. (2017) Cabani et al. (1978) Du et al. (2017) Du et al. (2017)	M T Q Q	480 551

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-amino-2-methyl-1-propanol $\text{C}_4\text{H}_{11}\text{NO}$ [124-68-5] CBTVGIZVANVGBH-UHFFFAOYSA-N	2.1×10^2 7.0×10^2 1.8×10^2 9.3×10^1	8500	Du et al. (2017) Nguyen (2013) Du et al. (2017) Du et al. (2017)	M M Q Q	480 11 551
N,N-dimethylaminoethanol $\text{C}_4\text{H}_{11}\text{NO}$ (dimethylethanolamine) [108-01-0] UEEJHVSXFDXPFK-UHFFFAOYSA-N	9.3×10^1 2.6×10^1 4.4×10^2	7900	Nguyen (2013) Duchowicz et al. (2020) Duchowicz et al. (2020)	M V Q	11 187
2-[(2-aminoethyl)amino]ethanol $\text{C}_4\text{H}_{12}\text{N}_2\text{O}$ [111-41-1] LHIJANUOQMGNT-UHFFFAOYSA-N	9.0×10^7		HSDB (2015)	Q	100
tetramethylammonium hydroxide $\text{C}_4\text{H}_{13}\text{NO}$ [75-59-2] WGTYBPLFGIVFAS-UHFFFAOYSA-M	2.3×10^{10}		HSDB (2015)	Q	100
methacrylamide $\text{C}_4\text{H}_7\text{NO}$ [79-39-0] FQPSGWSUVKBHSU-UHFFFAOYSA-N	8.8×10^3		Ebert et al. (2023)	?	317
acetone cyanohydrin $\text{C}_4\text{H}_7\text{NO}$ [75-86-5] MWFMBGPXGAXYFAR-UHFFFAOYSA-N	8.0×10^1		HSDB (2015)	V	
carbamic acid, 1-methylethyl ester $\text{C}_4\text{H}_9\text{NO}_2$ [1746-77-6] OVPLZYJGTGDFNB-UHFFFAOYSA-N	1.4×10^2		HSDB (2015)	Q	100
propylcarbamate $\text{C}_4\text{H}_9\text{NO}_2$ [627-12-3] YNTOKMNHRSFGFU-UHFFFAOYSA-N	1.0×10^2		HSDB (2015)	V	
butanamide $\text{C}_4\text{H}_9\text{NO}$ [541-35-5] DNSISZSEWVHGLH-UHFFFAOYSA-N	3.6×10^3		Ebert et al. (2023)	?	317

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N,N-dimethylacetamide $\text{C}_4\text{H}_9\text{NO}$ [127-19-5] FXHOOIRPVKKKFG-UHFFFAOYSA-N	6.1×10^1 6.1×10^1 4.4×10^2 4.4×10^2	7800 7800 8000 8600	Burkholder et al. (2019) Burkholder et al. (2015) Brockbank (2013) Bernauer and Dohnal (2008)	L L L M	1
	1.7×10^2 1.3×10^1 3.6×10^2		Hilal et al. (2008) Modarresi et al. (2007) Taft et al. (1985)	Q Q Q	68
2-butanone, oxime $\text{C}_4\text{H}_9\text{NO}$ [96-29-7] WHIVNJATOVLWBW-UHFFFAOYSA-N	8.1		HSDB (2015)	V	
nitrosoethylurethane $\text{C}_5\text{H}_{10}\text{N}_2\text{O}_3$ (N-ethyl-N-nitrosourethane) [614-95-9] RAUQLNDTFONODT-UHFFFAOYSA-N	5.2×10^2		HSDB (2015)	Q	100
N,N-diethylmethanamide $\text{C}_5\text{H}_{11}\text{NO}$ (N,N-diethylformamide) [617-84-5] SUAKHGWARZSWIH-UHFFFAOYSA-N	1.3×10^2		Yaffe et al. (2003)	Q	249, 250
N-nitroso-N-butylurea $\text{C}_5\text{H}_{11}\text{N}_3\text{O}_2$ [869-01-2] LSWOCDLIYSKTRX-UHFFFAOYSA-N	4.3×10^4		HSDB (2015)	Q	100
N-methyldiethanolamine $\text{C}_5\text{H}_{13}\text{NO}_2$ [105-59-9] CRVGTESFCCXCTH-UHFFFAOYSA-N	3.3×10^3 3.9×10^3 4.0×10^5 3.1×10^5 3.2×10^5 1.3×10^5 2.4×10^3 1.9×10^3	3800 12000	Du et al. (2017) Nguyen (2013) Kim et al. (2008) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Du et al. (2017) Du et al. (2017)	M M M V V Q Q Q	480 11 552 187 551
methylbutylnitrosamine $\text{C}_5\text{H}_{12}\text{N}_2\text{O}$ [7068-83-9] PKTSCJXWLVREKX-UHFFFAOYSA-N	1.7		Mirvish et al. (1976)	M	14
2-(isopropylamino)ethanol $\text{C}_5\text{H}_{13}\text{NO}$ [109-56-8] RILLZYSZSDGYGV-UHFFFAOYSA-N	1.1×10^2 1.4×10^1 5.4×10^1		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	480 551

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-(dimethylamino)-1,2-propanediol $\text{C}_5\text{H}_{13}\text{NO}_2$ [623-57-4] QCMHUGYTOGXZIW-UHFFFAOYSA-N	6.7×10^2		Du et al. (2017)	M	480
	6.1×10^3		Du et al. (2017)	Q	551
	6.4×10^2		Du et al. (2017)	Q	
2-amino-2-ethyl-1,3-propanediol $\text{C}_5\text{H}_{13}\text{NO}_2$ [115-70-8] IOAOAKDONABGPZ-UHFFFAOYSA-N	7.1×10^2		Du et al. (2017)	M	480
	4.0×10^4		Du et al. (2017)	Q	551
	2.7×10^3		Du et al. (2017)	Q	
daminozide $\text{C}_6\text{H}_{11}\text{NO}_3$ [1596-84-5] NOQGZXFHARMLW-UHFFFAOYSA-N	2.3×10^4		Duchowicz et al. (2020)	V	187
	4.1×10^3		Duchowicz et al. (2020)	Q	
	7.0×10^1		Maniere et al. (2011)	?	166
methylpentyl nitrosamine $\text{C}_6\text{H}_{14}\text{N}_2\text{O}$ [13256-07-0] KSFCDINBDBFFSI-UHFFFAOYSA-N	2.0		Mirvish et al. (1976)	M	14
ethylbutyl nitrosamine $\text{C}_6\text{H}_{14}\text{N}_2\text{O}$ [4549-44-4] ZGMCNGHHUQZNIH-UHFFFAOYSA-N	9.9×10^{-1}		Mirvish et al. (1976)	M	14
nitrosohexamethyleneimine $\text{C}_6\text{H}_{12}\text{N}_2\text{O}$ [932-83-2] UZMVSVHUTOAPT-D-UHFFFAOYSA-N	4.3×10^1		Mirvish et al. (1976)	M	14
2,6-dimethylnitrosomorpholine $\text{C}_6\text{H}_{12}\text{N}_2\text{O}_2$ [1456-28-6] DPYMAXOKJUBANR-UHFFFAOYSA-N	3.5×10^1		Mirvish et al. (1976)	M	14
2,6-dimethyldinitrosopiperazine $\text{C}_6\text{H}_{12}\text{N}_4\text{O}_2$ [55380-34-2] JIWAGFGPBKDFQN-UHFFFAOYSA-N	$> 1.9 \times 10^2$		Mirvish et al. (1976)	M	14
N-(1-methylethyl)-2-propenamide $\text{C}_6\text{H}_{11}\text{NO}$ (N-isopropylacrylamide) [2210-25-5] QNILTEGFHQSKFF-UHFFFAOYSA-N	4.3×10^2		HSDB (2015)	Q	100
hexanamide $\text{C}_6\text{H}_{13}\text{NO}$ [628-02-4] ALBYIUDWACNRRB-UHFFFAOYSA-N	1.8×10^3		Ebert et al. (2023)	?	317

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N-butylacetamide $\text{C}_6\text{H}_{13}\text{NO}$ [1119-49-9] GYLDXXLJMRTVSS-UHFFFAOYSA-N	2.7×10^3 5.2×10^2		Gibbs et al. (1991) Hilal et al. (2008)	M Q	
N-(1-methylethyl)-N-nitroso-2-propanamine $\text{C}_6\text{H}_{14}\text{N}_2\text{O}$ (nitrosodiisopropylamine) [601-77-4] AUIKJTGFPFLMFP-UHFFFAOYSA-N	1.2 3.4×10^{-1} 1.1		Mirvish et al. (1976) Hilal et al. (2008) Modarresi et al. (2007)	M Q Q	14 68
N-nitrosodipropylamine $\text{C}_6\text{H}_{14}\text{N}_2\text{O}$ (N,N-dipropyl nitrosamine) [621-64-7] YLKFDHTUAUWZPQ-UHFFFAOYSA-N	1.8 2.8 2.8 1.6 5.8 1.3		Mirvish et al. (1976) Mackay et al. (2006d) Mackay et al. (1995) Mackay et al. (1995) Hilal et al. (2008) Modarresi et al. (2007)	M V V C Q Q	14 68
N-(2-hydroxyethyl)piperazine $\text{C}_6\text{H}_{14}\text{N}_2\text{O}$ [103-76-4] WFCSWCVEJLETKA-UHFFFAOYSA-N	2.9×10^3	6400	Nguyen (2013)	M	33, 11
N-ethyldiethanolamine $\text{C}_6\text{H}_{15}\text{NO}_2$ [139-87-7] AKNUHUCEWALCOI-UHFFFAOYSA-N	9.0×10^4		HSDB (2015)	Q	100
triethanolamine $\text{C}_6\text{H}_{15}\text{NO}_3$ [102-71-6] GSEJCLTVZPLZKY-UHFFFAOYSA-N	1.4×10^7 1.4×10^7 3.3×10^7		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
<i>o</i> -aminophenol $\text{C}_6\text{H}_7\text{NO}$ (2-aminophenol) [95-55-6] CDAWCLOXVUBKRW-UHFFFAOYSA-N	4.9×10^4		HSDB (2015)	Q	100
4-aminophenol $\text{C}_6\text{H}_7\text{NO}$ [123-30-8] PLIKAWJENQZMHA-UHFFFAOYSA-N	2.7×10^4 2.7×10^4 1.8×10^4		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
3-aminophenol $\text{C}_6\text{H}_7\text{NO}$ [591-27-5] CWLKGDVCFYWJK-UHFFFAOYSA-N	3.7×10^4		HSDB (2015)	Q	100

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-(2-hydroxyethyl)morpholine $\text{C}_6\text{H}_{13}\text{NO}_2$ [622-40-2] KKFDCBRMNSAAW-UHFFFAOYSA-N	1.4×10^3 6.0×10^1 1.7×10^3		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	480 551
4-hydroxy-N-methylpiperidine $\text{C}_6\text{H}_{13}\text{NO}$ [106-52-5] BAUWRHPMUVYFOD-UHFFFAOYSA-N	1.3×10^3 4.6×10^3 1.1×10^3		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	480 551
dimethylaminoethoxyethanol $\text{C}_6\text{H}_{15}\text{NO}_2$ [1704-62-7] YSAANLSYLSUVHB-UHFFFAOYSA-N	8.3×10^2 4.3×10^3 5.6×10^2 6.2×10^2	8500	Du et al. (2017) Nguyen (2013) Du et al. (2017) Du et al. (2017)	M M Q Q	480 11 551
2-(diethylamino)ethanol $\text{C}_6\text{H}_{15}\text{NO}$ [100-37-8] BFSVOASYOCHEOV-UHFFFAOYSA-N	5.9 3.2 1.8×10^1		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	480 551
bis(2-methoxyethyl)amine $\text{C}_6\text{H}_{15}\text{NO}_2$ [111-95-5] IBZKBSXREAQDQTO-UHFFFAOYSA-N	1.1×10^2 2.3×10^2 1.5×10^2		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	480 551
cyclohexanone oxime $\text{C}_6\text{H}_{11}\text{NO}$ [100-64-1] VEZUQRBDRNJBXY-UHFFFAOYSA-N	4.3×10^1 1.4×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
<i>p</i> -diaminoanisole $\text{C}_7\text{H}_{10}\text{N}_2\text{O}$ (2-methoxy-1,4-benzenediamine) [5307-02-8] HGUYBLVGLMAUFF-UHFFFAOYSA-N	2.5×10^5		HSDB (2015)	Q	100
4-methoxy-1,3-benzenediamine $\text{C}_7\text{H}_{10}\text{N}_2\text{O}$ [615-05-4] BAHPQISAXRFLCL-UHFFFAOYSA-N	1.4×10^4		HSDB (2015)	Q	100

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-cyano-N- [(ethylamino)carbonyl]-2- (methoxyimino)acetamide C ₇ H ₁₀ N ₄ O ₃ (cymoxanil) [57966-95-7] XERJKGMBORTKEO-UHFFFAOYSA-N	3.0 × 10 ⁴		Duchowicz et al. (2020)	V	187
	3.0 × 10 ⁴		HSDB (2015)	V	
	6.2 × 10 ²		Barcelo and Hennion (1997)	X	569
	9.9 × 10 ⁸		Duchowicz et al. (2020)	Q	
	3.2 × 10 ¹		Goodarzi et al. (2010)	Q	570, 571
	2.6 × 10 ⁴		Maniere et al. (2011)	?	242, 495, 166
	3.0 × 10 ⁴		Maniere et al. (2011)	?	242, 572, 166
isocyanatocyclohexane C ₇ H ₁₁ NO [3173-53-3] KQWGXHWJMSMDJJ-UHFFFAOYSA-N	5.8 × 10 ⁻³		HSDB (2015)	Q	100
<i>L</i> -theanine C ₇ H ₁₄ N ₂ O ₃ [3081-61-6] DATAGRPVKZEWAH-YFKPBYRVSA-N	1.1 × 10 ¹⁰		HSDB (2015)	Q	449
tetryl C ₇ H ₅ N ₅ O ₈ [479-45-8] AGUIVNYEYSCPNI-UHFFFAOYSA-N	3.7 × 10 ³		HSDB (2015)	Q	100
anthranilic acid C ₇ H ₇ NO ₂ [118-92-3] RWZYAGGXGHYGMB-UHFFFAOYSA-N	2.6 × 10 ⁵		HSDB (2015)	Q	100
3-aminobenzoic acid C ₇ H ₇ NO ₂ [99-05-8] XFDUHJPVQKIXHO-UHFFFAOYSA-N	3.7 × 10 ⁶		Ebert et al. (2023)	?	317
4-aminobenzoic acid C ₇ H ₇ NO ₂ [150-13-0] ALYNCZNDIQEVRV-UHFFFAOYSA-N	6.6 × 10 ⁴		HSDB (2015)	V	
salicylamide C ₇ H ₇ NO ₂ [65-45-2] SKZKKFZAGNVIMN-UHFFFAOYSA-N	2.0 × 10 ⁴ 3.4 × 10 ⁴		Abraham et al. (2019) HSDB (2015)	Q Q	100

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
mesalamine $\text{C}_7\text{H}_7\text{NO}_3$ [89-57-6] KBOPZPXVLCULAV-UHFFFAOYSA-N	2.0×10^6		HSDB (2015)	Q	100
N-phenylformamide $\text{C}_7\text{H}_7\text{NO}$ [103-70-8] DYDNPEsBYVVLBO-UHFFFAOYSA-N	1.2×10^3		HSDB (2015)	Q	100
benzamide $\text{C}_7\text{H}_7\text{NO}$ [55-21-0] KXDAEFpNCMNJSK-UHFFFAOYSA-N	2.2×10^4		Mackay et al. (2006d)	V	560
	4.7×10^4		Mackay et al. (1995)	V	
	4.7×10^4		Abraham et al. (1994a)	R	
	5.2×10^3		Keshavarz et al. (2022)	Q	
	9.0×10^2		Duchowicz et al. (2020)	Q	300
	3.8×10^3		Hilal et al. (2008)	Q	
	2.7×10^4		Modarresi et al. (2007)	Q	68
	8.2×10^3		Nirmalakhanda et al. (1997)	Q	
anthranilamide $\text{C}_7\text{H}_8\text{N}_2\text{O}$ (2-aminobenzamide) [88-68-6] PXBFMLJZNCDSMP-UHFFFAOYSA-N	4.0×10^4		Duchowicz et al. (2020)	?	186, 21
	4.0×10^4		HSDB (2015)	?	421
N-methyl-N-nitrosobenzeneamine $\text{C}_7\text{H}_8\text{N}_2\text{O}$ [614-00-6] MAXCWSIJKVASQC-UHFFFAOYSA-N	2.0		HSDB (2015)	Q	100
2-methoxy-benzenamine $\text{C}_7\text{H}_9\text{NO}$ (2-methoxyaniline) [90-04-0] VMPITZXLsNTON-UHFFFAOYSA-N	1.1×10^1		Duchowicz et al. (2020)	V	187
	1.2×10^1		Abraham et al. (1994a)	R	
	6.7×10^1		Duchowicz et al. (2020)	Q	
	1.1×10^1		HSDB (2015)	Q	100
	2.8×10^1		Hilal et al. (2008)	Q	
	5.6		Modarresi et al. (2007)	Q	68
3-methoxy-benzenamine $\text{C}_7\text{H}_9\text{NO}$ (3-methoxyaniline) [536-90-3] NCBZRJODKRCREW-UHFFFAOYSA-N	1.5×10^1		Nirmalakhanda et al. (1997)	Q	
	9.0×10^1		Abraham et al. (1994a)	R	
	9.0×10^1		HSDB (2015)	Q	100
	1.8×10^2		Hilal et al. (2008)	Q	
	2.8×10^1		Modarresi et al. (2007)	Q	68
NGBZRJODKRCREW-UHFFFAOYSA-N	6.4×10^1		English and Carroll (2001)	Q	231, 232
	1.5×10^1		Nirmalakhanda et al. (1997)	Q	

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methoxy-benzenamine C_7H_9NO (4-methoxyaniline) [104-94-9] BHAAPTBBJKJZER-UHFFFAOYSA-N	1.5×10^2		Altschuh et al. (1999)	M	
	1.2×10^2		Abraham et al. (1994a)	R	
	1.8×10^2		Keshavarz et al. (2022)	Q	
	5.8×10^1		Duchowicz et al. (2020)	Q	
	1.4×10^2		Hilal et al. (2008)	Q	
	2.8×10^1		Modarresi et al. (2007)	Q	68
	9.9×10^1		English and Carroll (2001)	Q	231, 232
	1.5×10^1 1.5×10^2		Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	Q ?	186, 21
4-(methylamino)phenol C_7H_9NO (N-methyl-4-aminophenol) [150-75-4] ZFIQGRISGKSVAG-UHFFFAOYSA-N	2.2×10^4		HSDB (2015)	Q	100
3-(diethylamino)-1,2-propanediol $C_7H_{17}NO_2$ [621-56-7] LTACQVCHVAUOKN-UHFFFAOYSA-N	5.4×10^2		Du et al. (2017)	M	480
	7.0×10^2		Du et al. (2017)	Q	551
	2.6×10^2		Du et al. (2017)	Q	
1-(2-hydroxyethyl)piperidine $C_7H_{15}NO$ (2-piperidinoethanol) [3040-44-6] KZTWONRVIPDPKH-UHFFFAOYSA-N	5.1×10^1		Du et al. (2017)	M	480
	6.1×10^{-1}		Du et al. (2017)	Q	551
	4.9×10^1		Du et al. (2017)	Q	
2-piperidineethanol $C_7H_{15}NO$ [1484-84-0] PTHDBHDZSMGHKF-UHFFFAOYSA-N	3.9×10^2		Du et al. (2017)	M	480
	1.2×10^2		Du et al. (2017)	Q	551
	2.3×10^2		Du et al. (2017)	Q	
emylcamate $C_7H_{15}NO_2$ [78-28-4] SLWGJZPKHAXZQL-UHFFFAOYSA-N	3.0×10^{-1}		Duchowicz et al. (2020)	V	187
	8.7		Duchowicz et al. (2020)	Q	
defenuron $C_8H_{10}N_2O$ [1007-36-9] SQBHGSDVWCPHN-UHFFFAOYSA-N	8.5×10^5		MacBean (2012a)	?	12
N-methyl-N-nitrosobenzenemethanamine $C_8H_{10}N_2O$ [937-40-6] NGXUJKBJBFLCAR-UHFFFAOYSA-N	7.9×10^{-1}		Mirvish et al. (1976)	M	14
	1.2×10^2		Hilal et al. (2008)	Q	
	3.8×10^1		Modarresi et al. (2007)	Q	68

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
norepinephrine $\text{C}_8\text{H}_{11}\text{NO}_3$ [51-41-2] SFLSHLFXELFNJZ-QMMMGPBSA-N	3.1×10^{13}		HSDB (2015)	Q	100
2,4-dimethoxyaniline $\text{C}_8\text{H}_{11}\text{NO}_2$ [2735-04-8] GEQNZVKIDIPGCO-UHFFFAOYSA-N	1.6×10^1		Ebert et al. (2023)	?	319
4-methoxy-2-methylbenzenamine $\text{C}_8\text{H}_{11}\text{NO}$ (<i>m</i> -cresidine) [102-50-1] CDGNLUSBENXDGG-UHFFFAOYSA-N	8.2×10^1		HSDB (2015)	Q	100
<i>p</i> -cresidine $\text{C}_8\text{H}_{11}\text{NO}$ [120-71-8] WXWCDTXEKVRRRO-UHFFFAOYSA-N	8.0×10^1		HSDB (2015)	Q	100
N-nitrosodi-N-butylamine $\text{C}_8\text{H}_{18}\text{N}_2\text{O}$ [924-16-3] YGHZCLPZAZIHH-UHFFFAOYSA-N	7.2×10^{-1} 7.5×10^{-1} 1.1		Mirvish et al. (1976) Hilal et al. (2008) Modarresi et al. (2007)	M Q Q	14 68
(diisopropylamino)-ethanol $\text{C}_8\text{H}_{19}\text{NO}$ [96-80-0] ZYWUVGFIXPNBDL-UHFFFAOYSA-N	2.2 2.3 2.4 1.9×10^2 8.2×10^1		Du et al. (2017) Du et al. (2017) Du et al. (2017) Hilal et al. (2008) Modarresi et al. (2007)	M Q Q Q Q	480 551 68
phthalamide $\text{C}_8\text{H}_8\text{N}_2\text{O}_2$ [88-96-0] NAYYNDKKHOD-UHFFFAOYSA-N	7.0×10^6		HSDB (2015)	Q	100
acetaminophen $\text{C}_8\text{H}_9\text{NO}_2$ [103-90-2] RZVAJINKPMORJF-UHFFFAOYSA-N	1.5×10^7		HSDB (2015)	Q	100
methyl anthranilate $\text{C}_8\text{H}_9\text{NO}_2$ [134-20-3] VAMXMNIEUEQDV-UHFFFAOYSA-N	5.2 5.2 3.6 2.6×10^2		Duchowicz et al. (2020) HSDB (2015) Dupeux et al. (2022) Duchowicz et al. (2020)	V V Q Q	187 260

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4'-aminoacetophenone $\text{C}_8\text{H}_9\text{NO}$ (4-acetylaniline) [99-92-3] GPRYKVSEZCQIHD-UHFFFAOYSA-N	2.2×10^3		HSDB (2015)	Q	100
N-phenylacetamide $\text{C}_8\text{H}_9\text{NO}$ (acetanilide) [103-84-4] FZERHIULMFGESH-UHFFFAOYSA-N	4.7×10^2 1.5×10^3 1.6×10^3		Yaws (2003) Dupeux et al. (2022) HSDB (2015)	X Q Q	259 260 100
tropine $\text{C}_8\text{H}_{15}\text{NO}$ [120-29-6] CYHOMWAPJJPNMW-UHFFFAOYSA-N	1.3×10^3 2.6×10^3 5.6×10^2		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	480 551
bis[2-(N,N-dimethylamino)ethyl] ether $\text{C}_8\text{H}_{20}\text{N}_2\text{O}$ [3033-62-3] GTEXIOINCJRBIO-UHFFFAOYSA-N	7.9×10^1 2.4×10^2 7.9×10^1		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	480 551
methylcarbamic acid, 3-methylphenyl ester $\text{C}_9\text{H}_{11}\text{NO}_2$ (metolcarb) [1129-41-5] VOEYXMAFNDNNED-UHFFFAOYSA-N	1.2×10^4		HSDB (2015)	V	
phenylcarbamic acid, ethyl ester $\text{C}_9\text{H}_{11}\text{NO}_2$ [101-99-5] LBKPGNUOUPQTQKA-UHFFFAOYSA-N	3.4×10^2		HSDB (2015)	Q	100
ethyl anthranilate $\text{C}_9\text{H}_{11}\text{NO}_2$ [87-25-2] TWLLPUMZVVGILS-UHFFFAOYSA-N	6.2×10^2		HSDB (2015)	Q	100
benzocaine $\text{C}_9\text{H}_{11}\text{NO}_2$ [94-09-7] BLFLLBZGZJTVJG-UHFFFAOYSA-N	6.2×10^2		HSDB (2015)	Q	100
1-(4-aminophenyl)-1-propanone $\text{C}_9\text{H}_{11}\text{NO}$ (4-aminopropiophenone) [70-69-9] FSWXOANXOQPCFF-UHFFFAOYSA-N	2.1×10^3		HSDB (2015)	Q	100

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(4-ethoxyphenyl)urea $\text{C}_9\text{H}_{12}\text{N}_2\text{O}_2$ (dulcin) [150-69-6] GGLIEWRLXDLBBF-UHFFFAOYSA-N	6.2×10^5		HSDB (2015)	Q	449
fenuron $\text{C}_9\text{H}_{12}\text{N}_2\text{O}$ [101-42-8] XXOYNJXVWVNOOJ-UHFFFAOYSA-N	4.9×10^3 8.7×10^2 3.7×10^3 3.6×10^1		Duchowicz et al. (2020) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997)	V V V X	187 12 569
	9.6 1.0×10^4 4.4		Duchowicz et al. (2020) HSDB (2015) Goodarzi et al. (2010)	Q Q Q	100 570, 573
epinephrine $\text{C}_9\text{H}_{13}\text{NO}_3$ [51-43-4] UCTWMZQNUQWSLP-UHFFFAOYSA-N	1.4×10^{13}		HSDB (2015)	Q	100
meprobamate $\text{C}_9\text{H}_{18}\text{N}_2\text{O}_4$ [57-53-4] NPPQSCRMBWNHMW-UHFFFAOYSA-N	5.5×10^4		HSDB (2015)	Q	100
propamocarb $\text{C}_9\text{H}_{20}\text{N}_2\text{O}_2$ [24579-73-5] WZZLDXDUQPOXNW-UHFFFAOYSA-N	2.1×10^3 1.6×10^3 1.6×10^3 3.3×10^2		Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	Q Q Q Q	185 68
	6.7×10^3 1.2×10^8		Duchowicz et al. (2020) Maniere et al. (2011)	? ?	186, 21 242, 166
proximpham $\text{C}_{10}\text{H}_{12}\text{N}_2\text{O}_2$ [2828-42-4] LATYTXGNKNTDS-UHFFFAOYSA-N	3.9×10^3		MacBean (2012a)	?	12
dioxacarb $\text{C}_{10}\text{H}_{13}\text{NO}_4$ [6988-21-2] SDKQRNRRDYRQKY-UHFFFAOYSA-N	6.7×10^5 2.2×10^4 6.7×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020) MacBean (2012a)	V Q ?	187
phenol, 3,5-dimethyl-, methylcarbamate $\text{C}_{10}\text{H}_{13}\text{NO}_2$ (3,5-xylol methylcarbamate) [2655-14-3] CVQODEWAPZVVBV-UHFFFAOYSA-N	5.5×10^1 9.1 2.5×10^2 4.3×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015) MacBean (2012a)	V Q Q ?	187 100

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
phenylcarbamic acid, 1-methylethyl ester $\text{C}_{10}\text{H}_{13}\text{NO}_2$ [122-42-9] VXPLXMJHHKHSOA-UHFFFAOYSA-N	5.4×10^1 5.5×10^1 3.2×10^{-2}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
xylylcarb $\text{C}_{10}\text{H}_{13}\text{NO}_2$ [2425-10-7] WCJYTPVNMWIZCG-UHFFFAOYSA-N	9.1×10^1 9.4×10^1 9.1		Watanabe (1993) Duchowicz et al. (2020) Duchowicz et al. (2020)	M V Q	187
phenacetin $\text{C}_{10}\text{H}_{13}\text{NO}_2$ [62-44-2] CPJSUEIXXCENMM-UHFFFAOYSA-N	4.6×10^4 4.7×10^4 2.7		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
ephedrine $\text{C}_{10}\text{H}_{15}\text{NO}$ [299-42-3] KWGRBVOPLSCSI-PSASIEDQSA-N	1.1×10^5		HSDB (2015)	Q	449
<i>m</i> -cumenyl methylcarbamate $\text{C}_{11}\text{H}_{15}\text{NO}_2$ (3-isopropylphenyl methyl carbamate) [64-00-6] GYKXQTKSWLAUIT-UHFFFAOYSA-N	1.6×10^2		HSDB (2015)	Q	100
propoxur $\text{C}_{11}\text{H}_{15}\text{NO}_3$ [114-26-1] ISRUGXGCCGIOQO-UHFFFAOYSA-N	2.9×10^3 5.1×10^5 7.1×10^3 7.7 7.6×10^{-2} 1.4		HSDB (2015) Mackay et al. (2006d) Siebers et al. (1994) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V V X Q	12 569 570
methocarbamol $\text{C}_{11}\text{H}_{15}\text{NO}_5$ [532-03-6] GNXFOGHNGIVQEH-UHFFFAOYSA-N	1.5×10^{10}		HSDB (2015)	Q	100
aminocarb $\text{C}_{11}\text{H}_{16}\text{N}_2\text{O}_2$ [2032-59-9] IMIDCRTMDIQJ-UHFFFAOYSA-N	1.9×10^3 1.8×10^4		Mackay et al. (2006d) HSDB (2015)	V Q	100
monodesmethylisoproturon $\text{C}_{11}\text{H}_{16}\text{N}_2\text{O}$ [34123-57-4] DOULWSSZVEPIN-UHFFFAOYSA-N	2.8×10^5		Otto et al. (1997)	V	

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cycluron $\text{C}_{11}\text{H}_{22}\text{N}_2\text{O}$ [2163-69-1] DQZCVNGCTZLGAQ-UHFFFAOYSA-N	8.2×10^2		HSDB (2015)	Q	100
methylneodecanamide $\text{C}_{11}\text{H}_{23}\text{NO}$ [105726-67-8] GELCOLZWXWHMIB-UHFFFAOYSA-N	4.1×10^1		HSDB (2015)	Q	100
isoprocarb $\text{C}_{11}\text{H}_{15}\text{NO}_2$ [2631-40-5] QBSJMKIUCUGGNG-UHFFFAOYSA-N	7.4×10^2 7.6		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
4-(phenylazo)phenol $\text{C}_{12}\text{H}_{10}\text{N}_2\text{O}$ (4-hydroxyazobenzene) [1689-82-3] BEYOBVMPDRKTNR-UHFFFAOYSA-N	1.5×10^4 1.5×10^4 1.0×10^4		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
1-naphthaleneacetamide $\text{C}_{12}\text{H}_{11}\text{NO}$ [86-86-2] XFNJVKMNNVCYEK-UHFFFAOYSA-N	9.8×10^7		Maniere et al. (2011)	?	12, 166
carbetamide $\text{C}_{12}\text{H}_{16}\text{N}_2\text{O}_3$ [16118-49-3] AMRQXHFZNZFDCH-UHFFFAOYSA-N	1.1 3.7 5.2×10^7		Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011)	X Q ?	569 570 12, 166
N-nitrosodiphenylamine $\text{C}_{12}\text{H}_{10}\text{N}_2\text{O}$ (N,N-Diphenylnitrosamine) [86-30-6] UBUCNCOMADRQHX-UHFFFAOYSA-N	8.7×10^{-3} 8.7×10^{-3} 1.5×10^{-2} 8.2		Mackay et al. (2006d) Mackay et al. (1995) Mackay et al. (1995) HSDB (2015)	V V C Q	100
carbaryl $\text{C}_{12}\text{H}_{11}\text{NO}_2$ [63-25-2] CVXBEEMKQHEXEN-UHFFFAOYSA-N	$>9.9 \times 10^1$ 3.6×10^3 3.0×10^3 2.2×10^4 2.3×10^3 7.7×10^2 7.6×10^1 2.3×10^3 3.5×10^3 1.2×10^2 8.1 1.4×10^3 3.1×10^3		Mabury and Crosby (1996) Watanabe (1993) Duchowicz et al. (2020) Mackay et al. (2006d) Meylan and Howard (1991) Suntio et al. (1988) Barcelo and Hennion (1997) Howard and Meylan (1997) Armbrust (2000) Duchowicz et al. (2020) Goodarzi et al. (2010) Hilal et al. (2008) Meylan and Howard (1991)	M M V V V V X X C Q Q Q Q	187 12 569 448 570, 573

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,4'-oxybisbenzenamine $\text{C}_{12}\text{H}_{12}\text{N}_2\text{O}$ (bis(4-aminophenyl) ether) [101-80-4] HLBLWEWZXPISGM-UHFFFAOYSA-N	6.6×10^5		HSDB (2015)	Q	100
carbofuran $\text{C}_{12}\text{H}_{15}\text{NO}_3$ [1563-66-2] DUEPRVBVGDRKAG-UHFFFAOYSA-N	2.4×10^1 $> 9.9 \times 10^1$ 2.2×10^4 2.0×10^4		Chao et al. (2017) Mabury and Crosby (1996) HSDB (2015) Mackay et al. (2006d)	M M V V	
	2.0×10^3 1.9×10^1 4.6×10^1		Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V X Q	12 569 570
phenol, 3-methyl-5-(1-methylethyl)-, methylcarbamate $\text{C}_{12}\text{H}_{16}\text{NO}_2$ (promecarb) [2631-37-0] DTAPQAJKAFRNJB-UHFFFAOYSA-N	1.1×10^2 1.1×10^2 4.1 3.1×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) MacBean (2012a)	V V Q ?	187
fenobucarb $\text{C}_{12}\text{H}_{17}\text{NO}_2$ [3766-81-2] DIRFUJHNVNOBMY-UHFFFAOYSA-N	1.5×10^2 1.7×10^2 8.2		Watanabe (1993) Duchowicz et al. (2020) Duchowicz et al. (2020)	M V Q	187
diethyltoluamide $\text{C}_{12}\text{H}_{17}\text{NO}$ (DEET) [134-62-3] MMOXZBCLCQITDF-UHFFFAOYSA-N	4.7×10^2		HSDB (2015)	Q	100
N,N-dimethyl-N'-[4-(1-methylethyl)phenyl]-urea $\text{C}_{12}\text{H}_{18}\text{N}_2\text{O}$ (isoprotruron) [34123-59-6] PUIYMUZLKQOUOZ-UHFFFAOYSA-N	8.8×10^4 8.1×10^4 9.5×10^4 1.1×10^5 2.3		Duchowicz et al. (2020) Mackay et al. (2006d) Otto et al. (1997) Siebers et al. (1994) Duchowicz et al. (2020)	V V V V Q	187
dimorpholinodiethyl ether $\text{C}_{12}\text{H}_{24}\text{N}_2\text{O}_3$ [6425-39-4] ZMSQJSMSLXVTKN-UHFFFAOYSA-N	1.8×10^3	2600	Nguyen (2013)	M	11
carisoprodol $\text{C}_{12}\text{H}_{24}\text{N}_2\text{O}_4$ [78-44-4] OFZCIYFFPZCNJE-UHFFFAOYSA-N	1.4×10^4		HSDB (2015)	Q	100

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-hydroxy-4'-nitroazobenzene $\text{C}_{12}\text{H}_9\text{N}_3\text{O}_3$ [1435-60-5] NRJPIVOTANUIINF-YPKPFQOOSA-N	4.0×10^5 1.4×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
2,4-dinitro-N-phenyl-benzenamine $\text{C}_{12}\text{H}_9\text{N}_3\text{O}_4$ [961-68-2] RHTVQEPJVKUMPI-UHFFFAOYSA-N	1.3×10^4 6.6×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
N-(2,4-dinitrophenyl)-N-(4-hydroxyphenyl)amine $\text{C}_{12}\text{H}_9\text{N}_3\text{O}_5$ [119-15-3] BCPQALWAROJVLE-UHFFFAOYSA-N	6.8×10^6 1.4×10^9		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
disperse orange 3 $\text{C}_{12}\text{H}_{10}\text{N}_4\text{O}_2$ [730-40-5] UNBOSJFEZZJZLR-UHFFFAOYSA-N	3.5×10^4 1.9×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
diethylpropion $\text{C}_{13}\text{H}_{19}\text{NO}$ [90-84-6] XXEPPPIWZFCOJ-UHFFFAOYSA-N	4.3×10^1		HSDB (2015)	Q	100
salbutamol $\text{C}_{13}\text{H}_{21}\text{NO}_3$ (albuterol) [18559-94-9] NDAUXUAQIAJITI-UHFFFAOYSA-N	1.5×10^{10}		HSDB (2015)	Q	100
disperse blue 1 $\text{C}_{14}\text{H}_{12}\text{N}_4\text{O}_2$ [2475-45-8] JSFUMBWFPQSADC-UHFFFAOYSA-N	4.7×10^1		HSDB (2015)	V	
3,3'-dimethoxybenzidine $\text{C}_{14}\text{H}_{16}\text{N}_2\text{O}_2$ [119-90-4] JRBJSXQPQWSCCF-UHFFFAOYSA-N	2.1×10^5		HSDB (2015)	Q	100
aspartame $\text{C}_{14}\text{H}_{18}\text{N}_2\text{O}_5$ [22839-47-0] IAOZJIPTCAWIRG-QWRGUYRKSAN	3.9×10^{12}		HSDB (2015)	Q	100

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dinobuton $\text{C}_{14}\text{H}_{18}\text{N}_2\text{O}_7$ (dessin) [973-21-7] HDWLUGYOLUHEMN-UHFFFAOYSA-N	6.2×10^2		HSDB (2015)	Q	100
N-(2-methylcyclohexyl)-N'-phenylurea $\text{C}_{14}\text{H}_{20}\text{N}_2\text{O}$ (siduron) [1982-49-6] JXVIIQLNUPXOII-UHFFFAOYSA-N	1.5×10^5		HSDB (2015)	V	
butralin $\text{C}_{14}\text{H}_{21}\text{N}_3\text{O}_4$ [33629-47-9] SPNQRCTZKIBOAX-UHFFFAOYSA-N	2.0 2.0		HSDB (2015) Mackay et al. (2006d)	V V	
lauramine oxide $\text{C}_{14}\text{H}_{31}\text{NO}$ [1643-20-5] SYELZBGXAIXKHU-UHFFFAOYSA-N	1.5×10^5		HSDB (2015)	Q	100
2-aminoanthraquinone $\text{C}_{14}\text{H}_9\text{NO}_2$ [117-79-3] XOGPDSATLSAZEK-UHFFFAOYSA-N	1.1×10^5 1.1×10^5 3.1×10^5		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
1-amino-9,10-anthracenedione $\text{C}_{14}\text{H}_9\text{NO}_2$ [82-45-1] KHUFHLFHOQVFGB-UHFFFAOYSA-N	2.0×10^3 9.8×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
1-amino-4-hydroxy-9,10-anthracenedione $\text{C}_{14}\text{H}_9\text{NO}_3$ [116-85-8] AQXYVFBSSOBBQV-UHFFFAOYSA-N	3.8×10^5 4.2×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
1,4-diamino-9,10-anthracenedione $\text{C}_{14}\text{H}_{10}\text{N}_2\text{O}_2$ [128-95-0] FBMQNRKSAWNXBT-UHFFFAOYSA-N	2.1×10^4 1.3×10^7		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
N,N-dimethyl-4-[(4-nitrophenyl)azo]-benzenamine $\text{C}_{14}\text{H}_{14}\text{N}_4\text{O}_2$ [2491-74-9] LSFRFLWCKLQTO-UHFFFAOYSA-N	1.5×10^2 1.0×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
karbutilate $\text{C}_{14}\text{H}_{21}\text{N}_3\text{O}_3$ [4849-32-5] OWNAXTAAQTBSP-UHFFFAOYSA-N	1.8×10^8		Ebert et al. (2023)	?	319
diethofencarb $\text{C}_{14}\text{H}_{21}\text{NO}_4$ [87130-20-9] LNJNFVJKDJYTEU-UHFFFAOYSA-N	1.2×10^1 1.3×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
1-amino-2-methyl-9,10- anthracenedione $\text{C}_{15}\text{H}_{11}\text{NO}_2$ (1-amino-2-methylanthraquinone) [82-28-0] ZLCUIOWQYBYEBG-UHFFFAOYSA-N	8.2×10^6		HSDB (2015)	Q	100
N-2-fluorenylacetamide $\text{C}_{15}\text{H}_{13}\text{NO}$ (2-acetylaminofluorene) [53-96-3] CZIHNRWJTSTCEX-UHFFFAOYSA-N	5.2×10^4		HSDB (2015)	Q	100
tebutam $\text{C}_{15}\text{H}_{23}\text{NO}$ [35256-85-0] RJKCKKDSSRYCB-UHFFFAOYSA-N	3.8×10^1 1.5×10^{-1} 6.7×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020) MacBean (2012a)	V Q ?	187
isopropalin $\text{C}_{15}\text{H}_{23}\text{N}_3\text{O}_4$ [33820-53-0] NEKOXWSIMFDGMA-UHFFFAOYSA-N	1.9×10^{-1}		Mackay et al. (2006d)	V	
dodine $\text{C}_{15}\text{H}_{33}\text{N}_3\text{O}_2$ (doguadine) [2439-10-3] YIKWKLYQRFRGPM-UHFFFAOYSA-N	1.1×10^5 9.9×10^5 1.1×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	187 242, 166
metalaxyl $\text{C}_{15}\text{H}_{21}\text{NO}_4$ [57837-19-1] ZQEIXNIJLIKNTD-UHFFFAOYSA-N	3.3×10^3 4.0×10^4 8.5×10^4		HSDB (2015) Mackay et al. (2006d) Burkhard and Guth (1981)	V V V	
metalaxyl-m $\text{C}_{15}\text{H}_{21}\text{NO}_4$ [70630-17-0] ZQEIXNIJLIKNTD-GFCCVEGCSA-N	2.8×10^4 2.1×10^2 2.9×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	187 166

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
metoprolol $\text{C}_{15}\text{H}_{25}\text{NO}_3$ [37350-58-6] IUBSYMUCCVWXPE-UHFFFAOYSA-N	4.7×10^5		HSDB (2015)	Q	100
1-(methylamino)anthraquinone $\text{C}_{15}\text{H}_{11}\text{NO}_2$ [82-38-2] SVTDYSXXLJYUTM-UHFFFAOYSA-N	3.3×10^2 7.1×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
4'-[(2-hydroxy-5-methylphenyl)azo]acetanilide $\text{C}_{15}\text{H}_{15}\text{N}_3\text{O}_2$ [2832-40-8] PXOZAFXVEWKXED-UHFFFAOYSA-N	6.6×10^5 3.2×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
desmedipham $\text{C}_{16}\text{H}_{16}\text{N}_2\text{O}_4$ [13684-56-5] WZJZMXBKUWKXTQ-UHFFFAOYSA-N	2.3×10^6		Ebert et al. (2023)	?	367
phenmedipham $\text{C}_{16}\text{H}_{16}\text{N}_2\text{O}_4$ (betanal) [13684-63-4] IDOWTHOLJBTAFI-UHFFFAOYSA-N	1.2×10^7 1.2×10^7 1.2×10^5 4.5 5.3×10^2 2.0×10^7		Duchowicz et al. (2020) HSDB (2015) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010) Maniere et al. (2011)	V V X Q Q ?	187 569 570, 571 12, 166
fenam $\text{C}_{16}\text{H}_{17}\text{NO}$ [957-51-7] QAHFOPILNICLA-UHFFFAOYSA-N	2.7×10^5 4.1×10^5 2.7×10^5 4.9×10^1		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	187
difenoxuron $\text{C}_{16}\text{H}_{18}\text{N}_2\text{O}_3$ [14214-32-5] AMVYOYGIJXTQB-UHFFFAOYSA-N	5.6×10^7		MacBean (2012a)	?	
butacarb $\text{C}_{16}\text{H}_{25}\text{NO}_2$ [2655-19-8] SLZWBCGZQRRUNG-UHFFFAOYSA-N	2.2×10^2		HSDB (2015)	V	
oseltamivir $\text{C}_{16}\text{H}_{28}\text{N}_2\text{O}_4$ [196618-13-0] VSZGPKBBMSAYNT-RRFJBIMHSA-N	3.4×10^{10}		HSDB (2015)	Q	100

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N,N-bis(2-hydroxyethyl)dodecanamide $\text{C}_{16}\text{H}_{33}\text{NO}_3$ [120-40-1] AOMUHOFVNGZAN-UHFFFAOYSA-N	4.6×10^6		HSDB (2015)	Q	100
1,4-bis(methylamino)-9,10-anthracenedione $\text{C}_{16}\text{H}_{14}\text{N}_2\text{O}_2$ [2475-44-7] QOSTVEDABRQTSU-UHFFFAOYSA-N	5.2×10^4 7.5×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
metominostrobin $\text{C}_{16}\text{H}_{16}\text{N}_2\text{O}_3$ [133408-50-1] HIIRDDUVRXCDBN-SDXDJHTJSA-N	2.5×10^4 8.6×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
1-[(2-methoxyphenyl)azo]-2-naphthol $\text{C}_{17}\text{H}_{14}\text{N}_2\text{O}_2$ [1229-55-6] ALLOLPOYFRLCCX-VHEBQXMUSA-N	9.0×10^4		HSDB (2015)	Q	100
furalaxyl $\text{C}_{17}\text{H}_{19}\text{NO}_4$ [57646-30-7] CIEXPHRYOLIQQD-UHFFFAOYSA-N	1.1×10^4		MacBean (2012a)	?	
fenoxycarb $\text{C}_{17}\text{H}_{19}\text{NO}_4$ [72490-01-8] HJUFTIJOISQSKQ-UHFFFAOYSA-N	2.3×10^4 2.5×10^4 2.3×10^7 1.2×10^4 8.4×10^2 8.4×10^2 3.0×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V V V V Q Q ?	187 187 242, 166
bifenazate $\text{C}_{17}\text{H}_{20}\text{N}_2\text{O}_3$ [149877-41-8] VHLKTXFWDRXILV-UHFFFAOYSA-N	1.0×10^3 $>9.9 \times 10^2$		MacBean (2012b) Maniere et al. (2011)	X ?	352 12, 166
napropamide $\text{C}_{17}\text{H}_{21}\text{NO}_2$ [15299-99-7] WXZVAROIGSFCEJ-UHFFFAOYSA-N	1.2×10^4 1.2×10^4		HSDB (2015) Maniere et al. (2011)	V ?	242, 166
napropamide-M $\text{C}_{17}\text{H}_{21}\text{NO}_2$ [41643-35-0] WXZVAROIGSFCEJ-CYBMUJFWSA-N	3.8×10^4		Ebert et al. (2023)	?	319

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
padimate O $\text{C}_{17}\text{H}_{27}\text{NO}_2$ [21245-02-3] WYWZRNAHINYAEF-UHFFFAOYSA-N	2.5		HSDB (2015)	Q	449
nadolol $\text{C}_{17}\text{H}_{27}\text{NO}_4$ [42200-33-9] VWPOSFSPZNDTMJ-UHFFFAOYSA-N	7.0×10^8		HSDB (2015)	Q	100
2,6-di- <i>tert</i> -butyl-4- (dimethylaminomethyl)phenol $\text{C}_{17}\text{H}_{29}\text{NO}$ [88-27-7] VMZVBRIIHDYRGK-UHFFFAOYSA-N	4.8×10^3		Zhang et al. (2010)	Q	288, 289
	2.4×10^2		Zhang et al. (2010)	Q	288, 290
	1.3		Zhang et al. (2010)	Q	288, 291
	4.8×10^1		Zhang et al. (2010)	Q	288, 292
mepronil $\text{C}_{17}\text{H}_{19}\text{NO}_2$ [55814-41-0] BCTQJXQXJVLISIG-UHFFFAOYSA-N	8.4×10^2		Duchowicz et al. (2020)	V	187
	4.7		Duchowicz et al. (2020)	Q	
daimuron $\text{C}_{17}\text{H}_{20}\text{N}_2\text{O}$ [42609-52-9] NNYRZQHKCHEXSD-UHFFFAOYSA-N	9.9×10^3		Duchowicz et al. (2020)	V	187
	2.6×10^1		Duchowicz et al. (2020)	Q	
naptalam $\text{C}_{18}\text{H}_{13}\text{NO}_3$ [132-66-1] JXTHEWSKYLZVJC-UHFFFAOYSA-N	$> 2.3 \times 10^{10}$		MacBean (2012a)	?	
citrus red 2 $\text{C}_{18}\text{H}_{16}\text{N}_2\text{O}_3$ [6358-53-8] ULLJIFAIUSUJBP-ZZEZOPTASA-N	1.9×10^7		HSDB (2015)	Q	100
kresoxim-methyl $\text{C}_{18}\text{H}_{19}\text{NO}_4$ [143390-89-0] ZOTBXTZVPCKPN-UHFFFAOYSA-N	2.7×10^3		HSDB (2015)	V	
	2.8×10^3		Maniere et al. (2011)	?	242, 166
dinocap $\text{C}_{18}\text{H}_{24}\text{N}_2\text{O}_6$ [39300-45-3] RNDNTTUTQAXII-GORDUTHDSA-N	2.1×10^3		HSDB (2015)	V	
orysastrobin $\text{C}_{18}\text{H}_{25}\text{N}_5\text{O}_5$ [248593-16-0] JHIPUJPTQJYEQK-ZLHHXESBSA-N	2.9×10^5		Ebert et al. (2023)	?	319

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
spiroxamine $\text{C}_{18}\text{H}_{35}\text{NO}_2$ [118134-30-8] PUYXTUJWRLUOCW-UHFFFAOYSA-N	4.0×10^2 2.0×10^2		Maniere et al. (2011) Maniere et al. (2011)	? ?	12, 166 12, 166
capsaicin $\text{C}_{18}\text{H}_{27}\text{NO}_3$ [404-86-4] YKPUWZUDDOIDPM-SOFGYWHQSA-N	9.9×10^7		HSDB (2015)	Q	100
mandestrobin $\text{C}_{19}\text{H}_{23}\text{NO}_3$ [173662-97-0] PDPWCKVFIFAQIQ-UHFFFAOYSA-N	1.5×10^6		Maniere et al. (2011)	?	12, 166
dimoxystrobin $\text{C}_{19}\text{H}_{22}\text{N}_2\text{O}_3$ [149961-52-4] WXUZAHCNPWONDH-DYTRJAOYSA-N	2.2×10^7		Maniere et al. (2011)	?	242, 166
(<i>RS</i>)- α -2-naphthoxypropionanilide $\text{C}_{19}\text{H}_{17}\text{NO}_2$ (naproanilide) [52570-16-8] LVKTXOXHRYGDMM-UHFFFAOYSA-N	1.6×10^5 7.5×10^4		Hilal et al. (2008) Modarresi et al. (2007)	Q Q	68
phenylbutazone $\text{C}_{19}\text{H}_{20}\text{N}_2\text{O}_2$ [50-33-9] VYMDGNCVAMGZFE-UHFFFAOYSA-N	1.5×10^3		HSDB (2015)	Q	100
phenisopham $\text{C}_{19}\text{H}_{22}\text{N}_2\text{O}_4$ [57375-63-0] PWEOEHNGYFXZLI-UHFFFAOYSA-N	1.3×10^4		MacBean (2012a)	?	
formoterol $\text{C}_{19}\text{H}_{24}\text{N}_2\text{O}_4$ [73573-87-2] BPZSYCZIITTYBL-ORAYPTAESA-N	1.1×10^{17}		HSDB (2015)	Q	100
benalaxyl-m $\text{C}_{20}\text{H}_{23}\text{NO}_3$ [98243-83-5] CJPIRJIHIZUAQP-MRXNPFEDSA-N	4.3×10^3		Maniere et al. (2011)	?	12, 166
benalaxyl $\text{C}_{20}\text{H}_{23}\text{NO}_3$ [71626-11-4] CJPIRJIHIZUAQP-UHFFFAOYSA-N	8.5×10^1 8.3×10^1 5.1×10^1 1.5×10^2		Duchowicz et al. (2020) Mackay et al. (2006d) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	187 12, 166

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tralkoxydim $\text{C}_{20}\text{H}_{27}\text{NO}_3$ [87820-88-0] SOTLWPHEAQOHHH-UHFFFAOYSA-N	4.1×10^4		HSDB (2015)	V	
neotame $\text{C}_{20}\text{H}_{30}\text{N}_2\text{O}_5$ [165450-17-9] HLIAVLHNDJUHFG-HOTGVXAUSA-N	4.3×10^3		HSDB (2015)	Q	100
colchicine $\text{C}_{22}\text{H}_{25}\text{NO}_6$ [64-86-8] IAKHMKGGTNLK SZ-MRXNPFEDSA-N	5.5×10^{11}		HSDB (2015)	Q	100
tebufenozide $\text{C}_{22}\text{H}_{28}\text{N}_2\text{O}_2$ [112410-23-8] QYPNKSZPJQQLRK-UHFFFAOYSA-N	7.6×10^2 $> 1.5 \times 10^4$		HSDB (2015) Maniere et al. (2011)	V ?	166
methoxyfenozide $\text{C}_{22}\text{H}_{28}\text{N}_2\text{O}_3$ [161050-58-4] QCAWEPFNJXQPAN-UHFFFAOYSA-N	2.6×10^6 $> 6.1 \times 10^3$		HSDB (2015) Maniere et al. (2011)	Q ?	100 12, 166
propoxyphene $\text{C}_{22}\text{H}_{29}\text{NO}_2$ [469-62-5] XLMALTXPSGQGBX-PGRDOPGGSA-N	4.3×10^3		HSDB (2015)	Q	100
(Z)-13-docosenamide $\text{C}_{22}\text{H}_{43}\text{NO}$ (erucamide) [112-84-5] UAUDZVJPLUQNMU-KTKRTIGZSA-N	3.5		HSDB (2015)	Q	547
butroxydim $\text{C}_{24}\text{H}_{33}\text{NO}_4$ [138164-12-2] ZOGDSYNXUXQGHF-XIEYBQDHSA-N	1.7×10^4		MacBean (2012a)	?	
2,2-bis[4-(4-aminophenoxy)phenyl]propane $\text{C}_{27}\text{H}_{26}\text{N}_2\text{O}_2$ [13080-86-9] KMKWGXGSGPYISJ-UHFFFAOYSA-N	2.0×10^8 2.8×10^8 1.0×10^8 3.1×10^{10}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,4-bis[(4-methylphenyl)amino]- 9,10-anthracenedione $\text{C}_{28}\text{H}_{22}\text{N}_2\text{O}_2$ (D&C Green No. 6) [128-80-3] TVRGPOFMYCMNRB-UHFFFAOYSA-N	6.6×10^{10}		HSDB (2015)	Q	100
mifepristone $\text{C}_{29}\text{H}_{35}\text{NO}_2$ [84371-65-3] VKHAHZOOUSRJNA-GCNJZUOMSA-N	2.0×10^{-1}		HSDB (2015)	Q	100
2'-anilino-6'-[ethyl(3- methylbutyl)amino]-3'- methylspiro[isobenzofuran- 1(3H),9'-[9H]xanthene]-3-one $\text{C}_{34}\text{H}_{34}\text{N}_2\text{O}_3$ [70516-41-5] HUSIBQLZEMMTCQ-UHFFFAOYSA-N	8.4×10^7		Zhang et al. (2010)	Q	288, 289
	2.0×10^8		Zhang et al. (2010)	Q	288, 290
	3.5×10^8		Zhang et al. (2010)	Q	288, 291
	8.0×10^8		Zhang et al. (2010)	Q	288, 292
spinetoram $\text{C}_{42}\text{H}_{69}\text{NO}_{10}$ [935545-74-7] GOENIMGKWNZVDA-OAMCMWQSA-N	1.0×10^2		Maniere et al. (2011)	?	242, 572, 166
	1.1×10^4		Maniere et al. (2011)	?	242, 572, 166
	1.6×10^2		Maniere et al. (2011)	?	242, 574, 166
	2.0×10^3		Maniere et al. (2011)	?	242, 166
	2.9×10^2		Maniere et al. (2011)	?	242, 495, 166
	2.9×10^3		Maniere et al. (2011)	?	242, 495, 166
	4.3×10^1		Maniere et al. (2011)	?	242, 574, 166
	2.5×10^2		Maniere et al. (2011)	?	242, 166
spinosad $\text{C}_{42}\text{H}_{71}\text{NO}_9$ [168316-95-8] RQOIAWYOVOXMST-UHFFFAOYSA-N	5.3×10^6		Maniere et al. (2011)	?	242, 166
	4.3×10^4		Maniere et al. (2011)	?	242, 166
emamectin benzoate $\text{C}_{56}\text{H}_{81}\text{NO}_{15}$ [155569-91-8] GCKZANITAMOIAR-UHFFFAOYSA-N	5.8×10^3		HSDB (2015)	V	
	2.5×10^1		Maniere et al. (2011)	?	242, 575, 166
	5.9×10^3		Maniere et al. (2011)	?	242, 495, 166
	7.7×10^4		Maniere et al. (2011)	?	242, 572, 166

Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
glutamic acid $\text{C}_5\text{H}_9\text{NO}_4$ [617-65-2] WHUUTDBJXRKMK-UHFFFAOYSA-N	9.0×10^7 1.8×10^{10} 9.6×10^7 9.9×10^{10}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Saxena and Hildemann (1996)	X Q Q E	238 247 403
asparagine $\text{C}_4\text{H}_8\text{N}_2\text{O}_3$ [70-47-3] DCXYFEDJOCDNAF-UWTATZPHSA-N	9.9×10^{10}		Saxena and Hildemann (1996)	E	403
serine $\text{C}_3\text{H}_7\text{NO}_3$ [302-84-1] MTCFGRXMJLQNBG-UHFFFAOYSA-N	3.9×10^{10}		Saxena and Hildemann (1996)	E	403
glutamine $\text{C}_5\text{H}_{10}\text{N}_2\text{O}_3$ [56-85-9] ZDXPYRJPNDTMRX-GSVOUGTGSA-N	3.3×10^{10} 9.9×10^{10}		HSDB (2015) Saxena and Hildemann (1996)	Q E	449 403
glycine $\text{C}_2\text{H}_5\text{NO}_2$ [56-40-6] DHMQDGOQFOQNFH-UHFFFAOYSA-N	1.2×10^{11} 8.9×10^5	16000	Brimblecombe et al. (1992) Saxena and Hildemann (1996)	V E	 403
arginine $\text{C}_6\text{H}_{14}\text{N}_4\text{O}_2$ [74-79-3] ODKSFYDXXFIFQN-SCSAIBSYSAN	9.9×10^{14}		Saxena and Hildemann (1996)	E	403
alanine $\text{C}_3\text{H}_7\text{NO}_2$ [302-72-7] QNAYBMKLOCPYGJ-UHFFFAOYSA-N	3.5×10^{10} 5.9×10^5	16000	Brimblecombe et al. (1992) Saxena and Hildemann (1996)	V E	 403
leucine $\text{C}_6\text{H}_{13}\text{NO}_2$ [328-39-2] ROHFNLRQFUQHCH-UHFFFAOYSA-N	2.0×10^5		Saxena and Hildemann (1996)	E	403

A4.5 Heterocycles with oxygen and nitrogen (C, H, O, N)

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cyanuric acid $\text{C}_3\text{H}_3\text{N}_3\text{O}_3$ [108-80-5] ZFSLODLOARCGLH-UHFFFAOYSA-N	1.1×10^9		HSDB (2015)	Q	100
	1.1×10^9		Zhang et al. (2010)	Q	288, 289
	3.4×10^5		Zhang et al. (2010)	Q	288, 290
	4.2×10^{10} 4.0×10^7		Zhang et al. (2010) Zhang et al. (2010)	Q Q	288, 291 288, 292
isoxazole $\text{C}_3\text{H}_3\text{NO}$ [288-14-2] CTAPFRYPJLPFDU-UHFFFAOYSA-N	4.0×10^{-1}		Duchowicz et al. (2020)	V	187
	5.4×10^{-1}		Duchowicz et al. (2020)	Q	
	2.4×10^{-1}		Hilal et al. (2008)	Q	
	2.1×10^{-1}		Modarresi et al. (2007)	Q	68
glycidamide $\text{C}_3\text{H}_5\text{NO}_2$ [5694-00-8] FMAZQSYXRGRESX-UHFFFAOYSA-N	7.7×10^4		HSDB (2015)	Q	100
cyclonite $\text{C}_3\text{H}_6\text{N}_6\text{O}_6$ [121-82-4] XTFIVUDBNACUBN-UHFFFAOYSA-N	4.9×10^5		HSDB (2015)	V	
5-methyl-3-(2H)-isoxazolone $\text{C}_4\text{H}_5\text{NO}_2$ (hymexazol) [10004-44-1] KGVPNLBXJKTABS-UHFFFAOYSA-N	4.7×10^3		Duchowicz et al. (2020)	V	187
	4.7×10^2		Duchowicz et al. (2020)	Q	
	5.0×10^3		Hilal et al. (2008)	Q	
	1.6×10^2		Modarresi et al. (2007)	Q	68
	7.1×10^3		Maniere et al. (2011)	?	242, 166
3-amino-1H-pyridazin-6-one $\text{C}_4\text{H}_5\text{N}_3\text{O}$ (maleic hydrazide) [10071-13-3] MMZLICVOTDAZOX-UHFFFAOYSA-N	1.2×10^7		Ebert et al. (2023)	?	319
maleic hydrazide $\text{C}_4\text{H}_4\text{N}_2\text{O}_2$ [123-33-1] BGRDGMNRNKXEXQD-UHFFFAOYSA-N	2.5×10^7		Maniere et al. (2011)	?	12, 166
allantoin $\text{C}_4\text{H}_6\text{N}_4\text{O}_3$ [97-59-6] POJWUDADGALRAB-UHFFFAOYSA-N	2.9×10^{12}		HSDB (2015)	Q	100
2-pyrrolidinone $\text{C}_4\text{H}_7\text{NO}$ [616-45-5] HNJBEVLQSNELDL-UHFFFAOYSA-N	9.3×10^3		Duchowicz et al. (2020)	V	187
	9.3×10^3		HSDB (2015)	V	
	1.2×10^3		Duchowicz et al. (2020)	Q	

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
4-nitrosomorpholine $\text{C}_4\text{H}_8\text{N}_2\text{O}_2$ [59-89-2] ZKXDGKXYMTYWTB-UHFFFAOYSA-N	3.9×10^2 9.0×10^2 1.5×10^2		Mirvish et al. (1976) Hilal et al. (2008) Modarresi et al. (2007)	M Q Q	14 68
N-nitrosopyrrolidine $\text{C}_4\text{H}_8\text{N}_2\text{O}$ [930-55-2] WNYADZVDBIBLJJ-UHFFFAOYSA-N	1.5×10^2 1.9×10^2 3.4×10^1	8500	Klein (1982) Mirvish et al. (1976) Hilal et al. (2008)	M M Q	 14
cyclotetramethylenetetranitramine $\text{C}_4\text{H}_8\text{N}_8\text{O}_8$ [2691-41-0] UZGLIJVICEWHF-UHFFFAOYSA-N	1.1×10^4		HSDB (2015)	Q	100
1-oxa-4-azacyclohexane $\text{C}_4\text{H}_9\text{NO}$ (morpholine) [110-91-8] YNAVUWVOSKDBBP-UHFFFAOYSA-N	1.9×10^2 8.5 8.2 7.3×10^1 2.2×10^1 1.6×10^2 8.1×10^1 9.5×10^1 1.0×10^1 4.2×10^1	7800 8400	Nguyen (2013) Duchowicz et al. (2020) HSDB (2015) Cabani et al. (1975a) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhandan et al. (1997) Yaws (1999)	M V V T Q Q Q Q Q ?	11 187 68 231, 275 21, 12
1-aziridineethanol $\text{C}_4\text{H}_9\text{NO}$ [1072-52-2] VYONOYDEFODAJ-UHFFFAOYSA-N	1.3×10^4		HSDB (2015)	Q	100
2-ethyl-3-methoxypyrazine $\text{C}_4\text{N}_2\text{H}_3(\text{C}_2\text{H}_5)\text{OCH}_3$ [25680-58-4] DPCILIMHENXHQX-UHFFFAOYSA-N	6.7×10^{-1} 2.5×10^1 2.6		Buttery et al. (1971) Hilal et al. (2008) Modarresi et al. (2007)	M Q Q	 68
2-isobutyl-3-methoxypyrazine $\text{C}_4\text{N}_2\text{H}_3(\text{C}_4\text{H}_9)\text{OCH}_3$ [24683-00-9] UXFSPRAGHGMRSQ-UHFFFAOYSA-N	1.7×10^{-1} 2.0×10^{-1} 1.3		Karl et al. (2003) Buttery et al. (1971) Modarresi et al. (2007)	M M Q	 68
N-nitrosopiperidine $\text{C}_5\text{H}_{10}\text{N}_2\text{O}$ [100-75-4] UWSDONTXWQOZFN-UHFFFAOYSA-N	1.1×10^1 2.9×10^1 9.6 3.4		Mirvish et al. (1976) Hilal et al. (2008) Modarresi et al. (2007) Katritzky et al. (1998)	M Q Q Q	14 68
butyl carbamate $\text{C}_5\text{H}_{11}\text{NO}_2$ [592-35-8] SKKTUOZKZKCGTB-UHFFFAOYSA-N	1.1×10^2		HSDB (2015)	Q	100

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
4-methyl-1-oxa-4-azacyclohexane $\text{C}_5\text{H}_{11}\text{NO}$ (N-methylmorpholine; 4-methylmorpholine) [109-02-4] SJRJKPEHAURKC-UHFFFAOYSA-N	5.0 1.2×10^1 1.8×10^1 9.6 3.6 5.7 6.4 1.4×10^1 1.7×10^1		Du et al. (2017) Leng et al. (2015a) Cabani et al. (1975a) Du et al. (2017) Du et al. (2017) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhandan et al. (1997)	M M T Q Q Q Q Q Q	480 551 68 231, 232
allopurinol $\text{C}_5\text{H}_4\text{N}_4\text{O}$ [315-30-0] OFCNXP DARWKPPY-UHFFFAOYSA-N	4.9×10^8		HSDB (2015)	Q	100
4-methoxypyridine $\text{C}_5\text{H}_4\text{NOCH}_3$ [620-08-6] XQABVLBGNWBWIV-UHFFFAOYSA-N		7100	Arnett and Chawla (1979)	?	561
N-methyl-2-pyrrolidone $\text{C}_5\text{H}_9\text{NO}$ [872-50-4] SECXISVLQFMRJM-UHFFFAOYSA-N	3.1×10^3 2.1×10^3 3.1×10^3 2.8×10^3 1.0×10^1 3.7×10^1 3.1×10^3	11000 9100	Brockbank (2013) Bernauer and Dohnal (2009) Kim et al. (2000) Keshavarz et al. (2022) Duchowicz et al. (2020) Modarresi et al. (2007) Duchowicz et al. (2020)	L M M Q Q Q Q ?	1 185 68 186, 21
5,5-dimethyl-2,4-imidazolidinedione $\text{C}_5\text{H}_8\text{N}_2\text{O}_2$ [77-71-4] YIROYDNZEPTFOL-UHFFFAOYSA-N	3.5×10^3 3.6×10^3 1.6×10^5 5.1×10^6 1.6×10^5		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
1-methyluracil $\text{C}_5\text{H}_6\text{N}_2\text{O}_2$ [615-77-0] XBCXJKGHPABGSD-UHFFFAOYSA-N	2.3×10^3 2.1×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
2-azacycloheptanone $\text{C}_6\text{H}_{11}\text{NO}$ (caprolactam) [105-60-2] JBKVHLHDHXXQEQ-UHFFFAOYSA-N	1.8×10^5 2.0×10^3 3.9×10^4		HSDB (2015) Hwang et al. (1992) Abraham et al. (2019)	V V Q	

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N-acetylpyrrolidine $\text{C}_6\text{H}_{11}\text{NO}$ [4030-18-6] LNWWQYYLZVZXKS-UHFFFAOYSA-N	6.2×10^3		Gibbs et al. (1991)	M	
glucosamine $\text{C}_6\text{H}_{13}\text{NO}_5$ [3416-24-8] MSWZFWKMSRAUBD-IVMDWMLBSA-N	1.3×10^{10}		HSDB (2015)	Q	100
N-ethylmorpholine $\text{C}_6\text{H}_{13}\text{NO}$ [100-74-3] HVCNXQOWACZAFN-UHFFFAOYSA-N	4.0×10^2		HSDB (2015)	Q	100
3-formylpyridine $\text{C}_6\text{H}_5\text{NO}$ [500-22-1] QJZUKDFHGGYHMC-UHFFFAOYSA-N	6.5×10^1 6.5×10^1 1.5×10^1 1.0×10^2 2.7×10^1 6.5×10^1 1.2×10^2 3.8×10^1 6.6×10^1		Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	R Q Q Q Q Q Q Q ?	68 249, 250 231, 275 186, 21
4-formylpyridine $\text{C}_6\text{H}_5\text{NO}$ [872-85-5] BGUWFUQJCDRPTL-UHFFFAOYSA-N	5.6×10^1 6.5×10^1 1.5×10^1 1.0×10^2 2.2×10^1 6.5×10^1 6.4×10^1 3.8×10^1 5.6×10^1		Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	R Q Q Q Q Q Q Q ?	300 68 249, 273 231, 232 186, 21
niacinamide $\text{C}_6\text{H}_6\text{N}_2\text{O}$ [98-92-0] DFPAKSUCGFBDDF-UHFFFAOYSA-N	3.4×10^6		HSDB (2015)	Q	100
metronidazole $\text{C}_6\text{H}_9\text{N}_3\text{O}_3$ [443-48-1] VAOCPAMSLUNLGC-UHFFFAOYSA-N	5.8×10^5		HSDB (2015)	Q	100
nicotinic acid $\text{C}_6\text{H}_5\text{NO}_2$ [59-67-6] PVNIIMVLHYAWGP-UHFFFAOYSA-N	2.5×10^4		Abraham et al. (2019)	Q	

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
isonicotinic acid $\text{C}_6\text{H}_5\text{NO}_2$ [55-22-1] TWBYWOBDOCUKOW-UHFFFAOYSA-N	1.6×10^4		Abraham et al. (2019)	Q	
1-methylthymine $\text{C}_6\text{H}_8\text{N}_2\text{O}_2$ [4160-72-9] GKMIDMKPBOUSBQ-UHFFFAOYSA-N	1.7×10^4		Ebert et al. (2023)	?	367
glydant $\text{C}_7\text{H}_{12}\text{N}_2\text{O}_4$ (1,3-dimethylol-5,5-dimethylhydantoin) [6440-58-0] WSDISUOETYPRIL-UHFFFAOYSA-N	1.4×10^6		HSDB (2015)	Q	100
3-quinuclidinol $\text{C}_7\text{H}_{13}\text{NO}$ [1619-34-7] IVLICPVPXWEGCA-UHFFFAOYSA-N	1.7×10^3 1.8×10^4 5.1×10^3 1.2×10^4		Du et al. (2017) Du et al. (2017) Du et al. (2017) HSDB (2015)	M Q Q Q	480 551 100
dinotefuran $\text{C}_7\text{H}_{14}\text{N}_4\text{O}_3$ [165252-70-0] YKBZOVFACRVRJN-UHFFFAOYSA-N	1.5×10^8		HSDB (2015)	V	
1,2,3-benzotriazin-4(1H)-one $\text{C}_7\text{H}_5\text{N}_3\text{O}$ [90-16-4] DMSSTLLDFWKBSX-UHFFFAOYSA-N	3.1×10^4		HSDB (2015)	Q	100
4-acetylpyridine $\text{C}_7\text{H}_7\text{NO}$ [1122-54-9] WMQUKDQWMMOHSU-UHFFFAOYSA-N	1.6×10^2 8.8×10^1 5.0 1.9×10^2 4.1×10^1 8.0×10^1 2.7×10^1 1.6×10^2		Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	R Q Q Q Q Q Q ?	300 68 231, 232 186, 21
3-acetylpyridine $\text{C}_7\text{H}_7\text{NO}$ [350-03-8] WEGYGNROSJDEIW-UHFFFAOYSA-N	4.6×10^2 8.8×10^1 5.0 1.9×10^2 5.2×10^1 2.7×10^1 4.6×10^2		Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	R Q Q Q Q Q ?	300 68 186, 21

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
theophylline $\text{C}_7\text{H}_8\text{N}_4\text{O}_2$ [58-55-9] ZFXFYFBGIUFBOJW-UHFFFAOYSA-N	5.5×10^8		HSDB (2015)	Q	100
theobromine $\text{C}_7\text{H}_8\text{N}_4\text{O}_2$ [83-67-0] YAPQBXQYLJRXSA-UHFFFAOYSA-N	6.2×10^5		HSDB (2015)	Q	100
2-pyridineethanol $\text{C}_7\text{H}_9\text{NO}$ [103-74-2] BXGYBSJAZFGIPX-UHFFFAOYSA-N	6.6×10^4		HSDB (2015)	Q	100
caffeine $\text{C}_8\text{H}_{10}\text{N}_4\text{O}_2$ [58-08-2] RYYVLZVUVIJVGH-UHFFFAOYSA-N	9.0×10^5		HSDB (2015)	V	
acyclovir $\text{C}_8\text{H}_{11}\text{N}_5\text{O}_3$ [59277-89-3] MKUXAQIIEYXACX-UHFFFAOYSA-N	3.1×10^{16}		HSDB (2015)	Q	100
2-methoxy-3-(1-methylethyl)- pyrazine $\text{C}_8\text{H}_{12}\text{N}_2\text{O}$ [25773-40-4] NTOPKICPEQUPPH-UHFFFAOYSA-N	2.1×10^1		Wu et al. (2022a)	Q	415
	1.5×10^1		Hilal et al. (2008)	Q	
simeton $\text{C}_8\text{H}_{15}\text{N}_5\text{O}$ [673-04-1] HKAMKLBXTLTVCN-UHFFFAOYSA-N	1.5×10^4 2.5×10^4		Hilal et al. (2008) Abraham et al. (2007)	Q Q	
N-isobutylmorpholine $\text{C}_8\text{H}_{17}\text{NO}$ [10315-98-7] QKVSMSABRNCNRS-UHFFFAOYSA-N		8100 6000	Kühne et al. (2005) Kühne et al. (2005)	Q ?	
phthalimide $\text{C}_8\text{H}_5\text{NO}_2$ [85-41-6] XKJCHHZQLQNZHY-UHFFFAOYSA-N	9.9×10^2		HSDB (2015)	Q	100
furazolidone $\text{C}_8\text{H}_7\text{N}_3\text{O}_5$ [67-45-8] PLHJDBGFBMTGZ-UHFFFAOYSA-N	3.0×10^5		HSDB (2015)	Q	100

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,6-tetrahydrophthalimide $\text{C}_8\text{H}_9\text{NO}_2$ [85-40-5] CIFFBTOJCKSRJY-UHFFFAOYSA-N	3.3×10^2		HSDB (2015)	Q	100
N-nitrosornicotine $\text{C}_9\text{H}_{11}\text{N}_3\text{O}$ [16543-55-8] XKABJYQDMJTNGQ-UHFFFAOYSA-N	5.8×10^4		HSDB (2015)	Q	449
9-[(1,3-dihydroxy-2-propoxy)methyl]guanine $\text{C}_9\text{H}_{13}\text{N}_5\text{O}_4$ (ganciclovir) [82410-32-0] IRSCQMHWYFCW-UHFFFAOYSA-N	6.6×10^{17}		HSDB (2015)	Q	100
2-sec-butyl-3-methoxypyrazine $\text{C}_9\text{H}_{14}\text{N}_2\text{O}$ [24168-70-5] QMJDJVIJVEQHE-UHFFFAOYSA-N	2.0×10^{-1}		Ebert et al. (2023)	?	367
atraton $\text{C}_9\text{H}_{17}\text{N}_5\text{O}$ [1610-17-9] PXWUJKZGIHQRDHL-UHFFFAOYSA-N	6.4×10^3 1.1×10^4 2.2×10^3		Hilal et al. (2008) Abraham et al. (2007) MacBean (2012a)	Q Q ?	
4-hydroxy-2,2,6,6-tetramethyl-1-piperidinyloxy $\text{C}_9\text{H}_{18}\text{NO}_2$ [2226-96-2] UZFMOKQJFYMBGY-UHFFFAOYSA-N	3.3×10^9		HSDB (2015)	Q	100
8-hydroxyquinoline $\text{C}_9\text{H}_7\text{NO}$ [148-24-3] MCJGNVYPOGVAJF-UHFFFAOYSA-N	1.7×10^1 1.7×10^1 8.9×10^1 5.5×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	187 242, 166
carbendazim $\text{C}_9\text{H}_9\text{N}_3\text{O}_2$ [10605-21-7] TWFZGCMQGLPBSX-UHFFFAOYSA-N	4.7×10^5 6.5×10^5		HSDB (2015) Mackay et al. (2006d)	V V	
metamitron $\text{C}_{10}\text{H}_{10}\text{N}_4\text{O}$ [41394-05-2] VHCNQEUVZYOAEV-UHFFFAOYSA-N	1.0×10^6 2.2×10^6 4.5×10^3 2.8×10^7 1.6×10^7 1.1×10^7		Barcelo and Hennion (1997) Delgado and Alderete (2003) Goodarzi et al. (2010) Delgado and Alderete (2003) Delgado and Alderete (2003) Maniere et al. (2011)	X C Q Q Q ?	569 570 242, 166

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pymetrozin $\text{C}_{10}\text{H}_{11}\text{N}_5\text{O}$ [123312-89-0] QHMTXANCGGJZR-X-UHFFFAOYSA-N	3.3×10^5		HSDB (2015)	V	
3-oxo-N-phenylbutanamide $\text{C}_{10}\text{H}_{11}\text{NO}_2$ (acetoacetanilide) [102-01-2] DYRDKSSFIVWSNM-UHFFFAOYSA-N	2.3×10^6		HSDB (2015)	Q	100
2,3'-didehydro-3'-deoxythymidine (stavudine) $\text{C}_{10}\text{H}_{12}\text{N}_2\text{O}_4$ (stavudine) [3056-17-5] XNKLLVCARDGLGL-JGVFFNPUSA-N	4.3×10^9		HSDB (2015)	Q	100
cotinine $\text{C}_{10}\text{H}_{12}\text{N}_2\text{O}$ [486-56-6] UIKROCXWUNQSPJ-UHFFFAOYSA-N	3.0×10^6		HSDB (2015)	Q	100
4-(N-nitroso-N-methylamino)-1-(3-pyridyl)-1-butanone $\text{C}_{10}\text{H}_{13}\text{N}_3\text{O}_2$ [64091-91-4] FLAQQSHRLBFIEZ-UHFFFAOYSA-N	1.2×10^8		HSDB (2015)	Q	100
9-(4-hydroxy-3-hydroxymethylbut-1-yl)guanine $\text{C}_{10}\text{H}_{15}\text{N}_5\text{O}_3$ (penciclovir) [39809-25-1] JNTOCHDNEULJHD-UHFFFAOYSA-N	1.0×10^{26}		HSDB (2015)	Q	100
anatoxin A $\text{C}_{10}\text{H}_{15}\text{NO}$ [64285-06-9] SGNXVBOIDPPRJJ-UHFFFAOYSA-N	1.5×10^3		HSDB (2015)	Q	100
dimetilan $\text{C}_{10}\text{H}_{16}\text{N}_4\text{O}_3$ [644-64-4] RDBIYWSVMRVKSG-UHFFFAOYSA-N	2.4×10^5		HSDB (2015)	Q	100
isolan $\text{C}_{10}\text{H}_{17}\text{N}_3\text{O}_2$ [119-38-0] RNNBHZYEKNHLKT-UHFFFAOYSA-N	4.9×10^3		HSDB (2015)	Q	100

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
amicarbazone $\text{C}_{10}\text{H}_{19}\text{N}_5\text{O}_2$ [129909-90-6] ORFPWVRKFLOQHK-UHFFFAOYSA-N	1.5×10^7		MacBean (2012b)	X	352
prometone $\text{C}_{10}\text{H}_{19}\text{N}_5\text{O}$ (prometon) [1610-18-0] ISEUFVQQFVBCY-UHFFFAOYSA-N	1.1×10^4 1.1×10^4 1.1×10^4 1.1×10^2 6.9×10^1		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	 12 569 570
secbumeton $\text{C}_{10}\text{H}_{19}\text{N}_5\text{O}$ [26259-45-0] ZJMZZNVGNSWOOM-UHFFFAOYSA-N	2.8×10^3 2.9×10^3 5.0×10^3 7.2×10^3 2.7×10^3		Mackay et al. (2006d) Suntio et al. (1988) Hilal et al. (2008) Abraham et al. (2007) MacBean (2012a)	V V Q Q ?	 12
terbumeton $\text{C}_{10}\text{H}_{19}\text{N}_5\text{O}$ [33693-04-8] BCQMBFHBDZVHKU-UHFFFAOYSA-N	2.1×10^3 2.4×10^3 1.6×10^3		Mackay et al. (2006d) Hilal et al. (2008) Abraham et al. (2007)	V Q Q	
kinetin $\text{C}_{10}\text{H}_9\text{N}_5\text{O}$ [525-79-1] QANMHLXAZMSUEX-UHFFFAOYSA-N	8.2×10^8		HSDB (2015)	Q	100
isouron $\text{C}_{10}\text{H}_{17}\text{N}_3\text{O}_2$ [55861-78-4] JLLJHQLUZAKJFH-UHFFFAOYSA-N	7.3×10^4 3.3×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
fuberidazole $\text{C}_{11}\text{H}_8\text{N}_2\text{O}$ [3878-19-1] UYJUZNLJAWNEZ-UHFFFAOYSA-N	1.9×10^5		Ebert et al. (2023)	?	319
carbadox $\text{C}_{11}\text{H}_{10}\text{N}_4\text{O}_4$ [6804-07-5] OVGGLBAWFMIPPY-WUXMJOGZSA-N	2.2×10^{17}		HSDB (2015)	Q	100
bendiocarb $\text{C}_{11}\text{H}_{13}\text{NO}_4$ [22781-23-3] XEGGRYVFLWGFHI-UHFFFAOYSA-N	2.5×10^2 2.5×10^2 2.7×10^2 2.0×10^2		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	187

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,5-trimethylphenol, methylcarbamate $C_{11}H_{15}NO_2$ (2,3,5-trimethacarb) [2655-15-4] NYOKZHDTNBDOPOB-UHFFFAOYSA-N	4.5×10^1		HSDB (2015)	V	
butalbital $C_{11}H_{16}N_2O_3$ [77-26-9] UZVHFVZFNXBMQJ-UHFFFAOYSA-N	1.6×10^7		HSDB (2015)	Q	100
dexrazoxane $C_{11}H_{16}N_4O_4$ [24584-09-6] BMKDZUISNHGIBY-ZETCQYMHSA-N	4.7×10^{13}		HSDB (2015)	Q	100
pentobarbital $C_{11}H_{18}N_2O_3$ [76-74-4] WEXRUCMBJFQVBZ-UHFFFAOYSA-N	1.2×10^7		HSDB (2015)	Q	100
pirimor $C_{11}H_{18}N_4O_2$ (pirimicarb) [23103-98-2] YFGYUFNIOHWBOB-UHFFFAOYSA-N	1.2×10^4		HSDB (2015)	V	
	3.1×10^3		Mackay et al. (2006d)	V	
	5.0×10^3		Siebers and Mattusch (1996)	V	12
	5.9×10^3		Siebers et al. (1994)	V	
	3.1×10^3		Suntio et al. (1988)	V	12
	3.4×10^4		Maniere et al. (2011)	?	12, 576, 166
	3.0×10^4		Maniere et al. (2011)	?	12, 577, 166
	3.0×10^4		Maniere et al. (2011)	?	12, 578, 166
	2.8×10^4		Maniere et al. (2011)	?	12, 166
ethirimol $C_{11}H_{19}N_3O$ [23947-60-6] BBXXLROWFHWQY-UHFFFAOYSA-N	3.6×10^3		Mackay et al. (2006d)	V	
pyroquilon $C_{11}H_{11}NO$ [57369-32-1] XRJLAOUDSILTFT-UHFFFAOYSA-N	5.1×10^3		Ebert et al. (2023)	?	319
fenfuram $C_{12}H_{11}NO_2$ [24691-80-3] JFSPBVWPKOEZCB-UHFFFAOYSA-N	2.5×10^4		Mackay et al. (2006d)	V	

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
oxabetrinil $\text{C}_{12}\text{H}_{12}\text{N}_2\text{O}_3$ [74782-23-3] WVUIONFJOAYPK-UHFFFAOYSA-N	8.6×10^1		Ebert et al. (2023)	?	319
phenobarbital $\text{C}_{12}\text{H}_{12}\text{N}_2\text{O}_3$ [50-06-6] DDBREPKUVSBGFI-UHFFFAOYSA-N	5.8×10^8		HSDB (2015)	Q	100
triaziquone $\text{C}_{12}\text{H}_{13}\text{N}_3\text{O}_2$ [68-76-8] PXSOHRWMIRDKMP-UHFFFAOYSA-N	1.1×10^{10}		HSDB (2015)	Q	100
triallyl cyanurate $\text{C}_{12}\text{H}_{15}\text{N}_3\text{O}_3$ [101-37-1] BJELTSYBAHKXRW-UHFFFAOYSA-N	2.3×10^1 1.8×10^3 1.9×10^2 4.1×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
entecavir $\text{C}_{12}\text{H}_{15}\text{N}_5\text{O}_3$ [142217-69-4] QDGDZCVAUDNJFG-FXQIFTODSA-N	6.2×10^{15}		HSDB (2015)	Q	100
metaxalone $\text{C}_{12}\text{H}_{15}\text{NO}_3$ [1665-48-1] IMWZZHHPURKASS-UHFFFAOYSA-N	3.7×10^4		HSDB (2015)	Q	100
phendimetrazine $\text{C}_{12}\text{H}_{17}\text{NO}$ [634-03-7] MFOCDFTXLCYLKU-UHFFFAOYSA-N	3.7×10^2		HSDB (2015)	Q	100
hexazinone $\text{C}_{12}\text{H}_{20}\text{N}_4\text{O}_2$ [51235-04-2] CAWXEEYDBZRFPE-UHFFFAOYSA-N	$>9.9 \times 10^1$ 4.4×10^6		Mabury and Crosby (1996) HSDB (2015)	M V	
picaridin $\text{C}_{12}\text{H}_{23}\text{NO}_3$ [119515-38-7] QLHULAHOXSSASE-UHFFFAOYSA-N	3.3×10^5		HSDB (2015)	Q	100
lenacil $\text{C}_{13}\text{H}_{18}\text{N}_2\text{O}_2$ [2164-08-1] ZTMKADLOSYPKAWCA-UHFFFAOYSA-N	1.3×10^5 3.8×10^4 7.7×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	187 242, 166

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pyrinuron $\text{C}_{13}\text{H}_{12}\text{N}_4\text{O}_3$ (pyriminil) [53558-25-1] CLKZWXHKFXZIMA-UHFFFAOYSA-N	5.4×10^{10}		HSDB (2015)	Q	100
melatonin $\text{C}_{13}\text{H}_{16}\text{N}_2\text{O}_2$ [73-31-4] DRLFMBDRBRZALE-UHFFFAOYSA-N	3.8×10^8		HSDB (2015)	Q	449
dibenz[<i>b, f</i>][1,4]oxazepine $\text{C}_{13}\text{H}_9\text{NO}$ [257-07-8] NPUACKRELIJTFM-UHFFFAOYSA-N	2.4×10^{-3}		HSDB (2015)	Q	100
oxadixyl $\text{C}_{14}\text{H}_{18}\text{N}_2\text{O}_4$ [77732-09-3] UWVQIROCRJWDKL-UHFFFAOYSA-N	2.0×10^6		Ebert et al. (2023)	?	319
benomyl $\text{C}_{14}\text{H}_{18}\text{N}_4\text{O}_3$ [17804-35-2] RIOXQFHNBCOKP-UHFFFAOYSA-N	5.2×10^5 3.1×10^5 1.8×10^5 2.0×10^6		Mackay et al. (2006d) Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q Q ?	186, 21
trimethoprim $\text{C}_{14}\text{H}_{18}\text{N}_4\text{O}_3$ [738-70-5] IEDVJHCEMCRBQM-UHFFFAOYSA-N	4.1×10^8		HSDB (2015)	Q	100
ethoxyquin $\text{C}_{14}\text{H}_{19}\text{NO}$ [91-53-2] DECIPOUIJURFOJ-UHFFFAOYSA-N	8.0		Ebert et al. (2023)	?	319
famciclovir $\text{C}_{14}\text{H}_{19}\text{N}_5\text{O}_4$ [104227-87-4] GGXKVVWZWMLEJH-UHFFFAOYSA-N	1.0×10^8		HSDB (2015)	Q	100
furmecyclox $\text{C}_{14}\text{H}_{21}\text{NO}_3$ [60568-05-0] QTDRLOKFLJJHTG-UHFFFAOYSA-N	1.4×10^2		MacBean (2012a)	?	
oxcarbazepine $\text{C}_{15}\text{H}_{12}\text{N}_2\text{O}_2$ [28721-07-5] CTRLABGOLIVAIY-UHFFFAOYSA-N	1.4×10^7		HSDB (2015)	Q	100

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
phenytoin $\text{C}_{15}\text{H}_{12}\text{N}_2\text{O}_2$ [57-41-0] CXOFVDLJLONNDW-UHFFFAOYSA-N	9.7×10^5		HSDB (2015)	Q	100
carbamazepine $\text{C}_{15}\text{H}_{12}\text{N}_2\text{O}$ [298-46-4] FFGPTBGBLSHEPO-UHFFFAOYSA-N	9.0×10^4		HSDB (2015)	Q	100
propylthiouracil $\text{C}_{15}\text{H}_{12}\text{N}_2\text{O}$ [51-52-5] KNAHARQHSZJURB-UHFFFAOYSA-N	9.0×10^3		HSDB (2015)	Q	100
ancymidol $\text{C}_{15}\text{H}_{16}\text{N}_2\text{O}_2$ [12771-68-5] HUTDUHSNJYTCAR-UHFFFAOYSA-N	9.1×10^5 1.5×10^6 4.7×10^6 6.3×10^5		Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Duchowicz et al. (2020)	Q Q Q ?	186, 21
imazethapyr $\text{C}_{15}\text{H}_{19}\text{N}_3\text{O}_3$ [81335-77-5] XVOKUMIPKHGGTN-UHFFFAOYSA-N	9.9×10^{10}		HSDB (2015)	Q	100
imazamox $\text{C}_{15}\text{H}_{19}\text{N}_3\text{O}_4$ [114311-32-9] NUPJIGQFXCQJBK-UHFFFAOYSA-N	1.1×10^{13} 2.0×10^{11}		HSDB (2015) Maniere et al. (2011)	Q ?	100 242, 166
cycloheximide $\text{C}_{15}\text{H}_{23}\text{NO}_4$ [66-81-9] YPHMISFOHDHNIV-FSZOTQKASA-N	2.8×10^9		HSDB (2015)	Q	100
oxymatrine $\text{C}_{15}\text{H}_{24}\text{N}_2\text{O}_2$ [16837-52-8] XVPBINOPNYFXID-LHDUFFHYSA-N	9.9×10^{12}		HSDB (2015)	Q	100
triapenthenol $\text{C}_{15}\text{H}_{25}\text{N}_3\text{O}$ [76608-88-3] CNFMJLVJDNGPHR-UKTHLTGXSA-N	4.0×10^4		Ebert et al. (2023)	?	319
mebendazole $\text{C}_{16}\text{H}_{13}\text{N}_3\text{O}_3$ [31431-39-7] OPXLLQIJSORQAM-UHFFFAOYSA-N	1.8×10^{10}		HSDB (2015)	Q	100

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
imazamethabenz-methyl $\text{C}_{16}\text{H}_{20}\text{N}_2\text{O}_3$ [81405-85-8] FFCCBBNQPIMUJI-UHFFFAOYSA-N	2.6×10^6		HSDB (2015)	V	
nifedipine $\text{C}_{17}\text{H}_{18}\text{N}_2\text{O}_6$ [21829-25-4] HYIMSNHJOBLJNT-UHFFFAOYSA-N	1.4×10^8		HSDB (2015)	Q	100
oxymorphone $\text{C}_{17}\text{H}_{19}\text{NO}_4$ [76-41-5] UQC�KQCJZOAFQTQ-UHFFFAOYSA-N	2.4×10^{13}		HSDB (2015)	Q	100
desomorphine $\text{C}_{17}\text{H}_{21}\text{NO}_2$ [427-00-9] LNNWVNGFPYWNQE-UHFFFAOYSA-N	2.4×10^6		HSDB (2015)	Q	100
cocaine $\text{C}_{17}\text{H}_{21}\text{NO}_4$ [50-36-2] ZPUCINDJBIVPJ-PFSRBDOWSA-N	2.3×10^5 2.3×10^5 7.9×10^4		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
N-(2-ethylhexyl)-5-norbornene- 2,3-dicarboximide $\text{C}_{17}\text{H}_{25}\text{NO}_2$ [113-48-4] WLLGXSLBOPFWQV-UHFFFAOYSA-N	3.5×10^1		HSDB (2015)	Q	100
imazaquin $\text{C}_{17}\text{H}_{17}\text{N}_3\text{O}_3$ [81335-37-7] CABMTIJINOIHOD-UHFFFAOYSA-N	2.7×10^{11}		Maniere et al. (2011)	?	12, 166
(E)-pyriminobac-methyl $\text{C}_{17}\text{H}_{19}\text{N}_3\text{O}_6$ [147411-69-6] USSIUIGPBLPCDF-KEBDBYFISA-N	7.3×10^2		Ebert et al. (2023)	?	319
(Z)-pyriminobac-methyl $\text{C}_{17}\text{H}_{19}\text{N}_3\text{O}_6$ [147411-70-9] USSIUIGPBLPCDF-JMIUGGIZSA-N	1.9×10^4		Ebert et al. (2023)	?	319
imiprothrin $\text{C}_{17}\text{H}_{22}\text{N}_2\text{O}_4$ [72963-72-5] VPRAQYXPZIFIOH-UHFFFAOYSA-N	1.6×10^5 6.9×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
iprovalicarb $\text{C}_{18}\text{H}_{28}\text{N}_2\text{O}_3$ [140923-17-7] NWUWYYSKZYIQAE-LBAUFWKAWSA-N	7.1×10^5		Maniere et al. (2011)	?	12, 166
quinophthalone $\text{C}_{18}\text{H}_{11}\text{NO}_2$ [8003-22-3] IZMJMGDDWKSTTK-UHFFFAOYSA-N	1.6×10^8		HSDB (2015)	Q	100
pefurazoate $\text{C}_{18}\text{H}_{23}\text{N}_3\text{O}_4$ [101903-30-4] WBTYBAGIHOISQ-UHFFFAOYSA-N	1.8×10^3		Ebert et al. (2023)	?	319
tetramethrin $\text{C}_{19}\text{H}_{25}\text{NO}_4$ [7696-12-0] CXBMCYHAMVGWJQ-UHFFFAOYSA-N	5.8		HSDB (2015)	V	
isoxaben $\text{C}_{19}\text{H}_{25}\text{NO}_4$ [82558-50-7] PMHURSZHKKJGBM-UHFFFAOYSA-N	7.8×10^3 7.8×10^3 5.3×10^3 5.1×10^3		Duchowicz et al. (2020) MacBean (2012b) Duchowicz et al. (2020) Maniere et al. (2011)	V X Q ?	187 352 12, 166
alfuzosin $\text{C}_{19}\text{H}_{27}\text{N}_5\text{O}_4$ [81403-80-7] WNMJYKCGWZFFKR-UHFFFAOYSA-N	1.0×10^{14}		HSDB (2015)	Q	100
2,6-dimethyl-4-tridecylmorpholine $\text{C}_{19}\text{H}_{39}\text{NO}$ (tridemorph) [24602-86-6] YTOPFCCWCSOHFV-UHFFFAOYSA-N	5.8×10^{-2}		Ebert et al. (2023)	?	319
pyriproxyfen $\text{C}_{20}\text{H}_{19}\text{NO}_3$ [95737-68-1] NHDHVHZZCFYRSB-UHFFFAOYSA-N	1.6×10^4 $> 1.4 \times 10^1$		HSDB (2015) Maniere et al. (2011)	Q ?	100 73, 166
papaverine $\text{C}_{20}\text{H}_{21}\text{NO}_4$ [58-74-2] XQYZDYMELSDRZ-UHFFFAOYSA-N	1.3×10^7		HSDB (2015)	Q	100
fenazaquin $\text{C}_{20}\text{H}_{22}\text{N}_2\text{O}$ [120928-09-8] DMYHGDXADUDKCQ-UHFFFAOYSA-N	2.1×10^2 9.9×10^1 4.7×10^1 1.8×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	187 242, 166

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
bitertanol $\text{C}_{20}\text{H}_{23}\text{N}_3\text{O}_2$ [55179-31-2] VGPIBGGRCVEHQZ-UHFFFAOYSA-N	1.2×10^4		Mackay et al. (2006d)	V	
bitertanol diastereoisomer a $\text{C}_{20}\text{H}_{23}\text{N}_3\text{O}_2$ [70585-36-3] VGPIBGGRCVEHQZ-OALUTQOASA-N	3.1×10^6		Mackay et al. (2006d)	V	
bitertanol diastereoisomer b $\text{C}_{20}\text{H}_{23}\text{N}_3\text{O}_2$ [70585-38-5] VGPIBGGRCVEHQZ-RBUKOAKNSA-N	1.5×10^6		Mackay et al. (2006d)	V	
naltrexone $\text{C}_{20}\text{H}_{23}\text{NO}_4$ [16590-41-3] DQCKKXVULJGBQN-UHFFFAOYSA-N	2.3×10^{13}		HSDB (2015)	Q	100
<i>D</i> -lysergic acid N,N-diethylamide $\text{C}_{20}\text{H}_{25}\text{N}_3\text{O}$ (LSD) [50-37-3] VAYOSLLFUXYJDT-UHFFFAOYSA-N	6.6×10^{10}		HSDB (2015)	Q	100
ibogaine $\text{C}_{20}\text{H}_{26}\text{N}_2\text{O}$ [83-74-9] HSIBGVUMFOSJPD-UHFFFAOYSA-N	8.2×10^5		HSDB (2015)	Q	100
fenpropimorph $\text{C}_{20}\text{H}_{33}\text{NO}$ [67564-91-4] RYAUSKQZRMAL-ALOPSCKCSA-N	6.2 6.2×10^{-2} 7.9×10^{-2} 3.6×10^{-1}		Mackay et al. (2006d) Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011)	V X Q ?	569 570 242, 166
strychnine $\text{C}_{21}\text{H}_{22}\text{N}_2\text{O}_2$ [57-24-9] QMGVPVNSZLJIA-UHFFFAOYSA-N	1.6×10^8		HSDB (2015)	Q	100
nalmefene $\text{C}_{21}\text{H}_{25}\text{NO}_3$ [55096-26-9] WJBLNOPPDWQMCH-UHFFFAOYSA-N	5.5×10^{10}		HSDB (2015)	Q	100
benztropine $\text{C}_{21}\text{H}_{25}\text{NO}$ [86-13-5] GIJXKZJWITVLHI-UHFFFAOYSA-N	4.5×10^3		HSDB (2015)	Q	100

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
stanozolol $\text{C}_{21}\text{H}_{32}\text{N}_2\text{O}$ [10418-03-8] LKAJKIOFIWVMDJ-KIWJEFSTSA-N	9.0×10^2		HSDB (2015)	Q	100
spirotetramat $\text{C}_{21}\text{H}_{27}\text{NO}_5$ [203313-25-1] CLSVJBIHYWPGQY-GGYDESQDSA-N	1.4×10^7 1.6×10^7 9.2×10^6		Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	? ? ?	242, 495, 166 242, 579, 166 242, 575, 166
diacetylmorphine $\text{C}_{21}\text{H}_{23}\text{NO}_5$ (heroin) [561-27-3] GVGLGOZIDCSQPN-PVHGPHFFSA-N	1.6×10^7 2.7×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
pyrametostrobin $\text{C}_{21}\text{H}_{23}\text{N}_3\text{O}_4$ [915410-70-7] DWTVBEZBWMXDXY-UHFFFAOYSA-N	2.2×10^4		Ebert et al. (2023)	?	319
azoxystrobin $\text{C}_{22}\text{H}_{17}\text{N}_3\text{O}_5$ [131860-33-8] WFDXOXNFRHQEC-GHRIWEEISA-N	1.4×10^8 1.4×10^8		HSDB (2015) Maniere et al. (2011)	V ?	242, 166
famoxadone $\text{C}_{22}\text{H}_{18}\text{N}_2\text{O}_4$ [131807-57-3] PCCSBWNGDMYFCW-UHFFFAOYSA-N	2.1×10^2 2.2×10^2		HSDB (2015) Maniere et al. (2011)	V ?	242, 166
tadalafil $\text{C}_{22}\text{H}_{19}\text{N}_3\text{O}_4$ [171596-29-5] WOXKDUGGOYFFRN-IIBYNOLFSA-N	2.0×10^{12}		HSDB (2015)	Q	100
bisacodyl $\text{C}_{22}\text{H}_{19}\text{NO}_4$ [603-50-9] KHOITXIGCFIULA-UHFFFAOYSA-N	1.4×10^6		HSDB (2015)	Q	100
fentanyl $\text{C}_{22}\text{H}_{28}\text{N}_2\text{O}$ [437-38-7] PJMPHNIQZUBGLI-UHFFFAOYSA-N	1.1×10^6		HSDB (2015)	Q	100

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-(triphenylmethyl)morpholine $\text{C}_{23}\text{H}_{23}\text{NO}$ (trifenmorph) [1420-06-0] ZJMLMBICUVVJDX-UHFFFAOYSA-N	7.6×10^4 3.2		HSDB (2015) MacBean (2012a)	Q ?	100
brucine $\text{C}_{23}\text{H}_{26}\text{N}_2\text{O}_4$ [357-57-3] RRKTZKIUPZVBMF-UHFFFAOYSA-N	4.7×10^{10}		HSDB (2015)	Q	100
mycophenolate mofetil $\text{C}_{23}\text{H}_{31}\text{NO}_7$ [128794-94-5] RTGDFNSFWBGLEC-SYZQJQIISA-N	1.8×10^9		HSDB (2015)	Q	100
pinoxaden $\text{C}_{23}\text{H}_{32}\text{N}_2\text{O}_4$ [243973-20-8] MGOHCFMYLBAPRN-UHFFFAOYSA-N	1.1×10^6 1.1×10^6		HSDB (2015) Maniere et al. (2011)	V ?	166
fenpyroximate $\text{C}_{24}\text{H}_{27}\text{N}_3\text{O}_4$ [134098-61-6] YYJNOYZRYGDPNH-MFKUBSTISA-N	4.6 7.6 5.8×10^4		Duchowicz et al. (2020) MacBean (2012b) Duchowicz et al. (2020)	V X Q	187 352
valsartan $\text{C}_{24}\text{H}_{29}\text{N}_5\text{O}_3$ [137862-53-4] ACWBQPMHZXGDFX-QFIPXVFZSA-N	3.2×10^{12}		HSDB (2015)	Q	100
donepezil $\text{C}_{24}\text{H}_{29}\text{NO}_3$ [120014-06-4] ADEBPBSSDYVVL D-UHFFFAOYSA-N	8.2×10^6		HSDB (2015)	Q	100
chromafenozide $\text{C}_{24}\text{H}_{30}\text{N}_2\text{O}_3$ [143807-66-3] HPNSNYBUADCDFR-UHFFFAOYSA-N	5.1×10^5 6.2×10^5 5.6×10^5		Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	? ? ?	12, 495, 166 12, 579, 166 12, 575, 166
cyenopyrafen $\text{C}_{24}\text{H}_{31}\text{N}_3\text{O}_2$ [560121-52-0] APJLTUBHYCOZJI-VZCXRCSSSA-N	1.6×10^3		Ebert et al. (2023)	?	319

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-[4-[4-(2-benzoxazolyl)styryl]phenyl]-5-methylbenzoxazole $\text{C}_{29}\text{H}_{20}\text{N}_2\text{O}_2$ [5242-49-9] SOTPOQQKAUOHRO-BQYQJAHWSA-N	7.5×10^8		Zhang et al. (2010)	Q	288, 289
2-(2H-benzotriazol-2-yl)-4,6-bis(1-methyl-1-phenylethyl)phenol $\text{C}_{30}\text{H}_{29}\text{N}_3\text{O}$ [70321-86-7] OLFNLXEGXRUI-UHFFFAOYSA-N	7.2×10^9		Zhang et al. (2010)	Q	288, 289
fenicoxamid $\text{C}_{31}\text{H}_{38}\text{N}_2\text{O}_{11}$ [517875-34-2] QGTOTYJSCYHYFK-RBODFLQRSA-N	4.2×10^2		Maniere et al. (2011)	?	166
norbormide $\text{C}_{33}\text{H}_{25}\text{N}_3\text{O}_3$ [991-42-4] DNTHHIVFNQZZRD-UHFFFAOYSA-N	3.7×10^{17}		HSDB (2015)	Q	100
reserpine $\text{C}_{33}\text{H}_{40}\text{N}_2\text{O}_9$ [50-55-5] QEVHRUUCFGRFIF-UHFFFAOYSA-N	1.8×10^{17}		HSDB (2015)	Q	100
telmisartan $\text{C}_{33}\text{H}_{30}\text{N}_4\text{O}_2$ [144701-48-4] RMMXLENWKUUMAY-UHFFFAOYSA-N	1.9×10^{14}		Abraham et al. (2019)	Q	
telaprevir $\text{C}_{36}\text{H}_{53}\text{N}_7\text{O}_6$ [402957-28-2] BBAWEDCPNXPBQM-GDEBMMAJSA-N	1.3×10^{25}		HSDB (2015)	Q	100
lopinavir $\text{C}_{37}\text{H}_{48}\text{N}_4\text{O}_5$ [192725-17-0] KJHKTHWMRKYKJE-WRHCQWCJSA-N	2.3×10^{22}		HSDB (2015)	Q	100
atazanavir $\text{C}_{38}\text{H}_{52}\text{N}_6\text{O}_7$ [198904-31-3] AXRYRYVKAWYZBR-GASGPIRDSA-N	2.7×10^{26}		HSDB (2015)	Q	100

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tylosin $\text{C}_{46}\text{H}_{77}\text{NO}_{17}$ [1401-69-0] WBPYTXDJUJLPQ-SNQVITFCSA-N	1.7×10^{32}		HSDB (2015)	Q	100
nystatin $\text{C}_{47}\text{H}_{75}\text{NO}_{17}$ [1400-61-9] VQOXZBDYSJBXMA-QFHUWGMOSA-N	4.9×10^4		HSDB (2015)	Q	100
1,3,5-tris(3,5-di- <i>tert</i> -butyl-4-hydroxybenzyl)-1,3,5-triazinane-2,4,6-trione $\text{C}_{48}\text{H}_{69}\text{N}_3\text{O}_6$ [27676-62-6] VNQNXQYZMPJLQX-UHFFFAOYSA-N	6.1×10^{20}		Zhang et al. (2010)	Q	288, 289
	1.3×10^{12}		Zhang et al. (2010)	Q	288, 290
	3.4×10^{10}		Zhang et al. (2010)	Q	288, 291
	8.2×10^{14}		Zhang et al. (2010)	Q	288, 292

A4.6 Nitrates (RONO₂)Table A4.6: Nitrates (RONO₂)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
urea nitrate CH ₅ N ₃ O ₄ [124-47-0] AYTGUZPQPXGYFS-UHFFFAOYSA-N	5.8×10^{11}		HSDB (2015)	Q	100
methyl nitrate CH ₃ ONO ₂ [598-58-3] LRMHVPPGGOAJQ-UHFFFAOYSA-N	2.0×10^{-2}	4700	Burkholder et al. (2019)	L	
	2.0×10^{-2}	4700	Burkholder et al. (2015)	L	
	2.0×10^{-2}	4700	Sander et al. (2011)	L	
	2.0×10^{-2}	4700	Sander et al. (2006)	L	
	2.0×10^{-2}	4700	Kames and Schurath (1992)	M	
	2.6×10^{-2}		Schwartz (1986)	C	88
	1.6×10^{-2}		Wang et al. (2017)	Q	81, 239
	1.3×10^{-1}		Wang et al. (2017)	Q	81, 240
	1.0×10^{-3}		Wang et al. (2017)	Q	81, 241
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	6.2×10^{-2}		Hilal et al. (2008)	Q	
		4900	Kühne et al. (2005)	Q	
		4800	Kühne et al. (2005)	?	
ethyl nitrate C ₂ H ₅ ONO ₂ [625-58-1] IDNUEBSJWINEMI-UHFFFAOYSA-N	1.6×10^{-2}	5400	Burkholder et al. (2019)	L	
	1.6×10^{-2}	5400	Burkholder et al. (2015)	L	
	1.6×10^{-2}	5400	Sander et al. (2011)	L	
	1.6×10^{-2}	5400	Sander et al. (2006)	L	
	1.6×10^{-2}	5400	Kames and Schurath (1992)	M	
	1.2×10^{-2}		Wang et al. (2017)	Q	81, 239
	6.5×10^{-2}		Wang et al. (2017)	Q	81, 240
	9.1×10^{-4}		Wang et al. (2017)	Q	81, 241
	3.3×10^{-2}		HSDB (2015)	Q	100
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	3.9×10^{-2}		Hilal et al. (2008)	Q	
1-propyl nitrate C ₃ H ₇ ONO ₂ [627-13-4] JNTOKFNBDGMTIV-UHFFFAOYSA-N	1.1×10^{-2}	5500	Burkholder et al. (2019)	L	
	1.1×10^{-2}	5500	Burkholder et al. (2015)	L	
	1.1×10^{-2}	5500	Sander et al. (2011)	L	
	1.1×10^{-2}	5500	Sander et al. (2006)	L	
	9.0×10^{-3}	5600	Staudinger and Roberts (2001)	L	
	7.4×10^{-3}	4600	Hauff et al. (1998)	M	
	1.1×10^{-2}	5500	Kames and Schurath (1992)	M	
	1.1×10^{-2}		Hauff et al. (1998)	V	
	3.6×10^{-3}		Keshavarz et al. (2022)	Q	
	6.9×10^{-3}		Duchowicz et al. (2020)	Q	185

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.0×10^{-2}		Wang et al. (2017)	Q	81, 239
	3.1×10^{-2}		Wang et al. (2017)	Q	81, 240
	6.2×10^{-4}		Wang et al. (2017)	Q	81, 241
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	2.5×10^{-2}		Hilal et al. (2008)	Q	
	5.3×10^{-2}		Modarresi et al. (2007)	Q	68
		5600	Kühne et al. (2005)	Q	
	7.8×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		4600	Kühne et al. (2005)	?	
2-propyl nitrate C ₃ H ₇ ONO ₂ (isopropyl nitrate) [1712-64-7] GAPFWGOSHOCNBM-UHFFFAOYSA-N	7.8×10^{-3}	5400	Burkholder et al. (2019)	L	
	7.8×10^{-3}	5400	Burkholder et al. (2015)	L	
	7.8×10^{-3}	5400	Sander et al. (2011)	L	
	7.8×10^{-3}	5400	Sander et al. (2006)	L	
	6.6×10^{-3}	5400	Staudinger and Roberts (2001)	L	
	5.5×10^{-3}	4300	Hauff et al. (1998)	M	
	7.8×10^{-3}	5400	Kames and Schurath (1992)	M	
	8.1×10^{-3}		Hauff et al. (1998)	V	
	3.6×10^{-3}		Keshavarz et al. (2022)	Q	
	2.7×10^{-3}		Duchowicz et al. (2020)	Q	185
	1.1×10^{-2}		Wang et al. (2017)	Q	81, 239
	2.4×10^{-2}		Wang et al. (2017)	Q	81, 240
	7.1×10^{-4}		Wang et al. (2017)	Q	81, 241
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	4.9		Raventos-Duran et al. (2010)	Q	246
	1.7×10^{-2}		Hilal et al. (2008)	Q	
	4.9×10^{-2}		Modarresi et al. (2007)	Q	68
		4600	Kühne et al. (2005)	Q	
	6.1×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		4300	Kühne et al. (2005)	?	
1-butyl nitrate C ₄ H ₉ ONO ₂ [928-45-0] QQHZPQUHC AKSOL-UHFFFAOYSA-N	1.0×10^{-2}	5800	Burkholder et al. (2019)	L	
	1.0×10^{-2}	5800	Burkholder et al. (2015)	L	
	1.0×10^{-2}	5800	Sander et al. (2011)	L	
	1.0×10^{-2}	5800	Sander et al. (2006)	L	
	8.8×10^{-3}	6000	Staudinger and Roberts (2001)	L	
	6.3×10^{-3}	5200	Hauff et al. (1998)	M	
	1.0×10^{-2}	5800	Kames and Schurath (1992)	M	
	1.0×10^{-2}	6000	Luke et al. (1989)	M	
	8.5×10^{-3}		Hauff et al. (1998)	V	
	4.8×10^{-3}		Keshavarz et al. (2022)	Q	
	1.0×10^{-2}		Duchowicz et al. (2020)	Q	
	8.9×10^{-3}		Wang et al. (2017)	Q	81, 239
	2.0×10^{-2}		Wang et al. (2017)	Q	81, 240

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.0×10^{-4}		Wang et al. (2017)	Q	81, 241
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	1.7×10^{-2}		Hilal et al. (2008)	Q	
	4.2×10^{-2}		Modarresi et al. (2007)	Q	68
		5900	Kühne et al. (2005)	Q	
	6.4×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		5800	Kühne et al. (2005)	?	
2-butyl nitrate C ₄ H ₉ ONO ₂ [924-52-7] DYONNFFVDNILGI-UHFFFAOYSA-N	6.4×10^{-3}	5400	Burkholder et al. (2019)	L	
	6.4×10^{-3}	5400	Burkholder et al. (2015)	L	
	6.4×10^{-3}	5400	Sander et al. (2011)	L	
	6.4×10^{-3}	5400	Sander et al. (2006)	L	
	6.4×10^{-3}	6100	Staudinger and Roberts (2001)	L	
	4.4×10^{-3}		Hauff et al. (1998)	M	
	6.4×10^{-3}	5400	Kames and Schurath (1992)	M	
	6.3×10^{-3}	5600	Luke et al. (1989)	M	
	6.4×10^{-3}		Hauff et al. (1998)	V	
	8.9×10^{-3}		Wang et al. (2017)	Q	81, 239
	1.5×10^{-2}		Wang et al. (2017)	Q	81, 240
	5.5×10^{-4}		Wang et al. (2017)	Q	81, 241
		4900	Kühne et al. (2005)	Q	
		5400	Kühne et al. (2005)	?	
isobutyl nitrate C ₄ H ₉ ONO ₂ [543-29-3] LNNXFUZKZLXPOF-UHFFFAOYSA-N	7.0×10^{-3}	5200	Kames and Schurath (1992)	M	
	4.8×10^{-3}		Keshavarz et al. (2022)	Q	
	3.9×10^{-3}		Duchowicz et al. (2020)	Q	
	8.9×10^{-3}		Wang et al. (2017)	Q	81, 239
	2.0×10^{-2}		Wang et al. (2017)	Q	81, 240
	4.6×10^{-4}		Wang et al. (2017)	Q	81, 241
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	272, 244
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	1.6×10^{-2}		Hilal et al. (2008)	Q	
	4.4×10^{-2}		Modarresi et al. (2007)	Q	68
	4.4×10^{-3}		Duchowicz et al. (2020)	?	186, 21
1-pentyl nitrate C ₅ H ₁₁ ONO ₂ (amyl nitrate) [1002-16-0] HSNWZBCBUSSQD-UHFFFAOYSA-N	6.6×10^{-3}	6300	Hauff et al. (1998)	M	
	1.2×10^{-2}		Kames and Schurath (1992)	M	12
	4.0×10^{-3}		Hauff et al. (1998)	V	
	6.5×10^{-3}		Keshavarz et al. (2022)	Q	
	1.3×10^{-2}		Duchowicz et al. (2020)	Q	
	6.9×10^{-3}		Wang et al. (2017)	Q	81, 239
	1.4×10^{-2}		Wang et al. (2017)	Q	81, 240
	4.8×10^{-4}		Wang et al. (2017)	Q	81, 241
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	272, 244

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	1.3×10^{-2}		Hilal et al. (2008)	Q	
	3.8×10^{-2}		Modarresi et al. (2007)	Q	68
		6300	Kühne et al. (2005)	Q	
	5.9×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		6300	Kühne et al. (2005)	?	
2-pentyl nitrate C ₅ H ₁₁ ONO ₂ (MCM:PEBNO3) [21981-48-6] RWRBSYOTDDOXKC-UHFFFAOYSA-N	3.7×10^{-3}	6400	Staudinger and Roberts (2001)	L	
	3.7×10^{-3}	5100	Hauff et al. (1998)	M	
	3.6×10^{-3}	6300	Kames and Schurath (1992)	M	
	4.8×10^{-3}		Hauff et al. (1998)	V	
	3.4×10^{-3}	6000	Wieser et al. (2023)	Q	439
	6.5×10^{-3}		Keshavarz et al. (2022)	Q	
	5.0×10^{-3}		Duchowicz et al. (2020)	Q	300
	8.3×10^{-3}		Wang et al. (2017)	Q	81, 239
	1.0×10^{-2}		Wang et al. (2017)	Q	81, 240
	4.8×10^{-4}		Wang et al. (2017)	Q	81, 241
	9.5×10^{-3}		Hilal et al. (2008)	Q	
	3.6×10^{-2}		Modarresi et al. (2007)	Q	68
		5300	Kühne et al. (2005)	Q	
	3.3×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		5100	Kühne et al. (2005)	?	
3-pentyl nitrate C ₅ H ₁₃ ONO ₂ [82944-59-0] WQZKVKVJFBZPJSU-UHFFFAOYSA-N	3.8×10^{-3}	5300	Hauff et al. (1998)	M	
	4.9×10^{-3}		Hauff et al. (1998)	V	
	6.5×10^{-3}		Keshavarz et al. (2022)	Q	
	5.0×10^{-3}		Duchowicz et al. (2020)	Q	300
	8.3×10^{-3}		Wang et al. (2017)	Q	81, 239
	1.0×10^{-2}		Wang et al. (2017)	Q	81, 240
	3.7×10^{-4}		Wang et al. (2017)	Q	81, 241
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	9.2×10^{-3}		Hilal et al. (2008)	Q	
	4.0×10^{-2}		Modarresi et al. (2007)	Q	68
		5300	Kühne et al. (2005)	Q	
	3.6×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		5300	Kühne et al. (2005)	?	
3-methyl-1-butanol nitrate C ₅ H ₁₁ ONO ₂ (isoamyl nitrate) [543-87-3] NTHGIYFSMNNHSC-UHFFFAOYSA-N	5.0×10^{-3}	5900	Hauff et al. (1998)	M	
	6.5×10^{-3}		Keshavarz et al. (2022)	Q	
	5.0×10^{-3}		Duchowicz et al. (2020)	Q	185
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	272, 244
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	1.2×10^{-2}		Hilal et al. (2008)	Q	

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.8×10^{-2}		Modarresi et al. (2007)	Q	68
		6300	Kühne et al. (2005)	Q	
	4.5×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		5900	Kühne et al. (2005)	?	
pentaerythritol tetranitrate C ₅ H ₈ N ₄ O ₁₂ [78-11-5] TZRXHJWUDPFEEY-UHFFFAOYSA-N	7.6×10^3		HSDB (2015)	V	
	1.2		Yaws (2003)	X	238
	8.2×10^5		Zhang et al. (2010)	Q	288, 289
	1.1×10^4		Zhang et al. (2010)	Q	288, 290
	7.9×10^4		Zhang et al. (2010)	Q	288, 291
	3.6×10^3		Zhang et al. (2010)	Q	288, 292
	1.2		Gharagheizi et al. (2010)	Q	247
1-hexyl nitrate C ₆ H ₁₃ ONO ₂ [20633-11-8] AGDYNDJUZRMYPG-UHFFFAOYSA-N	7.6×10^{-3}	6700	Hauff et al. (1998)	M	
	3.6×10^{-3}		Hauff et al. (1998)	V	
	8.8×10^{-3}		Keshavarz et al. (2022)	Q	
	1.5×10^{-2}		Duchowicz et al. (2020)	Q	185
	5.8×10^{-3}		Wang et al. (2017)	Q	81, 239
	1.0×10^{-2}		Wang et al. (2017)	Q	81, 240
	2.4×10^{-4}		Wang et al. (2017)	Q	81, 241
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	272, 244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	9.5×10^{-3}		Hilal et al. (2008)	Q	
	3.1×10^{-2}		Modarresi et al. (2007)	Q	68
		6600	Kühne et al. (2005)	Q	
	6.6×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		6700	Kühne et al. (2005)	?	
2-nitrooxyethanol HOC ₂ H ₄ ONO ₂ [16051-48-2] HTKIMWYSDZQBP-UHFFFAOYSA-N	3.9×10^2		Burkholder et al. (2019)	L	
	3.9×10^2		Burkholder et al. (2015)	L	
	3.9×10^2		Sander et al. (2011)	L	
	3.9×10^2		Sander et al. (2006)	L	
	3.8×10^2	8600	Shepson et al. (1996)	M	
	3.9×10^2		Kames and Schurath (1992)	M	12
	5.7×10^1		Keshavarz et al. (2022)	Q	
	9.0×10^{-1}		Duchowicz et al. (2020)	Q	300
	4.2×10^1		Wang et al. (2017)	Q	81, 239
	5.5×10^2		Wang et al. (2017)	Q	81, 240
	7.6		Wang et al. (2017)	Q	81, 241
	3.9×10^1		Raventos-Duran et al. (2010)	Q	243, 244
	2.0×10^2		Raventos-Duran et al. (2010)	Q	245
	9.9×10^2		Raventos-Duran et al. (2010)	Q	246
	1.7×10^2		Hilal et al. (2008)	Q	
	8.5×10^1		Modarresi et al. (2007)	Q	68
		9200	Kühne et al. (2005)	Q	
	3.8×10^2		Duchowicz et al. (2020)	?	186, 21
		8700	Kühne et al. (2005)	?	

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-nitrooxy-2-propanol C ₃ H ₇ O ₄ N [20266-65-3] OMDFJTSKBNDDRM-UHFFFAOYSA-N	6.6 × 10 ¹	10000	Burkholder et al. (2019)	L	
	6.6 × 10 ¹		Burkholder et al. (2015)	L	
	6.6 × 10 ¹		Sander et al. (2011)	L	
	6.6 × 10 ¹		Sander et al. (2006)	L	
	1.1 × 10 ²		Shepson et al. (1996)	M	
	6.6 × 10 ¹		Kames and Schurath (1992)	M	580, 12
	7.2 × 10 ¹		Kames and Schurath (1992)	M	580, 12
	7.7 × 10 ¹		Keshavarz et al. (2022)	Q	
	9.3 × 10 ⁻¹		Duchowicz et al. (2020)	Q	
	3.9 × 10 ¹		Wang et al. (2017)	Q	81, 239
	3.6 × 10 ²		Wang et al. (2017)	Q	81, 240
	1.7		Wang et al. (2017)	Q	81, 241
	3.1 × 10 ¹		Raventos-Duran et al. (2010)	Q	243, 244
	1.2 × 10 ²		Raventos-Duran et al. (2010)	Q	245
7.8 × 10 ²	Raventos-Duran et al. (2010)	Q	246		
9.5 × 10 ¹	Hilal et al. (2008)	Q			
5.5 × 10 ¹	Modarresi et al. (2007)	Q	68		
1.1 × 10 ²	Duchowicz et al. (2020)	?	186, 21		
2-nitrooxy-1-propanol C ₃ H ₇ O ₄ N [20266-74-4] HGCMMKIIGJXXMW-UHFFFAOYSA-N	7.2 × 10 ¹	8800	Burkholder et al. (2019)	L	
	7.2 × 10 ¹		Burkholder et al. (2015)	L	
	7.2 × 10 ¹		Sander et al. (2011)	L	
	7.2 × 10 ¹		Sander et al. (2006)	L	
	4.4 × 10 ¹		Shepson et al. (1996)	M	
	6.6 × 10 ¹		Kames and Schurath (1992)	M	580, 12
	7.2 × 10 ¹		Kames and Schurath (1992)	M	580, 12
	7.7 × 10 ¹		Keshavarz et al. (2022)	Q	
	9.3 × 10 ⁻¹		Duchowicz et al. (2020)	Q	185
	3.9 × 10 ¹		Wang et al. (2017)	Q	81, 239
	2.7 × 10 ²		Wang et al. (2017)	Q	81, 240
	1.6		Wang et al. (2017)	Q	81, 241
	3.1 × 10 ¹		Raventos-Duran et al. (2010)	Q	243, 244
	9.9 × 10 ¹		Raventos-Duran et al. (2010)	Q	245
7.8 × 10 ²	Raventos-Duran et al. (2010)	Q	246		
8.6 × 10 ¹	Hilal et al. (2008)	Q			
6.9 × 10 ¹	Modarresi et al. (2007)	Q	68		
4.4 × 10 ¹	Duchowicz et al. (2020)	?	186, 21		
1-nitrooxy-2-butanol C ₄ H ₉ O ₄ N [147794-11-4] KNUQGVIXAYDSOX-UHFFFAOYSA-N	8.9 × 10 ¹	9200	Treves et al. (2000)	M	28
	5.7 × 10 ¹		Shepson et al. (1996)	M	
	1.0 × 10 ²		Keshavarz et al. (2022)	Q	
	1.7		Duchowicz et al. (2020)	Q	300
	3.2 × 10 ¹		Wang et al. (2017)	Q	81, 239
	1.9 × 10 ²		Wang et al. (2017)	Q	81, 240
	1.1		Wang et al. (2017)	Q	81, 241
2.5 × 10 ¹	Raventos-Duran et al. (2010)	Q	243, 244		

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.8×10^1		Raventos-Duran et al. (2010)	Q	245
	6.2×10^2		Raventos-Duran et al. (2010)	Q	246
	6.1×10^1		Hilal et al. (2008)	Q	
	5.4×10^1		Modarresi et al. (2007)	Q	68
	5.7×10^1		Duchowicz et al. (2020)	?	186, 21
2-nitrooxy-1-butanol $\text{C}_4\text{H}_9\text{O}_4\text{N}$ [147794-12-5] YXMNEYKMHSBVTU-UHFFFAOYSA-N	8.8×10^1	9600	Treves et al. (2000)	M	28
	5.9×10^1		Shepson et al. (1996)	M	
	1.0×10^2		Keshavarz et al. (2022)	Q	
	1.7		Duchowicz et al. (2020)	Q	300
	3.2×10^1		Wang et al. (2017)	Q	81, 239
	1.6×10^2		Wang et al. (2017)	Q	81, 240
	1.6		Wang et al. (2017)	Q	81, 241
	2.5×10^1		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^1		Raventos-Duran et al. (2010)	Q	245
	6.2×10^2		Raventos-Duran et al. (2010)	Q	246
	6.0×10^1		Hilal et al. (2008)	Q	
	5.4×10^1		Modarresi et al. (2007)	Q	68
	5.9×10^1	Duchowicz et al. (2020)	?	186, 21	
2-nitrooxy-3-butanol $\text{C}_4\text{H}_9\text{O}_4\text{N}$ [147794-10-3] CGFCSKMZZXPWEY-UHFFFAOYSA-N	1.0×10^2	9500	Shepson et al. (1996)	M	
	1.0×10^2		Keshavarz et al. (2022)	Q	
	6.8×10^{-1}		Duchowicz et al. (2020)	Q	300
	3.6×10^1		Wang et al. (2017)	Q	81, 239
	2.0×10^2		Wang et al. (2017)	Q	81, 240
	9.3×10^{-1}		Wang et al. (2017)	Q	81, 241
	2.5×10^1		Raventos-Duran et al. (2010)	Q	272, 244
	7.8×10^1		Raventos-Duran et al. (2010)	Q	245
	6.2×10^2		Raventos-Duran et al. (2010)	Q	246
	5.4×10^1		Hilal et al. (2008)	Q	
	7.4×10^1		Modarresi et al. (2007)	Q	68
	1.0×10^2		Duchowicz et al. (2020)	?	186, 21
3-nitrooxy-1-butanol $\text{C}_4\text{H}_9\text{O}_4\text{N}$ FOHXKGDMSQVTH-UHFFFAOYSA-N	1.4×10^2		Treves et al. (2000)	M	28
	2.6×10^1		Wang et al. (2017)	Q	81, 239
	5.1×10^2		Wang et al. (2017)	Q	81, 240
	5.0		Wang et al. (2017)	Q	81, 241
4-nitrooxy-1-butanol $\text{C}_4\text{H}_9\text{O}_4\text{N}$ [22911-39-3] FBOGSWRRYABFKU-UHFFFAOYSA-N	2.9×10^2		Treves et al. (2000)	M	28
	2.2×10^1		Wang et al. (2017)	Q	81, 239
	7.4×10^2		Wang et al. (2017)	Q	81, 240
	1.6×10^1		Wang et al. (2017)	Q	81, 241
4-nitrooxy-2-butanol $\text{C}_4\text{H}_9\text{O}_4\text{N}$ (3-hydroxy-1-nitrooxy-butane) [141299-18-5] WUKDMTQXKGFHBU-UHFFFAOYSA-N	1.3×10^2		Treves et al. (2000)	M	28
	2.6×10^1		Wang et al. (2017)	Q	81, 239
	6.5×10^2		Wang et al. (2017)	Q	81, 240
	3.4		Wang et al. (2017)	Q	81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-nitrooxy-1-pentanol C ₅ H ₁₁ O ₄ N SVIFKHUNGLAEN-UHFFFAOYSA-N	2.0 × 10 ² 2.0 × 10 ¹ 3.4 × 10 ² 1.3 × 10 ¹		Treves et al. (2000) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	M Q Q Q	28 81, 239 81, 240 81, 241
5-nitrooxy-1-pentanol C ₅ H ₁₁ O ₄ N DVOSRLSVEOCANS-UHFFFAOYSA-N	2.0 × 10 ²		Ebert et al. (2023)	?	581
5-nitrooxy-2-pentanol C ₅ H ₁₁ O ₄ N (MCM:HO ₂ C ₅ NO ₃) RIQPKERROQFFJK-UHFFFAOYSA-N	3.6 × 10 ² 2.1 × 10 ¹ 2.0 × 10 ¹ 4.4 × 10 ² 6.5	9900	Treves et al. (2000) Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	M Q Q Q Q	28 439 81, 239 81, 240 81, 241
1-nitrooxy-2-propanone CH ₃ COCH ₂ ONO ₂ (nitrooxyacetone) [6745-71-7] ISWXYJQANHQYSR-UHFFFAOYSA-N	1.0 × 10 ¹ 1.0 × 10 ¹ 1.0 × 10 ¹ 1.0 × 10 ¹ 1.0 × 10 ¹ 7.6 1.4 × 10 ² 5.0 × 10 ⁻¹ 2.5 × 10 ¹ 3.9 × 10 ¹ 7.8 × 10 ¹ 1.2 × 10 ²		Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Sander et al. (2006) Kames and Schurath (1992) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008)	L L L L M Q Q Q Q Q Q Q	12 81, 239 81, 240 81, 241 243, 244 245 246
ISOP1N6CO C ₅ H ₇ NO ₅ XXORYENTKCFSSM-UHFFFAOYSA-N	2.1 × 10 ⁵	14000	Wieser et al. (2023)	Q	439
C52COCONO2 C ₅ H ₇ NO ₅ QJXLMYNMVOSKND-UHFFFAOYSA-N	6.7 × 10 ¹	11000	Wieser et al. (2023)	Q	439
ISOP1N23O4CO C ₅ H ₇ NO ₅ WBVYLWVTRBDJ-UHFFFAOYSA-N	1.5 × 10 ³	12000	Wieser et al. (2023)	Q	439
ROO6R7ONO2 C ₆ H ₁₁ NO ₅ COKJDYWOSQONMU-UHFFFAOYSA-N	7.5 × 10 ⁴	13000	Wieser et al. (2023)	Q	439
2-heptyl nitrate C ₇ H ₁₅ NO ₃ (C7H15ONO2) HHXLSUKHLTZWKR-UHFFFAOYSA-N	2.3 × 10 ⁻³	6600	Wieser et al. (2023)	Q	439

Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
C7OHONO2 C ₇ H ₁₅ NO ₄ MZJHMUSTUUJGSJ-UHFFFAOYSA-N	1.2×10^1	11000	Wieser et al. (2023)	Q	439
C622CONO2 C ₇ H ₁₁ NO ₅ DJCVHBPUIJHAWIU-UHFFFAOYSA-N	9.9×10^2	14000	Wieser et al. (2023)	Q	439
2-octyl nitrate C ₈ H ₁₇ NO ₃ (C8H17ONO2) QCOKASLKUYXYJH-UHFFFAOYSA-N	6.8	7000	Wieser et al. (2023)	Q	439
C8OHONO2 C ₈ H ₁₇ NO ₄ UEQWMROIQKQFIM-UHFFFAOYSA-N	9.0	11000	Wieser et al. (2023)	Q	439
C824ONO2 C ₈ H ₁₃ NO ₅ YMYILPYDFNRVBZ-UHFFFAOYSA-N	9.5×10^6	14000	Wieser et al. (2023)	Q	439
C819ONO2 C ₈ H ₁₃ NO ₆ XLUWXWLWQTYVOF-UHFFFAOYSA-N	3.9×10^6	16000	Wieser et al. (2023)	Q	439
C92ONO2 C ₉ H ₁₅ NO ₅ PNFDSIMYWKOAKE-UHFFFAOYSA-N	4.7×10^5	15000	Wieser et al. (2023)	Q	439
NORLIMONO2 C ₉ H ₁₅ NO ₆ MUTWZANDXPDWFF-UHFFFAOYSA-N	3.8×10^8	16000	Wieser et al. (2023)	Q	439
C822CONO2 C ₉ H ₁₃ NO ₅ RVFLVBTUEWAABB-UHFFFAOYSA-N	6.2×10^1	13000	Wieser et al. (2023)	Q	439
C817CONO2 C ₉ H ₁₃ NO ₆ LHFXXFGIVAQFTO-UHFFFAOYSA-N	1.2×10^5	15000	Wieser et al. (2023)	Q	439
C9CONO2 C ₁₀ H ₁₅ NO ₅ FNVMVXZLPDKVAS-UHFFFAOYSA-N	8.0×10^1	20000	Wieser et al. (2023)	Q	439
LIMONO2 C ₁₀ H ₁₅ NO ₅ DEKWHDOXDJNWRD-UHFFFAOYSA-N	3.8×10^4	14000	Wieser et al. (2023)	Q	439

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2-ethanediol dinitrate	6.3		Burkholder et al. (2019)	L	
O ₃ NCH ₂ CH ₂ ONO ₂	6.3		Burkholder et al. (2015)	L	
(1,2-ethane dinitrate)	6.3		Sander et al. (2011)	L	
[628-96-6]	6.3		Sander et al. (2006)	L	
UQXKXGWFGRWILX-UHFFFAOYSA-N	7.8×10^{-1}		Fischer and Ballschmiter (1998b)	M	582
	6.3		Kames and Schurath (1992)	M	12
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	272, 244
	9.9		Raventos-Duran et al. (2010)	Q	245
	1.6×10^1		Raventos-Duran et al. (2010)	Q	246
	8.2		Hilal et al. (2008)	Q	
	4.9×10^{-1}		Modarresi et al. (2007)	Q	68
1,2-propanediol dinitrate	1.7		Burkholder et al. (2019)	L	
C ₃ H ₆ (ONO ₂) ₂	1.7		Burkholder et al. (2015)	L	
(1,2-propane dinitrate)	1.7		Sander et al. (2011)	L	
[6423-43-4]	1.7		Sander et al. (2006)	L	
PSXCGTLGGVDWFU-UHFFFAOYSA-N	3.2×10^{-1}		Fischer and Ballschmiter (1998b)	M	582
	1.7		Kames and Schurath (1992)	M	12
	1.0×10^1		HSDB (2015)	Q	100
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	272, 244
	3.1		Raventos-Duran et al. (2010)	Q	245
	9.9		Raventos-Duran et al. (2010)	Q	246
	2.7		Hilal et al. (2008)	Q	
1,3-propanediol dinitrate	1.6		Burkholder et al. (2019)	L	583
C ₃ H ₆ N ₂ O ₆	1.6		Burkholder et al. (2015)	L	584
[3457-90-7]	1.3		Fischer and Ballschmiter (1998b)	M	582
KOSAMXZBGUISK-UHFFFAOYSA-N	1.2		Raventos-Duran et al. (2010)	Q	243, 244
	3.9		Raventos-Duran et al. (2010)	Q	245
	9.9		Raventos-Duran et al. (2010)	Q	246
	4.4		Hilal et al. (2008)	Q	
1,2,3-propanetriol trinitrate	2.3×10^2		HSDB (2015)	V	
C ₃ H ₅ N ₃ O ₉	1.9×10^2		Yaws (2003)	X	238, 12
(nitroglycerin)	4.9×10^1		Raventos-Duran et al. (2010)	Q	243, 244
[55-63-0]	3.9×10^2		Raventos-Duran et al. (2010)	Q	245
SNIOPGDIGTZGOP-UHFFFAOYSA-N	3.9×10^3		Raventos-Duran et al. (2010)	Q	246
	1.9×10^2		Gharagheizi et al. (2010)	Q	247
	3.9×10^1		Hilal et al. (2008)	Q	
	1.0×10^2		Yaws (1999)	?	21, 12
1,2-butanediol dinitrate	2.1×10^{-1}		Fischer and Ballschmiter (1998b)	M	582
C ₄ H ₈ N ₂ O ₆	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	272, 244
[20820-41-1]	1.6		Raventos-Duran et al. (2010)	Q	245
CTISQZXTUUHJNC-UHFFFAOYSA-N	7.8		Raventos-Duran et al. (2010)	Q	246

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3-butanediol dinitrate C ₄ H ₈ N ₂ O ₆ [6423-44-5] DGFBUINMARLFTU-UHFFFAOYSA-N	5.7 × 10 ⁻¹ 9.9 × 10 ⁻¹ 1.6 7.8		Fischer and Ballschmiter (1998b) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	M Q Q Q	582 243, 244 245 246
1,4-butanediol dinitrate C ₄ H ₈ N ₂ O ₆ [3457-91-8] QELUJBJXJAWSRC-UHFFFAOYSA-N	1.6 9.9 × 10 ⁻¹ 3.1 7.8 2.7		Fischer and Ballschmiter (1998b) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008)	M Q Q Q Q	582 243, 244 245 246
2,3-butanediol dinitrate C ₄ H ₈ N ₂ O ₆ [6423-45-6] RVDDYBGRQLZMSB-UHFFFAOYSA-N	1.2 × 10 ⁻¹ 4.9 × 10 ⁻¹ 1.6 7.8		Fischer and Ballschmiter (1998b) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	M Q Q Q	582 243, 244 245 246
1,2-pentanediol dinitrate C ₅ H ₁₀ N ₂ O ₆ [89365-05-9] MZWVHVGGLDAPPHW-UHFFFAOYSA-N	1.3 × 10 ⁻¹		Fischer and Ballschmiter (1998b)	M	582
1,4-pentanediol dinitrate C ₅ H ₁₀ N ₂ O ₆ [25385-63-1] IUTIKUKYGRINOD-UHFFFAOYSA-N	3.9 × 10 ⁻¹		Fischer and Ballschmiter (1998b)	M	582
1,5-pentanediol dinitrate C ₅ H ₁₀ N ₂ O ₆ [3457-92-9] MIYIEPHJPVBSEV-UHFFFAOYSA-N	1.2 9.9 × 10 ⁻¹ 2.0 6.2		Fischer and Ballschmiter (1998b) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	M Q Q Q	582 243, 244 245 246
(2R,4S)-2,4-pentanediol dinitrate C ₅ H ₁₀ N ₂ O ₆ (<i>cis</i> -2,4-pentanediol dinitrate) [208252-05-5]	2.2 × 10 ⁻¹		Fischer and Ballschmiter (1998b)	M	582
(2R,4R)-2,4-pentanediol dinitrate C ₅ H ₁₀ N ₂ O ₆ (<i>trans</i> -2,4-pentanediol dinitrate) [208252-04-4]	1.4 × 10 ⁻¹		Fischer and Ballschmiter (1998b)	M	582
1,2-hexanediol dinitrate C ₆ H ₁₂ N ₂ O ₆ [110539-07-6] UJKJGCZXZPXTGS-UHFFFAOYSA-N	9.6 × 10 ⁻²		Fischer and Ballschmiter (1998b)	M	582
1,5-hexanediol dinitrate C ₆ H ₁₂ N ₂ O ₆ [206443-83-6] PGDWEAOSZKNU-UHFFFAOYSA-N	2.7 × 10 ⁻¹		Fischer and Ballschmiter (1998b)	M	582

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,6-hexanediol dinitrate C ₆ H ₁₂ N ₂ O ₆ [3457-93-0] GCVAYIWGKFFWEU-UHFFFAOYSA-N	1.5		Fischer and Ballschmiter (1998b)	M	582
2,5-hexanediol dinitrate C ₆ H ₁₂ N ₂ O ₆ [99115-63-6] ISSLCMSTXXUOEU-UHFFFAOYSA-N	3.1 × 10 ⁻¹ 6.2 × 10 ⁻¹ 6.2 × 10 ⁻¹ 4.9		Fischer and Ballschmiter (1998b) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	M Q Q Q	582 272, 244 245 246
(1R,2S)-1,2-cyclohexanediol dinitrate C ₆ H ₁₀ N ₂ O ₆ (<i>cis</i> -1,2-cyclohexanediol dinitrate) [32342-28-2]	1.3		Fischer and Ballschmiter (1998b)	M	582
(1R,2R)-1,2-cyclohexanediol dinitrate C ₆ H ₁₀ N ₂ O ₆ (<i>trans</i> -1,2-cyclohexanediol dinitrate) [32342-29-3]	5.2 × 10 ⁻¹		Fischer and Ballschmiter (1998b)	M	582
(1R,3S)-1,3-cyclohexanediol dinitrate C ₆ H ₁₀ N ₂ O ₆ (<i>cis</i> -1,3-cyclohexanediol dinitrate) [170994-36-2]	3.4		Fischer and Ballschmiter (1998b)	M	582
(1R,3R)-1,3-cyclohexanediol dinitrate C ₆ H ₁₀ N ₂ O ₆ (<i>trans</i> -1,3-cyclohexanediol dinitrate) [170994-41-9]	6.8 × 10 ⁻¹		Fischer and Ballschmiter (1998b)	M	582
1,7-heptanediol dinitrate C ₇ H ₁₄ N ₂ O ₆ [3457-94-1] KIERETFMVSIXIJ-UHFFFAOYSA-N	1.1		Fischer and Ballschmiter (1998b)	M	582
(1R,2R)-1,2-cycloheptanediol dinitrate C ₇ H ₁₂ N ₂ O ₆ (<i>trans</i> -1,2-cycloheptanediol dinitrate) [208252-06-6]	8.8 × 10 ⁻¹		Fischer and Ballschmiter (1998b)	M	582

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2-octanediol dinitrate C ₈ H ₁₆ N ₂ O ₆ [121222-48-8] RLNKMZWMCSTIEM-UHFFFAOYSA-N	5.2×10^{-2}		Fischer and Ballschmiter (1998b)	M	582
1,8-octanediol dinitrate C ₈ H ₁₆ N ₂ O ₆ [3457-95-2] BVIHOKFRPSZJEI-UHFFFAOYSA-N	7.8×10^{-1}		Fischer and Ballschmiter (1998b)	M	582
1,2-decanediol dinitrate C ₁₀ H ₂₀ N ₂ O ₆ [60123-40-2] KKNGVXOJDIUADE-UHFFFAOYSA-N	2.0×10^{-2}		Fischer and Ballschmiter (1998b)	M	582
1,10-decanediol dinitrate C ₁₀ H ₂₀ N ₂ O ₆ [3457-97-4] RHUZOYMELURURD-UHFFFAOYSA-N	4.3×10^{-1}		Fischer and Ballschmiter (1998b)	M	582
diethylene glycol dinitrate C ₄ H ₈ N ₂ O ₇ [693-21-0] LYAGTVMJGHTIDH-UHFFFAOYSA-N	2.5×10^1 4.9×10^1 1.2×10^2 9.9×10^2 1.1×10^2 3.8		HSDB (2015) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q Q Q	 243, 244 245 246 68
ISOP1N2ONO2 C ₅ H ₈ N ₂ O ₆ FQSKJUXVWIFNKX-UHFFFAOYSA-N	1.6	9400	Wieser et al. (2023)	Q	439
EPXISOPNONO2 C ₅ H ₈ N ₂ O ₇ UAFKAIYDADHRMX-UHFFFAOYSA-N	5.3×10^1	13000	Wieser et al. (2023)	Q	439
ISOP1N23O4ONO2 C ₅ H ₈ N ₂ O ₇ FSZUIXLMCRZJMS-UHFFFAOYSA-N	4.5×10^1	13000	Wieser et al. (2023)	Q	439
ISOP1N5ONO2 C ₅ H ₈ N ₂ O ₇ WRGRJJOKHABEJT-UHFFFAOYSA-N	5.8×10^4	13000	Wieser et al. (2023)	Q	439
LIMAB15ONO22 C ₁₀ H ₁₈ N ₂ O ₈ UNHNJOVXNACOSQ-UHFFFAOYSA-N	3.1×10^7	18000	Wieser et al. (2023)	Q	439

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
peroxyacetyl nitrate	2.8×10^{-2}	5700	Burkholder et al. (2019)	L	
CH ₃ COONO ₂	2.8×10^{-2}	5700	Burkholder et al. (2015)	L	
(PAN)	2.9×10^{-2}	5700	Warneck and Williams (2012)	L	
[2278-22-0]	2.8×10^{-2}	5700	Sander et al. (2011)	L	
VGQXTTSVLMQFHM-UHFFFAOYSA-N	2.8×10^{-2}	5700	Sander et al. (2006)	L	
	2.9×10^{-2}	5800	Leu and Zhang (1999)	L	
	3.0×10^{-2}	5600	Easterbrook et al. (2023)	M	
	2.3×10^{-2}	4800	Frenzel et al. (2000)	M	
	4.0×10^{-2}		Kames and Schurath (1995)	M	12
	2.8×10^{-2}	6500	Kames et al. (1991)	M	
	4.9×10^{-2}		Holdren et al. (1984)	M	375
	3.6×10^{-2}		Gaffney and Senum (1984)	X	391
	2.9×10^{-2}	5900	Pandis and Seinfeld (1989)	C	
	3.6×10^{-2}		Schwartz (1986)	C	88
	6.8×10^{-2}		Keshavarz et al. (2022)	Q	
	6.1×10^{-1}		Duchowicz et al. (2020)	Q	185
	4.9		Wang et al. (2017)	Q	81, 239
	1.0×10^1		Wang et al. (2017)	Q	81, 240
	7.4×10^{-4}		Wang et al. (2017)	Q	81, 241
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	272, 244
	4.9		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	2.2		Hilal et al. (2008)	Q	
	3.2		Modarresi et al. (2007)	Q	68
		4800	Kühne et al. (2005)	Q	
	3.6×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		6300	Kühne et al. (2005)	?	
			Warneck et al. (1996)	?	585
			Schurath et al. (1996)	W	586
peroxypropionyl nitrate	1.6×10^{-2}	6000	Easterbrook et al. (2023)	M	
C ₂ H ₅ COONO ₂	2.9×10^{-2}		Kames and Schurath (1995)	M	12
(PPN)	3.9		Wang et al. (2017)	Q	81, 239
[5796-89-4]	4.1		Wang et al. (2017)	Q	81, 240
TXINBPKSWKFMNB-UHFFFAOYSA-N	3.6×10^{-4}		Wang et al. (2017)	Q	81, 241
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	2.0		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	246
			Warneck et al. (1996)	?	585
			Schurath et al. (1996)	W	587

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
nitro butaneperoxoate C ₃ H ₇ COONO ₂ (PnBN) [27746-48-1] HZUMMZVMNQSPFF-UHFFFAOYSA-N	2.3 × 10 ⁻² 3.2 2.2 2.6 × 10 ⁻⁴ 1.6 × 10 ⁻²		Kames and Schurath (1995) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010)	M Q Q Q Q	12 81, 239 81, 240 81, 241 243, 244
	1.2 4.9 × 10 ⁻²		Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Warneck et al. (1996) Schurath et al. (1996)	Q Q Q ? W	245 246 585 588
peroxy-2-propenoyl nitrate CH ₂ C(CH ₃)COONO ₂ (peroxymethacryloyl nitrate; MPAN) [88181-75-3] LLZWPQFQEBKRLX-UHFFFAOYSA-N	1.7 × 10 ⁻² 7.4 4.8 2.4 × 10 ⁻⁴		Kames and Schurath (1995) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Warneck et al. (1996) Schurath et al. (1996)	M Q Q Q W W	12 81, 239 81, 240 81, 241 585 589
peroxy-isobutyryl nitrate C ₃ H ₇ COONO ₂ (PiBN) [65424-60-4] BDNFHGUXBRZLRQ-UHFFFAOYSA-N	9.9 × 10 ⁻³ 3.6 2.3 1.8 × 10 ⁻⁴ 1.6 × 10 ⁻²		Kames and Schurath (1995) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010)	M Q Q Q Q	12 81, 239 81, 240 81, 241 243, 244
	1.2 4.9 × 10 ⁻²		Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Warneck et al. (1996) Schurath et al. (1996)	Q Q Q ? W	245 246 585 590
furoyl peroxyxynitrate C ₅ H ₃ NO ₆ (fur-PAN) NMNZVYLGOWCHOD-UHFFFAOYSA-N	9.3 × 10 ⁻² 1.6 × 10 ⁻¹	8800	Roberts et al. (2022) Roberts et al. (2022)	M Q	591
MCM:CH3O2NO2 CH ₃ NO ₄ LCFGXMPUQSXLCQ-UHFFFAOYSA-N	4.1 × 10 ⁻¹ 1.5 × 10 ⁻¹ 1.7 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETHO2HNO3 C ₂ H ₅ NO ₅ IYCQDYQELIXMU-UHFFFAOYSA-N	9.3 × 10 ² 2.8 × 10 ³ 3.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NO3CH2CO3H C ₂ H ₃ NO ₆ VLCOOHYMNNDJ-UHFFFAOYSA-N	1.2 × 10 ⁴ 2.3 × 10 ³ 4.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NO3CH2PAN C ₂ H ₂ N ₂ O ₈ CSNUPQYBRZIENU-UHFFFAOYSA-N	5.6 × 10 ² 1.9 × 10 ³ 3.0 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:ACRPAN C ₃ H ₃ NO ₅ [157258-66-7] SFKRQQJZRXXQGLC-UHFFFAOYSA-N	1.1 × 10 ¹ 7.4 4.6 × 10 ⁻⁴ 2.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010)	Q Q Q Q	81, 239 81, 240 81, 241 272, 244
	3.1 1.6 × 10 ⁻¹		Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	Q Q	245 246
MCM:PR1O2HNO3 C ₃ H ₇ NO ₅ FROUFTMXOYPVXC-UHFFFAOYSA-N	8.7 × 10 ² 1.0 × 10 ³ 1.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PR2O2HNO3 C ₃ H ₇ NO ₅ UHIVGIHVGRYUPL-UHFFFAOYSA-N	8.7 × 10 ² 1.1 × 10 ³ 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PRNO3CO3H C ₃ H ₅ NO ₆ FMRKJWQAPYMRJD-UHFFFAOYSA-N	1.1 × 10 ⁴ 1.0 × 10 ³ 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PRNO3PAN C ₃ H ₄ N ₂ O ₈ ZLJYZUGEJFPONP-UHFFFAOYSA-N	5.0 × 10 ² 4.6 × 10 ² 1.6 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BU1ENO3OOH C ₄ H ₉ NO ₅ MFTWJXGCASCYHP-UHFFFAOYSA-N	6.8 × 10 ² 5.5 × 10 ² 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3DBPAN C ₄ H ₅ NO ₅ YVSVRLGWMDVSPN-UHFFFAOYSA-N	1.4 × 10 ¹ 5.8 1.2 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C42NO33OOH C ₄ H ₉ NO ₅ CGBCWMNQUOIZIB-UHFFFAOYSA-N	8.1 × 10 ² 5.1 × 10 ² 9.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C43NO34OOH C ₄ H ₉ NO ₅ BQDGSWCZHPGGT-UHFFFAOYSA-N	6.8 × 10 ² 5.5 × 10 ² 6.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4PAN9 C ₄ H ₄ N ₂ O ₈ SHASFEZZYJNCIM-UHFFFAOYSA-N	1.6 × 10 ³ 2.3 × 10 ³ 5.4 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MPRANO3OOH C ₄ H ₉ NO ₅ DTPMQEMACNJTBJ-UHFFFAOYSA-N	4.7 × 10 ² 3.2 × 10 ² 9.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MPRBNO3OOH C ₄ H ₉ NO ₅ RCQWCNCMOFDCKD-UHFFFAOYSA-N	4.7 × 10 ² 3.5 × 10 ² 5.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MPRBNO3PAN C ₄ H ₆ N ₂ O ₈ RAYRXKOIFAVDJK-UHFFFAOYSA-N	2.9 × 10 ² 1.1 × 10 ² 2.1 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MPRNO3CO3H C ₄ H ₇ NO ₆ HDNCPGDKOFQI-UHFFFAOYSA-N	6.2 × 10 ³ 2.2 × 10 ² 5.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NBUTDAOOH C ₄ H ₇ NO ₅ ZIAMBHNGSMXNCM-UHFFFAOYSA-N	2.0 × 10 ³ 1.2 × 10 ³ 6.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NBUTDBNO3 C ₄ H ₆ N ₂ O ₆ GCQJZAFTGYZGDG-UHFFFAOYSA-N	4.1 3.6 × 10 ¹ 1.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NBUTDBOOH C ₄ H ₇ NO ₅ SSNXKZNERJCDKO-UHFFFAOYSA-N	2.8 × 10 ³ 4.0 × 10 ³ 5.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC3CO3H C ₄ H ₅ NO ₆ ZKNVOGOFZJSFAE-UHFFFAOYSA-N	3.6 × 10 ⁴ 5.0 × 10 ³ 3.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TC4H9NO3 C ₄ H ₉ NO ₃ [926-05-6] AZAKMLHUDVIDFN-UHFFFAOYSA-N	6.2 × 10 ⁻³ 9.1 × 10 ⁻³ 1.0 × 10 ⁻³ 4.9 × 10 ⁻³ 6.2 × 10 ⁻³ 2.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	Q Q Q Q Q Q	81, 239 81, 240 81, 241 243, 244 245 246
MCM:C3ME3PAN C ₅ H ₉ NO ₅ OLNWAQLSTCXURT-UHFFFAOYSA-N	2.8 1.7 1.6 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3MNO3CO3H C ₅ H ₉ NO ₆ UNTXQXBLSROXLI-UHFFFAOYSA-N	9.3 × 10 ³ 3.2 × 10 ² 2.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3MNO3PAN C ₅ H ₈ N ₂ O ₈ ULZBZSVLLIBTGC-UHFFFAOYSA-N	3.9 × 10 ² 1.6 × 10 ² 1.0 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C43NO3CO3H C ₅ H ₉ NO ₆ KYFRJEXZVMOAMN-UHFFFAOYSA-N	5.8 × 10 ³ 1.3 × 10 ² 1.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C43NO3PAN C ₅ H ₈ N ₂ O ₈ WPFKHDFVFPXDFZ-UHFFFAOYSA-N	2.2 × 10 ² 6.6 × 10 ¹ 1.3 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C4M2NO3OOH C ₅ H ₁₁ NO ₅ BOAAVKBCMOPNIQ-UHFFFAOYSA-N	4.5 × 10 ² 1.6 × 10 ² 5.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4MNO31OOH C ₅ H ₁₁ NO ₅ LRRBWUKXCGVENZ-UHFFFAOYSA-N	6.3 × 10 ² 3.2 × 10 ² 7.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4MNO32OOH C ₅ H ₁₁ NO ₅ HXNZNKRZULBVRO-UHFFFAOYSA-N	6.3 × 10 ² 3.2 × 10 ² 4.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4NO32MOOH C ₅ H ₁₁ NO ₅ HCKTYRRBEFAEAC-UHFFFAOYSA-N	3.9 × 10 ² 1.7 × 10 ² 5.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4NO3CO3H C ₅ H ₉ NO ₆ JPUVYTOGMBaubQ-UHFFFAOYSA-N	8.3 × 10 ³ 3.0 × 10 ² 1.7 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4NO3M1OOH C ₅ H ₁₁ NO ₅ MWSZSODDMCBKIX-UHFFFAOYSA-N	3.9 × 10 ² 1.8 × 10 ² 3.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4NO3M2OOH C ₅ H ₁₁ NO ₅ QXHHHGYKLMZJBA-UHFFFAOYSA-N	4.5 × 10 ² 1.5 × 10 ² 4.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4NO3PAN C ₅ H ₈ N ₂ O ₈ GGZFCBHNGNBLNW-UHFFFAOYSA-N	3.2 × 10 ² 1.6 × 10 ² 1.2 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C51NO32OOH C ₅ H ₁₁ NO ₅ YPLQKABNDXJG-UHFFFAOYSA-N	6.3 × 10 ² 3.2 × 10 ² 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C52NO31OOH C ₅ H ₁₁ NO ₅ DCAGTGOPLFTTTQ-UHFFFAOYSA-N	6.3 × 10 ² 3.2 × 10 ² 4.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C52NO33OOH C ₅ H ₁₁ NO ₅ FQGADFCNSPWVJM-UHFFFAOYSA-N	6.3 × 10 ² 2.4 × 10 ² 4.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C53NO32OOH C ₅ H ₁₁ NO ₅ STNFTAQLRXEYDM-UHFFFAOYSA-N	6.3 × 10 ² 2.6 × 10 ² 2.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5PAN18 C ₅ H ₆ N ₂ O ₈ JYUXMKSMIBDSN-UHFFFAOYSA-N	1.1 × 10 ³ 2.2 × 10 ³ 2.0 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C5PAN4 C ₅ H ₉ NO ₅ LGNOWHJLTB AFC-UHFFFAOYSA-N	2.8 1.5 1.3×10^{-4}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5PAN6 C ₅ H ₉ NO ₅ VQRIYOXAZWZCOV-UHFFFAOYSA-N	2.0 1.4 1.6×10^{-4}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPEANO3 C ₅ H ₁₁ NO ₃ QSSWLPYLLKHHLB-UHFFFAOYSA-N	8.3×10^{-3} 1.5×10^{-2} 4.0×10^{-4}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPEBNO3 C ₅ H ₁₁ NO ₃ OTVLXFGCWJFXJU-UHFFFAOYSA-N	8.3×10^{-3} 1.4×10^{-2} 4.2×10^{-4}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPECNO3 C ₅ H ₁₁ NO ₃ UENFRVTUGZKXNH-UHFFFAOYSA-N	5.1×10^{-3} 6.6×10^{-3} 7.6×10^{-4}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC4CO3H C ₅ H ₇ NO ₆ SLKHOLIOIGBFQB-UHFFFAOYSA-N	2.3×10^4 4.6×10^3 1.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NEOPNO3 C ₅ H ₁₁ NO ₃ YJGBGWFCQXIM-UHFFFAOYSA-N	5.1×10^{-3} 1.2×10^{-2} 4.1×10^{-4}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NISOPNO3 C ₅ H ₈ N ₂ O ₆ JGJBVRGABXKDRR-UHFFFAOYSA-N	2.6 2.7 3.0×10^1 1.3×10^{-2}	9400	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:NISOPOOH C ₅ H ₉ NO ₅ IRFXVIPRKCCSLU-UHFFFAOYSA-N	9.7×10^2 1.8×10^3 3.0×10^3 3.0×10^1	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:PPEN C ₅ H ₉ NO ₅ UUYNBNAIGBJAO-UHFFFAOYSA-N	2.8 1.5 2.2×10^{-4}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C42MNO3OOH C ₆ H ₁₃ NO ₅ KKTQLMUUOWWZBO-UHFFFAOYSA-N	2.4×10^2 4.5×10^1 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C62NO33OOH C ₆ H ₁₃ NO ₅ PJRWVMFJYMZPCW-UHFFFAOYSA-N	5.6×10^2 1.5×10^2 4.2×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C63NO32OOH C ₆ H ₁₃ NO ₅ RLIDOIUHNSZVBK-UHFFFAOYSA-N	5.6 × 10 ² 1.9 × 10 ² 1.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C65NO36OOH C ₆ H ₁₃ NO ₅ ZVRSMGCQHDCSBC-UHFFFAOYSA-N	4.9 × 10 ² 2.2 × 10 ² 2.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C65NO3CO3H C ₆ H ₁₁ NO ₆ RASQUKWKKRVIQJ-UHFFFAOYSA-N	6.5 × 10 ³ 2.2 × 10 ² 1.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C65NO3PAN C ₆ H ₁₀ N ₂ O ₈ PNNYZMYAAWSJH-UHFFFAOYSA-N	3.0 × 10 ² 1.1 × 10 ² 6.5 × 10 ⁻⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C66NO35OOH C ₆ H ₁₃ NO ₅ YPVNGNKLOFDKIF-UHFFFAOYSA-N	4.9 × 10 ² 2.3 × 10 ² 9.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN10 C ₆ H ₁₁ NO ₅ INNSDEOCGQAUTR-UHFFFAOYSA-N	2.6 1.3 1.8 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN15 C ₆ H ₁₁ NO ₅ GWYKJYISUPTXQD-UHFFFAOYSA-N	1.6 9.8 × 10 ⁻¹ 1.4 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN17 C ₆ H ₁₁ NO ₅ CUMLTNLXWSMQLS-UHFFFAOYSA-N	1.6 1.1 1.7 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN18 C ₆ H ₁₁ NO ₅ FPWBUKNMBKRQCI-UHFFFAOYSA-N	3.0 1.4 1.4 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN3 C ₆ H ₁₁ NO ₅ BRVOFEXYGZHOW-UHFFFAOYSA-N	2.6 1.1 1.5 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHEXNO3 C ₆ H ₁₁ NO ₃ HLYOOCIMLHNMOG-UHFFFAOYSA-N	2.0 × 10 ⁻² 6.5 × 10 ⁻² 3.7 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HEXBNO3 C ₆ H ₁₃ NO ₃ JLGBQJVVQLNMGV-UHFFFAOYSA-N	3.1 × 10 ⁻⁴ 6.5 × 10 ⁻³ 7.4 × 10 ⁻³ 4.3 × 10 ⁻⁴	6300	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:HEXCNO3 C ₆ H ₁₃ NO ₃ OJOZCOXRANAOPV-UHFFFAOYSA-N	6.5 × 10 ⁻³ 8.1 × 10 ⁻³ 3.2 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:M22C43NO3 C ₆ H ₁₃ NO ₃ YUZOHIKIPTSGJ-UHFFFAOYSA-N	4.8 × 10 ⁻³ 9.3 × 10 ⁻³ 3.7 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M22C4NO3 C ₆ H ₁₃ NO ₃ JOWPFXKUGRKJFA-UHFFFAOYSA-N	4.6 × 10 ⁻³ 1.0 × 10 ⁻² 5.5 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M23C43NO3 C ₆ H ₁₃ NO ₃ PMABLOPIFVACLQ-UHFFFAOYSA-N	4.8 × 10 ⁻³ 7.4 × 10 ⁻³ 7.4 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M23C4NO3 C ₆ H ₁₃ NO ₃ HHRFTVZVEUIWEO-UHFFFAOYSA-N	7.8 × 10 ⁻³ 1.5 × 10 ⁻² 4.4 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2PEANO3 C ₆ H ₁₃ NO ₃ CETUNBADQVCCRS-UHFFFAOYSA-N	6.5 × 10 ⁻³ 1.1 × 10 ⁻² 3.4 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2PEBNO3 C ₆ H ₁₃ NO ₃ AYWPQHSaupNICG-UHFFFAOYSA-N	7.8 × 10 ⁻³ 7.8 × 10 ⁻³ 3.6 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2PECNO3 C ₆ H ₁₃ NO ₃ ZLERWGPawILHHJ-UHFFFAOYSA-N	7.8 × 10 ⁻³ 9.6 × 10 ⁻³ 3.2 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2PEDNO3 C ₆ H ₁₃ NO ₃ LFIPHSRTIDHJFT-UHFFFAOYSA-N	4.6 × 10 ⁻³ 5.1 × 10 ⁻³ 6.5 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M33C4NO3 C ₆ H ₁₃ NO ₃ DENSRMRCUIZNMK-UHFFFAOYSA-N	4.6 × 10 ⁻³ 9.8 × 10 ⁻³ 3.6 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M3PEANO3 C ₆ H ₁₃ NO ₃ HRVRJIMBNILCGN-UHFFFAOYSA-N	6.5 × 10 ⁻³ 1.3 × 10 ⁻² 4.7 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M3PEBNO3 C ₆ H ₁₃ NO ₃ IEHIEWLLOPOHIZ-UHFFFAOYSA-N	7.8 × 10 ⁻³ 1.1 × 10 ⁻² 4.1 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M3PECNO3 C ₆ H ₁₃ NO ₃ GFKONLNVJRACGN-UHFFFAOYSA-N	4.6 × 10 ⁻³ 5.3 × 10 ⁻³ 6.2 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PHXN C ₆ H ₁₁ NO ₅ ITHMZXMFOKWUTQ-UHFFFAOYSA-N	2.2 1.1 1.8 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HEPTNO3 C ₇ H ₁₅ NO ₃ RFSNRWONUSBTJN-UHFFFAOYSA-N	5.4 × 10 ⁻³ 6.3 × 10 ⁻³ 3.0 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2HEXANO3 C ₇ H ₁₅ NO ₃ YZGBSAOHUZMZSL-UHFFFAOYSA-N	6.2 × 10 ⁻³ 5.9 × 10 ⁻³ 4.0 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2HEXBNO3 C ₇ H ₁₅ NO ₃ CORAYZMLWQTGOE-UHFFFAOYSA-N	3.7 × 10 ⁻³ 3.9 × 10 ⁻³ 5.8 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M3HEXANO3 C ₇ H ₁₅ NO ₃ ZIINVFVZOGZDQJ-UHFFFAOYSA-N	6.2 × 10 ⁻³ 6.6 × 10 ⁻³ 3.4 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M3HEXBNO3 C ₇ H ₁₅ NO ₃ ADYNXMRWYWNUDX-UHFFFAOYSA-N	3.7 × 10 ⁻³ 4.4 × 10 ⁻³ 6.5 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PHPTN C ₇ H ₁₃ NO ₅ XCJVDRQLXVBEC-UHFFFAOYSA-N	1.8 8.9 × 10 ⁻¹ 2.0 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C8BCNO3 C ₈ H ₁₃ NO ₃ OSNOKXIMBITXOJ-UHFFFAOYSA-N	4.0 × 10 ⁻² 3.2 × 10 ⁻² 3.6 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OCTNO3 C ₈ H ₁₇ NO ₃ KDICWCURMCOQTP-UHFFFAOYSA-N	4.8 × 10 ⁻³ 5.0 × 10 ⁻³ 2.6 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NONNO3 C ₉ H ₁₉ NO ₃ YXUXBXICIGKFLH-UHFFFAOYSA-N	3.9 × 10 ⁻³ 3.8 × 10 ⁻³ 2.5 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DECNO3 C ₁₀ H ₂₁ NO ₃ VRGDYCVXNCXQKR-UHFFFAOYSA-N	3.0 × 10 ⁻³ 3.0 × 10 ⁻³ 2.8 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NAPINAOOH C ₁₀ H ₁₇ NO ₅ IKGBGFRUISEOBM-UHFFFAOYSA-N	1.6 × 10 ³ 2.3 × 10 ² 2.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NAPINBOOH C ₁₀ H ₁₇ NO ₅ RUHGEBIMHPPSGQ-UHFFFAOYSA-N	1.6 × 10 ³ 2.5 × 10 ² 6.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NBPINAOOH C ₁₀ H ₁₇ NO ₅ VJCKFKSOBWLFB-UHFFFAOYSA-N	1.3 × 10 ³ 4.4 × 10 ² 3.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NBPINBOOH C ₁₀ H ₁₇ NO ₅ AWECGRRBHMMAEGP-UHFFFAOYSA-N	1.3 × 10 ³ 3.8 × 10 ² 7.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC91CO3H C ₁₀ H ₁₅ NO ₆ TWWSEFGIBZQJYPL-UHFFFAOYSA-N	1.9 × 10 ⁴ 4.8 × 10 ² 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC91PAN C ₁₀ H ₁₄ N ₂ O ₈ LCMKIEFNSOTVJY-UHFFFAOYSA-N	8.0 × 10 ² 2.6 × 10 ² 9.8 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NLIMOOH C ₁₀ H ₁₇ NO ₅ HSXYRSLOXSIYGP-UHFFFAOYSA-N	1.4 × 10 ³ 6.9 × 10 ² 5.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:UDECNO3 C ₁₁ H ₂₃ NO ₃ KGEKWWIIMVPQKA-UHFFFAOYSA-N	2.8 × 10 ⁻³ 2.4 × 10 ⁻³ 2.0 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DDECNO3 C ₁₂ H ₂₅ NO ₃ BVAQOKLOUKLOJD-UHFFFAOYSA-N	2.2 × 10 ⁻³ 1.9 × 10 ⁻³ 1.9 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NBCOOH C ₁₅ H ₂₅ NO ₅ BEFFZATUSVKAHP-UHFFFAOYSA-N	1.4 × 10 ³ 8.7 × 10 ² 3.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6H5CH2NO3 C ₇ H ₇ NO ₃ WOIVNLSVAKYSKX-UHFFFAOYSA-N	4.3 × 10 ⁻¹ 7.1 × 10 ⁻¹ 3.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBZN C ₇ H ₅ NO ₅ ONDCXZPWEEKXYJE-UHFFFAOYSA-N	1.6 × 10 ² 2.6 × 10 ¹ 4.4 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6H5C2NO3 C ₈ H ₉ NO ₃ REJUUAZLLYKBCW-UHFFFAOYSA-N	3.6 × 10 ⁻¹ 5.6 × 10 ⁻¹ 4.2 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6H5CH2PAN C ₈ H ₇ NO ₅ KKRIGRPRRNIVGL-UHFFFAOYSA-N	1.4 × 10 ² 4.7 × 10 ¹ 1.2 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYLNO3 C ₈ H ₉ NO ₃ OIEIRDPNAPXLBC-UHFFFAOYSA-N	2.5 × 10 ⁻¹ 6.5 × 10 ⁻¹ 3.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYLPAN C ₈ H ₇ NO ₅ HJGURQOGPAEQPE-UHFFFAOYSA-N	8.9 × 10 ¹ 2.3 × 10 ¹ 4.1 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NSTYRENOOH C ₈ H ₉ NO ₅ LKBHTMHNYICJQS-UHFFFAOYSA-N	3.0 × 10 ⁴ 1.1 × 10 ⁴ 1.1 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYLNO3 C ₈ H ₉ NO ₃ WKRHODAGVPDBTG-UHFFFAOYSA-N	2.5 × 10 ⁻¹ 7.1 × 10 ⁻¹ 2.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYLPAN C ₈ H ₇ NO ₅ TXXSKKGTQSQWKQ-UHFFFAOYSA-N	8.9 × 10 ¹ 3.1 × 10 ¹ 3.2 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYLNO3 C ₈ H ₉ NO ₃ SHZSDLPSACZYM-UHFFFAOYSA-N	2.5 × 10 ⁻¹ 7.8 × 10 ⁻¹ 3.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYLPAN C ₈ H ₇ NO ₅ ZGFUWGCXWYZODV-UHFFFAOYSA-N	8.9 × 10 ¹ 2.6 × 10 ¹ 6.5 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETOLNO3 C ₉ H ₁₁ NO ₃ LYNFROWVHACAMO-UHFFFAOYSA-N	2.3 × 10 ⁻¹ 3.2 × 10 ⁻¹ 1.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PHC3NO3 C ₉ H ₁₁ NO ₃ IFDAHDBLKMQHMM-UHFFFAOYSA-N	3.3 × 10 ⁻¹ 2.2 × 10 ⁻¹ 1.8 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PHIC3NO3 C ₉ H ₁₁ NO ₃ YCCLKZYFPBVILU-UHFFFAOYSA-N	2.2 × 10 ⁻¹ 1.5 × 10 ⁻¹ 3.8 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM123BNO3 C ₉ H ₁₁ NO ₃ GDXXSVUXDQKEMHM-UHFFFAOYSA-N	1.6 × 10 ⁻¹ 9.8 × 10 ⁻¹ 3.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM123BPAN C ₉ H ₉ NO ₅ VMALQUVLPIFIEM-UHFFFAOYSA-N	5.9 × 10 ¹ 3.9 × 10 ¹ 4.5 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124BNO3 C ₉ H ₁₁ NO ₃ VLXWVVSZKXVGNM-UHFFFAOYSA-N	1.6 × 10 ⁻¹ 9.3 × 10 ⁻¹ 3.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124BPAN C ₉ H ₉ NO ₅ SSMPYZHCWJGIJH-UHFFFAOYSA-N	5.9 × 10 ¹ 3.0 × 10 ¹ 7.4 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TMBNO3 C ₉ H ₁₁ NO ₃ CHDZRXPQKVNDRJ-UHFFFAOYSA-N	1.6 × 10 ⁻¹ 5.5 × 10 ⁻¹ 2.8 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:TMBPAN C ₉ H ₉ NO ₅ QURBGWBLEPWFEF-UHFFFAOYSA-N	5.9 × 10 ¹ 1.9 × 10 ¹ 4.0 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DM35EBNO3 C ₁₀ H ₁₃ NO ₃ CZPIEXHJQQIGZ-UHFFFAOYSA-N	1.4 × 10 ⁻¹ 2.4 × 10 ⁻¹ 1.7 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EMPHPAN C ₁₀ H ₁₁ NO ₅ DPRDWMVUHNTRQI-UHFFFAOYSA-N	4.9 × 10 ¹ 1.1 × 10 ¹ 3.2 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DE35TNO3 C ₁₁ H ₁₅ NO ₃ XLLSPDIGUQFTC-UHFFFAOYSA-N	1.1 × 10 ⁻¹ 1.5 × 10 ⁻¹ 1.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PHAN C ₂ H ₃ NO ₆ KMDWHTZYVJXWAH-UHFFFAOYSA-N	6.2 × 10 ² 9.6 × 10 ³ 6.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:A2PAN C ₃ H ₅ NO ₇ RQFAVCUBLOXKI-UHFFFAOYSA-N	7.3 × 10 ⁵ 2.3 × 10 ⁶ 2.2 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3PAN1 C ₃ H ₅ NO ₆ ZDHDBTZUUXEIQG-UHFFFAOYSA-N	1.1 × 10 ⁴ 3.2 × 10 ⁴ 6.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO1C3NO3 C ₃ H ₇ NO ₄ [100502-66-7] PTMLFFXFTRSBJW-UHFFFAOYSA-N	2.8 × 10 ¹ 1.2 × 10 ³ 6.3 2.0 × 10 ¹ 3.9 × 10 ² 7.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	Q Q Q Q Q Q	81, 239 81, 240 81, 241 272, 244 245 246
MCM:IPROPOLPAN C ₃ H ₅ NO ₆ VGQGEUUGHUVAJJ-UHFFFAOYSA-N	5.9 × 10 ² 1.1 × 10 ⁴ 2.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BUTDANO3 C ₄ H ₇ NO ₄ JVISETCEJQRRQM-UHFFFAOYSA-N	1.0 × 10 ² 2.3 × 10 ³ 3.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BUTDBNO3 C ₄ H ₇ NO ₄ MVWTUBMDIKBOB-UHFFFAOYSA-N	9.8 × 10 ¹ 2.5 × 10 ² 3.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4PAN1 C ₄ H ₇ NO ₆ ZAYFYZJEFHQRME-UHFFFAOYSA-N	8.7 × 10 ³ 5.5 × 10 ⁴ 2.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C4PAN2 C ₄ H ₇ NO ₇ KFPIYXZEKUAVMP-UHFFFAOYSA-N	1.3 × 10 ⁶ 1.7 × 10 ⁷ 1.2 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4PAN3 C ₄ H ₇ NO ₆ PIBQEVCOXTKAE-UHFFFAOYSA-N	1.0 × 10 ⁴ 3.6 × 10 ⁴ 4.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4PAN4 C ₄ H ₇ NO ₆ NXHSYZWHYBOEBH-UHFFFAOYSA-N	1.0 × 10 ⁴ 2.0 × 10 ⁴ 4.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4PAN5 C ₄ H ₇ NO ₆ BZGCEXLIVXRKX-UHFFFAOYSA-N	3.2 × 10 ² 4.1 × 10 ³ 5.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4PAN7 C ₄ H ₅ NO ₆ YKQOPDHVAHDODD-UHFFFAOYSA-N	3.6 × 10 ⁴ 1.2 × 10 ⁵ 2.5 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4PAN8 C ₄ H ₅ NO ₆ QZCDOTFCQHJUGH-UHFFFAOYSA-N	1.5 × 10 ³ 7.1 × 10 ³ 6.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C56NO3 C ₄ H ₉ NO ₅ XYUWBXDQANMXIL-UHFFFAOYSA-N	8.0 × 10 ⁴ 9.1 × 10 ⁵ 1.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HMPAN C ₄ H ₅ NO ₆ XPXMBKPWAOWOBP-UHFFFAOYSA-N	2.1 × 10 ⁴ 1.4 × 10 ⁴ 6.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO13C4NO3 C ₄ H ₉ NO ₅ IOYLZWMTXYBAPI-UHFFFAOYSA-N	8.9 × 10 ⁴ 1.0 × 10 ⁶ 3.2 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C3PAN C ₄ H ₇ NO ₆ JGMDPJZYJFPSOE-UHFFFAOYSA-N	5.1 × 10 ² 6.2 × 10 ³ 9.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IBUTOLBNO3 C ₄ H ₉ NO ₄ ILMPSGIQBJFTRG-UHFFFAOYSA-N	2.2 × 10 ¹ 1.0 × 10 ² 6.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IBUTOLCNO3 C ₄ H ₉ NO ₄ OARBGYKXUANYLR-UHFFFAOYSA-N	2.6 × 10 ¹ 6.9 × 10 ² 3.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MACRNBPAN C ₄ H ₆ N ₂ O ₉ HHPQSZXZUAZGAQ-UHFFFAOYSA-N	5.0 × 10 ⁴ 7.6 × 10 ⁵ 1.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MACRNCO3H C ₄ H ₇ NO ₇ VCAMMMQHKHRNFT-UHFFFAOYSA-N	2.4 × 10 ⁷ 2.3 × 10 ⁶ 1.7 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MACRN PAN C ₄ H ₆ N ₂ O ₉ YVNHVFURNFQJQM-UHFFFAOYSA-N	9.8 × 10 ⁵ 2.8 × 10 ⁵ 1.2 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NBUTDAOH C ₄ H ₇ NO ₄ ZANUSWCYRLK DAN-UHFFFAOYSA-N	9.8 × 10 ¹ 2.9 × 10 ² 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TBUTOLNO3 C ₄ H ₉ NO ₄ SPXXYWSDFUWLEP-UHFFFAOYSA-N	2.2 × 10 ¹ 1.4 × 10 ² 9.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3M3OH2PAN C ₅ H ₉ NO ₆ NSGPYXAFGPXNMV-UHFFFAOYSA-N	4.8 × 10 ² 4.9 × 10 ³ 2.8 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C46PAN C ₅ H ₇ NO ₆ WDMYRNZGJSFESH-UHFFFAOYSA-N	1.6 × 10 ⁴ 7.4 × 10 ⁴ 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4OH2CPAN C ₅ H ₉ NO ₇ INCMEOVDRBCULR-UHFFFAOYSA-N	3.7 × 10 ⁵ 3.5 × 10 ⁶ 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4OHPAN C ₅ H ₉ NO ₆ GAAOIPAQRGTBI-UHFFFAOYSA-N	4.3 × 10 ² 3.7 × 10 ³ 5.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C524NO3 C ₅ H ₉ NO ₅ IRMGDWDXIVCKPE-UHFFFAOYSA-N	1.7 × 10 ⁵ 2.6 × 10 ⁶ 2.2 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C52NO3 C ₅ H ₁₁ NO ₄ NBCYUKLMSBOGIC-UHFFFAOYSA-N	2.0 × 10 ¹ 5.0 × 10 ² 6.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C54NO3 C ₅ H ₁₁ NO ₅ OXSZOTYJVSIXIT-UHFFFAOYSA-N	4.9 × 10 ⁴ 3.8 × 10 ⁵ 9.1 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C57NO3CO3H C ₅ H ₉ NO ₈ BPRAPKBGVRGZEK-UHFFFAOYSA-N	2.4 × 10 ¹⁰ 1.4 × 10 ⁹ 3.6 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C57NO3PAN C ₅ H ₈ N ₂ O ₁₀ QHZGCLHPLOENFL-UHFFFAOYSA-N	9.8 × 10 ⁸ 2.7 × 10 ⁸ 2.5 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C58NO3CO3H C ₅ H ₉ NO ₈ NFCMHUFQLLKQQS-UHFFFAOYSA-N	3.5 × 10 ⁹ 5.8 × 10 ⁷ 5.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C58NO3PAN C ₅ H ₈ N ₂ O ₁₀ VIMTZSSJOGPGII-UHFFFAOYSA-N	1.4 × 10 ⁸ 4.2 × 10 ⁸ 8.5 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5PAN10 C ₅ H ₉ NO ₇ YRCMXGZRWLAVBH-UHFFFAOYSA-N	1.2 × 10 ⁶ 2.5 × 10 ⁷ 9.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5PAN11 C ₅ H ₉ NO ₆ ISSHIFFUOEHLT-UHFFFAOYSA-N	5.8 × 10 ³ 2.4 × 10 ⁴ 1.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5PAN12 C ₅ H ₉ NO ₇ VRGURBHINCFLEI-UHFFFAOYSA-N	7.3 × 10 ⁵ 1.0 × 10 ⁷ 9.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5PAN13 C ₅ H ₉ NO ₇ GDYHQRWKLNLCBR-UHFFFAOYSA-N	1.2 × 10 ⁶ 2.0 × 10 ⁷ 5.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5PAN14 C ₅ H ₉ NO ₆ KAYGTWBSLGDXRUV-UHFFFAOYSA-N	9.3 × 10 ³ 2.2 × 10 ⁴ 5.8 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5PAN15 C ₅ H ₉ NO ₆ DDVUSZKFLFMJLG-UHFFFAOYSA-N	5.8 × 10 ³ 9.3 × 10 ³ 5.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5PAN17 C ₅ H ₇ NO ₆ WOHMTHRFBCEPEN-UHFFFAOYSA-N	2.3 × 10 ⁴ 1.3 × 10 ⁵ 2.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5PAN19 C ₅ H ₇ NO ₆ SXXBKHKGTQGHOF-UHFFFAOYSA-N	2.3 × 10 ⁴ 1.0 × 10 ⁵ 1.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5PAN1 C ₅ H ₉ NO ₆ BXAPPDLQCWAVAO-UHFFFAOYSA-N	8.3 × 10 ³ 4.0 × 10 ⁴ 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5PAN3 C ₅ H ₉ NO ₆ GANOVMBKDCJS-UHFFFAOYSA-N	8.3 × 10 ³ 3.3 × 10 ⁴ 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5PAN5 C ₅ H ₉ NO ₆ SNADUXVVPKYKTN-UHFFFAOYSA-N	8.3 × 10 ³ 3.0 × 10 ⁴ 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C5PAN8 C ₅ H ₉ NO ₆ AVADEHRLZLNNT-UHFFFAOYSA-N	8.3 × 10 ³ 1.9 × 10 ⁴ 7.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2M3C4NO3 C ₅ H ₁₁ NO ₄ KRCHLCXLXFPMO-UHFFFAOYSA-N	2.5 × 10 ¹ 5.0 × 10 ² 1.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM22C3NO3 C ₅ H ₁₁ NO ₄ GJZIQWDDCYOUOR-UHFFFAOYSA-N	1.4 × 10 ¹ 3.2 × 10 ² 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM2C43NO3 C ₅ H ₁₁ NO ₄ OLLXHFMLUGEEM-UHFFFAOYSA-N	2.5 × 10 ¹ 4.1 × 10 ² 2.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM33C3NO3 C ₅ H ₁₁ NO ₄ LCUGTHWCLWAZIN-UHFFFAOYSA-N	1.4 × 10 ¹ 2.0 × 10 ² 5.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO13C5NO3 C ₅ H ₁₁ NO ₅ HRXGEJHIRPMYKD-UHFFFAOYSA-N	8.3 × 10 ⁴ 5.4 × 10 ⁵ 1.6 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO24C5NO3 C ₅ H ₁₁ NO ₅ GDKLMXJUXHUPHP-UHFFFAOYSA-N	8.3 × 10 ⁴ 5.8 × 10 ⁵ 1.4 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2C54NO3 C ₅ H ₁₁ NO ₄ BDOVYOMPHMUDCA-UHFFFAOYSA-N	2.5 × 10 ¹ 2.8 × 10 ² 1.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2M2C4NO3 C ₅ H ₁₁ NO ₄ JLEBTGVTEJACMC-UHFFFAOYSA-N	1.4 × 10 ¹ 3.6 × 10 ² 1.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C5NO3 C ₅ H ₁₁ NO ₄ VSJMKXXNGJNYTF-UHFFFAOYSA-N	2.0 × 10 ¹ 3.8 × 10 ² 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INAHCO3H C ₅ H ₉ NO ₈ NANYPKIUOGNJFQ-UHFFFAOYSA-N	1.2 × 10 ⁹ 4.9 × 10 ⁷ 5.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INAHPAN C ₅ H ₈ N ₂ O ₁₀ ISRNXRSYOJKFEQ-UHFFFAOYSA-N	5.0 × 10 ⁷ 6.8 × 10 ⁸ 5.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INAHPCO3H C ₅ H ₉ NO ₉ ZYWYMWCOZFANRV-UHFFFAOYSA-N	1.8 × 10 ¹² 2.5 × 10 ⁹ 3.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:INAHPPAN C ₅ H ₈ N ₂ O ₁₁ ZXVKOORKVQYPPA-UHFFFAOYSA-N	8.0 × 10 ¹⁰ 1.1 × 10 ⁹ 3.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INANCO3H C ₅ H ₈ N ₂ O ₁₀ HKZKRKUNOXITIG-UHFFFAOYSA-N	2.7 × 10 ⁹ 2.6 × 10 ⁸ 3.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INANO3 C ₅ H ₁₀ N ₂ O ₈ VVVQXVVEBQASSQ-UHFFFAOYSA-N	7.8 × 10 ⁶ 2.6 × 10 ⁷ 1.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INANPAN C ₅ H ₇ N ₃ O ₁₂ PTXQCTHWIXKTGJ-UHFFFAOYSA-N	1.2 × 10 ⁸ 3.7 × 10 ⁷ 4.7 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INAOH C ₅ H ₁₁ NO ₆ KOIOFJRFFFLZDV-UHFFFAOYSA-N	4.0 × 10 ⁷ 2.9 × 10 ⁸ 3.2 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INAOOH C ₅ H ₁₁ NO ₇ JJIJPRURLLPNXAY-UHFFFAOYSA-N	5.3 × 10 ⁹ 4.7 × 10 ⁸ 2.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INB1HPCO3H C ₅ H ₉ NO ₉ UQVCIXBCKWUTPD-UHFFFAOYSA-N	1.5 × 10 ¹² 1.3 × 10 ⁹ 2.2 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INB1HPPAN C ₅ H ₈ N ₂ O ₁₁ MXDOILKWVFGWCS-UHFFFAOYSA-N	6.9 × 10 ¹⁰ 5.3 × 10 ⁸ 1.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INB1NACO3H C ₅ H ₈ N ₂ O ₁₀ IWCHPIGOQCZQCT-UHFFFAOYSA-N	2.6 × 10 ⁹ 2.5 × 10 ⁸ 8.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INB1NAPAN C ₅ H ₇ N ₃ O ₁₂ NYNQOGZUUKXJDZ-UHFFFAOYSA-N	1.0 × 10 ⁸ 7.1 × 10 ⁷ 2.8 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INB1NBCO3H C ₅ H ₈ N ₂ O ₁₀ KPBUCMMBNBINOH-UHFFFAOYSA-N	2.6 × 10 ⁹ 2.0 × 10 ⁸ 3.5 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INB1NBPAN C ₅ H ₇ N ₃ O ₁₂ JLOMTJWSNAHKLK-UHFFFAOYSA-N	1.0 × 10 ⁸ 5.8 × 10 ⁷ 4.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INB1NO3 C ₅ H ₁₀ N ₂ O ₈ JLJGQNDHJZYHP-UHFFFAOYSA-N	7.8 × 10 ⁶ 1.4 × 10 ⁷ 8.1 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:INB1OH C ₅ H ₁₁ NO ₆ CMMIHJKAMSCCNX-UHFFFAOYSA-N	6.9 × 10 ⁷ 1.7 × 10 ⁸ 1.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INB1OOH C ₅ H ₁₁ NO ₇ QLIFJAFKYUVUMD-UHFFFAOYSA-N	5.3 × 10 ⁹ 1.1 × 10 ⁸ 1.9 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INB2OOH C ₅ H ₁₁ NO ₇ KNHLEPZPJYMKZ-UHFFFAOYSA-N	5.3 × 10 ⁹ 5.6 × 10 ⁸ 4.7 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INCNCO3H C ₅ H ₈ N ₂ O ₁₀ OBBLXUYBPVASEH-UHFFFAOYSA-N	2.7 × 10 ⁹ 3.0 × 10 ⁸ 8.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INCNO3 C ₅ H ₁₀ N ₂ O ₈ YANCNBBJBURWKL-UHFFFAOYSA-N	7.8 × 10 ⁶ 2.7 × 10 ⁷ 2.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INCNPAN C ₅ H ₇ N ₃ O ₁₂ MINPDRSMAYIHBB-UHFFFAOYSA-N	1.2 × 10 ⁸ 5.4 × 10 ⁷ 2.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INCOH C ₅ H ₁₁ NO ₆ CLYWBEAWDTVRBE-UHFFFAOYSA-N	4.0 × 10 ⁷ 2.8 × 10 ⁸ 4.4 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INCOOH C ₅ H ₁₁ NO ₇ LZOWWVNBCGLMRZ-UHFFFAOYSA-N	5.3 × 10 ⁹ 6.9 × 10 ⁸ 2.0 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INDHCO3H C ₅ H ₉ NO ₈ QUYOEJZVAFIYRP-UHFFFAOYSA-N	3.5 × 10 ⁹ 5.3 × 10 ⁷ 5.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INDHPAN C ₅ H ₈ N ₂ O ₁₀ WUJYJPIJVADQXS-UHFFFAOYSA-N	1.4 × 10 ⁸ 6.3 × 10 ⁸ 3.7 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INDHPCO3H C ₅ H ₉ NO ₉ XHWXDLVQLOECHL-UHFFFAOYSA-N	1.5 × 10 ¹² 8.9 × 10 ⁸ 6.5 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INDHPPAN C ₅ H ₈ N ₂ O ₁₁ MNXVJBKQIAYCJC-UHFFFAOYSA-N	6.9 × 10 ¹⁰ 4.4 × 10 ⁸ 7.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INDOH C ₅ H ₁₁ NO ₆ HMAKIHHEIANEM-UHFFFAOYSA-N	6.9 × 10 ⁷ 1.7 × 10 ⁸ 3.7 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:INDOOH C ₅ H ₁₁ NO ₇ MAYHMSJZSHQSOH-UHFFFAOYSA-N	5.3 × 10 ⁹ 1.1 × 10 ⁸ 7.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ISOPANO3 C ₅ H ₉ NO ₄ ISDFXKLTMDHJL-UHFFFAOYSA-N	6.0 × 10 ¹ 1.9 × 10 ³ 1.7 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ISOPBNO3 C ₅ H ₉ NO ₄ CIXVZPWFWMUOH-UHFFFAOYSA-N	5.6 × 10 ¹ 1.1 × 10 ² 3.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ISOPCNO3 C ₅ H ₉ NO ₄ IDJHVSOIJITEQU-UHFFFAOYSA-N	6.0 × 10 ¹ 1.9 × 10 ³ 2.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ISOPDNO3 C ₅ H ₉ NO ₄ PYTOMGVARIWPAT-UHFFFAOYSA-N	5.9 × 10 ¹ 1.8 × 10 ² 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2BU2OLNO3 C ₅ H ₁₁ NO ₄ AGMVBVSNQJHQAX-UHFFFAOYSA-N	2.0 × 10 ¹ 9.1 × 10 ¹ 5.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2BUOL2NO3 C ₅ H ₁₁ NO ₄ RQINUHXDZGZGUX-UHFFFAOYSA-N	1.7 × 10 ¹ 7.4 × 10 ¹ 5.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M3BU2OLNO3 C ₅ H ₁₁ NO ₄ HJMHUJWXCNPJL-UHFFFAOYSA-N	3.4 × 10 ¹ 1.4 × 10 ² 3.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MBOANO3 C ₅ H ₁₁ NO ₅ SMFXIBRHTKUPLI-UHFFFAOYSA-N	6.8 × 10 ⁴ 1.6 × 10 ⁵ 5.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MBOBNO3 C ₅ H ₁₁ NO ₅ DYXSFFPMZZUQFC-UHFFFAOYSA-N	2.1 × 10 ⁴ 1.6 × 10 ⁵ 4.5 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ME2BUOLNO3 C ₅ H ₁₁ NO ₄ SBGDAJKUHMJEMT-UHFFFAOYSA-N	2.0 × 10 ¹ 8.1 × 10 ¹ 4.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ME3BUOLNO3 C ₅ H ₁₁ NO ₄ YWTWLHUMBHVVS-UHFFFAOYSA-N	3.4 × 10 ¹ 1.4 × 10 ² 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC4OHCO3H C ₅ H ₉ NO ₇ PAYOKBFCVFNAB-UHFFFAOYSA-N	2.2 × 10 ⁷ 1.6 × 10 ⁶ 4.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NC4OHCPAN C ₅ H ₈ N ₂ O ₉ JNBJPCXCXYUJJV-UHFFFAOYSA-N	9.1 × 10 ⁵ 4.2 × 10 ⁵ 2.8 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC524NO3 C ₅ H ₁₀ N ₂ O ₉ NSZUZBPWOYNZJW-UHFFFAOYSA-N	2.7 × 10 ¹⁰ 1.6 × 10 ¹⁰ 1.0 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC524OH C ₅ H ₁₁ NO ₇ ZZGZKDXCMVGDSK-UHFFFAOYSA-N	1.1 × 10 ¹¹ 1.4 × 10 ¹¹ 5.4 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC524OOH C ₅ H ₁₁ NO ₈ IVLBZHUBMDVGDGP-UHFFFAOYSA-N	1.8 × 10 ¹³ 1.7 × 10 ¹¹ 9.3 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NMBOAOOH C ₅ H ₁₁ NO ₆ JWWMAKNKCQEFPPZ-UHFFFAOYSA-N	1.5 × 10 ⁶ 9.8 × 10 ⁴ 1.0 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NMBOBOOH C ₅ H ₁₁ NO ₆ ZVOCBPRLBFFNTM-UHFFFAOYSA-N	1.5 × 10 ⁶ 4.3 × 10 ⁴ 3.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PE1ENEANO3 C ₅ H ₁₁ NO ₄ VVLSYMLJBKJHQI-UHFFFAOYSA-N	2.8 × 10 ¹ 1.1 × 10 ² 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PE1ENEBNO3 C ₅ H ₁₁ NO ₄ ZAYLQHAUCSLXCO-UHFFFAOYSA-N	2.8 × 10 ¹ 1.3 × 10 ² 6.5 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PE2ENEANO3 C ₅ H ₁₁ NO ₄ SNSYWPGYFWSVQC-UHFFFAOYSA-N	3.4 × 10 ¹ 1.2 × 10 ² 6.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PE2ENEBNO3 C ₅ H ₁₁ NO ₄ FSHUAFNCTFMDNJ-UHFFFAOYSA-N	3.4 × 10 ¹ 1.1 × 10 ² 2.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PROL11MNO3 C ₅ H ₁₁ NO ₄ XLOGQOLFBMMDEL-UHFFFAOYSA-N	1.7 × 10 ¹ 8.5 × 10 ¹ 5.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PROL1MPAN C ₅ H ₉ NO ₆ KGIFHBAEXLJKCU-UHFFFAOYSA-N	3.0 × 10 ² 2.5 × 10 ³ 1.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BZBIPERNO3 C ₆ H ₇ NO ₆ RBJPNJQUNYROJW-UHFFFAOYSA-N	1.0 × 10 ⁶ 8.7 × 10 ⁴ 1.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C4ME2OHNO3 C ₆ H ₁₃ NO ₄ KWGTWPROGIVFDL-UHFFFAOYSA-N	1.1 × 10 ¹ 5.1 × 10 ¹ 1.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C518PAN C ₆ H ₉ NO ₆ SMGAVNKPBYPONP-UHFFFAOYSA-N	1.5 × 10 ⁴ 1.4 × 10 ⁴ 4.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C622NO3 C ₆ H ₁₁ NO ₄ UCAFMJTBHTENA-UHFFFAOYSA-N	3.5 × 10 ¹ 4.0 × 10 ¹ 6.6 × 10 ² 2.0	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C624NO3 C ₆ H ₁₁ NO ₄ NPRBCQJDIIBUMY-UHFFFAOYSA-N	4.0 × 10 ¹ 3.8 × 10 ² 5.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C64OH5NO3 C ₆ H ₁₃ NO ₄ SZVWRLIYDKPIRS-UHFFFAOYSA-N	2.7 × 10 ¹ 7.8 × 10 ¹ 2.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C65OH4NO3 C ₆ H ₁₃ NO ₄ ZZPOFDLVCBSRPC-UHFFFAOYSA-N	2.7 × 10 ¹ 8.7 × 10 ¹ 5.5 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C66NO35OH C ₆ H ₁₃ NO ₄ FGVUHVRIWFWDQ-UHFFFAOYSA-N	2.3 × 10 ¹ 8.9 × 10 ¹ 5.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6OH5NO3 C ₆ H ₁₃ NO ₄ WNZDORMXFCCFFY-UHFFFAOYSA-N	2.3 × 10 ¹ 8.1 × 10 ¹ 8.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN11 C ₆ H ₁₁ NO ₆ MMZOJEONIKVQSZ-UHFFFAOYSA-N	7.8 × 10 ³ 2.8 × 10 ⁴ 6.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN13 C ₆ H ₁₁ NO ₆ UVFJOYDNGFNBNV-UHFFFAOYSA-N	4.5 × 10 ³ 1.8 × 10 ⁴ 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN14 C ₆ H ₁₁ NO ₆ OFISHWPBQMHPPEB-UHFFFAOYSA-N	4.5 × 10 ³ 1.9 × 10 ⁴ 1.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN19 C ₆ H ₁₁ NO ₆ ZTVAXWHNQKLGPW-UHFFFAOYSA-N	7.8 × 10 ³ 2.6 × 10 ⁴ 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C6PAN1 C ₆ H ₁₁ NO ₆ INIWXNWKFGUMOJ-UHFFFAOYSA-N	6.5 × 10 ³ 2.6 × 10 ⁴ 6.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN20 C ₆ H ₁₁ NO ₆ HBAXDJNNSYEITK-UHFFFAOYSA-N	7.8 × 10 ³ 1.5 × 10 ⁴ 4.8 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN21 C ₆ H ₁₁ NO ₆ PXGXPDBWDXFTJ-UHFFFAOYSA-N	4.5 × 10 ³ 1.6 × 10 ⁴ 3.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN22 C ₆ H ₁₁ NO ₆ YIFZDOMLXOKIHL-UHFFFAOYSA-N	6.5 × 10 ³ 1.3 × 10 ⁴ 1.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN23 C ₆ H ₁₁ NO ₆ OODNPGDDVDMKSB-UHFFFAOYSA-N	3.3 × 10 ² 2.6 × 10 ³ 4.2 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN4 C ₆ H ₁₁ NO ₆ ZWWUNLHZACGCEV-UHFFFAOYSA-N	7.8 × 10 ³ 2.1 × 10 ⁴ 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN8 C ₆ H ₁₁ NO ₆ UOLRWSMDFSCHJH-UHFFFAOYSA-N	4.5 × 10 ³ 2.8 × 10 ⁴ 7.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CYHXOLANO3 C ₆ H ₁₁ NO ₄ GVSCAKVHXWAQQJ-UHFFFAOYSA-N	8.5 × 10 ¹ 4.6 × 10 ² 4.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H13M3C5NO3 C ₆ H ₁₃ NO ₅ ZRQJKBICSYYJDC-UHFFFAOYSA-N	4.6 × 10 ⁴ 2.8 × 10 ⁵ 4.2 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H1MC5NO3 C ₆ H ₁₃ NO ₄ YQESDLQNDPCVPT-UHFFFAOYSA-N	1.9 × 10 ¹ 3.6 × 10 ² 8.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2MC5NO3 C ₆ H ₁₃ NO ₄ OQOPDPWKHFKGPO-UHFFFAOYSA-N	1.9 × 10 ¹ 4.3 × 10 ² 4.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H3M3C5NO3 C ₆ H ₁₃ NO ₄ KFPWWQORUDKTSF-UHFFFAOYSA-N	1.2 × 10 ¹ 2.5 × 10 ² 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM22C4NO3 C ₆ H ₁₃ NO ₄ VALJBIPPHZOXME-UHFFFAOYSA-N	1.2 × 10 ¹ 3.0 × 10 ² 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HM23C4NO3 C ₆ H ₁₃ NO ₄ VYFSYIPQAVXJDI-UHFFFAOYSA-N	1.9 × 10 ¹ 4.8 × 10 ² 4.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HM33C4NO3 C ₆ H ₁₃ NO ₄ HUEIARDLQBFSAX-UHFFFAOYSA-N	1.2 × 10 ¹ 3.2 × 10 ² 4.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO1C6NO3 C ₆ H ₁₃ NO ₄ ITCMBKDCMKPMFX-UHFFFAOYSA-N	1.9 × 10 ¹ 2.5 × 10 ² 7.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO1MC5NO3 C ₆ H ₁₃ NO ₄ HKEZUADWXQLOIL-UHFFFAOYSA-N	1.9 × 10 ¹ 2.4 × 10 ² 4.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2C6NO3 C ₆ H ₁₃ NO ₄ PAWWQEMXBSLVJC-UHFFFAOYSA-N	1.6 × 10 ¹ 1.9 × 10 ¹ 2.0 × 10 ² 4.2	10000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:HO2M2C5NO3 C ₆ H ₁₃ NO ₄ VYPLOHRVLBPDEY-UHFFFAOYSA-N	1.2 × 10 ¹ 2.9 × 10 ² 5.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO2MC5NO3 C ₆ H ₁₃ NO ₄ HYCOTEZKEHIINQ-UHFFFAOYSA-N	1.9 × 10 ¹ 3.1 × 10 ² 3.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C6NO3 C ₆ H ₁₃ NO ₄ DLGRGHMYOOYQLW-UHFFFAOYSA-N	1.9 × 10 ¹ 3.0 × 10 ² 2.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NDNPHEOOH C ₆ H ₅ N ₃ O ₁₂ CXGWHQULUCBXTG-UHFFFAOYSA-N	1.2 × 10 ¹⁵ 3.2 × 10 ⁹ 1.8 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NNCATECOOH C ₆ H ₆ N ₂ O ₁₁ SEZKEDQZGXKDIE-UHFFFAOYSA-N	1.4 × 10 ¹⁶ 5.9 × 10 ⁸ 1.0 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPHENOH C ₆ H ₇ NO ₇ RMHIEAGXGVAIOV-UHFFFAOYSA-N	1.8 × 10 ⁹ 8.5 × 10 ⁶ 4.8 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPHENOOH C ₆ H ₇ NO ₈ AMKSGTJAMDYUMG-UHFFFAOYSA-N	4.7 × 10 ¹⁰ 5.8 × 10 ⁶ 4.3 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C622PAN C ₇ H ₁₁ NO ₆ YZCFVDKMDQZEJM-UHFFFAOYSA-N	1.3 × 10 ⁴ 2.8 × 10 ⁴ 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C624PAN C ₇ H ₁₁ NO ₆ GVGFFJILZZBAQC-UHFFFAOYSA-N	1.3 × 10 ⁴ 2.0 × 10 ⁴ 2.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C720NO3 C ₇ H ₁₁ NO ₄ VRUSDNGIDALYSE-UHFFFAOYSA-N	1.6 × 10 ² 1.7 × 10 ³ 3.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7PAN1 C ₇ H ₁₃ NO ₆ HWQKKNUBUUPBAM-UHFFFAOYSA-N	3.7 × 10 ³ 2.1 × 10 ⁴ 2.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7PAN2 C ₇ H ₁₃ NO ₆ LEPHBBVBSNQAKS-UHFFFAOYSA-N	6.0 × 10 ³ 9.8 × 10 ³ 6.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2M2C65NO3 C ₇ H ₁₅ NO ₄ CAEQJFHLOCBFOE-UHFFFAOYSA-N	1.0 × 10 ¹ 1.4 × 10 ² 3.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2M4C65NO3 C ₇ H ₁₅ NO ₄ GNQNFQMHRYMA-UHFFFAOYSA-N	1.8 × 10 ¹ 2.1 × 10 ² 3.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2M5C65NO3 C ₇ H ₁₅ NO ₄ JWGQNCMAKPVWAL-UHFFFAOYSA-N	1.0 × 10 ¹ 9.6 × 10 ¹ 1.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H3M3C6NO3 C ₇ H ₁₅ NO ₄ HWCRTHIHVAVLJX-UHFFFAOYSA-N	1.0 × 10 ¹ 2.3 × 10 ² 2.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C76NO3 C ₇ H ₁₅ NO ₄ FLDFLEPRHCTYNR-UHFFFAOYSA-N	1.7 × 10 ¹ 1.5 × 10 ² 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MNNCATCOOH C ₇ H ₈ N ₂ O ₁₁ QARZHCGBBCBWKI-UHFFFAOYSA-N	1.0 × 10 ¹⁶ 5.5 × 10 ⁹ 1.2 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NCRESOH C ₇ H ₉ NO ₇ DNQMNVMUZARJRH-UHFFFAOYSA-N	9.8 × 10 ⁸ 3.4 × 10 ⁶ 7.3 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NCRESOOH C ₇ H ₉ NO ₈ CBYLLFTZDVJCIH-UHFFFAOYSA-N	2.6 × 10 ¹⁰ 2.1 × 10 ⁶ 6.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NDNCRESOOH C ₇ H ₇ N ₃ O ₁₂ LRLYMWFQIDHJSH-UHFFFAOYSA-N	7.1 × 10 ¹⁴ 1.4 × 10 ⁹ 1.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:TLBIPERNO3 C ₇ H ₉ NO ₆ BBVQCFWACDVWPL-UHFFFAOYSA-N	5.8 × 10 ⁵ 2.5 × 10 ⁴ 4.9 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C8PAN1 C ₈ H ₁₅ NO ₆ JRARROZAJMGAPP-UHFFFAOYSA-N	4.7 × 10 ³ 8.0 × 10 ³ 7.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EBZBPERNO3 C ₈ H ₁₁ NO ₆ GVVNXZZYBMLIBS-UHFFFAOYSA-N	5.4 × 10 ⁵ 1.6 × 10 ⁴ 1.9 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ENNCATCOOH C ₈ H ₁₀ N ₂ O ₁₁ SUCBZAKUUVBJMN-UHFFFAOYSA-N	8.7 × 10 ¹⁵ 3.2 × 10 ⁹ 5.8 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C86NO3 C ₈ H ₁₇ NO ₄ WNECKFLKAYSMQF-UHFFFAOYSA-N	1.4 × 10 ¹ 1.2 × 10 ² 1.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXNNCATOOH C ₈ H ₁₀ N ₂ O ₁₁ SNJAPGUPFXVMJK-UHFFFAOYSA-N	5.4 × 10 ¹⁵ 2.0 × 10 ⁹ 4.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYBIPENO3 C ₈ H ₁₁ NO ₆ QFCKPTYGEYQVET-UHFFFAOYSA-N	3.3 × 10 ⁵ 8.9 × 10 ³ 1.3 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NDNEBZLOOH C ₈ H ₉ N ₃ O ₁₂ XZASAIPCUIAVQG-UHFFFAOYSA-N	6.3 × 10 ¹⁴ 8.5 × 10 ⁸ 4.4 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NDNMXYLOOH C ₈ H ₉ N ₃ O ₁₂ AAXPRTISYYDKLT-UHFFFAOYSA-N	4.6 × 10 ¹⁴ 8.0 × 10 ⁹ 1.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NDNOXYLOOH C ₈ H ₉ N ₃ O ₁₂ SEMBUWBKKSEFTL-UHFFFAOYSA-N	8.5 × 10 ¹⁴ 2.3 × 10 ⁹ 9.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NDNPXYLOOH C ₈ H ₉ N ₃ O ₁₂ YXONGYHUJBRFJO-UHFFFAOYSA-N	4.6 × 10 ¹⁴ 1.2 × 10 ⁹ 4.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NEBNZOLOH C ₈ H ₁₁ NO ₇ GKEIZOZEJLMBMT-UHFFFAOYSA-N	7.8 × 10 ⁸ 2.1 × 10 ⁶ 2.3 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NEBNZOLOOH C ₈ H ₁₁ NO ₈ DZFBJORWJYJOSR-UHFFFAOYSA-N	2.0 × 10 ¹⁰ 1.3 × 10 ⁶ 3.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NMXYOLOH C ₈ H ₁₁ NO ₇ SFEIDLQIDXHPNL-UHFFFAOYSA-N	5.4 × 10 ⁸ 1.4 × 10 ⁶ 3.6 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NMXYOLOOH C ₈ H ₁₁ NO ₈ ZTRVHLWFIBLUPT-UHFFFAOYSA-N	1.4 × 10 ¹⁰ 8.1 × 10 ⁵ 6.6 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOXYOLOH C ₈ H ₁₁ NO ₇ UBRWKHDWLQNZCI-UHFFFAOYSA-N	6.6 × 10 ⁸ 2.3 × 10 ⁶ 1.0 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOXYOLOOH C ₈ H ₁₁ NO ₈ UHJNRWWMXKFNWGQ-UHFFFAOYSA-N	1.7 × 10 ¹⁰ 1.5 × 10 ⁶ 2.0 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPXYOLOH C ₈ H ₁₁ NO ₇ DMOUSJNYQFTOEV-UHFFFAOYSA-N	6.6 × 10 ⁸ 3.0 × 10 ⁶ 2.6 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPXYOLOOH C ₈ H ₁₁ NO ₈ XNVGITFEYRRJBZ-UHFFFAOYSA-N	1.7 × 10 ¹⁰ 1.8 × 10 ⁶ 3.0 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXNNCATOOH C ₈ H ₁₀ N ₂ O ₁₁ GYUDSTHOULZHIU-UHFFFAOYSA-N	1.0 × 10 ¹⁶ 3.5 × 10 ⁸ 3.2 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYBIPENO3 C ₈ H ₁₁ NO ₆ QQSYVIZUYAXYBZ-UHFFFAOYSA-N	3.3 × 10 ⁵ 9.1 × 10 ³ 2.0 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXNNCATOOH C ₈ H ₁₀ N ₂ O ₁₁ PMLQPKQVRFHBT-UHFFFAOYSA-N	5.4 × 10 ¹⁵ 2.0 × 10 ⁸ 4.5 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYBIPENO3 C ₈ H ₁₁ NO ₆ DHJHBQWQGWNRXC-UHFFFAOYSA-N	3.3 × 10 ⁵ 9.3 × 10 ³ 2.9 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C9PAN1 C ₉ H ₁₇ NO ₆ XXDOIRAKHRPRCF-UHFFFAOYSA-N	3.7 × 10 ³ 6.8 × 10 ³ 6.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C96NO3 C ₉ H ₁₉ NO ₄ IBTJZA0BCFQTAU-UHFFFAOYSA-N	1.1 × 10 ¹ 9.3 × 10 ¹ 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPBZBPRNO3 C ₉ H ₁₃ NO ₆ VLTHUNWGYHRCPS-UHFFFAOYSA-N	5.0 × 10 ⁵ 1.5 × 10 ⁴ 1.2 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:IPNNCATOOH C ₉ H ₁₂ N ₂ O ₁₁ QQQAPHFHFZPQHQ-UHFFFAOYSA-N	8.1 × 10 ¹⁵ 2.9 × 10 ⁹ 1.4 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:METLBIPNO3 C ₉ H ₁₃ NO ₆ VQZACYIDHNLNBQ-UHFFFAOYSA-N	2.6 × 10 ⁵ 5.9 × 10 ³ 2.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTNNCATOOH C ₉ H ₁₂ N ₂ O ₁₁ ILPSXJBNDMCAEH-UHFFFAOYSA-N	4.8 × 10 ¹⁵ 1.2 × 10 ⁹ 9.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NDNIPBLOOH C ₉ H ₁₁ N ₃ O ₁₂ HEZPBZRCUHPAHJ-UHFFFAOYSA-N	5.9 × 10 ¹⁴ 8.0 × 10 ⁸ 2.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NDNMETLOOH C ₉ H ₁₁ N ₃ O ₁₂ GVOHWVMFRUNQQB-UHFFFAOYSA-N	3.8 × 10 ¹⁴ 4.9 × 10 ⁹ 1.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NDNOETLOOH C ₉ H ₁₁ N ₃ O ₁₂ DLTVFZDBANLVJD-UHFFFAOYSA-N	6.9 × 10 ¹⁴ 1.4 × 10 ⁹ 1.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NDNPBZLOOH C ₉ H ₁₁ N ₃ O ₁₂ JBFCLZRPRJLGG-UHFFFAOYSA-N	5.1 × 10 ¹⁴ 6.8 × 10 ⁸ 3.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NDNPETLOOH C ₉ H ₁₁ N ₃ O ₁₂ HIQGLTMZAYSJQX-UHFFFAOYSA-N	3.8 × 10 ¹⁴ 6.8 × 10 ⁸ 1.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NDNT123OOH C ₉ H ₁₁ N ₃ O ₁₂ UGLBOUATFGGZQD-UHFFFAOYSA-N	4.8 × 10 ¹⁴ 1.1 × 10 ⁹ 1.7 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NDNT124OOH C ₉ H ₁₁ N ₃ O ₁₂ JFYUNHMMAYFMSCF-UHFFFAOYSA-N	2.6 × 10 ¹⁴ 5.5 × 10 ⁸ 2.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NIPBNZOLOH C ₉ H ₁₃ NO ₇ IAYADIRZIVDBNK-UHFFFAOYSA-N	7.3 × 10 ⁸ 2.1 × 10 ⁶ 6.0 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NIPBZOLOOH C ₉ H ₁₃ NO ₈ UJRLUYDBOZESDX-UHFFFAOYSA-N	1.9 × 10 ¹⁰ 1.2 × 10 ⁶ 2.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NMETOLOH C ₉ H ₁₃ NO ₇ JUUDFVZFULKTPV-UHFFFAOYSA-N	4.4 × 10 ⁸ 9.8 × 10 ⁵ 1.3 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NMETOLOOH C ₉ H ₁₃ NO ₈ CCCPQNSHVNXETJ-UHFFFAOYSA-N	1.1 × 10 ¹⁰ 5.5 × 10 ⁵ 1.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOETOLOH C ₉ H ₁₃ NO ₇ RRTVORKFFCYCH-UHFFFAOYSA-N	6.5 × 10 ⁸ 2.9 × 10 ⁶ 4.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOETOLOOH C ₉ H ₁₃ NO ₈ CGRZNCNSBNPNBR-UHFFFAOYSA-N	1.7 × 10 ¹⁰ 1.7 × 10 ⁶ 2.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPBNZOLOH C ₉ H ₁₃ NO ₇ PSGNFPQCVGIEDF-UHFFFAOYSA-N	7.1 × 10 ⁸ 1.6 × 10 ⁶ 2.9 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPBNZOLOOH C ₉ H ₁₃ NO ₈ SNFHXCYEBCZPSO-UHFFFAOYSA-N	1.9 × 10 ¹⁰ 9.8 × 10 ⁵ 2.2 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPETOLOH C ₉ H ₁₃ NO ₇ ILVSHXKPUYWBMX-UHFFFAOYSA-N	5.3 × 10 ⁸ 1.8 × 10 ⁶ 2.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPETOLOOH C ₉ H ₁₃ NO ₈ BKSLAYLCQMXSES-UHFFFAOYSA-N	1.4 × 10 ¹⁰ 8.9 × 10 ⁵ 1.3 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NTM123LOOH C ₉ H ₁₃ NO ₈ BTWUGVBELCWISQ-UHFFFAOYSA-N	1.1 × 10 ¹⁰ 9.1 × 10 ⁵ 5.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NTM123OLOH C ₉ H ₁₃ NO ₇ DXGFZPSQDYIOOU-UHFFFAOYSA-N	4.4 × 10 ⁸ 1.6 × 10 ⁶ 7.4 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NTM124LOOH C ₉ H ₁₃ NO ₈ JDMNMHRINWGUFU-UHFFFAOYSA-N	1.1 × 10 ¹⁰ 1.3 × 10 ⁶ 3.4 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NTM124OLOH C ₉ H ₁₃ NO ₇ RASHBSOBGFFOLP-UHFFFAOYSA-N	4.4 × 10 ⁸ 2.3 × 10 ⁶ 2.0 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NTM135LOOH C ₉ H ₁₃ NO ₈ AUGMYCIDZMPUKI-UHFFFAOYSA-N	9.6 × 10 ⁹ 5.1 × 10 ⁵ 3.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NTM135OLOH C ₉ H ₁₃ NO ₇ RAAKFDOLNJCXRG-UHFFFAOYSA-N	3.6 × 10 ⁸ 1.1 × 10 ⁶ 2.7 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:OETLBIPNO3 C ₉ H ₁₃ NO ₆ FQBYEMVYEQXMF-UHFFFAOYSA-N	2.6 × 10 ⁵ 6.2 × 10 ³ 6.6 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OTNNCATOOH C ₉ H ₁₂ N ₂ O ₁₁ QVFSJCAPJVJPQJ-UHFFFAOYSA-N	8.9 × 10 ¹⁵ 2.1 × 10 ⁸ 1.3 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBZBPERNO3 C ₉ H ₁₃ NO ₆ XWXMYNZXCPDSAQ-UHFFFAOYSA-N	4.2 × 10 ⁵ 1.1 × 10 ⁴ 2.1 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PETLBIPNO3 C ₉ H ₁₃ NO ₆ SOIPWHDZHXSJN-UHFFFAOYSA-N	2.6 × 10 ⁵ 6.2 × 10 ³ 1.4 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PNNCATCOOH C ₉ H ₁₂ N ₂ O ₁₁ VZHROOMDTDJZFR-UHFFFAOYSA-N	6.9 × 10 ¹⁵ 2.5 × 10 ⁹ 4.3 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PTNNCATOOH C ₉ H ₁₂ N ₂ O ₁₁ DSPOEZNZVBSNSI-UHFFFAOYSA-N	4.8 × 10 ¹⁵ 1.2 × 10 ⁸ 1.8 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:T123NCTOOH C ₉ H ₁₃ NO ₉ QTWHDHJHZAXHRP-UHFFFAOYSA-N	9.3 × 10 ¹⁶ 3.4 × 10 ¹⁰ 2.6 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:T123NNCOOH C ₉ H ₁₂ N ₂ O ₁₁ DNVSLQYQQCSWFT-UHFFFAOYSA-N	3.0 × 10 ¹⁵ 8.9 × 10 ⁸ 1.4 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:T124NCTOOH C ₉ H ₁₃ NO ₉ TXEYLBVXEVRQAA-UHFFFAOYSA-N	1.7 × 10 ¹⁷ 3.4 × 10 ⁹ 6.9 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:T124NNCOOH C ₉ H ₁₂ N ₂ O ₁₁ ATYVZJLHFNLHKS-UHFFFAOYSA-N	3.0 × 10 ¹⁵ 1.0 × 10 ⁸ 7.8 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM123BPNO3 C ₉ H ₁₃ NO ₆ RQYOJMSOWIBID-UHFFFAOYSA-N	1.8 × 10 ⁵ 4.9 × 10 ³ 2.2 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124BPNO3 C ₉ H ₁₃ NO ₆ KUPKWWWJOBXRSMW-UHFFFAOYSA-N	1.8 × 10 ⁵ 3.8 × 10 ³ 9.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM135BPNO3 C ₉ H ₁₃ NO ₆ VYQMVFHQGVVJTP-UHFFFAOYSA-N	2.1 × 10 ⁵ 6.2 × 10 ³ 1.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:APINANO3 C ₁₀ H ₁₇ NO ₄ YITBNQHGGOKCTCE-UHFFFAOYSA-N	6.9 × 10 ¹ 7.3 × 10 ¹ 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:APINBNO3 C ₁₀ H ₁₇ NO ₄ AFJBVFUFZQZZRG-UHFFFAOYSA-N	6.9 × 10 ¹ 9.3 × 10 ¹ 2.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:APINCNO3 C ₁₀ H ₁₇ NO ₄ IHZLDCJLQGWYSYD-UHFFFAOYSA-N	7.6 × 10 ¹ 9.3 × 10 ² 4.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BPINANO3 C ₁₀ H ₁₇ NO ₄ LIKORQJDVXFRR-UHFFFAOYSA-N	6.2 × 10 ¹ 9.6 × 10 ¹ 5.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BPINBNO3 C ₁₀ H ₁₇ NO ₄ PIICVRQEXAAMFO-UHFFFAOYSA-N	6.2 × 10 ¹ 1.5 × 10 ² 2.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BPINCNO3 C ₁₀ H ₁₇ NO ₄ IVSZOCZGKNSHLW-UHFFFAOYSA-N	6.6 × 10 ¹ 1.7 × 10 ³ 1.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C10PAN1 C ₁₀ H ₁₉ NO ₆ PVQDOCOVRZVCAL-UHFFFAOYSA-N	3.4 × 10 ³ 6.0 × 10 ³ 6.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C918PAN C ₁₀ H ₁₅ NO ₆ GIWCNEZLGDWGNL-UHFFFAOYSA-N	8.7 × 10 ² 1.1 × 10 ⁴ 6.5 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMEBIPNO3 C ₁₀ H ₁₅ NO ₆ LWYZBKFMLLCHQU-UHFFFAOYSA-N	1.7 × 10 ⁵ 4.2 × 10 ³ 7.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C106NO3 C ₁₀ H ₂₁ NO ₄ LRSOGLAVONYUMB-UHFFFAOYSA-N	1.0 × 10 ¹ 7.6 × 10 ¹ 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LIMANO3 C ₁₀ H ₁₇ NO ₄ LZDKYYHMAURBIK-UHFFFAOYSA-N	8.4 × 10 ¹ 6.5 × 10 ¹ 1.8 × 10 ² 2.8	12000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:LIMBNO3 C ₁₀ H ₁₇ NO ₄ WIRXFNWUDJEZSG-UHFFFAOYSA-N	6.5 × 10 ¹ 2.3 × 10 ² 5.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:LIMCNO3 C ₁₀ H ₁₇ NO ₄ ZELLOEPLERCREX-UHFFFAOYSA-N	8.6 × 10 ¹ 8.1 × 10 ¹ 6.2 × 10 ² 8.1	19000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:NDMEPHOLOH C ₁₀ H ₁₅ NO ₇ XEZYIWLRTFENIO-UHFFFAOYSA-N	3.0 × 10 ⁸ 7.4 × 10 ⁵ 1.6 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NDMEPLOOH C ₁₀ H ₁₅ NO ₈ CUWVWZNCHEONFF-UHFFFAOYSA-N	7.4 × 10 ⁹ 3.4 × 10 ⁵ 7.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DETLBIPNO3 C ₁₁ H ₁₇ NO ₆ HUKONYHKUULPQM-UHFFFAOYSA-N	1.6 × 10 ⁵ 3.1 × 10 ³ 4.2 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C116NO3 C ₁₁ H ₂₃ NO ₄ ZSRHOFPLHKYIP-UHFFFAOYSA-N	8.0 6.2 × 10 ¹ 9.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NDEMPHOLOH C ₁₁ H ₁₇ NO ₇ SFAWLNJVZQJDAW-UHFFFAOYSA-N	2.6 × 10 ⁸ 4.7 × 10 ⁵ 1.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NDEMPLOOH C ₁₁ H ₁₇ NO ₈ KQXYOILDOZYPH-UHFFFAOYSA-N	6.2 × 10 ⁹ 2.4 × 10 ⁵ 1.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HO3C126NO3 C ₁₂ H ₂₅ NO ₄ NBVYOETUGSGBPE-UHFFFAOYSA-N	6.5 4.8 × 10 ¹ 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCANO3 C ₁₅ H ₂₅ NO ₄ DXJZLWPVAKABFC-UHFFFAOYSA-N	6.0 × 10 ¹ 1.1 × 10 ³ 2.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCBNO3 C ₁₅ H ₂₅ NO ₄ GGDFBGYMWXISJ-UHFFFAOYSA-N	6.0 × 10 ¹ 1.7 × 10 ³ 2.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCCNO3 C ₁₅ H ₂₅ NO ₄ AJHNYRDSMBHFTD-UHFFFAOYSA-N	8.5 × 10 ¹ 2.0 × 10 ³ 1.2 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:GLYPAN C ₂ HNO ₆ WWNQODGUPABTBB-UHFFFAOYSA-N	4.5 × 10 ³ 1.4 × 10 ³ 4.2 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NO3CH2CHO C ₂ H ₃ NO ₄ ABUBKAMLUVOXSP-UHFFFAOYSA-N	1.1 × 10 ¹ 9.3 × 10 ¹ 1.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3PAN2 C ₃ H ₃ NO ₆ JCWPFKBPQPIIIA-UHFFFAOYSA-N	3.6 × 10 ³ 4.0 × 10 ³ 5.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHOPRNO3 C ₃ H ₅ NO ₄ IIFXHQMWCHWMFS-UHFFFAOYSA-N	1.0 × 10 ¹ 3.9 × 10 ¹ 3.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BUTAL2NO3 C ₄ H ₇ NO ₄ JTMAFXAEAWTSPM-UHFFFAOYSA-N	8.1 1.9 × 10 ¹ 1.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BUTALNO3 C ₄ H ₇ NO ₄ YGQOBBYMNDZOFN-UHFFFAOYSA-N	8.1 4.6 × 10 ¹ 1.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4CONO3OOH C ₄ H ₇ NO ₆ OPYZRKWHBYWVWV-UHFFFAOYSA-N	7.1 × 10 ⁵ 2.1 × 10 ⁵ 1.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4NO3COOOH C ₄ H ₇ NO ₆ LPNJZRUFUCUXQKM-UHFFFAOYSA-N	7.1 × 10 ⁵ 1.1 × 10 ⁴ 5.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHOC2PAN C ₄ H ₅ NO ₆ RNHARUXEGCOCNU-UHFFFAOYSA-N	2.8 × 10 ³ 9.3 × 10 ³ 2.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CONM2CHO C ₄ H ₅ NO ₅ UXLHNUQVUCPVFF-UHFFFAOYSA-N	5.1 × 10 ³ 1.6 × 10 ³ 4.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CONM2CO3H C ₄ H ₅ NO ₇ KDPSYMPAERQTCV-UHFFFAOYSA-N	5.6 × 10 ⁶ 1.0 × 10 ⁵ 1.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CONM2PAN C ₄ H ₄ N ₂ O ₉ PRUSZGKEVUCSBM-UHFFFAOYSA-N	2.6 × 10 ⁵ 4.5 × 10 ⁴ 2.8 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IBUALANO3 C ₄ H ₇ NO ₄ BBEYVRKCPRBWGK-UHFFFAOYSA-N	8.1 6.0 × 10 ¹ 2.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IBUDIALPAN C ₄ H ₅ NO ₆ ANKFJODHGNELSW-UHFFFAOYSA-N	3.3 × 10 ³ 1.4 × 10 ³ 6.0 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MALDIALPAN C ₄ H ₃ NO ₆ JVYQADHFHGBZRY-UHFFFAOYSA-N	1.1 × 10 ⁴ 2.3 × 10 ⁴ 2.2 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MPRBNO3CHO C ₄ H ₇ NO ₄ ZFRSNPXDNOXJQA-UHFFFAOYSA-N	5.6 7.8 1.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC3CHO C ₄ H ₅ NO ₄ IRCIUAVPVOGPAB-UHFFFAOYSA-N	3.3 × 10 ¹ 1.1 × 10 ² 3.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3M3CHONO3 C ₅ H ₉ NO ₄ FSONNVXXYIKSKL-UHFFFAOYSA-N	4.7 1.6 × 10 ¹ 1.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3MCODBPAN C ₅ H ₅ NO ₆ ABUKHSDGKGHQTM-UHFFFAOYSA-N	7.6 × 10 ³ 2.2 × 10 ⁴ 6.8 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3MNO3CHO C ₅ H ₉ NO ₄ IIGIHDSEOSVDKL-UHFFFAOYSA-N	7.6 1.4 × 10 ¹ 1.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4CHOBNO3 C ₅ H ₉ NO ₄ IRTPVYBICUATCF-UHFFFAOYSA-N	6.8 2.5 × 10 ¹ 9.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4NO3CHO C ₅ H ₉ NO ₄ WGTULXFSTHCAFV-UHFFFAOYSA-N	4.7 5.0 1.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C514NO3 C ₅ H ₇ NO ₅ CEGGSEALUFJEH-UHFFFAOYSA-N	6.0 × 10 ³ 3.6 × 10 ⁴ 2.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C52NO31CO C ₅ H ₉ NO ₄ OIPNOUWHATXHMM-UHFFFAOYSA-N	6.8 1.2 × 10 ¹ 1.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO1M22PAN C ₅ H ₇ NO ₆ JNBWLXYXFYINSW-UHFFFAOYSA-N	1.8 × 10 ³ 6.0 × 10 ² 4.4 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MC3CODBPAN C ₅ H ₅ NO ₆ AENWJVVOXGCGHKR-UHFFFAOYSA-N	7.6 × 10 ³ 1.9 × 10 ⁴ 4.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC4CHO C ₅ H ₇ NO ₄ FHQODWHGFJXLCS-UHFFFAOYSA-N	2.2 × 10 ¹ 9.8 × 10 ¹ 6.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C522PAN C ₆ H ₇ NO ₆ BLDVCFQHJUDZGIY-UHFFFAOYSA-N	4.2 × 10 ³ 4.6 × 10 ³ 9.8 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C65NO36CHO C ₆ H ₁₁ NO ₄ AWOTULOVYXZRSX-UHFFFAOYSA-N	5.9 8.9 1.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHOC4PAN C ₆ H ₉ NO ₆ LKJHECXHBJSEQK-UHFFFAOYSA-N	2.0 × 10 ³ 3.6 × 10 ³ 3.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO1C6NO3 C ₆ H ₁₁ NO ₄ BSOUFWBHIRXMPX-UHFFFAOYSA-N	5.3 2.9 × 10 ¹ 1.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C615PAN C ₇ H ₉ NO ₇ QXDOZRAOCVERTF-UHFFFAOYSA-N	1.2 × 10 ⁶ 2.3 × 10 ⁵ 1.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C729NO3 C ₇ H ₁₁ NO ₄ IVMGVFSKIJXXOW-UHFFFAOYSA-N	1.1 × 10 ¹ 3.2 × 10 ¹ 4.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C729PAN C ₈ H ₁₁ NO ₆ UQYKHYVNMQUYAN-UHFFFAOYSA-N	3.6 × 10 ³ 1.6 × 10 ³ 2.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C810NO3 C ₈ H ₁₃ NO ₅ CHBSGOHAWLCLGZ-UHFFFAOYSA-N	2.8 × 10 ³ 7.3 × 10 ³ 4.3 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C822NO3 C ₈ H ₁₃ NO ₄ JWAJNALJDDSHOA-UHFFFAOYSA-N	2.9 × 10 ¹ 8.9 2.6 × 10 ¹ 1.1	10000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C830NO3 C ₈ H ₁₃ NO ₄ FXBNRUYCAFEP CZ-UHFFFAOYSA-N	1.0 × 10 ¹ 2.8 × 10 ¹ 7.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C831NO3 C ₈ H ₁₃ NO ₅ OVEOYJGENOZMLJ-UHFFFAOYSA-N	2.8 × 10 ³ 9.3 × 10 ³ 5.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C89NO3 C ₈ H ₁₃ NO ₄ JVGNHSSLWSUTIF-UHFFFAOYSA-N	1.0 × 10 ¹ 2.8 × 10 ¹ 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NC826OOH C ₈ H ₁₃ NO ₇ LIEZCAAIBRALIF-UHFFFAOYSA-N	1.9 × 10 ⁸ 5.1 × 10 ⁷ 3.6 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C822PAN C ₉ H ₁₃ NO ₆ AEOJBADXLVGVNE-UHFFFAOYSA-N	2.8 × 10 ³ 1.1 × 10 ³ 3.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C830PAN C ₉ H ₁₃ NO ₆ NSAJKAFLWKCEMC-UHFFFAOYSA-N	3.2 × 10 ³ 2.4 × 10 ³ 1.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C89PAN C ₉ H ₁₃ NO ₆ MAIUDZACSGCMBD-UHFFFAOYSA-N	3.2 × 10 ³ 2.5 × 10 ³ 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC91CHO C ₁₀ H ₁₅ NO ₄ AVQCYYCZMFYNOE-UHFFFAOYSA-N	1.6 × 10 ¹ 1.4 × 10 ¹ 8.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C126NO3 C ₁₂ H ₁₉ NO ₄ LCRFSVKVQOPOBC-UHFFFAOYSA-N	1.1 × 10 ¹ 3.4 × 10 ¹ 7.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C126PAN C ₁₃ H ₁₉ NO ₆ TVUSLNPYCCAOKX-UHFFFAOYSA-N	3.4 × 10 ³ 1.8 × 10 ³ 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C136NO3 C ₁₃ H ₂₁ NO ₄ FAQBCXSJSFDOSEN-UHFFFAOYSA-N	8.7 3.0 × 10 ¹ 8.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC1313OOH C ₁₃ H ₂₁ NO ₇ AIWUKZRYSUWIQN-UHFFFAOYSA-N	2.0 × 10 ⁸ 9.1 × 10 ⁷ 2.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C136PAN C ₁₄ H ₂₁ NO ₆ HVYQJFOLIDVKQK-UHFFFAOYSA-N	3.1 × 10 ³ 1.4 × 10 ³ 4.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C42AOH C ₃ H ₅ NO ₅ CQVFGUOVZVZZAM-UHFFFAOYSA-N	1.8 × 10 ³ 1.6 × 10 ⁴ 5.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HCOCOHPAN C ₃ H ₃ NO ₇ GGQYFRDCXKQQA-UHFFFAOYSA-N	1.2 × 10 ⁵ 5.4 × 10 ⁵ 2.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C41NO3 C ₄ H ₇ NO ₆ SGYMVPWBXCYWGY-UHFFFAOYSA-N	5.0 × 10 ⁶ 1.4 × 10 ⁷ 1.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C42OH C ₄ H ₇ NO ₆ OIAGCOLJHCONRV-UHFFFAOYSA-N	1.8 × 10 ⁶ 1.6 × 10 ⁷ 1.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C42OOH C ₄ H ₇ NO ₇ KUKJNXGETLVUQA-UHFFFAOYSA-N	1.3 × 10 ⁸ 1.4 × 10 ⁷ 1.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4OCCOHNO ₃ C ₄ H ₇ NO ₅ NEHFOAWUQWHZTI-UHFFFAOYSA-N	1.7 × 10 ³ 9.8 × 10 ³ 1.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:COCCOHNO ₃ C ₄ H ₇ NO ₅ HMCDHWALZVCNKO-UHFFFAOYSA-N	3.3 × 10 ⁴ 3.2 × 10 ⁴ 6.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:COHM2PAN C ₄ H ₅ NO ₇ UXUAXYPQPQSXR-R-UHFFFAOYSA-N	6.5 × 10 ⁴ 2.2 × 10 ⁵ 5.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MACRNB C ₄ H ₇ NO ₅ DLZDCWJOERFHAS-UHFFFAOYSA-N	1.0 × 10 ³ 1.3 × 10 ⁴ 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MACRNO ₃ C ₄ H ₇ NO ₅ ALINXPRBVMXOGH-UHFFFAOYSA-N	2.0 × 10 ⁴ 7.1 × 10 ³ 3.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4M2ALOHNO ₃ C ₅ H ₇ NO ₆ UOGOTHSJBRKVRR-UHFFFAOYSA-N	8.5 × 10 ⁵ 1.4 × 10 ⁶ 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C510OH C ₅ H ₉ NO ₆ ZCOZZYNQPKXJEJ-UHFFFAOYSA-N	1.0 × 10 ⁶ 1.2 × 10 ⁷ 8.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C510OOH C ₅ H ₉ NO ₇ GGBWELVRYZRQMP-UHFFFAOYSA-N	7.1 × 10 ⁷ 1.4 × 10 ⁷ 1.8 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C57NO ₃ C ₅ H ₉ NO ₆ KHAJTJUOMDNQGW-UHFFFAOYSA-N	2.0 × 10 ⁷ 1.3 × 10 ⁷ 6.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C58NO ₃ C ₅ H ₉ NO ₆ UZUIBKBJXOKLGO-UHFFFAOYSA-N	2.8 × 10 ⁶ 1.0 × 10 ⁷ 5.1 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNC524CO C ₅ H ₈ N ₂ O ₉ WXHJTLKSHGJDHS-UHFFFAOYSA-N	7.1 × 10 ⁹ 9.6 × 10 ⁸ 1.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HNC524CO C ₅ H ₉ NO ₇ UHQMTOKWUFCEERL-UHFFFAOYSA-N	2.9 × 10 ⁹ 1.5 × 10 ¹⁰ 5.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HPNC524CO C ₅ H ₉ NO ₈ QASKBBWYYSGCPQ-UHFFFAOYSA-N	4.7 × 10 ¹² 1.7 × 10 ¹⁰ 1.9 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INAHCHO C ₅ H ₉ NO ₆ GJDCYRXOLZPRRL-UHFFFAOYSA-N	1.0 × 10 ⁶ 1.5 × 10 ⁷ 1.2 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INAHPCHO C ₅ H ₉ NO ₇ WOIAKHQAPCBXNP-UHFFFAOYSA-N	1.6 × 10 ⁹ 2.6 × 10 ⁷ 1.1 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INANCHO C ₅ H ₈ N ₂ O ₈ AOWQROMNZIXQRL-UHFFFAOYSA-N	2.5 × 10 ⁶ 1.7 × 10 ⁶ 6.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INB1HPCHO C ₅ H ₉ NO ₇ PPUPDRIHXISUBS-UHFFFAOYSA-N	1.4 × 10 ⁹ 1.9 × 10 ⁷ 1.7 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INB1NACHO C ₅ H ₈ N ₂ O ₈ FPDRKJBIBBHIBW-UHFFFAOYSA-N	2.0 × 10 ⁶ 7.4 × 10 ⁶ 1.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INB1NBCHO C ₅ H ₈ N ₂ O ₈ DIJODJNNHWDXRN-UHFFFAOYSA-N	2.0 × 10 ⁶ 5.4 × 10 ⁶ 2.7 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INCNCHO C ₅ H ₈ N ₂ O ₈ QYWHAZCEYLWYSZ-UHFFFAOYSA-N	2.5 × 10 ⁶ 3.4 × 10 ⁶ 3.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INDHCHO C ₅ H ₉ NO ₆ LXJORHVMGZGMRK-UHFFFAOYSA-N	2.8 × 10 ⁶ 1.6 × 10 ⁷ 2.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INDHPCHO C ₅ H ₉ NO ₇ NKPCKBYOCYFEQQ-UHFFFAOYSA-N	1.4 × 10 ⁹ 1.3 × 10 ⁷ 4.0 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MMALNACO3H C ₅ H ₇ NO ₈ WWJYGONDDIBFHK-UHFFFAOYSA-N	9.3 × 10 ⁸ 2.0 × 10 ⁶ 8.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MMALNAPAN C ₅ H ₆ N ₂ O ₁₀ JNHZFZYBXVXPX-UHFFFAOYSA-N	4.3 × 10 ⁷ 6.0 × 10 ⁷ 2.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MMALNBCO3H C ₅ H ₇ NO ₈ ASZGKTQVJXPLHM-UHFFFAOYSA-N	9.3 × 10 ⁸ 3.9 × 10 ⁷ 2.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MMALNBPAN C ₅ H ₆ N ₂ O ₁₀ QNDDWZGVLTYMIK-UHFFFAOYSA-N	4.3 × 10 ⁷ 1.3 × 10 ⁷ 1.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NMBOBOCO C ₅ H ₉ NO ₅ ZWLCOCCHHFERQT-UHFFFAOYSA-N	1.8 × 10 ⁴ 2.2 × 10 ⁴ 1.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1H4C5PAN C ₆ H ₉ NO ₇ XKXYOEFJYDLELH-UHFFFAOYSA-N	5.9 × 10 ⁶ 2.5 × 10 ⁷ 1.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C623NO3 C ₆ H ₁₁ NO ₆ UTKYBRKMQKBGOV-UHFFFAOYSA-N	4.2 × 10 ⁷ 6.0 × 10 ⁷ 2.2 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C67NO3 C ₆ H ₁₁ NO ₅ MTROCBFSSNOSSFY-UHFFFAOYSA-N	1.5 × 10 ⁴ 6.9 × 10 ⁴ 4.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C68NO3 C ₆ H ₁₁ NO ₅ DFCRZDMTYDUCKH-UHFFFAOYSA-N	1.5 × 10 ⁴ 6.8 × 10 ⁴ 1.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO1H63NO3 C ₆ H ₁₁ NO ₅ QWPYKWKOPQKYFO-UHFFFAOYSA-N	1.4 × 10 ⁴ 6.0 × 10 ⁵ 1.7 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC623OH C ₆ H ₁₁ NO ₆ LIALSLHETRNECK-UHFFFAOYSA-N	4.2 × 10 ⁷ 2.7 × 10 ⁸ 2.3 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC623OOH C ₆ H ₁₁ NO ₇ LUCHFJMQFYPEG-UHFFFAOYSA-N	1.0 × 10 ⁹ 6.0 × 10 ⁷ 6.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C728NO3 C ₇ H ₁₃ NO ₆ CDBHNFQBQKSTCON-UHFFFAOYSA-N	1.5 × 10 ⁸ 3.2 × 10 ⁷ 2.0 × 10 ⁸ 3.0 × 10 ⁵	17000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C730NO3 C ₇ H ₁₃ NO ₆ RVWIAVBELSCRER-UHFFFAOYSA-N	3.5 × 10 ⁹ 3.2 × 10 ⁷ 1.4 × 10 ⁹ 9.8 × 10 ⁴	17000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NC728OH C ₇ H ₁₃ NO ₆ RMGZPHZIJLBXBA-UHFFFAOYSA-N	3.2 × 10 ⁷ 5.4 × 10 ⁸ 9.8 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC728OOH C ₇ H ₁₃ NO ₇ NMPAVXKBWDGSMK-UHFFFAOYSA-N	7.8 × 10 ⁸ 2.0 × 10 ⁸ 2.1 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC730OH C ₇ H ₁₃ NO ₆ ZPFRZNAADTZJOS-UHFFFAOYSA-N	3.2 × 10 ⁷ 2.4 × 10 ⁸ 1.5 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC730OOH C ₇ H ₁₃ NO ₇ LJYXGYOAXKBDIY-UHFFFAOYSA-N	7.8 × 10 ⁸ 2.7 × 10 ⁹ 6.0 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C826NO3 C ₈ H ₁₃ NO ₆ HYUHC BAMOFNBPC-UHFFFAOYSA-N	9.8 × 10 ⁶ 4.6 × 10 ⁷ 5.5 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC826OH C ₈ H ₁₃ NO ₆ UXZRCYKYQRKKOI-UHFFFAOYSA-N	9.8 × 10 ⁶ 6.2 × 10 ⁷ 3.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C127NO3 C ₁₂ H ₁₉ NO ₅ RZJFRKYKJWJUXLW-UHFFFAOYSA-N	1.9 × 10 ⁴ 1.7 × 10 ⁵ 4.2 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1311NO3 C ₁₃ H ₂₁ NO ₅ HIIZKUNLVYOKLJ-UHFFFAOYSA-N	1.7 × 10 ⁴ 1.4 × 10 ⁵ 1.0 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1313NO3 C ₁₃ H ₂₁ NO ₆ SXMORIYKGFOKAB-UHFFFAOYSA-N	9.1 × 10 ⁶ 5.8 × 10 ⁷ 2.2 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC1313OH C ₁₃ H ₂₁ NO ₆ RAUQQNONBFDDJB-UHFFFAOYSA-N	9.1 × 10 ⁶ 6.8 × 10 ⁷ 5.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3NO3COOOH C ₃ H ₅ NO ₆ JXBSDKIVLYRFTK-UHFFFAOYSA-N	5.8 × 10 ⁵ 4.0 × 10 ⁴ 2.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CH3COPAN C ₃ H ₃ NO ₆ BNYSUSDQQIWDSZ-UHFFFAOYSA-N	2.6 × 10 ³ 2.1 × 10 ³ 2.2 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BUTONENO3 C ₄ H ₇ NO ₄ KFRUNLQRYXGRRS-UHFFFAOYSA-N	7.1 3.5 × 10 ¹ 7.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CO23C4NO3 C ₄ H ₅ NO ₅ RSORCZUYAJEINP-UHFFFAOYSA-N	3.9 × 10 ³ 4.3 × 10 ³ 7.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2C3PAN C ₄ H ₅ NO ₆ VXGDXYQGFKIYIJ-UHFFFAOYSA-N	2.4 × 10 ³ 4.0 × 10 ³ 1.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2N3CO3H C ₄ H ₅ NO ₇ PLOOSZKRSUJKKF-UHFFFAOYSA-N	6.8 × 10 ⁶ 5.5 × 10 ⁵ 4.5 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO2N3PAN C ₄ H ₄ N ₂ O ₉ RXUYCSQEPKEYNB-UHFFFAOYSA-N	3.1 × 10 ⁵ 2.3 × 10 ⁵ 2.3 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2-oxobutyl nitrate C ₄ H ₇ NO ₄ [138779-12-1] OVISQPFXRZOZFI-UHFFFAOYSA-N	5.9 5.9 × 10 ¹ 3.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:COC4NO3OOH C ₄ H ₇ NO ₆ AEHFBVVGPA XMNG-UHFFFAOYSA-N	5.1 × 10 ⁵ 1.8 × 10 ⁴ 1.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MEKANO3 C ₄ H ₇ NO ₄ SQFMCLNZTWUJY-UHFFFAOYSA-N	5.9 1.3 × 10 ² 8.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NMVK C ₄ H ₅ NO ₄ YTEQPVIDLVIVHW-UHFFFAOYSA-N	1.7 × 10 ¹ 1.0 × 10 ² 3.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4M2NO3ONE C ₅ H ₉ NO ₄ DIMIHFOKQZMGY-UHFFFAOYSA-N	3.8 7.3 5.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4M3NO3ONE C ₅ H ₉ NO ₄ SAHLZHFOPIFWKH-UHFFFAOYSA-N	5.5 3.4 × 10 ¹ 1.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4MCNO3OOH C ₅ H ₉ NO ₆ AOCDDMVLVLTZNT-UHFFFAOYSA-N	2.9 × 10 ⁵ 8.3 × 10 ⁴ 2.2 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C51NO324CO C ₅ H ₇ NO ₅ KIDZPQUIRFWTHY-UHFFFAOYSA-N	3.6 × 10 ³ 2.0 × 10 ⁴ 8.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C51NO32CO C ₅ H ₉ NO ₄ TTZVKGPORDTQGG-UHFFFAOYSA-N	4.9 3.2 × 10 ¹ 2.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C52NO33CO C ₅ H ₉ NO ₄ VOCQUTRGVIAJPG-UHFFFAOYSA-N	5.5 1.6 × 10 ¹ 6.2 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C53NO324CO C ₅ H ₇ NO ₅ QYJXVKSLJQQNK-UHFFFAOYSA-N	3.7 × 10 ³ 7.4 × 10 ³ 1.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C53NO32CO C ₅ H ₉ NO ₄ LVGYWFUEHRGRSS-UHFFFAOYSA-N	5.5 1.7 × 10 ¹ 6.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5CONO3OOH C ₅ H ₉ NO ₆ ZDTBCADGPXXLKE-UHFFFAOYSA-N	2.9 × 10 ⁵ 3.7 × 10 ³ 3.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5COO2NO2 C ₅ H ₅ NO ₆ BZPLAICQOBBIOR-UHFFFAOYSA-N	7.6 × 10 ³ 3.9 × 10 ⁴ 4.7 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5NO3O4OOH C ₅ H ₉ NO ₆ CASCWEIOXSCVGJ-UHFFFAOYSA-N	4.8 × 10 ⁵ 4.6 × 10 ³ 1.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5NO3OAOOH C ₅ H ₉ NO ₆ FLHIUJMTRYIPLY-UHFFFAOYSA-N	4.2 × 10 ⁵ 5.3 × 10 ⁵ 1.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5ONO34OOH C ₅ H ₉ NO ₆ LOZNRBAEPWQBFW-UHFFFAOYSA-N	4.8 × 10 ⁵ 1.5 × 10 ⁵ 2.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5PAN16 C ₅ H ₇ NO ₆ IZEBTYZDWKBBFQ-UHFFFAOYSA-N	1.9 × 10 ³ 2.0 × 10 ³ 5.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5PAN2 C ₅ H ₇ NO ₆ XMORPKXVSPHXDA-UHFFFAOYSA-N	1.9 × 10 ³ 9.6 × 10 ³ 5.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5PAN7 C ₅ H ₇ NO ₆ VONRVKPFQAOPX-UHFFFAOYSA-N	2.2 × 10 ³ 1.5 × 10 ³ 3.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5PAN9 C ₅ H ₅ NO ₇ HJZPHZLLKGPYCO-UHFFFAOYSA-N	1.3 × 10 ⁶ 2.5 × 10 ⁵ 5.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DIEKBNO3 C ₅ H ₉ NO ₄ WKTFKAAKLZJYGP-UHFFFAOYSA-N	4.9 5.5 × 10 ¹ 5.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:INANCOCO3H C ₅ H ₆ N ₂ O ₁₀ OKQCOTADQFFQES-UHFFFAOYSA-N	4.4 × 10 ⁸ 1.4 × 10 ⁷ 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INANCOPAN C ₅ H ₅ N ₃ O ₁₂ OHHXWPYTKFCNFA-UHFFFAOYSA-N	1.9 × 10 ⁷ 5.3 × 10 ⁶ 8.0 × 10 ⁻⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MIPKBNO3 C ₅ H ₉ NO ₄ PNKPSVUHDDVFRG-UHFFFAOYSA-N	5.5 5.5 × 10 ¹ 6.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MPRKNO3 C ₅ H ₉ NO ₄ GMHWHQCXUOCSQQ-UHFFFAOYSA-N	5.5 3.9 × 10 ¹ 4.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3COCPAN C ₆ H ₉ NO ₆ QAGGXZNGFPYUOO-UHFFFAOYSA-N	1.6 × 10 ³ 1.1 × 10 ³ 4.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4MCODBPAN C ₆ H ₇ NO ₆ OBEVNDXPXGMJPT-UHFFFAOYSA-N	5.1 × 10 ³ 3.3 × 10 ⁴ 1.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C62NO335CO C ₆ H ₉ NO ₅ ABDNFJAHWTWRFH-UHFFFAOYSA-N	3.4 × 10 ³ 6.0 × 10 ³ 3.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C62NO33CO C ₆ H ₁₁ NO ₄ OBVLXHVNJQTRAU-UHFFFAOYSA-N	4.6 9.8 4.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C63NO32CO C ₆ H ₁₁ NO ₄ QSKMGJAWRGUYGL-UHFFFAOYSA-N	4.6 1.1 × 10 ¹ 5.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C64NO335CO C ₆ H ₉ NO ₅ CHGSCHAFWLLPDM-UHFFFAOYSA-N	3.4 × 10 ³ 4.2 × 10 ³ 8.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C66NO35CO C ₆ H ₁₁ NO ₄ NNYDFJRPKYRBEY-UHFFFAOYSA-N	4.3 2.2 × 10 ¹ 1.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CO134PAN C ₆ H ₇ NO ₇ OIZONYBQGYIWDV-UHFFFAOYSA-N	1.1 × 10 ⁶ 1.4 × 10 ⁵ 2.2 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CONO3OOH C ₆ H ₁₁ NO ₆ JAMSWIXAFBYGGR-UHFFFAOYSA-N	3.9 × 10 ⁵ 1.3 × 10 ⁵ 3.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C6DCARBAN C ₆ H ₇ NO ₆ QTAROYORLXGHIO-UHFFFAOYSA-N	7.1 × 10 ³ 1.8 × 10 ⁴ 3.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6NO324CO C ₆ H ₉ NO ₅ ZLHGQCIPJTVAP-UHFFFAOYSA-N	2.9 × 10 ³ 1.1 × 10 ⁴ 4.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6NO3COOOH C ₆ H ₁₁ NO ₆ HQTZSBFILMVSJZ-UHFFFAOYSA-N	3.3 × 10 ⁵ 2.6 × 10 ⁵ 5.9 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN12 C ₆ H ₉ NO ₆ LSIJQLAUAHXHOJI-UHFFFAOYSA-N	1.7 × 10 ³ 3.4 × 10 ³ 2.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN16 C ₆ H ₉ NO ₆ JDUNWYCOIXFXGK-UHFFFAOYSA-N	1.2 × 10 ³ 5.3 × 10 ² 1.8 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN2 C ₆ H ₉ NO ₆ BSRDZZSTWMTZHH-UHFFFAOYSA-N	1.6 × 10 ³ 4.9 × 10 ³ 4.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN5 C ₆ H ₉ NO ₆ AYORGEAGFIRFW-UHFFFAOYSA-N	1.7 × 10 ³ 3.4 × 10 ³ 4.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN6 C ₆ H ₉ NO ₆ STXATUQYWORJHN-UHFFFAOYSA-N	1.7 × 10 ³ 6.6 × 10 ² 1.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN7 C ₆ H ₇ NO ₇ FEUNFERSGUKVTQ-UHFFFAOYSA-N	1.3 × 10 ⁶ 1.0 × 10 ⁵ 2.7 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CONO3C6OOH C ₆ H ₁₁ NO ₆ BPHZXGKZHPQLPB-UHFFFAOYSA-N	3.9 × 10 ⁵ 7.3 × 10 ⁴ 1.5 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CYHXONANO3 C ₆ H ₉ NO ₄ VLCBNIODXGFPBM-UHFFFAOYSA-N	1.4 × 10 ¹ 3.6 × 10 ² 9.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ECO3PAN C ₆ H ₅ NO ₈ GLZSBLKUFXYNN-UHFFFAOYSA-N	7.8 × 10 ⁸ 4.0 × 10 ⁷ 3.4 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EIPKBNO3 C ₆ H ₁₁ NO ₄ QPLZWEVCYZLYTL-UHFFFAOYSA-N	4.6 2.7 × 10 ¹ 2.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HEX2ONANO3 C ₆ H ₁₁ NO ₄ OZSNHPHDGAJMHG-UHFFFAOYSA-N	4.6 2.2 × 10 ¹ 2.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HEX2ONBNO3 C ₆ H ₁₁ NO ₄ JYVFNKYOALTNTA-UHFFFAOYSA-N	4.6 3.0 × 10 ¹ 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HEX3ONANO3 C ₆ H ₁₁ NO ₄ KTYGBCIWLHIEKP-UHFFFAOYSA-N	4.6 2.0 × 10 ¹ 4.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HEX3ONDNO3 C ₆ H ₁₁ NO ₄ PRTKDFINSKNZSU-UHFFFAOYSA-N	4.3 3.6 × 10 ¹ 6.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:M2BKANO3 C ₆ H ₁₁ NO ₄ NYAAKBDXIQFYDD-UHFFFAOYSA-N	5.1 2.6 × 10 ¹ 3.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MC4CODBPAN C ₆ H ₇ NO ₆ WHFHKQLMYAOVSY-UHFFFAOYSA-N	5.1 × 10 ³ 3.3 × 10 ⁴ 2.2 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MIBKANO3 C ₆ H ₁₁ NO ₄ PKJJSCTBLHEMI-UHFFFAOYSA-N	3.0 1.5 × 10 ¹ 1.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTBKNO3 C ₆ H ₁₁ NO ₄ OYSBYTCKEAIMOW-UHFFFAOYSA-N	3.0 2.6 × 10 ¹ 5.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NBZQOOH C ₆ H ₅ NO ₇ NXGPPVQDYDGLWQQ-UHFFFAOYSA-N	3.2 × 10 ⁹ 5.6 × 10 ⁸ 1.7 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C627PAN C ₇ H ₉ NO ₇ FQVTWXYWQSSRX-UHFFFAOYSA-N	9.1 × 10 ⁵ 3.0 × 10 ⁶ 2.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7ADCPAN C ₇ H ₉ NO ₆ OFKNKTFVVCQBW-UHFFFAOYSA-N	3.5 × 10 ³ 4.3 × 10 ⁴ 8.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7DCPAN C ₇ H ₉ NO ₆ ZGBUEZLBCHGZPP-UHFFFAOYSA-N	5.5 × 10 ³ 9.6 × 10 ³ 1.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7DDCPAN C ₇ H ₉ NO ₆ WCHGYJHJZMHIAR-UHFFFAOYSA-N	4.6 × 10 ³ 1.4 × 10 ⁴ 5.5 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C7PAN3 C ₇ H ₇ NO ₈ XMNXEJJPBOBVEP-UHFFFAOYSA-N	6.3 × 10 ⁸ 1.7 × 10 ⁷ 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IC7DCPAN C ₇ H ₉ NO ₆ NZLPHNCQJFNGH-UHFFFAOYSA-N	6.3 × 10 ³ 1.0 × 10 ⁴ 8.1 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC71CO C ₇ H ₇ NO ₆ CDHAVACRDDMHGZ-UHFFFAOYSA-N	3.9 × 10 ⁶ 2.5 × 10 ⁷ 1.2 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC71OOH C ₇ H ₉ NO ₇ CIJBWMVCSXGACJ-UHFFFAOYSA-N	4.5 × 10 ⁸ 1.6 × 10 ⁹ 5.6 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC72OOH C ₇ H ₇ NO ₈ RYHDNZNGTUJGAD-UHFFFAOYSA-N	3.0 × 10 ¹¹ 3.6 × 10 ¹⁰ 5.8 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPTLQOOH C ₇ H ₇ NO ₇ WIZJVJIMHIROQF-UHFFFAOYSA-N	2.2 × 10 ⁹ 4.8 × 10 ⁸ 6.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5DBEPAN C ₈ H ₉ NO ₇ OYOZKJOWUFGKRQ-UHFFFAOYSA-N	2.5 × 10 ⁶ 1.1 × 10 ⁶ 9.6 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5EDBPAN C ₈ H ₉ NO ₇ KNPMBKOCKIUXFV-UHFFFAOYSA-N	2.5 × 10 ⁶ 1.1 × 10 ⁶ 7.6 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C727PAN C ₈ H ₁₁ NO ₇ WBGZRMCIPEEGH-UHFFFAOYSA-N	8.5 × 10 ⁵ 6.9 × 10 ⁵ 4.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7CODBPAN C ₈ H ₁₁ NO ₆ QVHZZCVTEAGIPK-UHFFFAOYSA-N	3.7 × 10 ³ 7.6 × 10 ³ 3.8 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C817NO3 C ₈ H ₁₃ NO ₅ ZONZWPKPCIWKRN-UHFFFAOYSA-N	3.9 × 10 ⁴ 2.2 × 10 ³ 3.8 × 10 ⁴ 3.1 × 10 ²	12000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:NMXYQOOH C ₈ H ₉ NO ₇ MDRQMTCLWPCNU-UHFFFAOYSA-N	1.2 × 10 ⁹ 9.6 × 10 ⁷ 4.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NOXYQOOH C ₈ H ₉ NO ₇ SFYCEAPRSKIFCS-UHFFFAOYSA-N	1.5 × 10 ⁹ 3.8 × 10 ⁸ 4.2 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPEBQOOH C ₈ H ₉ NO ₇ HZFUWULOZSGVHH-UHFFFAOYSA-N	2.0 × 10 ⁹ 2.6 × 10 ⁸ 5.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPXYQOOH C ₈ H ₉ NO ₇ LMPSHWMXIGVDOI-UHFFFAOYSA-N	1.2 × 10 ⁹ 9.3 × 10 ⁷ 2.3 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C816PAN C ₉ H ₁₃ NO ₆ JXXOSNUALVJMQL-UHFFFAOYSA-N	2.3 × 10 ³ 1.4 × 10 ³ 2.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C817PAN C ₉ H ₁₃ NO ₇ AGDIJRUETYZZKI-UHFFFAOYSA-N	6.9 × 10 ⁵ 1.6 × 10 ⁶ 3.2 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C827PAN C ₉ H ₁₃ NO ₇ QMDLSNSKOZAILD-UHFFFAOYSA-N	4.8 × 10 ⁵ 5.3 × 10 ⁵ 2.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C828PAN C ₉ H ₁₁ NO ₈ LCFHBKSAGMTDCX-UHFFFAOYSA-N	3.6 × 10 ⁸ 1.1 × 10 ⁷ 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C88PAN C ₉ H ₁₁ NO ₇ KLGKHKJTYFCRCN-UHFFFAOYSA-N	1.7 × 10 ⁶ 1.4 × 10 ⁷ 3.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C917NO3 C ₉ H ₁₃ NO ₅ KVVUPUMJPKRVQS-UHFFFAOYSA-N	4.3 × 10 ³ 2.5 × 10 ⁵ 2.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C923NO3 C ₉ H ₁₅ NO ₄ JEWJQSHMOKPQHI-UHFFFAOYSA-N	3.2 × 10 ¹ 6.0 2.5 × 10 ¹ 4.1	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:C928NO3 C ₉ H ₁₅ NO ₅ HCHMIBGRYQMLLZ-UHFFFAOYSA-N	1.2 × 10 ³ 3.2 × 10 ⁴ 6.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C96NO3 C ₉ H ₁₅ NO ₄ MMTOEOITRCIZDG-UHFFFAOYSA-N	6.6 5.0 × 10 ¹ 7.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C9DCNO3 C ₉ H ₁₁ NO ₅ TURIVFFHDFEFMU-UHFFFAOYSA-N	1.6 × 10 ⁴ 7.3 × 10 ⁵ 3.2 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C9PAN2 C ₉ H ₁₃ NO ₆ VXDDXZNSSANCGN-UHFFFAOYSA-N	2.6 × 10 ³ 3.2 × 10 ³ 8.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NIPRBQOOH C ₉ H ₁₁ NO ₇ KGZDDJNUZZWZIJ-UHFFFAOYSA-N	1.8 × 10 ⁹ 1.8 × 10 ⁸ 2.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NLMKAOOH C ₉ H ₁₅ NO ₆ ZOTFHCKOVMRARL-UHFFFAOYSA-N	5.0 × 10 ⁵ 8.9 × 10 ⁵ 5.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NMETLQOOH C ₉ H ₁₁ NO ₇ FSVFAZAPMWXECG-UHFFFAOYSA-N	1.1 × 10 ⁹ 5.0 × 10 ⁷ 1.4 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOETLQOOH C ₉ H ₁₁ NO ₇ GHGZYHLEQYQZHR-UHFFFAOYSA-N	1.2 × 10 ⁹ 2.1 × 10 ⁸ 3.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOPINANO3 C ₉ H ₁₃ NO ₄ JEOFIBHUYPQAJL-UHFFFAOYSA-N	2.3 × 10 ¹ 2.3 × 10 ² 1.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOPINBNO3 C ₉ H ₁₃ NO ₄ QGVNTXJLRAHBMW-UHFFFAOYSA-N	2.3 × 10 ¹ 3.1 × 10 ² 1.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOPINCNO3 C ₉ H ₁₃ NO ₄ CLMUTFVSCXCGKI-UHFFFAOYSA-N	1.3 × 10 ¹ 8.1 × 10 ¹ 1.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPETLQOOH C ₉ H ₁₁ NO ₇ IMJMJNZTMWKOFO-UHFFFAOYSA-N	1.1 × 10 ⁹ 4.8 × 10 ⁷ 2.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPPRBQOOH C ₉ H ₁₁ NO ₇ MMAZKJNYHBQGD-L-UHFFFAOYSA-N	1.6 × 10 ⁹ 1.8 × 10 ⁸ 1.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NTM124QOOH C ₉ H ₁₁ NO ₇ ZMXXAPJGXNLYQU-UHFFFAOYSA-N	8.1 × 10 ⁸ 6.9 × 10 ⁷ 5.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1011NO3 C ₁₀ H ₁₇ NO ₄ KLQCUGBDZZARMU-UHFFFAOYSA-N	5.4 2.5 × 10 ¹ 1.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C10PAN2 C ₁₀ H ₁₅ NO ₆ XGWGKMXMXPDAK-UHFFFAOYSA-N	2.1 × 10 ³ 2.6 × 10 ³ 4.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C923PAN C ₁₀ H ₁₅ NO ₆ ZVYIPTRRRFMSSU-UHFFFAOYSA-N	2.0 × 10 ³ 1.0 × 10 ³ 2.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C928PAN C ₁₀ H ₁₅ NO ₇ MIISGCVMOACDOR-UHFFFAOYSA-N	3.8 × 10 ⁵ 1.5 × 10 ⁶ 2.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC101CO C ₁₀ H ₁₅ NO ₄ BCIULZBFFUODJR-UHFFFAOYSA-N	1.4 × 10 ¹ 4.4 × 10 ¹ 4.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC101OOH C ₁₀ H ₁₅ NO ₆ AQVSRWLWNLUXIOL-UHFFFAOYSA-N	6.0 × 10 ⁵ 3.4 × 10 ⁵ 5.8 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC102OOH C ₁₀ H ₁₅ NO ₇ ZNOCONLMTXMLFU-UHFFFAOYSA-N	1.9 × 10 ⁸ 4.0 × 10 ⁸ 4.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1011PAN C ₁₁ H ₁₇ NO ₆ PRDFPHJPDVZXHH-UHFFFAOYSA-N	1.9 × 10 ³ 2.2 × 10 ³ 2.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C131NO3 C ₁₃ H ₂₁ NO ₅ HFRDBZMTZNPZMV-UHFFFAOYSA-N	2.3 × 10 ³ 3.5 × 10 ⁴ 2.2 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C131PAN C ₁₄ H ₂₁ NO ₇ YHMAABVAIQVHRP-UHFFFAOYSA-N	7.3 × 10 ⁵ 2.0 × 10 ⁶ 1.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C141NO3 C ₁₄ H ₂₃ NO ₄ JXPQKVXALDMDKF-UHFFFAOYSA-N	5.9 3.3 × 10 ¹ 3.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NBCKOOH C ₁₄ H ₂₃ NO ₆ IMGMBHKHHVQTQK-UHFFFAOYSA-N	4.8 × 10 ⁵ 4.4 × 10 ⁵ 1.5 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C141PAN C ₁₅ H ₂₃ NO ₆ PGNAVHCNSKAOHZ-UHFFFAOYSA-N	1.9 × 10 ³ 1.8 × 10 ³ 2.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4PAN10 C ₄ H ₅ NO ₈ JOAGXXIRMSWAAZ-UHFFFAOYSA-N	5.1 × 10 ⁷ 1.9 × 10 ⁷ 2.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C4PAN6 C ₄ H ₅ NO ₇ QRAIBPAZBCTEOB-UHFFFAOYSA-N	8.1 × 10 ⁴ 5.4 × 10 ⁵ 2.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO3C4NO3OH C ₄ H ₇ NO ₅ HZFDSYFRCPAXEA-UHFFFAOYSA-N	8.9 × 10 ² 3.2 × 10 ⁴ 2.5 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HMVKANO3 C ₄ H ₇ NO ₅ UFDPWCOBIOWDKA-UHFFFAOYSA-N	1.2 × 10 ³ 1.4 × 10 ⁴ 5.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HMVKNO3 C ₄ H ₇ NO ₆ NCLLRWDJHCXXDR-UHFFFAOYSA-N	3.0 × 10 ⁶ 3.5 × 10 ⁷ 2.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HNBIACET C ₄ H ₅ NO ₆ HPGBXXMJBUDRLY-UHFFFAOYSA-N	5.9 × 10 ⁵ 1.4 × 10 ⁶ 4.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HNMVKOH C ₄ H ₇ NO ₆ KPZZNRQGHDTQNJ-UHFFFAOYSA-N	1.1 × 10 ⁶ 6.8 × 10 ⁶ 1.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HNMVKOOH C ₄ H ₇ NO ₇ CTKAFSDGNPEZFUHFFFAOYSA-N	1.8 × 10 ⁹ 2.4 × 10 ⁷ 1.0 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MVKNO3 C ₄ H ₇ NO ₅ SCJQBCZNBCTOQ-UHFFFAOYSA-N	2.4 × 10 ⁴ 2.0 × 10 ⁴ 4.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MVKOHANO3 C ₄ H ₇ NO ₆ DMSMZXCVKMBQGA-UHFFFAOYSA-N	6.9 × 10 ⁵ 5.5 × 10 ⁵ 1.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4MCONO3OH C ₅ H ₉ NO ₅ VRAOJUVNLSNISW-UHFFFAOYSA-N	4.8 × 10 ² 1.5 × 10 ⁴ 1.5 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C517NO3 C ₅ H ₉ NO ₅ DLLRFAPPEPVGBN-UHFFFAOYSA-N	1.6 × 10 ⁴ 1.9 × 10 ⁵ 7.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C51NO3 C ₅ H ₉ NO ₅ OMTWKQRBUUWUQB-UHFFFAOYSA-N	1.9 × 10 ⁴ 2.3 × 10 ⁵ 2.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5NO3CO4OH C ₅ H ₉ NO ₅ GEKIHWHZVPPEBT-UHFFFAOYSA-N	1.6 × 10 ⁴ 3.1 × 10 ⁵ 9.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CO2OH3MPAN C ₅ H ₇ NO ₇ KOFNDQLSBTYFBZ-UHFFFAOYSA-N	4.5 × 10 ⁴ 1.6 × 10 ⁵ 6.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CO3H4PAN C ₅ H ₇ NO ₇ KVXLZPRANFUVNJ-UHFFFAOYSA-N	6.5 × 10 ⁴ 2.8 × 10 ⁵ 1.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H1C23C4PAN C ₅ H ₅ NO ₈ ZNIKVNWPMOTSJK-UHFFFAOYSA-N	1.9 × 10 ⁸ 7.4 × 10 ⁷ 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H3C2C4PAN C ₅ H ₇ NO ₇ UDPFHGOTTZCMEQ-UHFFFAOYSA-N	2.8 × 10 ⁵ 2.2 × 10 ⁶ 4.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HMKVBPAN C ₅ H ₇ NO ₇ VVIGYLNPENSKGX-UHFFFAOYSA-N	5.5 × 10 ⁶ 3.6 × 10 ⁶ 3.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INANCO C ₅ H ₈ N ₂ O ₈ IESHUNGXVKLDS-UHFFFAOYSA-N	1.5 × 10 ⁶ 1.2 × 10 ⁶ 1.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INBICO C ₅ H ₉ NO ₆ ASROEBVFUHHBLI-UHFFFAOYSA-N	1.7 × 10 ⁶ 1.8 × 10 ⁷ 2.1 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INCCO C ₅ H ₉ NO ₆ HXWBEXHMXOXGKY-UHFFFAOYSA-N	3.9 × 10 ⁵ 2.9 × 10 ⁵ 3.2 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4COMOHPAN C ₆ H ₇ NO ₈ KHOZKKAVCHSHMN-UHFFFAOYSA-N	2.8 × 10 ⁷ 9.3 × 10 ⁶ 3.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4MOHOPAN C ₆ H ₉ NO ₇ LVRCIQOIMYLYHB-UHFFFAOYSA-N	6.0 × 10 ⁴ 1.9 × 10 ⁵ 3.8 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C517PAN C ₆ H ₉ NO ₇ BRUHFHISVNPPNB-UHFFFAOYSA-N	4.9 × 10 ⁶ 9.1 × 10 ⁶ 4.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C519PAN C ₆ H ₉ NO ₇ QFUOUYQJXYVTOO-UHFFFAOYSA-N	4.9 × 10 ⁶ 9.6 × 10 ⁶ 3.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5O45OHPAN C ₆ H ₉ NO ₇ VCYALMFEDUSLKE-UHFFFAOYSA-N	5.6 × 10 ⁴ 1.7 × 10 ⁵ 5.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C610NO3 C ₆ H ₁₁ NO ₅ KOUUCDJHLKRSEQ-UHFFFAOYSA-N	1.8 × 10 ⁴ 1.5 × 10 ⁵ 2.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C614NO3 C ₆ H ₉ NO ₆ QPXWFZAVXNBNFW-UHFFFAOYSA-N	1.2 × 10 ⁷ 8.9 × 10 ⁶ 2.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C61NO3 C ₆ H ₁₁ NO ₅ SYDWDJOZRNKVSU-UHFFFAOYSA-N	1.8 × 10 ⁴ 1.4 × 10 ⁵ 6.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C63NO3 C ₆ H ₁₁ NO ₅ RHTCZESJRHZQFA-UHFFFAOYSA-N	1.6 × 10 ⁴ 9.8 × 10 ⁴ 3.1 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C64NO3 C ₆ H ₁₁ NO ₅ IYYWGRLOLOMZAZ-UHFFFAOYSA-N	1.1 × 10 ⁴ 8.3 × 10 ⁴ 1.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CONO34OH C ₆ H ₁₁ NO ₅ OLTUAQAPCXKDOJ-UHFFFAOYSA-N	1.8 × 10 ⁴ 1.6 × 10 ⁴ 2.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6NO3CO4OH C ₆ H ₁₁ NO ₅ WWUUDQUMERSNEM-UHFFFAOYSA-N	1.3 × 10 ⁴ 1.8 × 10 ⁵ 4.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6NO3CO5OH C ₆ H ₁₁ NO ₅ IZBQRALUURUKJG-UHFFFAOYSA-N	1.4 × 10 ⁴ 8.1 × 10 ⁴ 1.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6PAN9 C ₆ H ₉ NO ₇ NUFFIXOWLQJQIZ-UHFFFAOYSA-N	1.6 × 10 ⁵ 5.1 × 10 ⁵ 6.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MIBKAOHNO3 C ₆ H ₁₁ NO ₅ YCHDRSSXCQCYSO-UHFFFAOYSA-N	1.1 × 10 ⁴ 6.3 × 10 ⁴ 1.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C61CPAN C ₇ H ₉ NO ₈ FWCVDVIZOKXUGJ-UHFFFAOYSA-N	3.1 × 10 ⁷ 1.2 × 10 ⁷ 1.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C62CPAN C ₇ H ₉ NO ₈ LHOMRHYSYFWOPZ-UHFFFAOYSA-N	3.6 × 10 ⁷ 1.3 × 10 ⁷ 7.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C712NO3 C ₇ H ₁₃ NO ₅ RPPGGLBPWJPSSV-UHFFFAOYSA-N	1.0 × 10 ⁴ 5.4 × 10 ⁴ 7.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C719NO3 C ₇ H ₁₁ NO ₆ IXGSPJJVHFTXPK-UHFFFAOYSA-N	1.0 × 10 ⁸ 4.8 × 10 ⁹ 2.8 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C72NO3 C ₇ H ₁₃ NO ₅ MWIGFUUCEWIWBB-UHFFFAOYSA-N	1.6 × 10 ⁴ 6.5 × 10 ⁴ 2.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C77NO3 C ₇ H ₁₃ NO ₅ KZCKPUAVFWISTB-UHFFFAOYSA-N	1.0 × 10 ⁴ 5.0 × 10 ⁴ 7.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H3C25C6PAN C ₇ H ₉ NO ₈ GUUOCMMOMFUPSI-UHFFFAOYSA-N	1.4 × 10 ⁸ 6.8 × 10 ⁸ 1.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6MOHCOPAN C ₈ H ₉ NO ₈ PDGRPGJWHYLYKK-UHFFFAOYSA-N	9.6 × 10 ⁷ 1.1 × 10 ⁹ 6.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7CO2OHPAN C ₈ H ₉ NO ₈ MIPCXOSCTLYWLE-UHFFFAOYSA-N	9.6 × 10 ⁷ 1.1 × 10 ⁹ 4.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C829NO3 C ₈ H ₁₃ NO ₆ CDMYSTRAPZWSHD-UHFFFAOYSA-N	4.2 × 10 ⁶ 1.3 × 10 ⁶ 2.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C82NO3 C ₈ H ₁₅ NO ₅ HUKHBWOLGKLCRF-UHFFFAOYSA-N	1.3 × 10 ⁴ 4.1 × 10 ⁴ 7.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6EO2OHPAN C ₉ H ₁₁ NO ₈ YGQCKHJQVYPZEV-UHFFFAOYSA-N	7.6 × 10 ⁷ 6.9 × 10 ⁸ 3.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7MJPPAN C ₉ H ₁₁ NO ₈ XJDHGIQDEMCTOX-UHFFFAOYSA-N	7.6 × 10 ⁷ 6.5 × 10 ⁸ 8.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7MOHCOPAN C ₉ H ₁₁ NO ₈ SORJSZWEJQTGJA-UHFFFAOYSA-N	5.5 × 10 ⁷ 1.7 × 10 ⁹ 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C927NO3 C ₉ H ₁₅ NO ₅ RKOGSSYMVWPWJW-UHFFFAOYSA-N	1.0 × 10 ⁴ 1.1 × 10 ⁵ 2.9 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C93NO3 C ₉ H ₁₇ NO ₅ OEEOAFFOONSSLD-UHFFFAOYSA-N	1.0 × 10 ⁴ 3.4 × 10 ⁴ 5.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C98NO3 C ₉ H ₁₅ NO ₆ PQCIVFJRBSNULM-UHFFFAOYSA-N	4.0 × 10 ⁶ 5.6 × 10 ⁶ 1.8 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LMKANO3 C ₉ H ₁₅ NO ₅ OCTKYXAOGSBZDD-UHFFFAOYSA-N	2.3 × 10 ⁴ 2.2 × 10 ⁵ 1.3 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LMKBNO3 C ₉ H ₁₅ NO ₅ MVWAQXQSBOJSHS-UHFFFAOYSA-N	2.3 × 10 ⁴ 2.6 × 10 ⁵ 2.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C103NO3 C ₁₀ H ₁₉ NO ₅ NTZGBOUJHFKYIP-UHFFFAOYSA-N	8.3 × 10 ³ 3.0 × 10 ⁴ 4.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C920PAN C ₁₀ H ₁₅ NO ₇ JPFVAUYDZBUWDH-UHFFFAOYSA-N	3.1 × 10 ⁵ 5.9 × 10 ⁵ 1.9 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C113NO3 C ₁₁ H ₂₁ NO ₅ XIMKJTRLGBXFHP-UHFFFAOYSA-N	7.4 × 10 ³ 2.8 × 10 ⁴ 9.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C123NO3 C ₁₂ H ₂₃ NO ₅ MVMJPHZGIRWSLB-UHFFFAOYSA-N	6.0 × 10 ³ 2.5 × 10 ⁴ 3.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C133NO3 C ₁₃ H ₂₁ NO ₇ ODJFBKGDWLDLDF-UHFFFAOYSA-N	1.2 × 10 ⁹ 5.1 × 10 ⁸ 1.8 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCKANO3 C ₁₄ H ₂₃ NO ₅ YULYIMMPXZFYHU-UHFFFAOYSA-N	2.5 × 10 ⁴ 6.0 × 10 ⁵ 1.8 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCKBNO3 C ₁₄ H ₂₃ NO ₅ VHSFPWDPGIOBJY-UHFFFAOYSA-N	2.5 × 10 ⁴ 1.0 × 10 ⁶ 1.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C142NO3 C ₁₄ H ₂₃ NO ₅ AZGAJOUTVTYWPDUHFFFAOYSA-N	1.1 × 10 ⁴ 1.9 × 10 ⁵ 1.4 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C143NO3 C ₁₄ H ₂₃ NO ₆ NNHMCYUMVAAOGX-UHFFFAOYSA-N	3.4 × 10 ⁶ 5.0 × 10 ⁷ 1.0 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NMGLYOX C ₃ H ₃ NO ₅ OPXOPVKLHYDIMX-UHFFFAOYSA-N	6.0 × 10 ³ 4.1 × 10 ³ 3.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C312COPAN C ₄ H ₃ NO ₇ RRBQALAYWSLXKO-UHFFFAOYSA-N	2.2 × 10 ⁶ 2.8 × 10 ⁵ 3.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4CONO3CO C ₄ H ₅ NO ₅ RXLGSPGPVHCFU-UHFFFAOYSA-N	6.5 × 10 ³ 8.3 × 10 ³ 2.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NCO23CHO C ₄ H ₃ NO ₆ VZDGBDWMYVQZKU-UHFFFAOYSA-N	3.6 × 10 ⁶ 9.8 × 10 ⁵ 1.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4CO2DBPAN C ₅ H ₃ NO ₇ BTFAHSUMXINULH-UHFFFAOYSA-N	6.9 × 10 ⁶ 2.5 × 10 ⁶ 4.9 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4M22CONO3 C ₅ H ₇ NO ₅ FQGALMJVSZOCNN-UHFFFAOYSA-N	3.5 × 10 ³ 1.6 × 10 ³ 5.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C512NO3 C ₅ H ₇ NO ₅ OAO NLGDT CNNTSO-UHFFFAOYSA-N	4.4 × 10 ³ 2.0 × 10 ⁴ 8.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHOC3COPAN C ₅ H ₅ NO ₇ MEMYBUIJIAQZMF-UHFFFAOYSA-N	1.7 × 10 ⁶ 3.8 × 10 ⁵ 9.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INANCOCHO C ₅ H ₆ N ₂ O ₈ ALBXLNVOOLMBSV-UHFFFAOYSA-N	4.0 × 10 ⁵ 2.6 × 10 ⁵ 1.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C511PAN C ₆ H ₇ NO ₇ ADLPISUKTIEBV-UHFFFAOYSA-N	1.6 × 10 ⁶ 8.9 × 10 ⁵ 8.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5124COPAN C ₆ H ₅ NO ₈ DHCQJQARWDKNBK-UHFFFAOYSA-N	1.0 × 10 ⁹ 1.3 × 10 ⁷ 2.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C512PAN C ₆ H ₇ NO ₇ OLSCQSOEJBIJSE-UHFFFAOYSA-N	1.4 × 10 ⁶ 1.1 × 10 ⁶ 1.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C515PAN C ₆ H ₅ NO ₈ QIUJGMPSWRWOQB-UHFFFAOYSA-N	1.0 × 10 ⁹ 3.0 × 10 ⁷ 1.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5CO2DBPAN C ₆ H ₅ NO ₇ LCULQJDFGZNNJC-UHFFFAOYSA-N	4.7 × 10 ⁶ 2.1 × 10 ⁶ 2.8 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C5DBCO2PAN C ₆ H ₅ NO ₇ QMVFHWUFARKUQS-UHFFFAOYSA-N	4.7 × 10 ⁶ 2.1 × 10 ⁶ 3.6 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C626NO3 C ₆ H ₉ NO ₅ OCVBVQJPKPHST-UHFFFAOYSA-N	4.0 × 10 ³ 5.1 × 10 ⁴ 1.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6COCHOPAN C ₆ H ₇ NO ₇ YGLXJUWEIHLTAS-UHFFFAOYSA-N	1.4 × 10 ⁶ 2.6 × 10 ⁶ 8.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4DBM2PAN C ₇ H ₇ NO ₇ LSIPXVETZQMKNK-UHFFFAOYSA-N	3.0 × 10 ⁶ 3.0 × 10 ⁶ 5.4 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C617PAN C ₇ H ₉ NO ₇ PZZHENGPCXAAMZ-UHFFFAOYSA-N	8.7 × 10 ⁵ 9.6 × 10 ⁴ 6.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C618PAN C ₇ H ₉ NO ₇ TUYXNXVHKYYCNT-UHFFFAOYSA-N	8.7 × 10 ⁵ 7.8 × 10 ⁴ 5.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C626PAN C ₇ H ₉ NO ₇ JTOZIQOFBRFINW-UHFFFAOYSA-N	1.3 × 10 ⁶ 2.0 × 10 ⁶ 1.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C717NO3 C ₇ H ₉ NO ₆ YBNFZHXBULIKA-UHFFFAOYSA-N	2.4 × 10 ⁶ 8.0 × 10 ⁵ 2.2 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C718NO3 C ₇ H ₁₁ NO ₅ WMUFPKACUPNARK-UHFFFAOYSA-N	2.2 × 10 ³ 3.5 × 10 ³ 3.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C731NO3 C ₇ H ₁₁ NO ₅ WJSMASANGLXUCK-UHFFFAOYSA-N	3.2 × 10 ³ 4.5 × 10 ⁴ 1.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7CO2DBPAN C ₇ H ₇ NO ₇ FJSOTAPJABBDID-UHFFFAOYSA-N	3.7 × 10 ⁶ 1.2 × 10 ⁶ 2.6 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC61CO3H C ₇ H ₇ NO ₉ RCADYDMYBSYTRH-UHFFFAOYSA-N	1.7 × 10 ¹² 6.2 × 10 ⁸ 6.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC6PAN1 C ₇ H ₆ N ₂ O ₁₁ LNWBMFOWVOYBBT-UHFFFAOYSA-N	6.6 × 10 ¹⁰ 2.4 × 10 ⁸ 2.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C4DBMEPAN C ₈ H ₉ NO ₇ JDCDQJWNYIFIQT-UHFFFAOYSA-N	2.5 × 10 ⁶ 1.6 × 10 ⁶ 3.5 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C718PAN C ₈ H ₁₁ NO ₇ IZJQRCCOOGKQNV-UHFFFAOYSA-N	7.1 × 10 ⁵ 2.3 × 10 ⁵ 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C731PAN C ₈ H ₁₁ NO ₇ BCDDBCVPVNWUZKV-UHFFFAOYSA-N	1.1 × 10 ⁶ 1.7 × 10 ⁶ 4.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C8CO2DBPAN C ₈ H ₉ NO ₇ IPAWZRQBQOFPJA-UHFFFAOYSA-N	3.4 × 10 ⁶ 6.9 × 10 ⁵ 1.4 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C8DBC02PAN C ₈ H ₉ NO ₇ ZDCAPCKMKJMPHV-UHFFFAOYSA-N	3.5 × 10 ⁶ 8.0 × 10 ⁵ 1.0 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C87PAN C ₉ H ₁₁ NO ₈ KZPDHKTZVKNFJF-UHFFFAOYSA-N	6.0 × 10 ⁸ 2.8 × 10 ⁷ 7.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C915NO3 C ₉ H ₁₃ NO ₅ CFOCUCLSGKHNEG-UHFFFAOYSA-N	5.9 × 10 ³ 3.2 × 10 ⁴ 5.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C916NO3 C ₉ H ₁₃ NO ₆ VOXWVUGDBUBCW-UHFFFAOYSA-N	1.5 × 10 ⁶ 1.1 × 10 ⁶ 4.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C918NO3 C ₉ H ₁₃ NO ₅ AMOFMDWAGAYJCS-UHFFFAOYSA-N	5.9 × 10 ³ 5.6 × 10 ³ 5.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C919NO3 C ₉ H ₁₃ NO ₆ DCZHYWWXGROBKB-UHFFFAOYSA-N	1.5 × 10 ⁶ 1.0 × 10 ⁶ 8.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C930NO3 C ₉ H ₁₃ NO ₆ DDSHYSHFPVKRPI-UHFFFAOYSA-N	1.1 × 10 ⁶ 5.6 × 10 ⁵ 1.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1010NO3 C ₁₀ H ₁₅ NO ₅ GVXIDPZAUKXFPR-UHFFFAOYSA-N	3.0 × 10 ³ 8.5 × 10 ³ 4.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1012NO3 C ₁₀ H ₁₇ NO ₅ XKIZNDJDYSDNBL-UHFFFAOYSA-N	1.5 × 10 ³ 8.1 × 10 ³ 2.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C106NO3 C ₁₀ H ₁₅ NO ₆ DSEFLMWIAZKUSJ-UHFFFAOYSA-N	1.0 × 10 ⁶ 7.3 × 10 ⁵ 4.9 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C108NO3 C ₁₀ H ₁₅ NO ₆ MVSLQVXNIWKHQS-UHFFFAOYSA-N	1.0 × 10 ⁶ 2.2 × 10 ⁵ 6.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NLIMALOOH C ₁₀ H ₁₇ NO ₇ NTLQQKIUYMIZPN-UHFFFAOYSA-N	1.1 × 10 ⁸ 3.4 × 10 ⁷ 2.8 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PINALNO3 C ₁₀ H ₁₅ NO ₅ FNTMCASBPWQXGD-UHFFFAOYSA-N	3.4 × 10 ³ 1.6 × 10 ⁴ 3.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C116NO3 C ₁₁ H ₁₇ NO ₅ AWSJYNTZBDMUKU-UHFFFAOYSA-N	4.3 × 10 ³ 3.7 × 10 ⁴ 3.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C116PAN C ₁₂ H ₁₇ NO ₇ IHJLJJPVFFZKMO-UHFFFAOYSA-N	1.4 × 10 ⁶ 2.3 × 10 ⁶ 1.2 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1210NO3 C ₁₂ H ₁₉ NO ₅ IJHSXQWUSMROBJ-UHFFFAOYSA-N	3.4 × 10 ³ 4.1 × 10 ⁴ 7.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1210PAN C ₁₃ H ₁₉ NO ₇ PWZZEUPXUFAYML-UHFFFAOYSA-N	1.1 × 10 ⁶ 2.0 × 10 ⁶ 1.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NBCALOOH C ₁₅ H ₂₅ NO ₇ TUYLAULXHOKFAG-UHFFFAOYSA-N	1.1 × 10 ⁸ 8.5 × 10 ⁷ 7.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H3NCO2CHO C ₄ H ₅ NO ₆ VCTGKRYJUDQYFK-UHFFFAOYSA-N	1.8 × 10 ⁵ 3.6 × 10 ⁶ 3.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HMVKNGLYOX C ₄ H ₅ NO ₆ VDDXFUNTPSDTJP-UHFFFAOYSA-N	2.2 × 10 ⁷ 9.3 × 10 ⁵ 9.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INB1GLYOX C ₅ H ₇ NO ₆ NAZCWKUVRXJZPX-UHFFFAOYSA-N	1.2 × 10 ⁷ 3.1 × 10 ⁵ 3.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INCGLYOX C ₅ H ₇ NO ₆ DGCXGPGOOTUCCO-UHFFFAOYSA-N	6.2 × 10 ⁵ 4.8 × 10 ⁵ 3.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C5CO2OHPAN C ₆ H ₅ NO ₈ MLSWEUDOYVEBFO-UHFFFAOYSA-N	2.1 × 10 ⁸ 1.7 × 10 ⁹ 7.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C6CO2OHPAN C ₇ H ₇ NO ₈ GITGCCFTTYJWBT-UHFFFAOYSA-N	1.4 × 10 ⁸ 1.4 × 10 ⁹ 4.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5M2OHOPAN C ₈ H ₉ NO ₈ MJYXUWCXTAYXTN-UHFFFAOYSA-N	9.6 × 10 ⁷ 2.0 × 10 ⁹ 7.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C7OHCO2PAN C ₈ H ₉ NO ₈ WKRTWLVIYOGIB-UHFFFAOYSA-N	1.1 × 10 ⁸ 8.3 × 10 ⁸ 1.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C5MEJPAN C ₉ H ₁₁ NO ₈ KTOTUVLJTIGMKC-UHFFFAOYSA-N	7.6 × 10 ⁷ 1.2 × 10 ⁹ 5.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C8CO2OHPAN C ₉ H ₁₁ NO ₈ UEMVFSSSLHUULZ-UHFFFAOYSA-N	1.0 × 10 ⁸ 6.6 × 10 ⁸ 2.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C8OHCO2PAN C ₉ H ₁₁ NO ₈ GUTUSTBTBKWXHL-UHFFFAOYSA-N	9.1 × 10 ⁷ 5.8 × 10 ⁸ 1.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:LIMALNO3 C ₁₀ H ₁₇ NO ₆ FDBNDHKWTKEDSC-UHFFFAOYSA-N	1.3 × 10 ⁸ 5.3 × 10 ⁶ 3.2 × 10 ⁷ 3.1 × 10 ⁴	23000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	439 81, 239 81, 240 81, 241
MCM:NLIMALOH C ₁₀ H ₁₇ NO ₆ NNOYMJCUDKQQLW-UHFFFAOYSA-N	5.3 × 10 ⁶ 4.8 × 10 ⁷ 2.7 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C117NO3 C ₁₁ H ₁₇ NO ₆ VRGJRKXSASUXOA-UHFFFAOYSA-N	7.4 × 10 ⁶ 1.0 × 10 ⁷ 2.8 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C118NO3 C ₁₁ H ₁₇ NO ₇ RHEKUCZWBZRVBN-UHFFFAOYSA-N	2.2 × 10 ⁹ 6.5 × 10 ⁸ 3.2 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1215NO3 C ₁₂ H ₁₉ NO ₇ HIFZNEWSKKHKQF-UHFFFAOYSA-N	1.8 × 10 ⁹ 1.1 × 10 ¹⁰ 2.6 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C128NO3 C ₁₂ H ₁₉ NO ₆ XVMHBNQZULJQH-UHFFFAOYSA-N	6.5 × 10 ⁶ 5.3 × 10 ⁷ 1.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1312NO3 C ₁₃ H ₂₁ NO ₆ LCWPKTPKZZROTf-UHFFFAOYSA-N	5.0 × 10 ⁶ 1.4 × 10 ⁸ 3.2 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCALNO3 C ₁₅ H ₂₅ NO ₆ KJHBLMRUUAACD-UHFFFAOYSA-N	4.9 × 10 ⁶ 5.3 × 10 ⁷ 8.7 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NBCALOH C ₁₅ H ₂₅ NO ₆ YUOPYTDNMDNILJ-UHFFFAOYSA-N	4.9 × 10 ⁶ 6.2 × 10 ⁷ 6.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NO3CH2CO2H C ₂ H ₃ NO ₅ VHOVOPOBBVJMEP-UHFFFAOYSA-N	1.6 × 10 ³ 8.3 × 10 ⁴ 1.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PRNO3CO2H C ₃ H ₅ NO ₅ DVOPCQDTEPKYKW-UHFFFAOYSA-N	1.5 × 10 ³ 9.1 × 10 ³ 7.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MPRNO3CO2H C ₄ H ₇ NO ₅ MSBKTJKUKRRTOZ-UHFFFAOYSA-N	8.3 × 10 ² 3.3 × 10 ³ 3.2 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC3CO2H C ₄ H ₅ NO ₅ IYBHCPMQXJSPPT-UHFFFAOYSA-N	4.8 × 10 ³ 1.4 × 10 ⁴ 4.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C3MNO3CO2H C ₅ H ₉ NO ₅ CCKPHGGNTPAJHG-UHFFFAOYSA-N	1.1 × 10 ³ 2.2 × 10 ³ 2.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C43NO3CO2H C ₅ H ₉ NO ₅ PAJLSJNKCRUQAA-UHFFFAOYSA-N	6.8 × 10 ² 1.4 × 10 ³ 2.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C4NO3CO2H C ₅ H ₉ NO ₅ LHOHBJOUNVJDSQ-UHFFFAOYSA-N	9.8 × 10 ² 2.0 × 10 ³ 2.7 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC4CO2H C ₅ H ₇ NO ₅ ZKTRJZJYWMMAEY-UHFFFAOYSA-N	3.2 × 10 ³ 9.6 × 10 ³ 7.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C65NO3CO2H C ₆ H ₁₁ NO ₅ JEDGAPUZBUOYQF-UHFFFAOYSA-N	8.7 × 10 ² 1.1 × 10 ³ 2.5 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C721PAN C ₈ H ₁₁ NO ₇ OMUZIQDFMVGNTC-UHFFFAOYSA-N	5.6 × 10 ⁵ 4.3 × 10 ⁶ 6.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C811NO3 C ₈ H ₁₃ NO ₅ WYXUZPCNBFFDRO-UHFFFAOYSA-N	1.5 × 10 ³ 1.7 × 10 ⁴ 5.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C823NO3 C ₈ H ₁₃ NO ₅ QAJOXMTYFQHPC-UHFFFAOYSA-N	1.3 × 10 ³ 2.2 × 10 ⁴ 4.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C811PAN C ₉ H ₁₃ NO ₇ BOYXRFXWMBNIT-UHFFFAOYSA-N	4.7 × 10 ⁵ 3.1 × 10 ⁶ 3.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C823PAN C ₉ H ₁₃ NO ₇ GRHNTSHNCZZYLE-UHFFFAOYSA-N	4.2 × 10 ⁵ 1.3 × 10 ⁶ 2.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C137NO3 C ₁₃ H ₂₁ NO ₅ CQGOUXQAADNZJX-UHFFFAOYSA-N	1.3 × 10 ³ 3.8 × 10 ⁴ 2.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C137PAN C ₁₄ H ₂₁ NO ₇ KJDMPPVAHMJBAAO-UHFFFAOYSA-N	4.6 × 10 ⁵ 2.5 × 10 ⁶ 9.1 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MACRNBCO2H C ₄ H ₇ NO ₆ WQOIEXBGIWRREH-UHFFFAOYSA-N	1.5 × 10 ⁵ 2.6 × 10 ⁶ 3.6 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MACRNCO2H C ₄ H ₇ NO ₆ GPIMHHNLFCYMAO-UHFFFAOYSA-N	3.0 × 10 ⁶ 8.5 × 10 ⁵ 5.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C57NO3CO2H C ₅ H ₉ NO ₇ VNPCVOYEGJTTSH-UHFFFAOYSA-N	2.8 × 10 ⁹ 1.6 × 10 ⁸ 2.3 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C58NO3CO2H C ₅ H ₉ NO ₇ QOEJXJLKIMUJIJ-UHFFFAOYSA-N	4.1 × 10 ⁸ 5.0 × 10 ⁸ 1.0 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INAHCO2H C ₅ H ₉ NO ₇ KDGUUBLLRPAORR-UHFFFAOYSA-N	1.4 × 10 ⁸ 1.7 × 10 ⁹ 5.0 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INAHPCO2H C ₅ H ₉ NO ₈ CHIYBIMSWIBBRD-UHFFFAOYSA-N	2.3 × 10 ¹¹ 2.5 × 10 ⁹ 1.6 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:INANCO2H C ₅ H ₈ N ₂ O ₉ QEPBKMYMBRWSSY-UHFFFAOYSA-N	3.6 × 10 ⁸ 3.6 × 10 ⁷ 4.5 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INB1HPCO2H C ₅ H ₉ NO ₈ XWZUZABUMCCUCE-UHFFFAOYSA-N	2.0 × 10 ¹¹ 2.9 × 10 ⁸ 1.8 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INB1NACO2H C ₅ H ₈ N ₂ O ₉ FONBWUWRCYYCPB-UHFFFAOYSA-N	3.0 × 10 ⁸ 5.1 × 10 ⁶ 1.8 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INB1NBCO2H C ₅ H ₈ N ₂ O ₉ YGORAHXKXOIMV-UHFFFAOYSA-N	3.0 × 10 ⁸ 7.3 × 10 ⁶ 2.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INCNCO2H C ₅ H ₈ N ₂ O ₉ LXTUVHDUSAOJOD-UHFFFAOYSA-N	3.6 × 10 ⁸ 2.0 × 10 ⁷ 1.6 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C139NO3 C ₁₃ H ₂₁ NO ₇ UFNZJLDHNJULFY-UHFFFAOYSA-N	6.6 × 10 ⁷ 1.9 × 10 ⁸ 6.5 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CONM2CO2H C ₄ H ₅ NO ₆ LTGNKSWVEYSUMY-UHFFFAOYSA-N	7.4 × 10 ⁵ 8.3 × 10 ⁴ 3.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MMALNACO2H C ₅ H ₇ NO ₇ REHIBMNEJUPYOU-UHFFFAOYSA-N	1.2 × 10 ⁸ 4.5 × 10 ⁷ 6.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MMALNBCO2H C ₅ H ₇ NO ₇ RAMGTVAYJVLLRG-UHFFFAOYSA-N	1.2 × 10 ⁸ 1.9 × 10 ⁷ 5.9 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:INANCOCO2H C ₅ H ₆ N ₂ O ₉ XEVMEFHPLZUFAK-UHFFFAOYSA-N	5.8 × 10 ⁷ 8.5 × 10 ⁶ 6.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C732NO3 C ₇ H ₁₁ NO ₆ SXYZBZXZNRERD-UHFFFAOYSA-N	4.7 × 10 ⁵ 3.7 × 10 ⁷ 4.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C732PAN C ₈ H ₁₁ NO ₈ WNUKRJOERGBBRT-UHFFFAOYSA-N	1.7 × 10 ⁸ 1.7 × 10 ⁹ 2.0 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1211NO3 C ₁₂ H ₁₉ NO ₆ DQVGSELEPUBSS-UHFFFAOYSA-N	5.1 × 10 ⁵ 5.6 × 10 ⁷ 2.9 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C1211PAN C ₁₃ H ₁₉ NO ₈ IROGWMVYBREROI-UHFFFAOYSA-N	1.6 × 10 ⁸ 4.2 × 10 ⁹ 9.8 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C813NO3 C ₈ H ₁₃ NO ₇ GYZVFQOTJWWTBE-UHFFFAOYSA-N	8.5 × 10 ⁸ 4.6 × 10 ⁷ 7.1 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1212NO3 C ₁₂ H ₁₉ NO ₈ NTNWJSADTNTFFHH-UHFFFAOYSA-N	2.3 × 10 ¹⁰ 1.3 × 10 ¹⁰ 3.0 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1213NO3 C ₁₂ H ₁₉ NO ₈ FRAJAIKFGOMCR-UHFFFAOYSA-N	2.6 × 10 ¹¹ 1.8 × 10 ¹¹ 3.6 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1310NO3 C ₁₃ H ₂₁ NO ₇ YNRLOWIUKIUEHR-UHFFFAOYSA-N	7.3 × 10 ⁸ 1.4 × 10 ¹⁰ 3.0 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C151NO3 C ₁₅ H ₂₅ NO ₇ BHPYCCPMXIBJRO-UHFFFAOYSA-N	7.4 × 10 ⁸ 2.6 × 10 ¹⁰ 8.7 × 10 ⁸		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHOOCH2NO3 C ₂ H ₃ NO ₅ OAKKIQKQLJUJT-UHFFFAOYSA-N	5.8 1.4 × 10 ¹ 2.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHOOMPAN C ₃ H ₃ NO ₇ XZTQWYQUABOKPG-UHFFFAOYSA-N	1.8 × 10 ³ 1.6 × 10 ³ 1.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETHFORMNO3 C ₃ H ₅ NO ₅ DOXRBPPLNMOIQGP-UHFFFAOYSA-N	5.4 3.5 1.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:METACETNO3 C ₃ H ₅ NO ₅ HRSAJZJMUADCNM-UHFFFAOYSA-N	3.9 1.9 × 10 ¹ 3.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MMCFNO3 C ₃ H ₃ NO ₇ IFMSYUVMGRDEM-UHFFFAOYSA-N	1.8 × 10 ³ 1.1 × 10 ⁴ 7.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACEC2H4NO3 C ₄ H ₇ NO ₅ QOXSFWPQUXLCPI-UHFFFAOYSA-N	3.2 2.5 × 10 ¹ 9.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACETMEPAN C ₄ H ₅ NO ₇ QMSGSFOWAUFKPL-UHFFFAOYSA-N	1.2 × 10 ³ 1.8 × 10 ³ 1.7 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:COO2C3PAN C ₄ H ₅ NO ₇ YQMLKDOXYNVNTNM-UHFFFAOYSA-N	1.2 × 10 ³ 1.6 × 10 ³ 7.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETACETNO3 C ₄ H ₇ NO ₅ KORDSAOMZNGUAL-UHFFFAOYSA-N	3.6 3.5 2.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPRFORMNO3 C ₄ H ₇ NO ₅ DZSICYNSKFSRMV-UHFFFAOYSA-N	3.0 6.9 × 10 ⁻¹ 1.8 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NBZFUOOH C ₄ H ₅ NO ₇ TXWHL SUKLWEERR-UHFFFAOYSA-N	2.2 × 10 ⁸ 3.0 × 10 ⁶ 2.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACCOMEPAN C ₅ H ₅ NO ₈ ZQOVYYMCAFZVPL-UHFFFAOYSA-N	5.3 × 10 ⁴ 5.1 × 10 ⁵ 1.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACETC2PAN C ₅ H ₇ NO ₇ VMVPPLVFXDAZML-UHFFFAOYSA-N	1.0 × 10 ³ 2.1 × 10 ³ 6.5 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:COO2C4PAN C ₅ H ₇ NO ₇ GBAXNZCSCJEGAE-UHFFFAOYSA-N	1.0 × 10 ³ 1.7 × 10 ³ 1.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPRACBNO3 C ₅ H ₉ NO ₅ ZEVCP CUWR COHCL-UHFFFAOYSA-N	2.8 8.1 3.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPRACBPAN C ₅ H ₇ NO ₇ UJCZQTHKWBYHPW-UHFFFAOYSA-N	1.1 × 10 ³ 3.9 × 10 ² 2.2 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPRACNO3 C ₅ H ₉ NO ₅ JAQKAPGOMZJVBI-UHFFFAOYSA-N	2.0 8.0 × 10 ⁻¹ 2.2 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTBEAALNO3 C ₅ H ₉ NO ₅ NIMOOIUOXYQIIM-UHFFFAOYSA-N	2.7 2.5 1.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTBEAALPAN C ₅ H ₇ NO ₇ WKTKTTPK CZOX AQ-UHFFFAOYSA-N	9.6 × 10 ² 6.5 × 10 ¹ 1.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPRACANO3 C ₅ H ₉ NO ₅ FPQZKAXTSOKJRB-UHFFFAOYSA-N	2.8 8.1 3.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NPRACBNO3 C ₅ H ₉ NO ₅ HTKMYQNNJMTEJQ-UHFFFAOYSA-N	2.8 1.9 1.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPRACCNO3 C ₅ H ₉ NO ₅ PSJLJILPBUIYXRJ-UHFFFAOYSA-N	2.8 1.5 × 10 ¹ 3.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPXYFUOOH C ₅ H ₇ NO ₇ ARRSNV VNYK GUFK-UHFFFAOYSA-N	1.2 × 10 ⁸ 8.9 × 10 ⁵ 5.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NTLFUOOH C ₅ H ₇ NO ₇ OAXQEILKHMZHNV-UHFFFAOYSA-N	2.0 × 10 ⁸ 2.2 × 10 ⁶ 1.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MCOOTBNO3 C ₆ H ₁₁ NO ₅ BCWPDUXSEGSVPT-UHFFFAOYSA-N	1.6 2.9 1.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NBUACANO3 C ₆ H ₁₁ NO ₅ GNPRUWODPALWHJ-UHFFFAOYSA-N	2.6 6.9 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NBUACBNO3 C ₆ H ₁₁ NO ₅ UFOXFUDLAIUHTC-UHFFFAOYSA-N	2.6 5.0 4.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NBUACCNO3 C ₆ H ₁₁ NO ₅ PYXJHVBEHHCABK-UHFFFAOYSA-N	2.6 1.4 1.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NDMMALYOOH C ₆ H ₇ NO ₈ RZSLUQVSVWAZFJ-UHFFFAOYSA-N	2.2 × 10 ¹¹ 9.8 × 10 ⁷ 2.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NEBFUOOH C ₆ H ₉ NO ₇ CZSCMTWZZQSKMX-UHFFFAOYSA-N	1.8 × 10 ⁸ 1.4 × 10 ⁶ 9.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NMXYFUOOH C ₆ H ₉ NO ₇ URYSYTGABCDCM-UHFFFAOYSA-N	1.1 × 10 ⁸ 4.9 × 10 ⁵ 6.3 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOXYFUOOH C ₆ H ₉ NO ₇ CPPAIMSHWPDUBG-UHFFFAOYSA-N	6.8 × 10 ⁷ 3.2 × 10 ⁵ 2.4 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NTMB1FUOOH C ₆ H ₉ NO ₇ WRMOSOIHGVC RMO-UHFFFAOYSA-N	1.1 × 10 ⁸ 1.7 × 10 ⁷ 2.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PRCOOMPAN C ₆ H ₉ NO ₇ NSDDFRROKVQLRJ-UHFFFAOYSA-N	8.9 × 10 ² 5.6 × 10 ² 1.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:SBUACANO3 C ₆ H ₁₁ NO ₅ FWAMAOJLVLFAOA-UHFFFAOYSA-N	1.6 5.3 × 10 ⁻¹ 1.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:SBUACBNO3 C ₆ H ₁₁ NO ₅ FVMFJLQQOIKLHP-UHFFFAOYSA-N	3.0 4.0 2.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TBUACPAN C ₆ H ₉ NO ₇ WTCUHXZKDYOTB-UHFFFAOYSA-N	6.3 × 10 ² 7.3 × 10 ¹ 2.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NIPBFUOOH C ₇ H ₁₁ NO ₇ MJSJHBOZYWKETN-UHFFFAOYSA-N	1.7 × 10 ⁸ 1.3 × 10 ⁶ 5.4 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NMEBFUOOH C ₇ H ₁₁ NO ₇ LKMBYBKEMVMSAU-UHFFFAOYSA-N	1.0 × 10 ⁸ 3.2 × 10 ⁵ 3.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPBFUOOH C ₇ H ₁₁ NO ₇ DGKCEZHRNXTHAZ-UHFFFAOYSA-N	1.5 × 10 ⁸ 1.1 × 10 ⁶ 4.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NTMB2FUOOH C ₇ H ₁₁ NO ₇ IRLXCLTZUJZGMJ-UHFFFAOYSA-N	6.3 × 10 ⁷ 1.8 × 10 ⁵ 2.4 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1013NO3 C ₁₀ H ₁₇ NO ₅ TWKDJCLTDHUPBZ-UHFFFAOYSA-N	3.1 5.4 3.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1013PAN C ₁₁ H ₁₇ NO ₇ QVQKWVAIHQGLJY-UHFFFAOYSA-N	9.8 × 10 ² 4.8 × 10 ² 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C1014NO3 C ₁₀ H ₁₇ NO ₆ OQZDTLQTCPSBL-UHFFFAOYSA-N	7.8 × 10 ² 1.9 × 10 ³ 7.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C152NO3 C ₁₅ H ₂₅ NO ₇ VUWXYQDBWQFZDF-UHFFFAOYSA-N	3.0 × 10 ⁶ 1.3 × 10 ⁷ 7.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NBZFUONE C ₄ H ₃ NO ₆ LXADUFLCRLGLGHU-UHFFFAOYSA-N	1.9 × 10 ⁶ 4.3 × 10 ⁶ 8.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C23O3CPAN C ₅ H ₅ NO ₈ BCRD XKGRUU AZSU-UHFFFAOYSA-N	7.6 × 10 ⁵ 2.8 × 10 ⁵ 3.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ACBUONANO3 C ₆ H ₉ NO ₆ PDSBHIWVT CGSAN-UHFFFAOYSA-N	1.7 × 10 ³ 2.2 × 10 ³ 9.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C23O3MCPAN C ₆ H ₇ NO ₈ MJYWDTPJLIMPPV-UHFFFAOYSA-N	7.1 × 10 ⁵ 6.0 × 10 ⁴ 2.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NEBFUONE C ₆ H ₇ NO ₆ LZGWKDALCOZNIJ-UHFFFAOYSA-N	1.4 × 10 ⁶ 2.3 × 10 ⁶ 8.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C23O3ECPAN C ₇ H ₉ NO ₈ SOMJWLUSPZTMJM-UHFFFAOYSA-N	5.5 × 10 ⁵ 3.2 × 10 ⁴ 1.5 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NIPBFUONE C ₇ H ₉ NO ₆ OEYHEYBMUYSQHE-UHFFFAOYSA-N	1.3 × 10 ⁶ 2.0 × 10 ⁶ 4.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPBFUONE C ₇ H ₉ NO ₆ WTNUMEKWPLLNDJ-UHFFFAOYSA-N	1.3 × 10 ⁶ 1.7 × 10 ⁶ 6.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CH3OCH2NO3 C ₂ H ₅ NO ₄ VHAYDBAVTGOZLW-UHFFFAOYSA-N	3.4 × 10 ⁻¹ 3.4 × 10 ⁻¹ 4.5 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMMANO3 C ₃ H ₇ NO ₅ ZKGVKOFAVUIIEY-UHFFFAOYSA-N	8.1 5.5 3.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMMBNO3 C ₃ H ₇ NO ₅ ADJOFNYUECRONI-UHFFFAOYSA-N	9.3 1.0 × 10 ⁻¹ 1.7 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETOMENO3 C ₃ H ₇ NO ₃ ZMUPMMOTQUHRHQ-UHFFFAOYSA-N	5.8 × 10 ⁻¹ 6.6 × 10 ⁻¹ 3.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MEMOXYPAN C ₃ H ₅ NO ₆ JBHGAGLULWBGCW-UHFFFAOYSA-N	1.1 × 10 ² 2.2 × 10 ² 1.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DIETETNO3 C ₄ H ₉ NO ₄ CAMRTYJYAQGENN-UHFFFAOYSA-N	2.8 × 10 ⁻¹ 4.2 × 10 ⁻² 7.3 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:ETOC2NO3 C ₄ H ₉ NO ₄ GDNQXPDYGNUKII-UHFFFAOYSA-N	2.5 × 10 ⁻¹ 2.5 4.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETOMEPAN C ₄ H ₇ NO ₆ CCYZAMBLJVQHMC-UHFFFAOYSA-N	9.3 × 10 ¹ 1.1 × 10 ² 1.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPROC21NO3 C ₅ H ₁₁ NO ₄ YQGFTPNVRZNXAP-UHFFFAOYSA-N	2.6 × 10 ⁻¹ 2.0 × 10 ⁻² 8.0 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTBEANO3 C ₅ H ₁₁ NO ₄ NXHUJDLNRCHXIE-UHFFFAOYSA-N	1.5 × 10 ⁻¹ 2.7 × 10 ⁻² 8.3 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTBEBNO3 C ₅ H ₁₁ NO ₄ HWZCMFJGZXOLOM-UHFFFAOYSA-N	1.5 × 10 ⁻¹ 6.2 × 10 ⁻¹ 4.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTBEBPAN C ₅ H ₉ NO ₆ PQCDPGWYIKXNFH-UHFFFAOYSA-N	5.4 × 10 ¹ 1.4 × 10 ¹ 5.5 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXMPAN C ₆ H ₁₁ NO ₆ CPSEOWHBGRFRT-UHFFFAOYSA-N	6.0 × 10 ¹ 5.1 × 10 ¹ 3.2 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DIIPRETNO3 C ₆ H ₁₃ NO ₄ RYKOUKPIPKSCM-UHFFFAOYSA-N	1.4 × 10 ⁻¹ 4.9 × 10 ⁻³ 1.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETBEANO3 C ₆ H ₁₃ NO ₄ WGHLTNOFPVNDHK-UHFFFAOYSA-N	1.2 × 10 ⁻¹ 3.2 × 10 ⁻¹ 4.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETBEAPAN C ₆ H ₁₁ NO ₆ ZFJPSAIQYMAFAB-UHFFFAOYSA-N	4.8 × 10 ¹ 9.1 3.6 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETBEBNO3 C ₆ H ₁₃ NO ₄ BIDDBAQEKWTVIC-UHFFFAOYSA-N	1.4 × 10 ⁻¹ 7.1 × 10 ⁻³ 1.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETBECNO3 C ₆ H ₁₃ NO ₄ MGOGEALWXAMIEO-UHFFFAOYSA-N	1.2 × 10 ⁻¹ 4.0 × 10 ⁻¹ 5.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ETBECPAN C ₆ H ₁₁ NO ₆ JICVHVAZXJWJCM-UHFFFAOYSA-N	4.8 × 10 ¹ 2.3 × 10 ¹ 2.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:IPROMC2NO3 C ₆ H ₁₃ NO ₄ XJQWDDGHWZGMDK-UHFFFAOYSA-N	2.0 × 10 ⁻¹ 4.6 × 10 ⁻¹ 2.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPROMCPAN C ₆ H ₁₁ NO ₆ SFYHCJJQTXJNNN-UHFFFAOYSA-N	8.3 × 10 ¹ 2.0 × 10 ¹ 3.9 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MO2EOLANO3 C ₃ H ₇ NO ₅ FJVLHDUAJQRZPG-UHFFFAOYSA-N	1.2 × 10 ³ 5.6 × 10 ² 3.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MO2EOLBNO3 C ₃ H ₇ NO ₅ QPXYHMSZINTGRC-UHFFFAOYSA-N	1.0 × 10 ³ 1.3 × 10 ³ 2.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EOX2OLANO3 C ₄ H ₉ NO ₅ UVLBVBSPHYSYND-UHFFFAOYSA-N	1.0 × 10 ³ 3.6 × 10 ² 1.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EOX2OLBNO3 C ₄ H ₉ NO ₅ DLOZDRFLLIHYBD-UHFFFAOYSA-N	9.6 × 10 ² 3.2 × 10 ² 8.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:H2C3OCNO3 C ₄ H ₉ NO ₅ VJBSYBJCULHXOZ-UHFFFAOYSA-N	9.6 × 10 ² 9.1 × 10 ² 3.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PR2OHMONO3 C ₄ H ₉ NO ₅ YOBYTHKQRGEURN-UHFFFAOYSA-N	1.1 × 10 ³ 3.8 × 10 ² 8.5 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IEAPAN C ₅ H ₇ NO ₇ NFJKKZSQGXUZZSI-UHFFFAOYSA-N	3.5 × 10 ⁴ 2.3 × 10 ⁵ 9.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IECPAN C ₅ H ₇ NO ₇ UMKIAKGFUATPHT-UHFFFAOYSA-N	3.5 × 10 ⁴ 9.1 × 10 ⁴ 8.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXEOHANO3 C ₆ H ₁₃ NO ₅ NBMGDPHUZJHVTA-UHFFFAOYSA-N	6.2 × 10 ² 1.4 × 10 ² 3.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXEOHBNO3 C ₆ H ₁₃ NO ₅ YIIBDLSBOAJITL-UHFFFAOYSA-N	6.9 × 10 ² 1.4 × 10 ² 3.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXPOLANO3 C ₇ H ₁₅ NO ₅ QDPFCROPCKQGS-UHFFFAOYSA-N	5.8 × 10 ² 8.3 × 10 ¹ 1.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:BOXPOLBNO3 C ₇ H ₁₅ NO ₅ UNWVFJVCQCSAFHA-UHFFFAOYSA-N	6.5 × 10 ² 9.1 × 10 ¹ 2.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BCSOZNO3 C ₁₅ H ₂₅ NO ₇ HGUJSQZJFHDFKY-UHFFFAOYSA-N	1.3 × 10 ⁶ 5.3 × 10 ³ 1.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXDLPAN C ₄ H ₃ NO ₇ VANSFLPKLUXZKF-UHFFFAOYSA-N	3.1 × 10 ⁵ 1.2 × 10 ⁵ 8.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXMDLPAN C ₅ H ₅ NO ₇ KZASOTCYMWAOFU-UHFFFAOYSA-N	1.8 × 10 ⁵ 2.3 × 10 ⁴ 3.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BZEMUCPAN C ₆ H ₅ NO ₇ RFFCGVCNFANFMQ-UHFFFAOYSA-N	9.1 × 10 ⁵ 1.0 × 10 ⁵ 7.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXM2DLPAN C ₆ H ₇ NO ₇ KYBHJMDXHGJYTK-UHFFFAOYSA-N	9.6 × 10 ⁴ 6.3 × 10 ³ 4.2 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXMEDLPAN C ₇ H ₉ NO ₇ XUUSESFMFYTYXHU-UHFFFAOYSA-N	8.0 × 10 ⁴ 3.5 × 10 ³ 4.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYMUCPAN C ₈ H ₉ NO ₇ VIRSPYOLFRMIKR-UHFFFAOYSA-N	2.5 × 10 ⁵ 7.1 × 10 ³ 1.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OETLMUCPAN C ₉ H ₁₁ NO ₇ PYAKBDFKVOPHPS-UHFFFAOYSA-N	2.2 × 10 ⁵ 4.3 × 10 ³ 2.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BZEMUCNO3 C ₆ H ₇ NO ₇ UGJSRYKPNYMSMJ-UHFFFAOYSA-N	1.1 × 10 ⁸ 1.7 × 10 ⁸ 1.7 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXYMUCNO3 C ₈ H ₁₁ NO ₇ PMXJWIAVDRSVOJ-UHFFFAOYSA-N	7.8 × 10 ⁸ 3.2 × 10 ⁷ 2.6 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OETLMUCNO3 C ₉ H ₁₃ NO ₇ KQUUSIKCNRTUGT-UHFFFAOYSA-N	6.3 × 10 ⁸ 1.9 × 10 ⁷ 7.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXKTMPAN C ₆ H ₇ NO ₇ DBXZZDVADSLSSOS-UHFFFAOYSA-N	1.1 × 10 ⁵ 2.6 × 10 ⁴ 1.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:EPXMKTPAN C ₆ H ₇ NO ₇ UTKXQAWEMGMHOV-UHFFFAOYSA-N	1.1 × 10 ⁵ 2.6 × 10 ⁴ 4.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:BOXPROANO3 C ₇ H ₁₃ NO ₅ FWQXAWHLSYKKA-UHFFFAOYSA-N	1.0 × 10 ² 3.3 × 10 ¹ 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EPXEKTPAN C ₇ H ₉ NO ₇ ZMAMXAJQIDKIS-UHFFFAOYSA-N	9.3 × 10 ⁴ 1.6 × 10 ⁴ 3.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TLEMUCPAN C ₇ H ₇ NO ₇ AUCFXVOKAUJMN-UHFFFAOYSA-N	5.5 × 10 ⁵ 2.0 × 10 ⁵ 2.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EBZMUCPAN C ₈ H ₉ NO ₇ IJCUBYAOSTAFY-UHFFFAOYSA-N	4.9 × 10 ⁵ 1.0 × 10 ⁵ 9.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYMUCPAN C ₈ H ₉ NO ₇ FZEVZMXGRRYMCK-UHFFFAOYSA-N	3.0 × 10 ⁵ 4.0 × 10 ⁴ 1.2 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYMUCPAN C ₈ H ₉ NO ₇ JEHOQLADMJYMP-UHFFFAOYSA-N	3.0 × 10 ⁵ 5.9 × 10 ⁴ 8.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPBZMUCPAN C ₉ H ₁₁ NO ₇ JAYKUYZEOSXCLM-UHFFFAOYSA-N	4.6 × 10 ⁵ 6.2 × 10 ⁴ 3.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:METLMUCPAN C ₉ H ₁₁ NO ₇ ZBESLNAUTTYMKY-UHFFFAOYSA-N	2.8 × 10 ⁵ 1.9 × 10 ⁴ 5.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBZMUCPAN C ₉ H ₁₁ NO ₇ BNKFVONIJIIEPHK-UHFFFAOYSA-N	4.0 × 10 ⁵ 6.0 × 10 ⁴ 6.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PETLMUCPAN C ₉ H ₁₁ NO ₇ ZDDBRQJYUBFFIJ-UHFFFAOYSA-N	2.8 × 10 ⁵ 2.8 × 10 ⁴ 8.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124MUPAN C ₉ H ₁₁ NO ₇ TXJRVENADFPPLH-UHFFFAOYSA-N	1.7 × 10 ⁵ 1.3 × 10 ⁴ 1.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM135MUPAN C ₉ H ₁₁ NO ₇ APWJKVMWYCHHEO-UHFFFAOYSA-N	2.0 × 10 ⁵ 3.7 × 10 ⁴ 2.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:DMEBMUPAN C ₁₀ H ₁₃ NO ₇ OJIPANRKTQADST-UHFFFAOYSA-N	1.9 × 10 ⁵ 1.9 × 10 ⁴ 2.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DETLMUPAN C ₁₁ H ₁₅ NO ₇ WGGPAZKPQBFIGY-UHFFFAOYSA-N	1.5 × 10 ⁵ 1.3 × 10 ⁴ 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM123MUNO3 C ₉ H ₁₃ NO ₇ CNKHLWZBBXJTR-UHFFFAOYSA-N	2.8 × 10 ⁷ 3.0 × 10 ⁷ 5.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TLEMUCNO3 C ₇ H ₉ NO ₇ KLAQKLFQZHHGRD-UHFFFAOYSA-N	1.5 × 10 ⁹ 3.5 × 10 ⁸ 8.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EBZMUCNO3 C ₈ H ₁₁ NO ₇ ZZJNOSBMORNYPY-UHFFFAOYSA-N	1.4 × 10 ⁹ 2.0 × 10 ⁸ 1.7 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXYMUCNO3 C ₈ H ₁₁ NO ₇ YZJRXCREGHPQLR-UHFFFAOYSA-N	8.5 × 10 ⁸ 7.8 × 10 ⁷ 6.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXYMUCNO3 C ₈ H ₁₁ NO ₇ GICKPQRZPMBHKH-UHFFFAOYSA-N	8.5 × 10 ⁸ 9.3 × 10 ⁷ 1.6 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPBZMUCNO3 C ₉ H ₁₃ NO ₇ UHFJHZLCCDDVXBXJ-UHFFFAOYSA-N	1.3 × 10 ⁹ 1.5 × 10 ⁸ 1.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:METLMUCNO3 C ₉ H ₁₃ NO ₇ WWNOXWKNLSKIMY-UHFFFAOYSA-N	7.6 × 10 ⁸ 4.6 × 10 ⁷ 9.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBZMUCNO3 C ₉ H ₁₃ NO ₇ QLDJRFHCOXXYTH-UHFFFAOYSA-N	1.1 × 10 ⁹ 1.4 × 10 ⁸ 9.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PETLMUCNO3 C ₉ H ₁₃ NO ₇ PIVPLJYVWKBKLM-UHFFFAOYSA-N	7.6 × 10 ⁸ 5.8 × 10 ⁷ 1.0 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124MUNO3 C ₉ H ₁₃ NO ₇ NIRISDMZVMYRLC-UHFFFAOYSA-N	2.2 × 10 ⁷ 7.8 × 10 ⁶ 5.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM135MUNO3 C ₉ H ₁₃ NO ₇ WYJKGTDXAIWZNI-UHFFFAOYSA-N	2.2 × 10 ⁷ 1.4 × 10 ⁷ 7.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.6: Nitrates (RONO₂) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:DMEBMUNO3 C ₁₀ H ₁₅ NO ₇ KKQBKVQGVIRIRAG-UHFFFAOYSA-N	1.9 × 10 ⁷ 7.1 × 10 ⁶ 2.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DETLMUNO3 C ₁₁ H ₁₇ NO ₇ YPPYKYPDSBIFHG-UHFFFAOYSA-N	1.4 × 10 ⁷ 4.6 × 10 ⁶ 2.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMCNO3 C ₃ H ₅ NO ₆ XNSIPMZBSRCICM-UHFFFAOYSA-N	2.9 × 10 ¹ 3.6 × 10 ¹ 5.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MMFNO3 C ₃ H ₅ NO ₆ KROMLYNKDFILIM-UHFFFAOYSA-N	1.5 × 10 ² 4.5 4.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
ISOP1N5OOH C ₅ H ₉ NO ₆ LLNBZHMZYQLAS-UHFFFAOYSA-N	2.3 × 10 ⁷	14000	Wieser et al. (2023)	Q	439
C520ONO2 C ₅ H ₉ NO ₈ ZSADVAXZKJGKSG-UHFFFAOYSA-N	2.9 × 10 ⁹	21000	Wieser et al. (2023)	Q	439
ROO6R6ONO2 C ₆ H ₁₁ NO ₆ CRECMHNOVVIMCR-UHFFFAOYSA-N	6.1 × 10 ⁵	12000	Wieser et al. (2023)	Q	439
C624ONO2 C ₆ H ₁₁ NO ₇ XYBUKFJLXVIRLY-UHFFFAOYSA-N	2.0 × 10 ¹⁰	19000	Wieser et al. (2023)	Q	439
ROO6R5ONO2 C ₇ H ₁₁ NO ₇ LNWOWXJMUJHMJJ-UHFFFAOYSA-N	1.7 × 10 ⁵	15000	Wieser et al. (2023)	Q	439
ROO6R1ONO2 C ₁₀ H ₁₇ NO ₆ JOFCABYMPNXMIS-UHFFFAOYSA-N	1.4 × 10 ²	15000	Wieser et al. (2023)	Q	439
LIMAB15ONO2OOH C ₁₀ H ₁₉ NO ₇ JBKULLYZCMWERK-UHFFFAOYSA-N	5.0 × 10 ⁹	19000	Wieser et al. (2023)	Q	439

A4.7 Nitriles with oxygen (C, H, O, N)

Table A4.7: Nitriles with oxygen (C, H, O, N)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
isocyanic acid HNCO [75-13-8] OWIKHYCFFJSOEH-UHFFFAOYSA-N	2.0×10^{-1} 2.6×10^{-1} 2.1×10^{-1}	4700 4100	Roberts and Liu (2019) Borduas et al. (2016) Roberts et al. (2011)	M M M	592 593
methyl isocyanate CH ₃ NCO [624-83-9] HAMGRBXTJNITHG-UHFFFAOYSA-N	1.3×10^{-2}		Roberts and Liu (2019)	M	
hydroxyacetonitrile C ₂ H ₃ NO (glycolonitrile) [107-16-4] LTYRAPJYLUPLCI-UHFFFAOYSA-N	1.3		HSDB (2015)	Q	100
2-hydroxypropanenitrile C ₃ H ₅ NO [78-97-7] WOFDVFDFGLBFAC-UHFFFAOYSA-N	1.0		HSDB (2015)	Q	100
3-hydroxypropanenitrile C ₃ H ₅ NO (ethylene cyanohydrin) [109-78-4] WSGYTJNNHPZFKR-UHFFFAOYSA-N	1.3×10^3 2.3×10^4 3.2×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
methyl cyanoacetate C ₄ H ₅ NO ₂ [105-34-0] ANGDWNBGPBMQHW-UHFFFAOYSA-N	3.5×10^1		Ebert et al. (2023)	?	317
cianoethanoic acid, ethyl ester C ₅ H ₇ NO ₂ (ethyl cyanoacetate) [105-56-6] ZIUSEGNTOUIPT-UHFFFAOYSA-N	3.4×10^1 3.4×10^1 1.3×10^1 7.7×10^1 4.9 7.7 3.5×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yao et al. (2002) Yaws (1999)	V V Q Q Q Q ?	187 68 230 21
2-hydroxybenzoic acid nitrile C ₇ H ₅ NO (2-cyanophenol) [611-20-1] CHZCERSEMVVNHL-UHFFFAOYSA-N	2.8×10^1		Hilal et al. (2008)	Q	

Table A4.7: Nitriles with oxygen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-hydroxybenzoic acid nitrile $\text{C}_7\text{H}_5\text{NO}$ (3-cyanophenol) [873-62-1] SGHBRHKBCLLVCI-UHFFFAOYSA-N	4.0×10^4 1.6×10^3 3.6×10^3 3.3×10^5 3.8×10^3		Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhandan et al. (1997) Abraham et al. (1990)	Q Q Q Q ?	68 231, 232
4-hydroxybenzoic acid nitrile $\text{C}_7\text{H}_5\text{NO}$ (4-cyanophenol) [767-00-0] CVNOWLNPPYEOH-UHFFFAOYSA-N	1.4×10^4 2.0×10^3 3.3×10^5 1.2×10^4		Hilal et al. (2008) Modarresi et al. (2007) Nirmalakhandan et al. (1997) Abraham et al. (1990)	Q Q Q ?	68
phenyl isocyanate $\text{C}_7\text{H}_5\text{NO}$ [103-71-9] DGTNSSLYPYDJGL-UHFFFAOYSA-N	2.5×10^{-5} 2.5×10^{-5} 1.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2010) Yaws (1999)	X Q ?	238, 12 247 21, 12
1,1',1''-nitritotris-2-propanol $\text{C}_9\text{H}_{21}\text{NO}_3$ (triisopropanolamine) [122-20-3] SLINHMUFWFWMU-UHFFFAOYSA-N	1.0×10^6		HSDB (2015)	Q	449
cyometrinil $\text{C}_{10}\text{H}_7\text{N}_3\text{O}$ [78370-21-5] PYKLUAIDKVVEOS-JLHYAGUSA-N	1.1×10^4		MacBean (2012a)	?	
fenprothrin $\text{C}_{22}\text{H}_{23}\text{NO}_3$ [39515-41-8] XQUXKZZNEFRCAW-UHFFFAOYSA-N	5.5×10^{-2} 1.7×10^1		HSDB (2015) Siebers and Mattusch (1996)	V V	12

A4.8 Nitro compounds (RNO₂)Table A4.8: Nitro compounds (RNO₂)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
nitromethane	3.4×10^{-1}	4000	Burkholder et al. (2019)	L	
CH ₃ NO ₂	3.4×10^{-1}	4000	Burkholder et al. (2015)	L	
[75-52-5]	3.6×10^{-1}	3900	Brockbank (2013)	L	1
LYGJENNIWJXYER-UHFFFAOYSA-N	3.4×10^{-1}	4000	Sander et al. (2011)	L	
	3.4×10^{-1}	4000	Sander et al. (2006)	L	
	3.5×10^{-1}	4000	Beneš and Dohnal (1999)	M	
	3.6×10^{-1}		Park et al. (1987)	M	
	4.5×10^{-1}		Rohrschneider (1973)	M	
	3.4×10^{-2}		Yaws (2003)	X	238
	3.5×10^{-1}		Gaffney and Senum (1984)	X	391
	4.4×10^{-1}		Hayer et al. (2022)	Q	20
	2.5×10^{-1}		Keshavarz et al. (2022)	Q	
	6.2×10^{-1}		Duchowicz et al. (2020)	Q	185
	1.2×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	3.3×10^{-2}		Gharagheizi et al. (2010)	Q	247
	3.4×10^{-1}		Hilal et al. (2008)	Q	
	3.3×10^{-2}		Modarresi et al. (2007)	Q	68
		3700	Kühne et al. (2005)	Q	
	2.3×10^{-1}		Yaffe et al. (2003)	Q	249, 273
	6.2×10^{-1}		English and Carroll (2001)	Q	231, 232
	2.8×10^{-2}		Katritzky et al. (1998)	Q	
	7.3×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	3.5×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		3500	Kühne et al. (2005)	?	
	3.4×10^{-2}		Yaws (1999)	?	21
	1.8×10^{-1}		Abraham and Weathersby (1994)	?	21
	3.6×10^{-2}		Yaws and Yang (1992)	?	21
	3.6×10^{-1}		Abraham et al. (1990)	?	
nitromethane-13C	4.8×10^{-1}	5000	Hiatt (2013)	M	
CH ₃ NO ₂					
[32480-00-5]					
LYGJENNIWJXYER-OUBTZVSYSA-N					
nitroethane	2.1×10^{-1}	4400	Burkholder et al. (2019)	L	
C ₂ H ₅ NO ₂	2.1×10^{-1}	4400	Burkholder et al. (2015)	L	
[79-24-3]	2.1×10^{-1}	4700	Brockbank (2013)	L	1
MCSAJNNLRFCZED-UHFFFAOYSA-N	2.1×10^{-1}	4400	Sander et al. (2011)	L	
	2.1×10^{-1}	4400	Sander et al. (2006)	L	
	2.2×10^{-1}	4400	Beneš and Dohnal (1999)	M	
	1.4×10^{-1}		Friant and Suffet (1979)	M	38, 595
	1.9×10^{-1}		Hwang et al. (1992)	V	
	2.1×10^{-1}		Hine and Mookerjee (1975)	V	

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.1×10^{-1}		Gaffney and Senum (1984)	X	391
	3.4×10^{-1}		Keshavarz et al. (2022)	Q	
	3.7×10^{-1}		Duchowicz et al. (2020)	Q	185
	2.1×10^{-1}		Li et al. (2014)	Q	242
	9.9×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	2.2×10^{-1}		Hilal et al. (2008)	Q	
	3.0×10^{-2}		Modarresi et al. (2007)	Q	68
		4100	Kühne et al. (2005)	Q	
	2.3×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	3.1×10^{-1}		English and Carroll (2001)	Q	231, 261
	2.6×10^{-2}		Katritzky et al. (1998)	Q	
	6.1×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	1.5×10^{-1}		Suzuki et al. (1992)	Q	233
	2.1×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		4200	Kühne et al. (2005)	?	
	2.5×10^{-1}		Yaws (1999)	?	21
	2.1×10^{-1}		Abraham et al. (1990)	?	
1-nitropropane $\text{C}_3\text{H}_7\text{NO}_2$ [108-03-2] JSZOAYXJRCEYSX-UHFFFAOYSA-N	1.3×10^{-1}	4700	Burkholder et al. (2019)	L	
	1.3×10^{-1}	4700	Burkholder et al. (2015)	L	
	1.4×10^{-1}	5100	Brockbank (2013)	L	1
	1.3×10^{-1}	4700	Sander et al. (2011)	L	
	1.3×10^{-1}	4700	Sander et al. (2006)	L	
	1.3×10^{-1}	4700	Beneš and Dohnal (1999)	M	
	1.6×10^{-1}		Welke et al. (1998)	M	
	1.1×10^{-1}		Hine and Mookerjee (1975)	V	
	9.2×10^{-2}		Keshavarz et al. (2022)	Q	
	4.8×10^{-1}		Duchowicz et al. (2020)	Q	300
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	9.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	1.5×10^{-1}		Hilal et al. (2008)	Q	
	2.3×10^{-2}		Modarresi et al. (2007)	Q	68
		4400	Kühne et al. (2005)	Q	
	1.2×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	1.2×10^{-1}		English and Carroll (2001)	Q	231, 232
	3.1×10^{-2}		Katritzky et al. (1998)	Q	
	4.7×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	7.2×10^{-3}		Suzuki et al. (1992)	Q	233
	1.1×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		4400	Kühne et al. (2005)	?	
	1.2×10^{-1}		Yaws (1999)	?	21, 12
	1.6×10^{-1}		Yaws and Yang (1992)	?	21, 12
	1.1×10^{-1}		Abraham et al. (1990)	?	

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-nitropropane CH ₃ CH(NO ₂)CH ₃ [79-46-9] FGLBSLMDCBOPQK-UHFFFAOYSA-N	8.3 × 10 ⁻²	4500	Burkholder et al. (2019)	L	
	8.3 × 10 ⁻²	4500	Burkholder et al. (2015)	L	
	8.6 × 10 ⁻²	4800	Brockbank (2013)	L	1
	8.3 × 10 ⁻²	4500	Sander et al. (2011)	L	
	8.3 × 10 ⁻²	4500	Sander et al. (2006)	L	
	8.4 × 10 ⁻²	4500	Beneš and Dohnal (1999)	M	
	8.3 × 10 ⁻²		Duchowicz et al. (2020)	V	187
	8.3 × 10 ⁻²		HSDB (2015)	V	
	8.0 × 10 ⁻²		Hine and Mookerjee (1975)	V	
	2.2 × 10 ⁻¹		Duchowicz et al. (2020)	Q	
	7.8 × 10 ⁻²		Raventos-Duran et al. (2010)	Q	243, 244
	6.2 × 10 ⁻²		Raventos-Duran et al. (2010)	Q	245
	1.2 × 10 ⁻¹		Raventos-Duran et al. (2010)	Q	246
	7.2 × 10 ⁻²		Hilal et al. (2008)	Q	
	2.7 × 10 ⁻²		Modarresi et al. (2007)	Q	68
		4400	Kühne et al. (2005)	Q	
	8.6 × 10 ⁻²		Yaffe et al. (2003)	Q	249, 250
	7.2 × 10 ⁻²		English and Carroll (2001)	Q	231, 275
	2.1 × 10 ⁻²		Katritzky et al. (1998)	Q	
	4.1 × 10 ⁻²		Nirmalakhandan et al. (1997)	Q	
	8.4 × 10 ⁻³		Suzuki et al. (1992)	Q	233
		4400	Kühne et al. (2005)	?	
	8.2 × 10 ⁻²		Yaws (1999)	?	21, 12
	1.1 × 10 ⁻¹		Yaws and Yang (1992)	?	21, 12
	8.0 × 10 ⁻²		Abraham et al. (1990)	?	
1-nitrobutane C ₄ H ₉ NO ₂ [627-05-4] NALZTFARIYUCBY-UHFFFAOYSA-N	7.6 × 10 ⁻²		Brockbank (2013)	L	
	8.3 × 10 ⁻²		Duchowicz et al. (2020)	V	187
	5.6 × 10 ⁻¹		Duchowicz et al. (2020)	Q	
	9.7 × 10 ⁻²		Hilal et al. (2008)	Q	
	1.8 × 10 ⁻²		Modarresi et al. (2007)	Q	68
	3.7 × 10 ⁻²		Nirmalakhandan et al. (1997)	Q	
	7.5 × 10 ⁻²		Abraham et al. (1990)	?	
<i>tert</i> -butylnitrite C ₄ H ₉ ONO [540-80-7] IOGXOCVLYRDXLW-UHFFFAOYSA-N	7.9 × 10 ⁻³		Hilal et al. (2008)	Q	
1-nitropentane C ₅ H ₁₁ NO ₂ [628-05-7] BVALZCVRLDMXOQ-UHFFFAOYSA-N	4.7 × 10 ⁻²		Amoore and Buttery (1978)	V	
	6.0 × 10 ⁻²		Hilal et al. (2008)	Q	
	1.4 × 10 ⁻²		Modarresi et al. (2007)	Q	68
	2.9 × 10 ⁻²		Nirmalakhandan et al. (1997)	Q	
	4.7 × 10 ⁻²		Abraham et al. (1990)	?	

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tris(hydroxymethyl)ethane trinitrate C ₅ H ₉ N ₃ O ₉ [3032-55-1] IPPYBNCEPZCLNI-UHFFFAOYSA-N	2.2 × 10 ³		Zhang et al. (2010)	Q	288, 289
	1.4 × 10 ²		Zhang et al. (2010)	Q	288, 290
	2.4 × 10 ³		Zhang et al. (2010)	Q	288, 291
	3.4 × 10 ¹		Zhang et al. (2010)	Q	288, 292
1-nitrohexane C ₆ H ₁₃ NO ₂ [646-14-0] FEYJIFXFOHFGCC-UHFFFAOYSA-N	4.5 × 10 ⁻²		Hilal et al. (2008)	Q	
nitrocyclohexane C ₆ H ₁₁ NO ₂ [1122-60-7] NUNQUTDUIPVROZ-UHFFFAOYSA-N	2.4 × 10 ⁻¹		Hilal et al. (2008)	Q	
2-nitroethanol C ₂ H ₅ NO ₃ [625-48-9] KIPMDPDAFINLIV-UHFFFAOYSA-N	2.0 × 10 ²		Raventos-Duran et al. (2010)	Q	243, 244
	3.1 × 10 ²		Raventos-Duran et al. (2010)	Q	245
	4.9 × 10 ³		Raventos-Duran et al. (2010)	Q	246
	1.6 × 10 ²		Hilal et al. (2008)	Q	
1-nitro-2-propanol C ₃ H ₇ NO ₃ [3156-73-8] PFNCKQIYLAVYJF-UHFFFAOYSA-N	1.2 × 10 ²		Raventos-Duran et al. (2010)	Q	243, 244
	2.5 × 10 ²		Raventos-Duran et al. (2010)	Q	245
	3.9 × 10 ³		Raventos-Duran et al. (2010)	Q	246
	7.9 × 10 ¹		Hilal et al. (2008)	Q	
2-nitro-1-propanol C ₃ H ₇ NO ₃ [2902-96-7] PCNWBUOSTLGPMI-UHFFFAOYSA-N	1.2 × 10 ²		Raventos-Duran et al. (2010)	Q	243, 244
	2.5 × 10 ²		Raventos-Duran et al. (2010)	Q	245
	3.9 × 10 ³		Raventos-Duran et al. (2010)	Q	246
	9.9 × 10 ¹		Hilal et al. (2008)	Q	
1-nitro-2-butanol C ₄ H ₉ NO ₃ [3156-74-9] FMEFHKJRIGHSLB-UHFFFAOYSA-N	7.3 × 10 ¹		Hilal et al. (2008)	Q	
2-nitro-1-butanol C ₄ H ₉ NO ₃ [609-31-4] MHIHRIPETCJEMQ-UHFFFAOYSA-N	9.9 × 10 ¹		Raventos-Duran et al. (2010)	Q	272, 244
	2.0 × 10 ²		Raventos-Duran et al. (2010)	Q	245
	2.5 × 10 ³		Raventos-Duran et al. (2010)	Q	246
	7.5 × 10 ¹		Hilal et al. (2008)	Q	
3-nitro-2-butanol C ₄ H ₉ NO ₃ [6270-16-2] OJVOGABFNZDOOZ-UHFFFAOYSA-N	9.9 × 10 ¹		Raventos-Duran et al. (2010)	Q	243, 244
	2.0 × 10 ²		Raventos-Duran et al. (2010)	Q	245
	2.5 × 10 ³		Raventos-Duran et al. (2010)	Q	246
	5.7 × 10 ¹		Hilal et al. (2008)	Q	
nitroguanidine CH ₄ N ₄ O ₂ [556-88-7] IDCPFAYURAQKDZ-UHFFFAOYSA-N	2.2 × 10 ¹⁰		HSDB (2015)	V	

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tetranitromethane CN ₄ O ₈ [509-14-8] NYTOUQBROMCLBJ-UHFFFAOYSA-N	4.1×10^{-3}		HSDB (2015)	V	
N-methyl-N'-nitro-N-nitrosoguanidine C ₂ H ₅ N ₅ O ₃ [70-25-7] VZUNGTZRYYDE-UHFFFAOYSA-N	8.2×10^6		HSDB (2015)	Q	100
2-(hydroxymethyl)-2-nitro-1,3-propanediol C ₄ H ₉ NO ₅ [126-11-4] OLQJQHSAWMFDJE-UHFFFAOYSA-N	2.1×10^6		HSDB (2015)	Q	100
MCM:NC4DCO2H C ₄ H ₃ NO ₅ ODFCIXRXNCCVGH-UHFFFAOYSA-N	6.9×10^6 3.5×10^6 2.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC4MDCO2H C ₅ H ₅ NO ₅ LXEJKNKBIPISQO-UHFFFAOYSA-N	4.2×10^6 4.7×10^6 6.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC4EDCO2H C ₆ H ₇ NO ₅ GVSLZEQKUBDLJE-UHFFFAOYSA-N	3.6×10^6 6.9×10^6 3.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNPHENO2H C ₆ H ₆ N ₂ O ₁₀ AKJGOKAIBHUAEE-UHFFFAOYSA-N	7.3×10^{16} 8.0×10^{10} 5.4×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NCATECOOH C ₆ H ₇ NO ₉ UERHMILVGXASDJ-UHFFFAOYSA-N	8.1×10^{17} 1.6×10^{10} 4.4×10^9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC5MDCO2H C ₆ H ₇ NO ₅ VRGZGZRSZACGSZ-UHFFFAOYSA-N	2.8×10^6 1.1×10^7 2.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC4IPDCO2H C ₇ H ₉ NO ₅ VOBLVGUNJWYRHD-UHFFFAOYSA-N	3.5×10^6 3.5×10^6 1.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NC4PDCO2H C ₇ H ₉ NO ₅ MSTRQTMGALLSFO-UHFFFAOYSA-N	3.0×10^6 4.2×10^6 2.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:DNCRESOOH C ₇ H ₈ N ₂ O ₁₀ FHWDGQSKNURQKZ-UHFFFAOYSA-N	4.0 × 10 ¹⁶ 3.6 × 10 ¹⁰ 1.4 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MNCATECOOH C ₇ H ₉ NO ₉ OCHAAZKMUDWIOE-UHFFFAOYSA-N	3.0 × 10 ¹⁷ 1.7 × 10 ¹¹ 4.4 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TL4ONO2OOH C ₇ H ₉ NO ₈ MEXRHSIIQRTIBR-UHFFFAOYSA-N	1.4 × 10 ¹⁴ 2.8 × 10 ⁹ 3.5 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNEBNZLOOH C ₈ H ₁₀ N ₂ O ₁₀ FNCRENCSRXRIPJ-UHFFFAOYSA-N	3.6 × 10 ¹⁶ 2.3 × 10 ¹⁰ 3.0 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNMXYOLOOH C ₈ H ₁₀ N ₂ O ₁₀ KSAVSEUSLRIGAB-UHFFFAOYSA-N	2.7 × 10 ¹⁶ 2.2 × 10 ¹¹ 5.9 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNOXYOLOOH C ₈ H ₁₀ N ₂ O ₁₀ PBZRLTNSYSOGL-UHFFFAOYSA-N	3.2 × 10 ¹⁶ 5.9 × 10 ¹⁰ 7.8 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNPXYOLOOH C ₈ H ₁₀ N ₂ O ₁₀ AYHFAKIJCOHXBG-UHFFFAOYSA-N	2.7 × 10 ¹⁶ 3.1 × 10 ¹⁰ 1.5 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ENCATECOOH C ₈ H ₁₁ NO ₉ QJBJEZDKVLRDGG-UHFFFAOYSA-N	2.6 × 10 ¹⁷ 8.9 × 10 ¹⁰ 1.8 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXNCATCOOH C ₈ H ₁₁ NO ₉ QYJOURKZCRGVGB-UHFFFAOYSA-N	1.6 × 10 ¹⁷ 6.2 × 10 ¹⁰ 3.4 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXOHNO2OOH C ₈ H ₁₁ NO ₈ RRWTXIWIABDEOZ-UHFFFAOYSA-N	1.8 × 10 ¹⁴ 1.2 × 10 ⁹ 1.3 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXNCATCOOH C ₈ H ₁₁ NO ₉ GWPIPVJLOZVKC-UHFFFAOYSA-N	3.9 × 10 ¹⁷ 1.2 × 10 ¹⁰ 3.7 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXNCATCOOH C ₈ H ₁₁ NO ₉ RMUFWTRDQQMPCD-UHFFFAOYSA-N	3.0 × 10 ¹⁷ 5.5 × 10 ⁹ 1.4 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124NOOH C ₈ H ₁₁ NO ₈ LGMZUZOZZXWRQX-UHFFFAOYSA-N	1.8 × 10 ¹⁴ 1.3 × 10 ⁹ 5.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:DNIPBZLOOH C ₉ H ₁₂ N ₂ O ₁₀ YKBFACRSJWRBHR-UHFFFAOYSA-N	3.2 × 10 ¹⁶ 2.3 × 10 ¹⁰ 3.7 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNMETOLOOH C ₉ H ₁₂ N ₂ O ₁₀ LAMZNF DUTXWEFA-UHFFFAOYSA-N	2.1 × 10 ¹⁶ 1.4 × 10 ¹¹ 1.5 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNOETOLOOH C ₉ H ₁₂ N ₂ O ₁₀ KMVIJWGCTFHDMC-UHFFFAOYSA-N	2.5 × 10 ¹⁶ 3.9 × 10 ¹⁰ 7.6 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNPBNZLOOH C ₉ H ₁₂ N ₂ O ₁₀ YOHJWFUCUZUQBMA-UHFFFAOYSA-N	2.9 × 10 ¹⁶ 1.9 × 10 ¹⁰ 2.8 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNPETOLOOH C ₉ H ₁₂ N ₂ O ₁₀ IOZSITWJVFMIBH-UHFFFAOYSA-N	2.1 × 10 ¹⁶ 1.9 × 10 ¹⁰ 2.3 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNT123LOOH C ₉ H ₁₂ N ₂ O ₁₀ GBPJM JLXQYJDMC-UHFFFAOYSA-N	1.7 × 10 ¹⁶ 3.9 × 10 ¹⁰ 4.5 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNT124LOOH C ₉ H ₁₂ N ₂ O ₁₀ INCIWBVFUFSSNB-UHFFFAOYSA-N	1.4 × 10 ¹⁶ 2.0 × 10 ¹⁰ 1.6 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EMPONO2OOH C ₉ H ₁₃ NO ₈ FZXCIIHOWKZKJRK-UHFFFAOYSA-N	1.4 × 10 ¹⁴ 1.5 × 10 ⁹ 6.3 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPNCATCOOH C ₉ H ₁₃ NO ₉ NYRKVILWQFQUNU-UHFFFAOYSA-N	2.5 × 10 ¹⁷ 8.3 × 10 ¹⁰ 9.3 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTNCATCOOH C ₉ H ₁₃ NO ₉ MCLPDHQAEZEULP-UHFFFAOYSA-N	1.5 × 10 ¹⁷ 3.6 × 10 ¹⁰ 1.4 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OTNCATCOOH C ₉ H ₁₃ NO ₉ MVMRAYXEOTUUSG-UHFFFAOYSA-N	3.6 × 10 ¹⁷ 7.1 × 10 ⁹ 2.5 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PNCATECOOH C ₉ H ₁₃ NO ₉ AWPUGBPLGLTYEJ-UHFFFAOYSA-N	2.1 × 10 ¹⁷ 6.6 × 10 ¹⁰ 5.9 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PTNCATCOOH C ₉ H ₁₃ NO ₉ IJEUJFHQTRRKRP-UHFFFAOYSA-N	2.8 × 10 ¹⁷ 3.5 × 10 ⁹ 9.6 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
nitrobenzene C ₆ H ₅ NO ₂ [98-95-3] LQNUZADURLCDLV-UHFFFAOYSA-N	4.7 × 10 ⁻¹	6100	Brockbank (2013)	L	1
	6.7 × 10 ⁻¹		Chao et al. (2017)	M	
	6.4 × 10 ⁻¹	7500	Hiatt (2013)	M	
	1.4 × 10 ⁻¹		Zhang et al. (2013)	M	327
	2.3 × 10 ⁻²	11000	Dewulf et al. (1999)	M	596
	1.2		Altschuh et al. (1999)	M	
	1.4 × 10 ⁻¹		Hellmann (1987)	M	88
	4.1 × 10 ⁻¹		Warner et al. (1980)	M	
	4.7 × 10 ⁻¹		Chao et al. (2017)	V	
	4.8 × 10 ⁻¹	6400	Bernauer et al. (2006)	V	1
	7.7 × 10 ⁻¹		Mackay et al. (2006d)	V	
	4.2 × 10 ⁻¹		Lide and Frederikse (1995)	V	
	7.7 × 10 ⁻¹		Mackay et al. (1995)	V	
	4.6 × 10 ⁻¹		Hwang et al. (1992)	V	
	7.8 × 10 ⁻¹		Yoshida et al. (1983)	V	
	4.3 × 10 ⁻¹		Warner et al. (1980)	V	
	4.2 × 10 ⁻¹		Hine and Mookerjee (1975)	V	
	4.7 × 10 ⁻¹	4500	Goldstein (1982)	X	299
	4.2 × 10 ⁻¹		Hilal et al. (2008)	C	
	4.1 × 10 ⁻¹		Schüürmann (2000)	C	21
	7.5 × 10 ⁻¹		Mackay et al. (1995)	C	
	7.5 × 10 ⁻¹		Ryan et al. (1988)	C	
	4.1 × 10 ⁻¹		Shen (1982)	C	
	1.1		Keshavarz et al. (2022)	Q	
	2.1		Duchowicz et al. (2020)	Q	300
	2.2 × 10 ⁻¹		Hilal et al. (2008)	Q	
	2.7 × 10 ⁻¹		Modarresi et al. (2007)	Q	68
	4600	Kühne et al. (2005)	Q		
4.2 × 10 ⁻¹		Yaffe et al. (2003)	Q	249, 250	
5.1 × 10 ⁻¹		Yao et al. (2002)	Q	230	
2.9 × 10 ⁻¹		Katritzky et al. (1998)	Q		
3.3		Nirmalakhandan et al. (1997)	Q		
2.0 × 10 ⁻¹		Russell et al. (1992)	Q	280	
7.0 × 10 ⁻¹		Suzuki et al. (1992)	Q	233	
4.1 × 10 ⁻¹		Duchowicz et al. (2020)	?	186, 21	
	5600	Kühne et al. (2005)	?		
4.7 × 10 ⁻¹		Yaws (1999)	?	21	
4.2 × 10 ⁻¹		Abraham et al. (1990)	?		
nitrobenzene-d5 C ₆ D ₅ NO ₂ [4165-60-0] LQNUZADURLCDLV-RALIUCGRSA-N	8.5 × 10 ⁻¹	7500	Hiatt (2013)	M	

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
2-nitrotoluene <chem>C6H4(NO2)CH3</chem> [88-72-2] PLAZTGDQAHEYBI-UHFFFAOYSA-N	2.4×10^{-1}	5800	Brockbank (2013)	L		
	9.6×10^{-1}		Chao et al. (2017)	M		
	7.9×10^{-1}		Altschuh et al. (1999)	M		
	2.7×10^{-1}		Mackay et al. (2006d)	V		
	1.9×10^{-1}		Schüürmann (2000)	V		
	1.8×10^{-1}		Lide and Frederikse (1995)	V		
	2.7×10^{-1}		Mackay et al. (1995)	V		
	1.7×10^{-1}		Hine and Mookerjee (1975)	V		
	7.7×10^{-2}		2900	Goldstein (1982)	X	299
	1.5			Keshavarz et al. (2022)	Q	
	1.2	Duchowicz et al. (2020)		Q	300	
	4.9×10^{-1}	Raventos-Duran et al. (2010)		Q	243, 244	
	2.5×10^{-1}	Raventos-Duran et al. (2010)		Q	245	
	3.9×10^{-1}	Raventos-Duran et al. (2010)		Q	246	
	4.2×10^{-1}	Zhang et al. (2010)		Q	288, 289	
	2.4×10^{-1}	Zhang et al. (2010)		Q	288, 290	
	2.5×10^{-1}	Zhang et al. (2010)		Q	288, 291	
	1.8×10^{-1}	Zhang et al. (2010)		Q	288, 292	
	4.2×10^{-1}	Zhang et al. (2010)		Q	288, 289	
	2.4×10^{-1}	Zhang et al. (2010)		Q	288, 290	
	2.2×10^{-1}	Zhang et al. (2010)		Q	288, 291	
	1.8×10^{-1}	Zhang et al. (2010)	Q	288, 292		
	1.4×10^{-1}	Hilal et al. (2008)	Q			
2.3×10^{-1}	4900	Modarresi et al. (2007)	Q	68		
		Kühne et al. (2005)	Q			
1.4×10^{-1}		Yaffe et al. (2003)	Q	249, 273		
2.3		Nirmalakhandan et al. (1997)	Q			
5.7×10^{-1}		Suzuki et al. (1992)	Q	233		
7.9×10^{-1}		Duchowicz et al. (2020)	?	186, 21		
		5900	Kühne et al. (2005)	?		
1.7×10^{-1}	Abraham et al. (1990)		?			
3-nitrotoluene <chem>C6H4(NO2)CH3</chem> [99-08-1] QZYHIOPPLUJF-UHFFFAOYSA-N	2.7×10^{-1}	7000	Brockbank (2013)	L		
	1.3		Chao et al. (2017)	M		
	1.1		Altschuh et al. (1999)	M		
	2.8×10^{-1}		Li and Carr (1993)	M		
	1.3×10^{-1}		Mackay et al. (2006d)	V		
	1.3×10^{-1}		Mackay et al. (1995)	V		
	1.4×10^{-1}		Hine and Mookerjee (1975)	V		
	1.4×10^{-1}		3200	Goldstein (1982)	X	299
	1.5			Keshavarz et al. (2022)	Q	
	1.2			Duchowicz et al. (2020)	Q	300
	4.2×10^{-1}	Zhang et al. (2010)	Q	288, 289		
	2.5×10^{-1}	Zhang et al. (2010)	Q	288, 290		
	4.1×10^{-1}	Zhang et al. (2010)	Q	288, 291		
1.8×10^{-1}	Zhang et al. (2010)	Q	288, 292			
1.8×10^{-1}	Hilal et al. (2008)	Q				

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.6×10^{-1}	4900	Modarresi et al. (2007)	Q	68
	1.4×10^{-1}		Kühne et al. (2005)	Q	
	2.3	4900	Yaffe et al. (2003)	Q	249, 250
	5.7×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.1	4900	Suzuki et al. (1992)	Q	233
	1.3×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	1.4×10^{-1}		Kühne et al. (2005)	?	
			Yaws (1999)	?	21, 38
			Abraham et al. (1990)	?	
4-nitrotoluene $\text{C}_6\text{H}_4(\text{NO}_2)\text{CH}_3$ [99-99-0] ZPTVNYMJQHSSEA-UHFFFAOYSA-N	8.9×10^{-1}	7100	Brockbank (2013)	L	
	1.8		Altschuh et al. (1999)	M	
	2.8	3100	Mackay et al. (2006d)	V	
	2.0×10^{-1}		Lide and Frederikse (1995)	V	
	2.8		Mackay et al. (1995)	V	
	1.6×10^{-1}	3100	Goldstein (1982)	X	299
	1.5		Keshavarz et al. (2022)	Q	
	1.2		Duchowicz et al. (2020)	Q	185
	1.4×10^{-1}		Li et al. (2014)	Q	242
	4.2×10^{-1}		Zhang et al. (2010)	Q	288, 289
	2.8×10^{-1}		Zhang et al. (2010)	Q	288, 290
	9.0×10^{-1}		Zhang et al. (2010)	Q	288, 291
	1.8×10^{-1}		Zhang et al. (2010)	Q	288, 292
	2.0×10^{-1}		Hilal et al. (2008)	Q	
	2.4×10^{-1}	4900	Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	
	1.8		Duchowicz et al. (2020)	?	186, 21
		3800	Kühne et al. (2005)	?	
1,2-dinitrobenzene $\text{C}_6\text{H}_4\text{N}_2\text{O}_4$ [528-29-0] IZUKQVSCNEFMJ-UHFFFAOYSA-N	1.9×10^2		Duchowicz et al. (2020)	V	187
	1.9×10^2		HSDB (2015)	V	
	3.5×10^2		Duchowicz et al. (2020)	Q	
	1.2×10^2		Zhang et al. (2010)	Q	288, 289
	3.2×10^1		Zhang et al. (2010)	Q	288, 290
	2.6×10^1		Zhang et al. (2010)	Q	288, 291
	2.7×10^1		Zhang et al. (2010)	Q	288, 292
1,3-dinitrobenzene $\text{C}_6\text{H}_4\text{N}_2\text{O}_4$ [99-65-0] WDCYWAQPCXBPJA-UHFFFAOYSA-N	1.8×10^2		Chao et al. (2017)	M	
	2.0×10^2		Altschuh et al. (1999)	M	
			Mackay et al. (2006d)	V	560
	5.0×10^2		Mackay et al. (1995)	V	
	3.9×10^1		Smith et al. (1981a)	V	
	2.5×10^2		Keshavarz et al. (2022)	Q	
	2.1×10^2		Duchowicz et al. (2020)	Q	
	2.0×10^2		Gharagheizi et al. (2012)	Q	
	1.2×10^2		Raventos-Duran et al. (2010)	Q	243, 244
	1.6×10^1		Raventos-Duran et al. (2010)	Q	245
	1.2×10^2		Raventos-Duran et al. (2010)	Q	246

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.0×10^2		Duchowicz et al. (2020)	?	186, 21
1,4-dinitrobenzene $\text{C}_6\text{H}_4\text{N}_2\text{O}_4$ [100-25-4] FYFDQJRXFWGIBS-UHFFFAOYSA-N	2.0×10^{-1} 2.0×10^{-1} 1.2×10^2		Mackay et al. (2006d) Mackay et al. (1995) HSDB (2015)	V V Q	100
1,3,5-trinitrobenzene $\text{C}_6\text{H}_3\text{N}_3\text{O}_6$ [99-35-4] UATJOMSPNYCXIX-UHFFFAOYSA-N	1.5×10^3 2.7×10^2 2.8×10^2		HSDB (2015) Yaws (2003) Gharagheizi et al. (2010)	V X Q	238, 81 247
2,4,6-trinitrophenol $\text{C}_6\text{H}_3\text{N}_3\text{O}_7$ (picric acid) [88-89-1] OXNIZHLAWKMVMX-UHFFFAOYSA-N	3.0×10^5		Ebert et al. (2023)	?	317
2-nitrobenzenamine $\text{C}_6\text{H}_6\text{N}_2\text{O}_2$ (2-nitroaniline) [88-74-4] DPJXCZTLWNFOH-UHFFFAOYSA-N	7.1×10^1 1.7×10^2 1.0×10^2 2.0×10^2 2.5×10^2 3.1×10^1 2.1×10^2 4.5×10^2 1.7×10^2	6800	Brockbank (2013) Altschuh et al. (1999) Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	L M R Q Q Q Q Q Q ?	185 68 186, 21
3-nitrobenzenamine $\text{C}_6\text{H}_6\text{N}_2\text{O}_2$ (3-nitroaniline) [99-09-2] XJCVRTZCHMZPBD-UHFFFAOYSA-N	6.9×10^2 1.2×10^3 4.2×10^3 1.5×10^3 2.7×10^3 4.0×10^2 6.0×10^2 4.4×10^2 1.3×10^3 1.2×10^3 1.2×10^3		Meylan and Howard (1991) Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhandan et al. (1997) Meylan and Howard (1991) Duchowicz et al. (2020) HSDB (2015)	V R Q Q Q Q Q Q Q Q ? ?	68 231, 232 186, 21 421
4-nitrobenzenamine $\text{C}_6\text{H}_6\text{N}_2\text{O}_2$ (4-nitroaniline) [100-01-6] TYMLOMAKGOJONV-UHFFFAOYSA-N	8.7×10^3 8.6×10^3 1.4×10^4 1.8×10^2 4.2×10^3 1.5×10^3 8.5×10^2 1.7×10^2 2.2×10^3	8200	Brockbank (2013) Altschuh et al. (1999) Abraham et al. (1994a) Yaws (2003) Keshavarz et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008)	L M R X Q Q Q Q Q	238 247

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.5×10^2		Modarresi et al. (2007)	Q	68
	4.4×10^2		Nirmalakhandan et al. (1997)	Q	
	7.8×10^3		Duchowicz et al. (2020)	?	186, 21
2,4-dinitrobenzenamine $\text{C}_6\text{H}_5\text{N}_3\text{O}_4$ [97-02-9] LXQOQPGNGEELI-UHFFFAOYSA-N	6.5×10^4		HSDB (2015)	Q	547
2-methyl-6-nitroaniline $\text{C}_7\text{H}_8\text{N}_2\text{O}_2$ [570-24-1] FCMRHMPITHLLLA-UHFFFAOYSA-N	4.6×10^1		Abraham et al. (2019)	Q	
1-methyl-2,3-dinitrobenzene $\text{C}_7\text{H}_6\text{N}_2\text{O}_4$ (2,3-dinitrotoluene; 2,3-DNT) [602-01-7] DYSXLQBUUOPLBB-UHFFFAOYSA-N	1.1×10^2 1.1×10^2 2.2×10^1 9.5 1.5×10^1 1.1×10^2 2.3×10^1 1.1×10^1 1.5×10^1		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q Q Q Q Q	449 288, 289 288, 290 288, 291 288, 292 288, 289 288, 290 288, 291 288, 292
1-methyl-2,4-dinitrobenzene $\text{C}_7\text{H}_6\text{N}_2\text{O}_4$ (2,4-dinitrotoluene; 2,4-DNT) [121-14-2] RMBFBMJGBANMMK-UHFFFAOYSA-N	4.0×10^1 1.8×10^2 1.1×10^1 1.0×10^2 1.1×10^1 6.3×10^1 2.1×10^{-1} 2.2 3.1×10^{-2} 3.4×10^2 1.6×10^2 9.9×10^1 1.6×10^1 9.9×10^1 1.1×10^2 1.6×10^1 5.0 1.5×10^1 1.8×10^2	7900 2900	Brockbank (2013) Altschuh et al. (1999) Mackay et al. (2006d) Schüürmann (2000) Mackay et al. (1995) Smith et al. (1981a) Goldstein (1982) Mackay et al. (1995) Ryan et al. (1988) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Duchowicz et al. (2020)	L M V V V V X C C Q Q Q Q Q Q Q Q Q Q ?	1 299 243, 244 245 246 288, 289 288, 290 288, 291 288, 292 186, 21

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-1,4-dinitrobenzene C ₇ H ₆ N ₂ O ₄ (2,5-dinitrotoluene; 2,5-DNT) [619-15-8] KZBOXYKTSUUBTO-UHFFFAOYSA-N	1.8×10^1 1.1×10^2 1.8×10^1 1.4 1.5×10^1		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V Q Q Q Q	 288, 289 288, 290 288, 291 288, 292
2-methyl-1,3-dinitrobenzene C ₇ H ₆ N ₂ O ₄ (2,6-dinitrotoluene; 2,6-DNT) [606-20-2] XTRDKALNCIHNI-UHFFFAOYSA-N	4.8 1.3×10^1 1.5×10^1 1.4×10^1 1.4×10^1 1.2 3.1×10^{-2} 1.6×10^2 1.6 1.1×10^2 2.1×10^1 4.3 1.5×10^1	7600	Brockbank (2013) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Mackay et al. (1995) Mackay et al. (1995) Ryan et al. (1988) Duchowicz et al. (2020) Li et al. (2014) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	L V V V V C C Q Q Q Q Q Q	 187 242 288, 289 288, 290 288, 291 288, 292
4-methyl-1,2-dinitrobenzene C ₇ H ₆ N ₂ O ₄ (3,4-dinitrotoluene; 3,4-DNT) [610-39-9] INYDMNPNDHRJQJ-UHFFFAOYSA-N	3.3×10^1 1.1×10^2 1.1×10^2 3.9×10^1 3.1×10^1 1.5×10^1	9600	Brockbank (2013) HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	L Q Q Q Q Q	 449 288, 289 288, 290 288, 291 288, 292
1-methyl-2,4,6-trinitrobenzene C ₇ H ₅ N ₃ O ₆ (2,4,6-trinitrotoluene; TNT) [118-96-7] SPSSULHKWOKEEL-UHFFFAOYSA-N	4.7×10^2 4.7×10^2 5.4×10^2 	7700 6200 6400	Brockbank (2013) HSDB (2015) Schüürmann (2000) Kühne et al. (2005) Kühne et al. (2005)	L V V Q ?	1
2,4,6-trinitro-1,3-dimethyl-5- <i>tert</i> - butylbenzene C ₁₂ H ₁₅ N ₃ O ₆ (musk xylene) [81-15-2] XMWRWTSZNLQZFN-UHFFFAOYSA-N	3.2×10^{-1} 1.7×10^{-2} 1.3×10^3 9.5×10^3 5.6 4.8×10^{-2} 1.5×10^2		Lee et al. (2012) Amoore and Buttery (1978) HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	M V Q Q Q Q Q	 100 288, 289 288, 290 288, 291 288, 292
2-nitrophenol HOC ₆ H ₄ (NO ₂) [88-75-5] IQUPABOKLQSF BK-UHFFFAOYSA-N	9.9 1.4 8.3×10^{-1} 8.9×10^{-1} 7.7×10^{-1} 6.1×10^{-1} 2.9	5700 6300 6300	Chao et al. (2017) Guo and Brimblecombe (2007) Harrison et al. (2002) Müller and Heal (2001) Trempe et al. (1993) Mackay et al. (2006c) Lide and Frederikse (1995)	M M M M M V V	 12

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.9×10^{-1}		Riederer (1990)	V	
	7.3×10^{-1}		Schwarzenbach et al. (1988)	V	12
	2.8		Leuenberger et al. (1985)	V	418
	9.2×10^{-1}		Abraham et al. (1994a)	R	
	6.9×10^{-1}	4600	Goldstein (1982)	X	299
	1.3		Ryan et al. (1988)	C	
	1.1		Abraham et al. (2019)	Q	
	6.6		Wang et al. (2017)	Q	81, 239
	2.0		Wang et al. (2017)	Q	81, 240
	2.1×10^{-1}		Wang et al. (2017)	Q	81, 241
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	1.6		Raventos-Duran et al. (2010)	Q	246
	5.3		Hilal et al. (2008)	Q	
		4400	Kühne et al. (2005)	Q	
	3.5×10^1		Katritzky et al. (1998)	Q	
	1.5×10^4		Nirmalakhandan et al. (1997)	Q	
		6300	Kühne et al. (2005)	?	
	7.0×10^{-1}		Abraham et al. (1990)	?	
3-nitrophenol HOC ₆ H ₄ (NO ₂) [554-84-7] RTZCYNQPHTPPL-UHFFFAOYSA-N	1.6×10^2		Guo and Brimblecombe (2007)	M	557
	1.0		Lide and Frederikse (1995)	V	
	4.9×10^3		Gaffney and Senum (1984)	X	391
	2.1×10^4		Keshavarz et al. (2022)	Q	
	1.4×10^4		Duchowicz et al. (2020)	Q	300
	2.2×10^3		Abraham et al. (2019)	Q	
	2.0×10^3		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^4		Raventos-Duran et al. (2010)	Q	245
	4.9×10^3		Raventos-Duran et al. (2010)	Q	246
	9.5×10^3		Hilal et al. (2008)	Q	
	2.1×10^2		Modarresi et al. (2007)	Q	68
	4.8×10^3		English and Carroll (2001)	Q	231, 232
	1.5×10^4		Nirmalakhandan et al. (1997)	Q	
	4.9×10^3		Duchowicz et al. (2020)	?	186, 21
	4.6×10^3		Abraham et al. (1990)	?	
4-nitrophenol HOC ₆ H ₄ (NO ₂) [100-02-7] BTJIUGUIPKRLHP-UHFFFAOYSA-N	1.4×10^1		Chao et al. (2017)	M	
	2.1×10^2		Guo and Brimblecombe (2007)	M	557
	7.7×10^2		Tremp et al. (1993)	M	12
	3.0×10^2		Lide and Frederikse (1995)	V	
	2.0×10^4		Riederer (1990)	V	
	3.0×10^2		Schwarzenbach et al. (1988)	V	12
	9.4×10^4		Yoshida et al. (1983)	V	
	2.6×10^4	9100	Parsons et al. (1971)	T	419
	9.8	6000	Goldstein (1982)	X	299
	1.6		Ryan et al. (1988)	C	
	2.1×10^4		Keshavarz et al. (2022)	Q	

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.2×10^4		Duchowicz et al. (2020)	Q	185
	1.4×10^4		Abraham et al. (2019)	Q	
	2.4×10^4		Li et al. (2014)	Q	242
	2.0×10^3		Raventos-Duran et al. (2010)	Q	243, 244
	3.9×10^3		Raventos-Duran et al. (2010)	Q	245
	4.9×10^3		Raventos-Duran et al. (2010)	Q	246
	6.1×10^3		Hilal et al. (2008)	Q	
	2.3×10^2		Modarresi et al. (2007)	Q	68
	1.5×10^4		Nirmalakhandan et al. (1997)	Q	
	2.4×10^4		Duchowicz et al. (2020)	?	186, 21
	2.6×10^4		Abraham et al. (1990)	?	
4-nitroanisole C ₇ H ₇ NO ₃ [100-17-4] BNUHAJGCKIQFGE-UHFFFAOYSA-N	5.0		Ebert et al. (2023)	?	367
3-methyl-2-nitrophenol C ₇ H ₇ NO ₃ [4920-77-8] QIORDSKCCHRSSD-UHFFFAOYSA-N	3.2 2.4 1.9×10^2		Tremp et al. (1993) Schwarzenbach et al. (1988) Modarresi et al. (2007)	M V Q	12 12 68
		4700	Kühne et al. (2005)	Q	
		4200	Kühne et al. (2005)	?	
4-methyl-2-nitrophenol C ₇ H ₇ NO ₃ [119-33-5] SYDNSSSQVSOXTN-UHFFFAOYSA-N	6.7×10^{-1} 6.1×10^{-1} 3.9 1.9 2.5×10^{-1} 3.1×10^{-1} 6.2×10^{-1} 1.2		Tremp et al. (1993) Schwarzenbach et al. (1988) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	M V Q Q Q Q Q Q	12 12 81, 239 81, 240 81, 241 243, 244 245 246
		4700	Kühne et al. (2005)	Q	
		6800	Kühne et al. (2005)	?	
5-methyl-2-nitrophenol C ₇ H ₇ NO ₃ [700-38-9] NQXUSSVLFBRSE-UHFFFAOYSA-N	7.7×10^{-1} 6.7×10^{-1} 3.1×10^{-1} 7.8×10^{-1} 1.2		Tremp et al. (1993) Schwarzenbach et al. (1988) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	M V Q Q Q	12 12 272, 244 245 246
		4700	Kühne et al. (2005)	Q	
		5600	Kühne et al. (2005)	?	
6-methyl-2-nitrophenol C ₇ H ₇ NO ₃ [13073-29-5] AQDKZPFDOWHRDZ-UHFFFAOYSA-N	2.9×10^{-1} 3.9 2.0×10^1 1.2×10^{-1} 3.1×10^{-1} 3.9 1.2		Tremp et al. (1993) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	M Q Q Q Q Q Q	12 81, 239 81, 240 81, 241 243, 244 245 246

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
		4700	Kühne et al. (2005)	Q	
		5200	Kühne et al. (2005)	?	
3-methyl-4-nitrophenol C ₇ H ₇ NO ₃ [2581-34-2] PIIZYNQECPTVEO-UHFFFAOYSA-N	6.2 × 10 ² 1.6 × 10 ³ 3.9 × 10 ³ 3.9 × 10 ³ 2.1 × 10 ²		Tremp et al. (1993) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Modarresi et al. (2007)	M Q Q Q Q	12 272, 244 245 246 68
4-methoxy-2-nitrophenol C ₇ H ₇ NO ₄ [1568-70-3] YBUGOACXDPDIR-UHFFFAOYSA-N	5.3 2.3 × 10 ⁻¹ 6.2 1.2 × 10 ² 2.5 × 10 ¹ 9.4 × 10 ¹		Tremp et al. (1993) Schwarzenbach et al. (1988) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Modarresi et al. (2007)	M V Q Q Q Q	12 12 243, 244 245 246 68
		4900	Kühne et al. (2005)	Q	
		6600	Kühne et al. (2005)	?	
4-amino-2,6-dinitrotoluene C ₇ H ₇ N ₃ O ₄ [19406-51-0] KQRJATLINVYHEZ-UHFFFAOYSA-N	7.3 × 10 ³		Ebert et al. (2023)	?	367
4-hydroxy-3-nitro-benzaldehyde C ₇ H ₅ NO ₄ [3011-34-5] YTHJGZRFJGXPTL-UHFFFAOYSA-N	9.4 3.9 × 10 ¹ 2.0 × 10 ² 6.2 × 10 ²		Schwarzenbach et al. (1988) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	V Q Q Q	12 243, 244 245 246
2,4-dinitrophenol C ₆ H ₄ N ₂ O ₅ [51-28-5] UFBJCMHMOXMLKC-UHFFFAOYSA-N	9.7 × 10 ² 1.1 × 10 ² 3.5 × 10 ¹ 1.5 × 10 ⁴ 2.0 × 10 ² 2.6 × 10 ³ 2.1 × 10 ³ 3.0 7.8 × 10 ¹ 6.2 × 10 ² 3.9 × 10 ² 3.6 × 10 ² 6.2 × 10 ² 4.7 1.3 × 10 ³ 4.7 × 10 ¹		Chao et al. (2017) Tremp et al. (1993) Schwarzenbach et al. (1988) Ryan et al. (1988) Abraham et al. (2019) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Modarresi et al. (2007)	M M V C Q Q Q Q Q Q Q Q Q Q Q Q	12 12 81, 239 81, 240 81, 241 243, 244 245 246 288, 289 288, 290 288, 291 288, 292 68
		5000	Kühne et al. (2005)	Q	
		3300	Kühne et al. (2005)	?	

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,5-dinitrophenol <chem>C6H4N2O5</chem> [329-71-5] UWEZBKLLMKVIPI-UHFFFAOYSA-N	1.5×10^1 1.1×10^2 7.8×10^1 4.9×10^2 3.9×10^2		Schwarzenbach et al. (1988) Abraham et al. (2019) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	V Q Q Q Q	12 272, 244 245 246
picramic acid <chem>C6H5N3O5</chem> (4,6-dinitro-2-aminophenol) [96-91-3] QXYMVUZOGFVPGH-UHFFFAOYSA-N	1.0×10^6		HSDB (2015)	Q	100
4-amino-2-nitrophenol <chem>C6H6N2O3</chem> [119-34-6] WHODQVWERNSQEO-UHFFFAOYSA-N	4.5×10^6		HSDB (2015)	Q	100
2-amino-5-nitrophenol <chem>C6H6N2O3</chem> [121-88-0] DOPJTDJKZNWLRB-UHFFFAOYSA-N	1.3×10^7		HSDB (2015)	Q	100
2-amino-4-nitrophenol <chem>C6H6N2O3</chem> [99-57-0] VLZVIIYRNMWPSN-UHFFFAOYSA-N	4.5×10^6		HSDB (2015)	Q	100
4-nitro- <i>o</i> -phenylenediamine <chem>C6H7N3O2</chem> (4-nitro-1,2-diaminobenzene) [99-56-9] RAUWPNXIALNKQM-UHFFFAOYSA-N	1.3×10^6		HSDB (2015)	Q	100
4-nitrobenzene-1,3-diamine <chem>C6H7N3O2</chem> [5131-58-8] DPIZKMGPNXSGL-UHFFFAOYSA-N	1.7×10^5		HSDB (2015)	Q	100
2-nitro-1,4-benzenediamine <chem>C6H7N3O2</chem> [5307-14-2] HVHNMNGARPCGGD-UHFFFAOYSA-N	1.7×10^5		HSDB (2015)	Q	100
4-methyl-2,6-dinitrophenol <chem>C7H6N2O5</chem> (2,6-dinitro- <i>p</i> -cresol) [609-93-8] HOYRZHJJAHMMLL-UHFFFAOYSA-N	1.9×10^2 3.2×10^2 3.4×10^3 8.8×10^1 8.0 4.0×10^1		Tremp et al. (1993) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Modarresi et al. (2007)	M Q Q Q Q Q	12 288, 289 288, 290 288, 291 288, 292 68
		3000	Kühne et al. (2005)	Q	
		3400	Kühne et al. (2005)	?	

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-4,6-dinitrophenol C ₇ H ₆ N ₂ O ₅	4.3 × 10 ¹		Tremp et al. (1993)	M	12
(6-methyl-2,4-dinitrophenol; 4,6-dinitro- <i>o</i> -cresol; DNOC)	7.0		Warner et al. (1980)	M	
[534-52-1] ZXVONLUNISGICL-UHFFFAOYSA-N	9.2 × 10 ¹		Mackay et al. (2006d)	V	
	2.3 × 10 ¹		Schwarzenbach et al. (1988)	V	12
	9.1 × 10 ¹		Suntio et al. (1988)	V	12
	9.0 × 10 ⁻¹		Barcelo and Hennion (1997)	X	569
	7.0		Shen (1982)	C	
	1.7		Keshavarz et al. (2022)	Q	
	1.3 × 10 ³		Duchowicz et al. (2020)	Q	
	1.5 × 10 ³		Wang et al. (2017)	Q	81, 239
	1.7 × 10 ⁴		Wang et al. (2017)	Q	81, 240
	3.4		Wang et al. (2017)	Q	81, 241
	3.2 × 10 ²		Zhang et al. (2010)	Q	288, 289
	2.3 × 10 ³		Zhang et al. (2010)	Q	288, 290
	1.9 × 10 ¹		Zhang et al. (2010)	Q	288, 291
	7.2 × 10 ²		Zhang et al. (2010)	Q	288, 292
	4.1		Goodarzi et al. (2010)	Q	570
	3.4 × 10 ¹		Modarresi et al. (2007)	Q	68
		5400	Kühne et al. (2005)	Q	
	7.0		Duchowicz et al. (2020)	?	186, 21
		4200	Kühne et al. (2005)	?	
5-nitrobenzimidazole C ₇ H ₅ N ₃ O ₂ [94-52-0] XPAZGLFMMUODDK-UHFFFAOYSA-N	2.7 × 10 ¹		HSDB (2015)	Q	100
3-nitrobenzoic acid C ₇ H ₅ NO ₄ [121-92-6] AFPHTEQTJZKQAQ-UHFFFAOYSA-N	3.4 × 10 ³		Abraham et al. (2019)	Q	
4-nitrobenzoic acid C ₇ H ₅ NO ₄ [62-23-7] OTLNPYWUJJOZPPA-UHFFFAOYSA-N	3.2 × 10 ³ 2.6 × 10 ⁴		Abraham et al. (2019) HSDB (2015)	Q Q	100
3,5-dinitrobenzoic acid C ₇ H ₄ N ₂ O ₆ [99-34-3] VYWYYJYRVSBHJQ-UHFFFAOYSA-N	8.0 × 10 ⁴		Abraham et al. (2019)	Q	
2,4,6-trinitrobenzoic acid C ₇ H ₃ N ₃ O ₈ [129-66-8] KAQBNBSMMVTKRN-UHFFFAOYSA-N	3.8 × 10 ⁸		HSDB (2015)	Q	100

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dinitrotoluene C ₇ H ₆ N ₂ O ₄ [25321-14-6] MOSFIJXAXDLOML-UHFFFAOYSA-N	1.1×10^2		HSDB (2015)	Q	449
1-methyl-3,5-dinitrobenzene C ₇ H ₆ N ₂ O ₄ [618-85-9] RUIFULUFLANOCI-UHFFFAOYSA-N	1.1×10^2		HSDB (2015)	Q	449
1-methoxy-2-nitrobenzene C ₇ H ₇ NO ₃ [91-23-6] CFBYEGUGFPZCNF-UHFFFAOYSA-N	2.3×10^1 2.3×10^1 3.3×10^1 1.2×10^1 3.9×10^{-1} 7.8 1.6×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Katritzky et al. (1998)	V V Q Q Q Q Q	187 243, 244 245 246
2-methyl-5-nitrobenzenamine C ₇ H ₈ N ₂ O ₂ (5-nitro- <i>o</i> -toluidine) [99-55-8] DSBIJCMXAIIKKI-UHFFFAOYSA-N	1.2×10^3		HSDB (2015)	Q	100
2-methoxy-5-nitrobenzenamine C ₇ H ₈ N ₂ O ₃ (5-nitro- <i>o</i> -anisidine) [99-59-2] NIPDVSLAMPAWTP-UHFFFAOYSA-N	7.6×10^2		HSDB (2015)	Q	547
(2-nitroethyl)benzene C ₈ H ₇ NO ₂ [102-96-5] PIAOLBVUVDXHHL-UHFFFAOYSA-N	2.8		HSDB (2015)	Q	449
1,2-dimethyl-3-nitrobenzene C ₈ H ₉ NO ₂ [83-41-0] FVHAWXWFBPFOS-UHFFFAOYSA-N	1.9×10^{-1} 3.9×10^{-1} 2.9×10^{-1} 2.6×10^{-1} 1.0×10^{-1}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	449 288, 289 288, 290 288, 291 288, 292
1,2-dimethyl-4-nitrobenzene C ₈ H ₉ NO ₂ [99-51-4] HFZKOYWDLDYELC-UHFFFAOYSA-N	3.9×10^{-1} 3.1×10^{-1} 8.0×10^{-1} 1.0×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1,4-dimethyl-2-nitrobenzene C ₈ H ₉ NO ₂ [89-58-7] BSFHJMGROOFSRA-UHFFFAOYSA-N	3.9×10^{-1} 2.5×10^{-1} 2.2×10^{-1} 1.0×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4-dimethyl-1-nitrobenzene C ₈ H ₉ NO ₂ [89-87-2] BBUPBICWUURTNP-UHFFFAOYSA-N	3.9×10^{-1} 3.1×10^{-1} 4.3×10^{-1} 1.0×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
4-methyl-2-nitroanisole C ₈ H ₉ NO ₃ [119-10-8] LGNMURXRPLMVJI-UHFFFAOYSA-N	7.2 1.6 6.0×10^1 2.7		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2-methyl-3-nitrobenzoic acid C ₈ H ₇ NO ₄ [1975-50-4] YPQAFWHSMMWWPLX-UHFFFAOYSA-N	2.2×10^3		Abraham et al. (2019)	Q	
3-methyl-4-nitrobenzoic acid C ₈ H ₇ NO ₄ [3113-71-1] XDTTUTIFWDAMIX-UHFFFAOYSA-N	9.2×10^2		Abraham et al. (2019)	Q	
2-methyl-3,5-dinitrobenzoic acid C ₈ H ₆ N ₂ O ₆ [28169-46-2] CDVNZMKTJIBBBV-UHFFFAOYSA-N	3.7×10^6		Abraham et al. (2019)	Q	
1-(1-methylethyl)-4-nitrobenzene C ₉ H ₁₁ NO ₂ [1817-47-6] JXMYUMNAEKRMIP-UHFFFAOYSA-N	2.4×10^{-1} 1.3×10^{-1} 3.9×10^{-1} 1.4×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
5-nitro-8-hydroxyquinoline C ₉ H ₆ N ₂ O ₃ (nitroxoline) [4008-48-4] RUIWZDNTCBHXAL-UHFFFAOYSA-N	2.7×10^3		Abraham et al. (2019)	Q	
2-(1-methylpropyl)-4,6-dinitrophenol C ₁₀ H ₁₂ N ₂ O ₅ (dinoseb) [88-85-7] OWZPCEFYPYSAJFR-UHFFFAOYSA-N	2.2 2.0×10^{-2} 1.9×10^{-4} 1.4×10^2 5.2×10^2 1.3×10^2 4.3×10^2 6.2×10^{-3} 1.7×10^3		Tremp et al. (1993) Suntio et al. (1988) Barcelo and Hennion (1997) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Goodarzi et al. (2010) Kühne et al. (2005) MacBean (2012a) Kühne et al. (2005) Mackay et al. (2006d)	M V X Q Q Q Q Q Q Q ? ? W	12 12 569 288, 289 288, 290 288, 291 288, 292 570, 573 12 12 597

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-nitronaphthalene C ₁₀ H ₇ NO ₂ [86-57-7] RJKGJBPXVHTN JL-UHFFFAOYSA-N	4.6 5.6 2.9×10^{-1}		Chao et al. (2017) Altschuh et al. (1999) Mackay et al. (2006d) Mackay et al. (1995)	M M V V	560
	3.8 9.8 6.4 3.5 4.7 4.2 1.6 4.7 2.1 5.6		Keshavarz et al. (2022) Duchowicz et al. (2020) Abraham et al. (2019) Parnis et al. (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Modarresi et al. (2007) Duchowicz et al. (2020)	Q Q Q Q Q Q Q Q Q ?	371 288, 289 288, 290 288, 291 288, 292 68 186, 21
2-nitronaphthalene C ₁₀ H ₇ NO ₂ [581-89-5] ZJYJZEAJZXVAMF-UHFFFAOYSA-N	6.8		Parnis et al. (2015)	Q	371
1,3-dinitronaphthalene C ₁₀ H ₆ N ₂ O ₄ [606-37-1] ULALSFRIGPMWRS-UHFFFAOYSA-N	1.2×10^2		Parnis et al. (2015)	Q	371
1,5-dinitronaphthalene C ₁₀ H ₆ N ₂ O ₄ [605-71-0] ZUTCJXFCHHDFJS-UHFFFAOYSA-N	1.1×10^2		Parnis et al. (2015)	Q	371
1,8-dinitronaphthalene C ₁₀ H ₆ N ₂ O ₄ [602-38-0] AVCSMMMOCOTIHF-UHFFFAOYSA-N	5.2×10^3		Parnis et al. (2015)	Q	371
dinoterb C ₁₀ H ₁₂ N ₂ O ₅ [1420-07-1] IIPZYDQGBIWLBU-UHFFFAOYSA-N	1.7 9.1×10^{-1} 9.3×10^{-1}		Barcelo and Hennion (1997) Goodarzi et al. (2010) MacBean (2012a)	X Q ?	569 570, 571
4-(1-methylpropyl)-2-nitrophenol C ₁₀ H ₁₃ NO ₃ (4-sec-butyl-2-nitrophenol) [3555-18-8] GCDCKEORRIGZKI-UHFFFAOYSA-N	1.0×10^{-1} 2.4×10^{-1} 1.2×10^{-1} 3.9×10^{-1} 4.9×10^{-1}		Tremp et al. (1993) Schwarzenbach et al. (1988) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Kühne et al. (2005) Kühne et al. (2005)	M V Q Q Q Q ?	12 12 243, 244 245 246

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methyl-4-nitronaphthalene C ₁₁ H ₉ NO ₂ [880-93-3] FRLVKAJKOYFHKQ-UHFFFAOYSA-N	7.7		Parnis et al. (2015)	Q	371
1-methyl-5-nitronaphthalene C ₁₁ H ₉ NO ₂ [91137-27-8] AOSRALZFDNFXFZ-UHFFFAOYSA-N	5.0		Parnis et al. (2015)	Q	371
1-methyl-6-nitronaphthalene C ₁₁ H ₉ NO ₂ [105752-67-8] SOXBGESONWKYDX-UHFFFAOYSA-N	5.0		Parnis et al. (2015)	Q	371
2-methyl-1-nitronaphthalene C ₁₁ H ₉ NO ₂ [881-03-8] IZNWACYOILBFEG-UHFFFAOYSA-N	1.5		Parnis et al. (2015)	Q	371
3-methyl-1-nitronaphthalene C ₁₁ H ₉ NO ₂ [13615-38-8] HKMFJWNUOWBRGF-UHFFFAOYSA-N	3.9		Parnis et al. (2015)	Q	371
3-nitrodibenzofuran C ₁₂ H ₇ NO ₃ [5410-97-9] UVFAHDAUVZRVCC-UHFFFAOYSA-N	2.6×10^1		Parnis et al. (2015)	Q	371
musk ambrette (artificial) C ₁₂ H ₁₆ N ₂ O ₅ [83-66-9] SUAUILGSCPYJCS-UHFFFAOYSA-N	1.4×10^1 7.0×10^2 2.4 2.2×10^{-1} 4.6×10^1		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
bis(<i>p</i> -nitrophenyl) ether C ₁₂ H ₈ N ₂ O ₅ [101-63-3] MWAGUKZCDDRDCS-UHFFFAOYSA-N	5.4×10^3 2.3×10^2 3.0×10^3 1.1×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
4-nitroazobenzene C ₁₂ H ₉ N ₃ O ₂ [2491-52-3] TZTDJBMGSQLSLI-UHFFFAOYSA-N	1.8×10^1		Ebert et al. (2023)	?	317
4-nitro-N-phenylbenzenamine C ₁₂ H ₁₀ N ₂ O ₂ [836-30-6] XXYMSQQCBUKFHE-UHFFFAOYSA-N	2.4×10^3 1.7×10^2 2.9×10^4 2.5×10^3		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-cyclohexyl-4,6-dinitrophenol C ₁₂ H ₁₄ N ₂ O ₅ [131-89-5] QJYHUJAGJUHXJN-UHFFFAOYSA-N	1.8×10^2		HSDB (2015)	Q	100
dinoseb acetate C ₁₂ H ₁₄ N ₂ O ₆ [2813-95-8] RDJTWDKSYLLHRW-UHFFFAOYSA-N	1.5×10^3		Ebert et al. (2023)	?	317
dipicrylamine C ₁₂ H ₅ N ₇ O ₁₂ (2,2',4,4',6,6'- hexanitrodiphenylamine) [131-73-7] CBCIHIVRDWLAME-UHFFFAOYSA-N	4.3×10^{11}		HSDB (2015)	Q	100
1,2-dihydro-5-nitroacenaphthylene C ₁₂ H ₉ NO ₂ (5-nitroacenaphthene) [602-87-9] CUARLQDWYSRQDF-UHFFFAOYSA-N	9.0 9.2		HSDB (2015) Parnis et al. (2015)	Q Q	100 371
2-nitro-1,1'-biphenyl C ₁₂ H ₉ NO ₂ [86-00-0] YOJKKXRJMXIKSR-UHFFFAOYSA-N	1.6×10^1		Parnis et al. (2015)	Q	371
3-nitro-1,1'-biphenyl C ₁₂ H ₉ NO ₂ [2113-58-8] FYRPEHRWMMHQM-UHFFFAOYSA-N	9.9		Parnis et al. (2015)	Q	371
4-nitro-1,1'-biphenyl C ₁₂ H ₉ NO ₂ [92-93-3] BAJQRLZAPXASRD-UHFFFAOYSA-N	2.8 2.5×10^1		HSDB (2015) Parnis et al. (2015)	Q Q	547 371
2-nitro-9H-fluorene C ₁₃ H ₉ NO ₂ [607-57-8] XFOHWECQTFIEIX-UHFFFAOYSA-N	3.4×10^1 9.5×10^1		HSDB (2015) Parnis et al. (2015)	Q Q	547 371
5-tert-butyl-4,6-dinitro-1,2,3- trimethylbenzene C ₁₃ H ₁₈ N ₂ O ₄ [145-39-1] MINYPECWDZURGR-UHFFFAOYSA-N	3.4×10^1 2.1 4.6×10^{-2} 1.1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
penoxaline C ₁₃ H ₁₉ N ₃ O ₄ (pendimethalin) [40487-42-1] CHIFOSRWCNZCFN-UHFFFAOYSA-N	1.2 × 10 ¹ 2.7 × 10 ⁻¹ 2.6 × 10 ⁻³ 4.8 × 10 ⁻³ 4.8		Fendinger and Glotfelty (1990) Glotfelty et al. (1987) Barcelo and Hennion (1997) Goodarzi et al. (2010) Hilal et al. (2008)	M V X Q Q	
	3.4 × 10 ¹ 7.9 × 10 ⁻¹		Modarresi et al. (2007) Maniere et al. (2011)	Q ?	68 166
2,6-dinitro-4-octylphenol C ₁₄ H ₂₀ N ₂ O ₅ [4097-33-0] NYGISSDEOKKXOE-UHFFFAOYSA-N	1.6 × 10 ⁴		HSDB (2015)	Q	100
musk ketone C ₁₄ H ₁₈ N ₂ O ₅ [81-14-1] WXCMHFPAUCOJIG-UHFFFAOYSA-N	3.0 5.2 × 10 ³ 2.1 × 10 ⁴ 2.6 × 10 ² 8.4 5.0 × 10 ²		Lee et al. (2012) HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	M Q Q Q Q Q	
moskene C ₁₄ H ₁₈ N ₂ O ₄ [116-66-5] UHWURQRPEIFIAK-UHFFFAOYSA-N	4.8 × 10 ¹ 1.4 × 10 ¹ 7.5 × 10 ⁻¹ 2.5		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
nitrothal-isopropyl C ₁₄ H ₁₇ NO ₆ [10552-74-6] VJAWBEFMCIIINFU-UHFFFAOYSA-N	5.7 × 10 ²		Ebert et al. (2023)	?	317
9-ethyl-3-nitrocarbazole C ₁₄ H ₁₂ N ₂ O ₂ [86-20-4] WONHLSYSHMRRGO-UHFFFAOYSA-N	3.3 × 10 ² 6.9 × 10 ² 1.1 × 10 ³ 2.5 × 10 ²		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2-nitroanthracene C ₁₄ H ₉ NO ₂ [3586-69-4] NZWQBVBOKHEKLD-UHFFFAOYSA-N	1.0 × 10 ²		Parnis et al. (2015)	Q	371
9-nitroanthracene C ₁₄ H ₉ NO ₂ [602-60-8] LSIKFJXEYJIZNB-UHFFFAOYSA-N	1.6 × 10 ¹		Parnis et al. (2015)	Q	371
3-nitrophenanthrene C ₁₄ H ₉ NO ₂ [17024-19-0] CPRHWWUDRYJODK-UHFFFAOYSA-N	5.4 × 10 ¹		Parnis et al. (2015)	Q	371

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
9-nitrophenanthrene C ₁₄ H ₉ NO ₂ [954-46-1] QTTCNQHPKFAYEZ-UHFFFAOYSA-N	3.2×10^1		Parnis et al. (2015)	Q	371
binapacryl C ₁₅ H ₁₈ N ₂ O ₆ [485-31-4] ZRDUSMYWDRPZRM-UHFFFAOYSA-N	2.2×10^2		Ebert et al. (2023)	?	317
2-nitrofluoranthene C ₁₆ H ₉ NO ₂ [13177-29-2] VBCBFNMZBHKVQN-UHFFFAOYSA-N	8.2×10^1		Parnis et al. (2015)	Q	371
3-nitrofluoranthene C ₁₆ H ₉ NO ₂ [892-21-7] PIHGQKMEAMSUNA-UHFFFAOYSA-N	1.1×10^2		Parnis et al. (2015)	Q	371
1-[(2,4-dinitrophenyl)azo]-2-naphthol C ₁₆ H ₁₀ N ₄ O ₅ (C.I. pigment orange 5) [3468-63-1] HBHZKFOUIUMKHV-UHFFFAOYSA-N	1.1×10^9		HSDB (2015)	Q	100
3,7-dinitrofluoranthene C ₁₆ H ₈ N ₂ O ₄ [105735-71-5] WAAHHGKGQYVTNS-UHFFFAOYSA-N	4.9×10^4		HSDB (2015)	Q	100
1,3-dinitropyrene C ₁₆ H ₈ N ₂ O ₄ [75321-20-9] UJIPQBOHUQDIAA-UHFFFAOYSA-N	6.3×10^3		Parnis et al. (2015)	Q	371
1,6-dinitropyrene C ₁₆ H ₈ N ₂ O ₄ [42397-64-8] GUXACCKTQWVTLG-UHFFFAOYSA-N	7.6×10^4 7.3×10^3		HSDB (2015) Parnis et al. (2015)	Q Q	100 371
1,8-dinitropyrene C ₁₆ H ₈ N ₂ O ₄ [42397-65-9] BLYXNIHKOMELAP-UHFFFAOYSA-N	7.6×10^4 2.3×10^4		HSDB (2015) Parnis et al. (2015)	Q Q	100 371
1-nitropyrene C ₁₆ H ₉ NO ₂ [5522-43-0] ALRLPDGCPYIVHP-UHFFFAOYSA-N	3.9×10^2 2.0×10^2		HSDB (2015) Parnis et al. (2015)	Q Q	100 371

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-nitropyrene C ₁₆ H ₉ NO ₂ [789-07-1] MAZCGYFIOIVHE-UHFFFAOYSA-N	9.0×10^1		Parnis et al. (2015)	Q	371
4-nitropyrene C ₁₆ H ₉ NO ₂ [57835-92-4] UISKIUIWSPSAV-UHFFFAOYSA-N	3.9×10^2		HSDB (2015)	Q	100
N,N-diethyl-4-[(4-nitrophenyl)azo]aniline C ₁₆ H ₁₈ N ₄ O ₂ [3025-52-3] LVQIWDUSUJTZJF-ISLYRVAYSA-N	3.7 1.5×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
disperse red 1 C ₁₆ H ₁₈ N ₄ O ₃ [2872-52-8] FOQABOMYTOFLPZ-ZCXUNETKSA-N	1.2×10^8 1.1×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
1-[(4-methyl-2-nitrophenyl)azo]-2-naphthalenol C ₁₇ H ₁₃ N ₃ O ₃ (C.I. Pigment Red 3) [2425-85-6] ZLFVRXUOSPRRKQ-UHFFFAOYSA-N	8.2×10^6		HSDB (2015)	Q	100
phenyl 1-hydroxy-4-nitro-2-naphthoate C ₁₇ H ₁₁ NO ₅ [65208-34-6] DMPUGHYNLCGVVPX-UHFFFAOYSA-N	1.5×10^4 6.7×10^5 1.1×10^2 2.7×10^5		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
7-nitrobenz[a]anthracene C ₁₈ H ₁₁ NO ₂ [20268-51-3] KOPVBVBUIYTJBG-UHFFFAOYSA-N	9.9×10^1		Parnis et al. (2015)	Q	371
6-nitrochrysene C ₁₈ H ₁₁ NO ₂ [7496-02-8] UAWLTQJFZUYROA-UHFFFAOYSA-N	6.6×10^2		HSDB (2015)	Q	100
meptyldinocap C ₁₈ H ₂₄ N ₂ O ₆ [131-72-6] NIOPZPCMRQGZCE-WEVVXLNSA-N	8.6×10^1		Maniere et al. (2011)	?	242, 166

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-nitrobenzo[<i>a</i>]pyrene C ₂₀ H ₁₁ NO ₂ [70021-99-7] ICKISBPYFVBVQG-UHFFFAOYSA-N	3.1 × 10 ³		HSDB (2015)	Q	449
3-nitrobenzo[<i>a</i>]pyrene C ₂₀ H ₁₁ NO ₂ [70021-98-6] CQIJHYPCYZMIV-UHFFFAOYSA-N	3.1 × 10 ³		HSDB (2015)	Q	449
6-nitrobenzo[<i>a</i>]pyrene C ₂₀ H ₁₁ NO ₂ [63041-90-7] NMMAFYSZGOFZCM-UHFFFAOYSA-N	3.1 × 10 ³ 3.3 × 10 ²		HSDB (2015) Parnis et al. (2015)	Q Q	449 371
MCM:NPHEN1OOH C ₆ H ₅ NO ₄ QKMAXSKQIHICGE-UHFFFAOYSA-N	2.8 × 10 ⁴ 3.0 × 10 ⁴ 3.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NCATECHOL C ₆ H ₅ NO ₄ XJNPNXSISMKQEX-UHFFFAOYSA-N	3.2 × 10 ⁷ 8.0 × 10 ⁷ 6.0 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NCRES1OOH C ₇ H ₇ NO ₄ PUXUHFKGXFXGAC-UHFFFAOYSA-N	1.7 × 10 ⁴ 8.9 × 10 ³ 4.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MNCATECH C ₇ H ₇ NO ₄ DPKDSDOOIONLAG-UHFFFAOYSA-N	5.6 × 10 ³ 8.5 × 10 ⁵ 3.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NEBNZ1OOH C ₈ H ₉ NO ₄ WELXCAQABDDCET-UHFFFAOYSA-N	1.3 × 10 ⁴ 4.9 × 10 ³ 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NMXYOL1OOH C ₈ H ₉ NO ₄ WHVCHTZZIECJY-UHFFFAOYSA-N	9.6 × 10 ³ 2.2 × 10 ⁴ 2.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOXYOL1OOH C ₈ H ₉ NO ₄ WTJTXPQAQHBAPV-UHFFFAOYSA-N	9.6 × 10 ³ 1.2 × 10 ⁴ 8.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPXYOL1OOH C ₈ H ₉ NO ₄ MKCNKDVBLGUFV-UHFFFAOYSA-N	9.6 × 10 ³ 1.2 × 10 ⁴ 2.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DM124OHNO2 C ₈ H ₉ NO ₃ KGDYDUZVHFMHQ-UHFFFAOYSA-N	2.3 2.4 5.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:DMPHOHNO2 C ₈ H ₉ NO ₃ YXNYMZXPWOUJT-UHFFFAOYSA-N	2.3 1.2 × 10 ¹ 3.5 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNEBNZOL C ₈ H ₈ N ₂ O ₅ SYWMIOFIFBKHTK-UHFFFAOYSA-N	1.2 × 10 ³ 9.6 × 10 ³ 2.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNMXYOL C ₈ H ₈ N ₂ O ₅ MHXAYMPVZDCVJX-UHFFFAOYSA-N	1.1 × 10 ³ 2.1 × 10 ⁴ 1.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNOXYOL C ₈ H ₈ N ₂ O ₅ JCTQXQRGEDMCSI-UHFFFAOYSA-N	8.9 × 10 ² 1.6 × 10 ⁴ 2.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNPXYOL C ₈ H ₈ N ₂ O ₅ RROXWBBJMPCPHD-UHFFFAOYSA-N	8.9 × 10 ² 6.5 × 10 ³ 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:EBNZOHNO2 C ₈ H ₉ NO ₃ RSETVJMGQZKFCF-UHFFFAOYSA-N	3.5 1.3 × 10 ¹ 7.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:ENCATECH C ₈ H ₉ NO ₄ CGDBCFCRALNPBR-UHFFFAOYSA-N	4.5 × 10 ³ 5.1 × 10 ⁵ 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXNCATECH C ₈ H ₉ NO ₄ DNJZITGVNONOFW-UHFFFAOYSA-N	3.3 × 10 ³ 4.1 × 10 ⁵ 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MXY1OHNO2 C ₈ H ₉ NO ₃ KJRCHEILWKLEBC-UHFFFAOYSA-N	2.3 1.7 × 10 ¹ 1.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXNCATECH C ₈ H ₉ NO ₄ BBBHATWMUPCFKG-UHFFFAOYSA-N	3.3 × 10 ³ 8.0 × 10 ⁵ 3.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OXY1OHNO2 C ₈ H ₉ NO ₃ KXWOAPZXQJGYPU-UHFFFAOYSA-N	2.3 2.6 × 10 ¹ 2.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXNCATECH C ₈ H ₉ NO ₄ MAHUOFZDOBGSU-UHFFFAOYSA-N	1.1 × 10 ⁷ 2.5 × 10 ⁸ 4.7 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PXY1OHNO2 C ₈ H ₉ NO ₃ VIQHHRZADKSPIM-UHFFFAOYSA-N	2.3 8.7 1.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NIPBNZ1OOH C ₉ H ₁₁ NO ₄ IXEXRYHUTBEDFT-UHFFFAOYSA-N	1.2 × 10 ⁴ 3.6 × 10 ³ 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NMETOL1OOH C ₉ H ₁₁ NO ₄ OTBVEKBKVMFBF-UHFFFAOYSA-N	8.0 × 10 ³ 4.4 × 10 ³ 2.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NOETOL1OOH C ₉ H ₁₁ NO ₄ ZYYASKSQLLYACE-UHFFFAOYSA-N	8.0 × 10 ³ 6.5 × 10 ³ 3.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPBNZ1OOH C ₉ H ₁₁ NO ₄ CVKCTJQZVRPANA-UHFFFAOYSA-N	1.2 × 10 ⁴ 3.6 × 10 ³ 1.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NPETOL1OOH C ₉ H ₁₁ NO ₄ PGRGKKGDUKVIK-UHFFFAOYSA-N	8.0 × 10 ³ 3.2 × 10 ³ 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NT123L1OOH C ₉ H ₁₁ NO ₄ QUQYRHULCDEZAA-UHFFFAOYSA-N	5.6 × 10 ³ 1.4 × 10 ⁴ 1.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:NT124L1OOH C ₉ H ₁₁ NO ₄ DLQITMPSXAOFG-UHFFFAOYSA-N	5.6 × 10 ³ 4.6 × 10 ⁴ 2.9 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNIPBNZOL C ₉ H ₁₀ N ₂ O ₅ [29385-11-3] HBVHYLBZPLCIEE-UHFFFAOYSA-N	1.1 × 10 ³ 3.6 × 10 ³ 1.4 2.5 × 10 ¹ 6.2 × 10 ² 1.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	Q Q Q Q Q Q	81, 239 81, 240 81, 241 272, 244 245 246
MCM:DNMETOL C ₉ H ₁₀ N ₂ O ₅ NLLBSWNZAUXBGJ-UHFFFAOYSA-N	8.7 × 10 ² 2.4 × 10 ⁴ 1.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNOETOL C ₉ H ₁₀ N ₂ O ₅ AGMONASRVOHMRW-UHFFFAOYSA-N	7.3 × 10 ² 1.0 × 10 ⁴ 1.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNPBNZOL C ₉ H ₁₀ N ₂ O ₅ FCIYPWNHZQHVEQ-UHFFFAOYSA-N	1.1 × 10 ³ 5.8 × 10 ³ 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNPETOL C ₉ H ₁₀ N ₂ O ₅ DZWALJMRDDSGJQ-UHFFFAOYSA-N	7.3 × 10 ² 3.9 × 10 ³ 8.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:DNT123BOL C ₉ H ₁₀ N ₂ O ₅ KTYJIHPJHVSEQH-UHFFFAOYSA-N	6.2 × 10 ² 1.7 × 10 ⁴ 3.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DNT124BOL C ₉ H ₁₀ N ₂ O ₅ HCZZKJMHIZGVJN-UHFFFAOYSA-N	4.0 × 10 ⁵ 1.4 × 10 ⁴ 3.9 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:HOEMPHNO2 C ₉ H ₁₁ NO ₃ YSPMBFYZTNTHTGD-UHFFFAOYSA-N	2.1 1.0 × 10 ¹ 2.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPBNZOHNO2 C ₉ H ₁₁ NO ₃ RRFSVDKJKYCCEK-UHFFFAOYSA-N	3.2 5.6 6.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:IPNCATECH C ₉ H ₁₁ NO ₄ MCPZUPZVJHDAPC-UHFFFAOYSA-N	4.2 × 10 ³ 2.0 × 10 ⁵ 1.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MET1OHNO2 C ₉ H ₁₁ NO ₃ QDGFKFKXXCYOS-UHFFFAOYSA-N	2.1 1.0 × 10 ¹ 8.7 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:MTNCATECH C ₉ H ₁₁ NO ₄ CJFAOEWQLMJWBQ-UHFFFAOYSA-N	2.6 × 10 ³ 2.6 × 10 ⁵ 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OET1OHNO2 C ₉ H ₁₁ NO ₃ MEMHWZGPMWLWUCR-UHFFFAOYSA-N	2.1 1.5 × 10 ¹ 1.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:OTNCATECH C ₉ H ₁₁ NO ₄ JWEUFFGZFSJOFB-UHFFFAOYSA-N	2.6 × 10 ³ 4.6 × 10 ⁵ 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PBNZOHNO2 C ₉ H ₁₁ NO ₃ SNIBPLNVBYUZKZ-UHFFFAOYSA-N	2.8 8.5 6.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PET1OHNO2 C ₉ H ₁₁ NO ₃ DXOFURYTWRSOS-UHFFFAOYSA-N	2.1 5.6 6.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PNCATECH C ₉ H ₁₁ NO ₄ UWDKGIAMIWLDZ-UHFFFAOYSA-N	3.5 × 10 ³ 2.9 × 10 ⁵ 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:PTNCATECH C ₉ H ₁₁ NO ₄ POSTUROPYARVPT-UHFFFAOYSA-N	8.9 × 10 ⁶ 1.8 × 10 ⁸ 3.7 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A4.8: Nitro compounds (RNO₂) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:T123NCATEC C ₉ H ₁₁ NO ₄ NRIGBHNEXAXSY-UHFFFAOYSA-N	2.0 × 10 ³ 6.0 × 10 ⁵ 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:T124NCATEC C ₉ H ₁₁ NO ₄ XNILZTOSMSXQOP-UHFFFAOYSA-N	6.6 × 10 ⁶ 4.8 × 10 ⁸ 8.7 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM123OHNO2 C ₉ H ₁₁ NO ₃ GRYTUHBAWMNFLK-UHFFFAOYSA-N	1.5 3.3 × 10 ¹ 3.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TM124OHNO2 C ₉ H ₁₁ NO ₃ NKOCMNXLDSIDQC-UHFFFAOYSA-N	9.6 × 10 ² 2.4 × 10 ⁴ 1.0 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

A5 Organic species with fluorine (F)

A5.1 Organic fluorine

Table A5.1: Organic fluorine

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
fluoromethane CH ₃ F [593-53-3] NBVXSUQYWXR MNV-UHFFFAOYSA-N	6.1×10^{-4}	2100	Burkholder et al. (2019)	L	1
	6.1×10^{-4}	2000	Burkholder et al. (2015)	L	
	6.2×10^{-4}	2200	Brockbank (2013)	L	1, 598
	6.1×10^{-4}	2000	Sander et al. (2011)	L	
	6.1×10^{-4}	2000	Sander et al. (2006)	L	
	5.8×10^{-4}	2200	Wilhelm et al. (1977)	L	
	5.8×10^{-4}	2100	Swain and Thornton (1962)	M	
	5.8×10^{-4}	2200	Glew and Moelwyn-Hughes (1953)	M	599
	5.8×10^{-4}		Duchowicz et al. (2020)	V	187
	5.1×10^{-4}		Mackay and Shiu (1981)	V	
	5.8×10^{-4}		Hine and Mookerjee (1975)	V	
	7.1×10^{-4}		Yaws (2003)	X	238, 81
	1.0×10^{-7}		Hayer et al. (2022)	Q	20
	2.6×10^{-3}		Duchowicz et al. (2020)	Q	
	8.7×10^{-5}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	6.7×10^{-4}		Gharagheizi et al. (2010)	Q	247
	9.2×10^{-5}		Hilal et al. (2008)	Q	
		2200	Kühne et al. (2005)	Q	
	5.1×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	7.7×10^{-4}		English and Carroll (2001)	Q	231, 232
	6.5×10^{-4}		Russell et al. (1992)	Q	280
	5.8×10^{-4}		Suzuki et al. (1992)	Q	233
	1.9×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	5.9×10^{-4}		Irmann (1965)	Q	
		2200	Kühne et al. (2005)	?	
	7.1×10^{-4}		Yaws (1999)	?	21, 81
	4.7×10^{-4}		Abraham and Weathersby (1994)	?	21
	7.0×10^{-4}		Yaws and Yang (1992)	?	21, 81
difluoromethane CH ₂ F ₂ (R32) [75-10-5] RWRIWBAICGTTQ-UHFFFAOYSA-N	6.4×10^{-4}	2100	Kutsuna (2017)	M	1
	6.8×10^{-4}	2500	Anderson (2011)	M	
	3.0×10^{-4}	3500	Miguel et al. (2000)	M	
	6.9×10^{-4}	2400	Maaßen (1995)	M	600
	6.9×10^{-4}	2300	Reichl (1995)	M	601
	7.9×10^{-4}		Hayer et al. (2022)	Q	20
	1.8×10^{-4}		Gharagheizi et al. (2012)	Q	
	8.4×10^{-4}		Hilal et al. (2008)	Q	
		2200	Kühne et al. (2005)	Q	
	3.1×10^{-2}		Yaffe et al. (2003)	Q	249, 250
		2400	Kühne et al. (2005)	?	

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	8.6×10^{-4}		Yaws (1999)	?	21
	8.6×10^{-4}		Yaws and Yang (1992)	?	21
trifluoromethane CHF ₃ (R23) [75-46-7] XPDWGBQVDMORPB-UHFFFAOYSA-N	1.3×10^{-4}	2500	Burkholder et al. (2019)	L	
	1.2×10^{-4}	2200	Burkholder et al. (2019)	L	71
	1.3×10^{-4}	2500	Burkholder et al. (2015)	L	
	1.2×10^{-4}	2200	Burkholder et al. (2015)	L	71
	1.3×10^{-4}	3300	Sander et al. (2011)	L	
	1.3×10^{-4}	3200	Wilhelm et al. (1977)	L	
	2.1×10^{-4}	2500	Miguel et al. (2000)	M	
	1.3×10^{-4}	2400	Zheng et al. (1997)	M	602
	1.2×10^{-4}	2400	Maaßen (1995)	M	603
	1.0×10^{-4}		Hine and Mookerjee (1975)	V	
	1.3×10^{-4}		Yaws (2003)	X	238
	1.0×10^{-4}		Irmann (1965)	C	
	1.3×10^{-4}		Hayer et al. (2022)	Q	20
	1.0×10^{-4}		Keshavarz et al. (2022)	Q	
	8.8×10^{-4}		Duchowicz et al. (2020)	Q	185
	1.3×10^{-4}	2700	Li et al. (2019)	Q	1
	4.0×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	2.0×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	1.3×10^{-4}		Gharagheizi et al. (2010)	Q	247
	2.0×10^{-4}		Hilal et al. (2008)	Q	
	4.0×10^{-5}		Modarresi et al. (2007)	Q	68
		2200	Kühne et al. (2005)	Q	
	1.2×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	1.1×10^{-4}		Irmann (1965)	Q	
	1.0×10^{-4}		Duchowicz et al. (2020)	?	186, 21
		3000	Kühne et al. (2005)	?	
	1.3×10^{-4}		Yaws (1999)	?	21
	1.3×10^{-4}		Yaws and Yang (1992)	?	21
tetrafluoromethane CF ₄ (carbontetrafluoride) [75-73-0] TXEQDLBPFQVAA-UHFFFAOYSA-N	2.1×10^{-6}	1800	Burkholder et al. (2019)	L	1
	1.7×10^{-6}	2300	Burkholder et al. (2019)	L	71
	2.1×10^{-6}	1800	Burkholder et al. (2015)	L	1
	1.7×10^{-6}	2300	Burkholder et al. (2015)	L	71
	2.1×10^{-6}	2300	Warneck and Williams (2012)	L	
	2.1×10^{-6}	1800	Sander et al. (2011)	L	1
	2.1×10^{-6}	1800	Wilhelm et al. (1977)	L	
	2.0×10^{-6}	2000	Reichl (1995)	M	604
	2.1×10^{-6}	1800	Scharlin and Battino (1995)	M	605
	2.1×10^{-6}	1800	Scharlin and Battino (1994)	M	606
	2.1×10^{-6}		Park et al. (1982)	M	
	2.1×10^{-6}	1600	Cosgrove and Walkley (1981)	M	11
	2.0×10^{-6}	1900	Wen and Muccitelli (1979)	M	607

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.1×10^{-6}	1800	Ashton et al. (1968)	M	608
	2.0×10^{-6}	1500	Morrison and Johnstone (1954)	M	609
	1.9×10^{-6}		Hine and Mookerjee (1975)	V	
	3.3×10^{-6}		Pierotti (1965)	T	
	1.8×10^{-6}		Yaws (2003)	X	238
	1.9×10^{-6}		Irmann (1965)	C	
	2.8×10^{-6}		Hayer et al. (2022)	Q	20
	6.9×10^{-7}		Keshavarz et al. (2022)	Q	
	1.4×10^{-5}		Duchowicz et al. (2020)	Q	
	2.1×10^{-6}	1800	Li et al. (2019)	Q	1
	5.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	9.2×10^{-6}		Hilal et al. (2008)	Q	
	3.2×10^{-6}		Modarresi et al. (2007)	Q	68
		2200	Kühne et al. (2005)	Q	
	2.9×10^{-6}		Goss (2005)	Q	
	2.0×10^{-6}		Yaffe et al. (2003)	Q	249, 250
	1.0×10^{-6}	-840	Bonifácio et al. (2001)	Q	
	1.2×10^{-8}		Katritzky et al. (1998)	Q	
	5.4×10^{-6}		Nirmalakhandan and Speece (1988)	Q	
	1.6×10^{-6}		Irmann (1965)	Q	
	1.9×10^{-6}		Duchowicz et al. (2020)	?	186, 21
		1900	Kühne et al. (2005)	?	
	1.9×10^{-6}		Yaws (1999)	?	21
	2.1×10^{-6}	1700	Yaws et al. (1999)	?	21
	1.8×10^{-6}		Yaws and Yang (1992)	?	21
fluoroethane $\text{C}_2\text{H}_5\text{F}$ [353-36-6] UHCBBWUQDAVSMS-UHFFFAOYSA-N	4.6×10^{-4}		Yaws (2003)	X	238
	1.6×10^{-4}		Gharagheizi et al. (2012)	Q	
	3.1×10^{-4}		Raventos-Duran et al. (2010)	Q	272, 244
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	4.9×10^{-4}		Gharagheizi et al. (2010)	Q	247
	4.8×10^{-4}		Hilal et al. (2008)	Q	
	3.2×10^{-4}		Modarresi et al. (2007)	Q	68
	4.6×10^{-4}		Yaws (1999)	?	21
	5.0×10^{-4}		Abraham and Weathersby (1994)	?	21
	4.4×10^{-4}		Yaws and Yang (1992)	?	21
1,1-difluoroethane $\text{C}_2\text{H}_4\text{F}_2$ (R152a) [75-37-6] NPNPZTNLOVBDOC-UHFFFAOYSA-N	4.9×10^{-4}	2600	Burkholder et al. (2019)	L	610, 71
	4.9×10^{-4}	2600	Burkholder et al. (2015)	L	611, 71
	4.9×10^{-4}	2800	Zheng et al. (1997)	M	612
	5.0×10^{-4}	2800	Maaßen (1995)	M	613
	4.9×10^{-4}	2700	Reichl (1995)	M	614
	4.2×10^{-4}	2300	McLinden (1989)	V	
	4.8×10^{-4}		Hine and Mookerjee (1975)	V	
	4.8×10^{-4}		Irmann (1965)	C	295

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.7×10^{-4}		Hayer et al. (2022)	Q	20
	1.2×10^{-2}		Keshavarz et al. (2022)	Q	
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	1.6×10^{-4}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	272, 244
	1.6×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	2.9×10^{-4}		Hilal et al. (2008)	Q	
	1.4×10^{-4}		Modarresi et al. (2007)	Q	68
		2600	Kühne et al. (2005)	Q	
	9.0×10^{-4}		English and Carroll (2001)	Q	231, 232
	1.4×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	4.3×10^{-4}		Irmann (1965)	Q	
	4.9×10^{-4}		Duchowicz et al. (2020)	?	186, 21
		2800	Kühne et al. (2005)	?	
	3.9×10^{-4}		Yaws (1999)	?	21, 298
	3.7×10^{-4}		Yaws and Yang (1992)	?	21, 298
1,2-difluoroethane $\text{C}_2\text{H}_4\text{F}_2$ [624-72-6] AHFMSNDYOYCFEPH-UHFFFAOYSA-N	2.5×10^{-5}		HSDB (2015)	Q	100
1,1,1,2-tetrafluoroethane $\text{C}_2\text{H}_2\text{F}_4$ (R134a) [811-97-2] LVGUGZGTVOIAKKC-UHFFFAOYSA-N	1.6×10^{-4}	2700	Burkholder et al. (2019)	L	71
	1.6×10^{-4}	2700	Burkholder et al. (2015)	L	71
	1.5×10^{-4}	3100	Ooki and Yokouchi (2011)	M	71
	1.6×10^{-4}	2900	Zheng et al. (1997)	M	615
	1.6×10^{-4}	3000	Maaßen (1995)	M	616
	1.6×10^{-4}	2900	Reichl (1995)	M	617
	1.9×10^{-4}	1400	Chang and Criddle (1995)	M	618
	1.4×10^{-4}	2600	McLinden (1989)	V	
	2.5×10^{-4}		Hayer et al. (2022)	Q	20
	1.5×10^{-4}	3100	Li et al. (2019)	Q	1
	6.5×10^{-6}		HSDB (2015)	Q	100
	2.5×10^{-4}		Raventos-Duran et al. (2010)	Q	272, 244
	1.2×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	246
	9.7×10^{-5}		Hilal et al. (2008)	Q	
	5.5×10^{-5}		Modarresi et al. (2007)	Q	68
1,1,2,2-tetrafluoroethane $\text{C}_2\text{H}_2\text{F}_4$ [359-35-3] WXGNWUVNYMJENI-UHFFFAOYSA-N	2.9×10^{-4}		Ebert et al. (2023)	?	319

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pentafluoroethane C_2HF_5 (R125) [354-33-6] GTLACDSXYULKMZ-UHFFFAOYSA-N	3.1×10^{-4}	3300	Miguel et al. (2000)	M	
	3.5×10^{-5}	3000	Reichl (1995)	M	619
	8.0×10^{-5}	4800	McLinden (1989)	V	
	1.3×10^{-4}		Hayer et al. (2022)	Q	20
	3.5×10^{-5}	3000	Li et al. (2019)	Q	1
	2.0×10^{-4}		HSDB (2015)	Q	100
	3.2×10^{-6}		Zhang et al. (2010)	Q	288, 289
	2.0×10^{-5}		Zhang et al. (2010)	Q	288, 290
	5.7×10^{-5}		Zhang et al. (2010)	Q	288, 291
	2.1×10^{-5}		Zhang et al. (2010)	Q	288, 292
		2600	Kühne et al. (2005)	Q	
		2900	Kühne et al. (2005)	?	
hexafluoroethane C_2F_6 [76-16-4] WMIYKQLTONQJES-UHFFFAOYSA-N	6.5×10^{-7}	2100	Bonifácio et al. (2001)	M	
	5.3×10^{-7}		Park et al. (1982)	M	
	5.6×10^{-7}	2300	Wen and Muccitelli (1979)	M	620
	5.8×10^{-7}		Yaws (2003)	X	238
	7.1×10^{-7}		Hayer et al. (2022)	Q	20
	9.3×10^{-7}		Keshavarz et al. (2022)	Q	
	2.2×10^{-5}		Duchowicz et al. (2020)	Q	
	5.8×10^{-7}	2600	Li et al. (2019)	Q	1
	1.5×10^{-5}		Gharagheizi et al. (2012)	Q	
	4.1×10^{-7}		Zhang et al. (2010)	Q	288, 289
	1.1×10^{-5}		Zhang et al. (2010)	Q	288, 290
	8.4×10^{-7}		Zhang et al. (2010)	Q	288, 291
	1.9×10^{-6}		Zhang et al. (2010)	Q	288, 292
	8.1×10^{-7}		Gharagheizi et al. (2010)	Q	247
	1.2×10^{-5}		Hilal et al. (2008)	Q	
	1.8×10^{-6}		Modarresi et al. (2007)	Q	68
		2600	Kühne et al. (2005)	Q	
	1700	Bonifácio et al. (2001)	Q		
		Duchowicz et al. (2020)	?	186, 21	
	2900	Kühne et al. (2005)	?		
		Yaws (1999)	?	21	
		Yaws and Yang (1992)	?	21	
1-fluoropropane $\text{C}_3\text{H}_7\text{F}$ [460-13-9] JRHNUZCXXOTJCA-UHFFFAOYSA-N	6.3×10^{-4}		Yaws (2003)	X	238, 621
	7.9×10^{-5}		Gharagheizi et al. (2012)	Q	
	5.8×10^{-4}		Gharagheizi et al. (2010)	Q	247
	5.7×10^{-4}		Hilal et al. (2008)	Q	
	6.2×10^{-4}		Yaws (1999)	?	21, 621
	3.6×10^{-4}		Abraham and Weathersby (1994)	?	21
		6.1×10^{-4}	Yaws and Yang (1992)	?	21, 621

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-fluoropropane $\text{C}_3\text{H}_7\text{F}$ [420-26-8] PRNZBCYBKGCOFI-UHFFFAOYSA-N	6.0×10^{-4} 2.2×10^{-4} 6.0×10^{-4} 2.5×10^{-4} 5.9×10^{-4} 3.8×10^{-4} 5.8×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999) Abraham and Weathersby (1994) Yaws and Yang (1992)	X Q Q Q ? ? ?	238, 81 247 21, 81 21 21, 81
1,1,1,2,2-pentafluoropropane $\text{C}_3\text{H}_3\text{F}_5$ [1814-88-6] FDOPVENYMZRARC-UHFFFAOYSA-N	3.0×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
1,1,1,3,3,3-hexafluoropropane $\text{C}_3\text{H}_2\text{F}_6$ [690-39-1] NSGXIBWMJZWTPY-UHFFFAOYSA-N	1.2×10^{-6} 3.9×10^{-5} 1.8×10^{-4} 2.7×10^{-6}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1,1,1,2,3,3,3-heptafluoropropane C_3HF_7 (R227) [431-89-0] YFMFNYKEUDLDTL-UHFFFAOYSA-N	1.4×10^{-5} 2.2×10^{-4} 6.2×10^{-7}	3300 2900 3300	Reichl (1995) Hayer et al. (2022) HSDB (2015) Kühne et al. (2005) Kühne et al. (2005)	M Q Q Q ?	622 20 100
octafluoropropane C_3F_8 (R218) [76-19-7] QYSGYZVSCZSLHT-UHFFFAOYSA-N	1.2×10^{-7} 3.0×10^{-7} 3.0×10^{-7} 3.2×10^{-7} 1.1×10^{-3} 5.1×10^{-5} 4.2×10^{-5} 7.7×10^{-8} 1.0×10^{-5} 3.8×10^{-7} 4.5×10^{-7} 3.0×10^{-7} 1.1×10^{-5} 3.1×10^{-7}	6900	Wen and Muccitelli (1979) Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Hayer et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2012) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999)	M V V X Q Q Q Q Q Q Q Q Q ?	 238, 81 20 288, 289 288, 290 288, 291 288, 292 247 21, 81
decafluorobutane C_4F_{10} [355-25-9] KAVGMUDTWQVPDF-UHFFFAOYSA-N	1.5×10^{-8}		HSDB (2015)	Q	100

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
octafluorocyclobutane C_4F_8 [115-25-3] BCCOBQSFUDVTJQ-UHFFFAOYSA-N	1.2×10^{-6} 1.3×10^{-6} 1.2×10^{-6} 1.2×10^{-6} 2.5×10^{-6} 1.6×10^{-6} 3.9×10^{-3} 1.0×10^{-4} 1.3×10^{-7} 1.6×10^{-6} 2.2×10^{-6} 1.0×10^{-6} 2.6×10^{-6} 9.2×10^{-6}	3000 3300 3000 4500 3800	Clever et al. (2005) Scharlin and Battino (1994) Park et al. (1982) Wen and Muccitelli (1979) Duchowicz et al. (2020) Yaws (2003) Hayer et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2012) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Kühne et al. (2005) Kühne et al. (2005) Yaws (1999) Yaws and Yang (1992)	L M M M V X Q Q Q Q Q Q Q Q Q Q ?	623, 624 625 626 187 238, 374 20 288, 289 288, 290 288, 291 288, 292 247 21, 374 21, 374
1,1,1,2,2,3,3,4,5,5,5- decafluoropentane $\text{C}_5\text{H}_2\text{F}_{10}$ [138495-42-8] RIQRGMUSBYGDBL-UHFFFAOYSA-N	4.4×10^{-8} 3.2×10^{-5} 1.8×10^{-4} 9.0×10^{-7}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
dodecafluoropentane C_5F_{12} [678-26-2] NJCBUSHGCBERSK-UHFFFAOYSA-N	4.6×10^{-8} 6.1×10^{-6}		Brockbank (2013) Hilal et al. (2008)	L Q	
tetradecafluorohexane C_6F_{14} (perflexane) [355-42-0] ZJIJAJXFLBMLCK-UHFFFAOYSA-N	9.3×10^{-9} 5.4×10^{-10}		Brockbank (2013) HSDB (2015)	L Q	100
fluorocyclohexane $\text{C}_6\text{H}_{11}\text{F}$ [372-46-3] GOBGVVAHHOUMDK-UHFFFAOYSA-N	1.3×10^{-3}		Hilal et al. (2008)	Q	
1-fluoroheptane $\text{C}_7\text{H}_{15}\text{F}$ [661-11-0] BITLXSQYFZTQGC-UHFFFAOYSA-N	2.7×10^{-4}		Hilal et al. (2008)	Q	

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hexadecafluoroheptane C_7F_{16} [335-57-9] LGUZHRODIJCVOC-UHFFFAOYSA-N	3.0×10^{-9} 1.9×10^{-7}		Brockbank (2013) Hilal et al. (2008)	L Q	
1-fluorooctane $\text{C}_8\text{H}_{17}\text{F}$ [463-11-6] DHIVLKMKGIZOHF-UHFFFAOYSA-N	1.5×10^{-4}		Hilal et al. (2008)	Q	
perfluorooctane C_8F_{18} [307-34-6] YVBBRRALBYAZBM-UHFFFAOYSA-N	8.0×10^{-10}		Brockbank (2013)	L	
eicosafluorononane C_9F_{20} [375-96-2] UVWPNDVAQBNQBG-UHFFFAOYSA-N	4.5×10^{-9}		Hilal et al. (2008)	Q	
perfluoroundecane $\text{C}_{11}\text{F}_{24}$ [307-49-3] VCIVYCHKSHULON-UHFFFAOYSA-N	1.3×10^{-13} 1.2×10^{-11} 1.2×10^{-9} 6.0×10^{-12}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-henicosafuorododecane $\text{C}_{12}\text{H}_5\text{F}_{21}$ (perfluorodecyl ethane) [154478-87-2] HUPGRQWHZOWFPQ-UHFFFAOYSA-N	5.1×10^{-10}		Plassmann et al. (2010)	Q	
1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluorotetradecane $\text{C}_{14}\text{H}_{17}\text{F}_{13}$ [133331-77-8] WRYIIOKQSICTB-UHFFFAOYSA-N	6.4×10^{-7}		Plassmann et al. (2010)	Q	
1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoroicosane $\text{C}_{20}\text{H}_{29}\text{F}_{13}$ [154628-00-9] BREOHRVZEZMFOB-UHFFFAOYSA-N	2.5×10^{-7}		Plassmann et al. (2010)	Q	
1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluorodocosane $\text{C}_{22}\text{H}_{33}\text{F}_{13}$ [133310-71-1] ZKYMFAZZFTYJH-UHFFFAOYSA-N	2.0×10^{-7}		Plassmann et al. (2010)	Q	

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluorotetracosane $C_{24}H_{33}F_{17}$ [117146-18-6] FTECWULPOFDJS-UHFFFAOYSA-N	4.0×10^{-9}		Plassmann et al. (2010)	Q	
1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-henicosafluorohexacosane $C_{26}H_{33}F_{21}$ LZENXKBSJNMIKY-UHFFFAOYSA-N	3.2×10^{-11}		Plassmann et al. (2010)	Q	
1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-pentacosafluorohexacosane $C_{26}H_{29}F_{25}$ [93454-73-0] OUASUHCMZXPCH-UHFFFAOYSA-N	1.6×10^{-13}		Plassmann et al. (2010)	Q	
1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-pentacosafluorooctacosane $C_{28}H_{33}F_{25}$ [93454-74-1] CZCMNCOQMXNFTL-UHFFFAOYSA-N	8.0×10^{-14}		Plassmann et al. (2010)	Q	
fluoroethene C_2H_3F (vinyl fluoride) [75-02-5] XUCNUKMRBVNAPB-UHFFFAOYSA-N	8.2×10^{-5}		HSDB (2015)	Q	100
1,1-difluoroethene $C_2H_2F_2$ [75-38-7] BQCIDUSAKPWEQX-UHFFFAOYSA-N	2.5×10^{-5} 2.6×10^{-5} 2.8×10^{-5} 2.8×10^{-5} 5.1×10^{-5} 2.9×10^{-5} 1.6×10^{-5} 2.6×10^{-5} 2.5×10^{-5}		HSDB (2015) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaffe et al. (2003) Katritzky et al. (1998) Yaws (1999) Yaws and Yang (1992)	V X Q Q Q Q Q ? ?	238 247 249, 250 21 21
trifluoroethene C_2HF_3 [359-11-5] MIZLGWKEZAFEFJ-UHFFFAOYSA-N	2.3×10^{-5}		HSDB (2015)	Q	100

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tetrafluoroethene C_2F_4 [116-14-3] BFKJFAAPBSQJPD-UHFFFAOYSA-N	1.6×10^{-5}	2100	Wilhelm et al. (1977)	L	
	1.6×10^{-5}		HSDB (2015)	V	
	1.6×10^{-5}		Yaws (2003)	X	238
	9.8×10^{-6}		Irmann (1965)	C	38
	1.4×10^{-5}		Hayer et al. (2022)	Q	20
	2.8×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-5}		Gharagheizi et al. (2010)	Q	247
	1.9×10^{-5}		Hilal et al. (2008)	Q	
	2.8×10^{-5}	2400	Kühne et al. (2005)	Q	
		2100	Yao et al. (2002)	Q	230
			Kühne et al. (2005)	?	
	1.6×10^{-5}		Yaws (1999)	?	21
	1.6×10^{-5}		Yaws and Yang (1992)	?	21
3,3,3-trifluoropropene $\text{C}_3\text{H}_3\text{F}_3$ [677-21-4] FDMFUZHCI RHGRG-UHFFFAOYSA-N	1.3×10^{-5}		HSDB (2015)	Q	100
hexafluoropropene C_3F_6 [116-15-4] HCDGVLDPFQMKDK-UHFFFAOYSA-N	2.9×10^{-6}	2400	Wilhelm et al. (1977)	L	
	6.8×10^{-6}	2600	Maaßen (1995)	M	627
	7.3×10^{-6}		Hayer et al. (2022)	Q	20
	1.8×10^{-6}		HSDB (2015)	Q	100
	3.6×10^{-5}		Hilal et al. (2008)	Q	
		2800	Kühne et al. (2005)	Q	
	2400	Kühne et al. (2005)	?		
1,1,3,3,3-pentafluoro-2-(trifluoromethyl)-1-propene C_4F_8 (perfluoroisobutylene) [382-21-8] DAFIBNSJXIGBQB-UHFFFAOYSA-N	2.9×10^{-7}		HSDB (2015)	Q	100
(perfluorobutyl)ethene $\text{C}_6\text{H}_3\text{F}_9$ (4:2 FTO) [19430-93-4] GVEUEBXMTMZVSD-UHFFFAOYSA-N	9.0×10^{-8}		HSDB (2015)	Q	100
	8.8×10^{-8}		Zhang et al. (2010)	Q	288, 289
	3.3×10^{-6}		Zhang et al. (2010)	Q	288, 290
	8.6×10^{-6}		Zhang et al. (2010)	Q	288, 291
	3.6×10^{-7}		Zhang et al. (2010)	Q	288, 292
	2.5×10^{-6}	4100	Goss et al. (2006)	Q	
(E)-perfluoro(4-methyl-2-pentene) C_6F_{12} [3709-71-5] SAPOZTRFWJZUFT-OWOJBTEDSA-N	6.4×10^{-8}		Ebert et al. (2023)	?	367

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.3×10^{-3}		Katritzky et al. (1998)	Q	
	5.0×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	1.6×10^{-3}	3800	Duchowicz et al. (2020)	?	186, 21
			Kühne et al. (2005)	?	
	1.6×10^{-3}		Yaws (1999)	?	21
	1.2×10^{-3}		Hoff et al. (1993)	?	21
	1.6×10^{-3}		Yaws and Yang (1992)	?	21
	1.5×10^{-3}		Abraham et al. (1990)	?	
1,2-difluorobenzene $\text{C}_6\text{H}_4\text{F}_2$ (<i>o</i> -difluorobenzene) [367-11-3] GOYDNIKZWGIXJT-UHFFFAOYSA-N	1.3×10^{-3}	3700	Brockbank (2013)	L	
	1.2×10^{-3}	3500	Brockbank et al. (2013)	M	
	1.4×10^{-3}		Yaws (2003)	X	238
	3.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-3}		Gharagheizi et al. (2010)	Q	247
	2.2×10^{-3}		Hilal et al. (2008)	Q	
	6.4×10^{-4}		Modarresi et al. (2007)	Q	68
	5.1×10^{-3}		Yao et al. (2002)	Q	230
	1.4×10^{-3}		Yaws (1999)	?	21
	1.4×10^{-3}		Yaws and Yang (1992)	?	21
1,3-difluorobenzene $\text{C}_6\text{H}_4\text{F}_2$ (<i>m</i> -difluorobenzene) [372-18-9] UEMGWPRHOOEKTA-UHFFFAOYSA-N	3.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-3}		Hilal et al. (2008)	Q	
	5.2×10^{-4}		Modarresi et al. (2007)	Q	68
	1.3×10^{-4}		Yaws (1999)	?	21
	1.3×10^{-4}		Yaws and Yang (1992)	?	21
1,4-difluorobenzene $\text{C}_6\text{H}_4\text{F}_2$ (<i>p</i> -difluorobenzene) [540-36-3] QUGUFLJIAFISSW-UHFFFAOYSA-N	1.6×10^{-3}	3900	Hiatt (2013)	M	
	1.3×10^{-3}		Yaws (2003)	X	238
	4.2×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.8×10^{-3}		Hilal et al. (2008)	Q	
	3.5×10^{-4}		Modarresi et al. (2007)	Q	68
	9.5×10^{-4}		Yao et al. (2002)	Q	230
	1.3×10^{-3}		Yaws (1999)	?	21
	1.3×10^{-3}		Yaws and Yang (1992)	?	21
1,2,3,5-tetrafluorobenzene $\text{C}_6\text{H}_2\text{F}_4$ [2367-82-0] UHHYOKRQTQBKSB-UHFFFAOYSA-N	5.1×10^{-4}		Duchowicz et al. (2020)	V	187
	1.2×10^{-2}		Duchowicz et al. (2020)	Q	
	5.0×10^{-4}		Hilal et al. (2008)	Q	
	9.4×10^{-5}		Modarresi et al. (2007)	Q	68
1,2,4,5-tetrafluorobenzene $\text{C}_6\text{H}_2\text{F}_4$ [327-54-8] SDXUIOOHCIXRP-UHFFFAOYSA-N	5.6×10^{-4}		Duchowicz et al. (2020)	V	187
	1.1×10^{-2}		Duchowicz et al. (2020)	Q	
	7.0×10^{-4}		Hilal et al. (2008)	Q	
	1.2×10^{-4}		Modarresi et al. (2007)	Q	68

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pentafluorobenzene C_6HF_5 [363-72-4] WACNXHCZHTVBJM-UHFFFAOYSA-N	7.5×10^{-4}	4800	Hiatt (2013)	M	
hexafluorobenzene C_6F_6 [392-56-3] ZQBFAOFFOQMSGJ-UHFFFAOYSA-N	3.0×10^{-4} 5.5×10^{-4} 2.9×10^{-4} 1.1×10^{-4}	5100 5200	Brockbank (2013) Hiatt (2013) Schröder et al. (2011) Schröder et al. (2011)	L M M Q	1 628
(trifluoromethyl)-benzene $\text{C}_6\text{H}_5\text{CF}_3$ (α, α, α -trifluorotoluene; benzotrifluoride) [98-08-8] GETTZEONDQJALK-UHFFFAOYSA-N	6.0×10^{-4} 5.8×10^{-4} 6.1×10^{-4} 6.2×10^{-4} 5.9×10^{-4} 3.5×10^{-3} 3.2×10^{-3} 7.8×10^{-3} 1.2×10^{-3} 2.0×10^{-4} 5.7×10^{-4} 1.3×10^{-3} 2.7×10^{-4} 6.2×10^{-3} 6.1×10^{-4} 1.9×10^{-2} 6.0×10^{-4} 6.0×10^{-4}		Duchowicz et al. (2020) HSDB (2015) Abraham et al. (1994a) Mackay and Shiu (1981) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Yaffe et al. (2003) Nirmalakhandan et al. (1997) Yaws (1999) Yaws and Yang (1992)	V V V V X Q Q Q Q Q Q Q Q Q Q Q Q ?	187 238 243, 244 245 246 247 68 249, 250 249, 250 21 21
decafluorobiphenyl $\text{C}_{10}\text{F}_{10}$ [434-90-2] ONUFSRWQCKNVSL-UHFFFAOYSA-N	6.7×10^{-3}	3600	Hiatt (2013)	M	
carbonyl fluoride COF_2 [353-50-4] IYRWEQXVUNLMAY-UHFFFAOYSA-N	3.5×10^{-1} 9.9×10^{-3} 2.0×10^{-1}		Mirabel et al. (1996) De Bruyn et al. (1995a) George et al. (1993)	M M X	451 629
formyl fluoride FCHO [1493-02-3] NHGVZTMBVDFPHJ-UHFFFAOYSA-N	3.0×10^{-2}		Kanakidou et al. (1995)	E	

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.2×10^{-1}		Hilal et al. (2008)	Q	
	4.9×10^{-1}	6900	Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	
	5.2×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	4.5×10^{-1}	6300	Duchowicz et al. (2020)	?	186, 21
			Kühne et al. (2005)	?	
2,2,3,3-tetrafluoro-1-propanol CHF ₂ CF ₂ CH ₂ OH [76-37-9] NBUKAOOFKZFCGD-UHFFFAOYSA-N	1.4	7000	Burkholder et al. (2019)	L	
	1.4	7000	Burkholder et al. (2015)	L	
	1.4	7000	Sander et al. (2011)	L	
	1.4	7000	Chen et al. (2003)	M	
	7.5×10^{-1}		Eger et al. (1999)	M	14
	1.6	6700	Rochester and Symonds (1973)	M	
	4.6×10^{-1}		Keshavarz et al. (2022)	Q	
	8.3×10^{-1}		Duchowicz et al. (2020)	Q	
	1.2		Raventos-Duran et al. (2010)	Q	243, 244
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	6.0×10^{-1}		Hilal et al. (2008)	Q	
	1.0	6900	Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	
	3.7×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	1.6		Duchowicz et al. (2020)	?	186, 21
		6600	Kühne et al. (2005)	?	
2,2,3,3,3-pentafluoro-1-propanol CF ₃ CF ₂ CH ₂ OH [422-05-9] PSQZJKGXDGNDFF-UHFFFAOYSA-N	1.4×10^{-1}	4300	Burkholder et al. (2019)	L	
	1.4×10^{-1}	4300	Burkholder et al. (2015)	L	
	1.4×10^{-1}	4300	Sander et al. (2011)	L	
	1.4×10^{-1}	4300	Chen et al. (2003)	M	
	6.9×10^{-2}		Eger et al. (1999)	M	14
	4.5×10^{-1}	6000	Rochester and Symonds (1973)	M	
	4.6×10^{-1}		Keshavarz et al. (2022)	Q	
	1.8×10^{-1}		Duchowicz et al. (2020)	Q	185
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	2.5×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	2.3×10^{-1}		Hilal et al. (2008)	Q	
	4.8×10^{-1}	6800	Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	
	4.4×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		6000	Kühne et al. (2005)	?	

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1,1,3,3,3-hexafluoro-2-propanol CF ₃ CHOHCF ₃ [920-66-1] BYEAHWXPCBROCE-UHFFFAOYSA-N	1.0×10^{-1}		Eger et al. (1999)	M	14
	2.4×10^{-1}	6700	Rochester and Symonds (1973)	M	
	4.6×10^{-1}		Keshavarz et al. (2022)	Q	
	2.2		Duchowicz et al. (2020)	Q	
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	243, 244
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	2.5×10^{-2}		Hilal et al. (2008)	Q	
	2.6×10^{-1}	6800	Modarresi et al. (2007)	Q	68
	2.4×10^{-1}		Kühne et al. (2005)	Q	
	2.4×10^{-1}		Goss (2005)	Q	631
2.3×10^{-1}		Nirmalakhandan and Speece (1988)	Q		
2.3×10^{-1}	6700	Duchowicz et al. (2020)	?	186, 21	
2.3×10^{-1}		Kühne et al. (2005)	?		
2.3×10^{-1}		Abraham et al. (1990)	?		
trifluoroacetylfluoride CF ₃ COF [354-34-7] DCEPGADSNJKOJK-UHFFFAOYSA-N	3.0×10^{-2}		Mirabel et al. (1996)	M	
	9.5×10^{-3}		De Bruyn et al. (1995a)	M	451
	3.0×10^{-2}		George et al. (1994b)	M	632
	1.2×10^{-2}		Keshavarz et al. (2022)	Q	
	4.3×10^{-3}		Duchowicz et al. (2020)	Q	
3.0×10^{-2}		Duchowicz et al. (2020)	?	186, 21	
1-fluoro-2-propanone CH ₂ FCOCH ₃ (fluoroacetone) [430-51-3] MSWVMWGCNZQPIA-UHFFFAOYSA-N	4.6×10^{-1}		Burkholder et al. (2019)	L	
	4.6×10^{-1}		Burkholder et al. (2015)	L	
	4.6×10^{-1}		O'Farrell and Waghorne (2010)	M	
1,1,1-trifluoro-2-propanone CF ₃ COCH ₃ (1,1,1-trifluoroacetone) [421-50-1] FHUDAMLDFXJHJE-UHFFFAOYSA-N	1.4	8900	Burkholder et al. (2019)	L	
	1.4	8900	Burkholder et al. (2015)	L	
	1.4	8900	Sander et al. (2011)	L	
	1.4	8900	Betterton (1991)	M	
	1.4		Keshavarz et al. (2022)	Q	
	1.8×10^{-2}		Duchowicz et al. (2020)	Q	
	4.9		Raventos-Duran et al. (2010)	Q	243, 244
	9.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	4.4×10^{-2}		Modarresi et al. (2007)	Q	68
1.3		Duchowicz et al. (2020)	?	186, 21	
1,1-difluoro-2-methoxyethane C ₃ H ₆ F ₂ O [461-57-4] CRGZRUXKXVTRNO-UHFFFAOYSA-N	1.3×10^{-2}		Duchowicz et al. (2020)	V	187
	2.2×10^{-2}		Duchowicz et al. (2020)	Q	

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
fluoroethanoic acid CH ₂ FCOOH (fluoroacetic acid) [144-49-0] QEYWKACRFQMRMB-UHFFFAOYSA-N	8.0 × 10 ²		Burkholder et al. (2019)	L	
	8.0 × 10 ²		Burkholder et al. (2015)	L	
	8.0 × 10 ²		Sander et al. (2011)	L	
	8.0 × 10 ²		Bowden et al. (1998a)	M	
	5.6 × 10 ²		Keshavarz et al. (2022)	Q	
	6.7 × 10 ¹		Duchowicz et al. (2020)	Q	185
	6.2 × 10 ²		Raventos-Duran et al. (2010)	Q	272, 244
	9.9 × 10 ²		Raventos-Duran et al. (2010)	Q	245
	9.9		Raventos-Duran et al. (2010)	Q	246
5.4 × 10 ²		Hilal et al. (2008)	Q		
8.0 × 10 ²		Duchowicz et al. (2020)	?	186, 21	
difluoroethanoic acid CHF ₂ COOH (difluoroacetic acid) [381-73-7] PBWZKZYHONABLN-UHFFFAOYSA-N	3.0 × 10 ²	6900	Burkholder et al. (2019)	L	
	3.0 × 10 ²	6900	Burkholder et al. (2015)	L	
	3.0 × 10 ²	6900	Sander et al. (2011)	L	
	3.0 × 10 ²	6900	Bowden et al. (1998a)	M	
	5.6 × 10 ²		Keshavarz et al. (2022)	Q	
	8.5 × 10 ¹		Duchowicz et al. (2020)	Q	300
	4.9 × 10 ²		Raventos-Duran et al. (2010)	Q	243, 244
	9.9 × 10 ¹		Raventos-Duran et al. (2010)	Q	245
	4.9		Raventos-Duran et al. (2010)	Q	246
	7.2 × 10 ¹	7700	Hilal et al. (2008)	Q	
3.0 × 10 ²	6900	Kühne et al. (2005)	Q		
		Duchowicz et al. (2020)	?	186, 21	
		Kühne et al. (2005)	?		
trifluoroethanoic acid CF ₃ COOH (trifluoroacetic acid) [76-05-1] DTQVDTLACAAQTR-UHFFFAOYSA-N	5.7 × 10 ¹	4100	Burkholder et al. (2019)	L	
	5.7 × 10 ¹	4100	Burkholder et al. (2015)	L	
	8.9 × 10 ¹	9300	Sander et al. (2011)	L	
	5.7 × 10 ¹	4100	Kutsuna and Hori (2008a)	M	
	8.3 × 10 ¹		Kwan (2001)	M	633
	8.8 × 10 ¹	9300	Bowden et al. (1996)	M	
	5.6 × 10 ²		Keshavarz et al. (2022)	Q	
	2.3		Abusallout et al. (2022)	Q	634
	1.9 × 10 ¹		Duchowicz et al. (2020)	Q	185
	6.2 × 10 ¹		Raventos-Duran et al. (2010)	Q	243, 244
	1.6 × 10 ⁻¹		Raventos-Duran et al. (2010)	Q	245
	2.5		Raventos-Duran et al. (2010)	Q	246
	2.3		Zhang et al. (2010)	Q	288, 289
	1.6 × 10 ⁻¹		Zhang et al. (2010)	Q	288, 290
	8.0		Zhang et al. (2010)	Q	288, 291
	3.9		Zhang et al. (2010)	Q	288, 292
	4.0 × 10 ⁻¹		Hilal et al. (2008)	Q	
6.3 × 10 ¹		Modarresi et al. (2007)	Q	68	
8.9 × 10 ¹	7700	Kühne et al. (2005)	Q		
		Duchowicz et al. (2020)	?	186, 21	
	9400	Kühne et al. (2005)	?		

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
perfluoropropanoic acid $\text{C}_3\text{HF}_5\text{O}_2$ [422-64-0] LRMSQVBRUNSOJL-UHFFFAOYSA-N	8.8 4.3×10^{-1}		Kwan (2001) Abusallout et al. (2022)	M Q	633 634
perfluorobutanoic acid $\text{C}_4\text{HF}_7\text{O}_2$ [375-22-4] YPJUNDFVDDCYIH-UHFFFAOYSA-N	8.1×10^{-1} 8.2×10^{-2} 8.2×10^{-2} 7.2×10^{-1} 2.5×10^{-1} 6.4×10^{-1}		Kwan (2001) Abusallout et al. (2022) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	M Q Q Q Q Q	633 634 288, 289 288, 290 288, 291 288, 292
perfluoropentanoic acid $\text{C}_5\text{HF}_9\text{O}_2$ [2706-90-3] CXZGQIAOTKWDCB-UHFFFAOYSA-N	6.7×10^{-1} 1.6×10^{-2}		Kwan (2001) Abusallout et al. (2022)	M Q	633 634
perfluorohexanoic acid $\text{C}_6\text{HF}_{11}\text{O}_2$ [307-24-4] PXUULQAPEKKVAH-UHFFFAOYSA-N	1.1 3.0×10^{-3} 4.4×10^{-1} 1.2×10^{-1}		Kwan (2001) Abusallout et al. (2022) Arp et al. (2006) Arp et al. (2006)	M Q Q Q	633 634 635 636
perfluoroheptanoic acid $\text{C}_7\text{HF}_{13}\text{O}_2$ [375-85-9] ZWBAMYVPMDSJGQ-UHFFFAOYSA-N	1.7 5.8×10^{-4} 5.7×10^{-4} 5.0×10^{-2} 2.2×10^{-2} 5.6×10^{-3} 1.8×10^{-1} 5.7×10^{-2}		Kwan (2001) Abusallout et al. (2022) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Arp et al. (2006) Arp et al. (2006)	M Q Q Q Q Q Q Q	633 634 288, 289 288, 290 288, 291 288, 292 635 636
pentadecafluorooctanoic acid $\text{C}_8\text{HF}_{15}\text{O}_2$ (perfluorooctanoic acid; PFOA) [335-67-1] SNGREZUHAYWORS-UHFFFAOYSA-N	4.9×10^{-2} 4.0×10^{-1} 2.8 1.1×10^{-4} 1.1×10^{-4} 1.0×10^{-2} 1.2×10^{-2} 1.1×10^{-3} 1.1×10^{-4} 1.0×10^{-2} 2.1×10^{-2} 1.1×10^{-3} 9.5×10^{-2} 2.0×10^{-2}		Kutsuna and Hori (2008b) Li et al. (2007) Kwan (2001) Abusallout et al. (2022) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Arp et al. (2006) Arp et al. (2006)	M M M Q Q Q Q Q Q Q Q Q Q Q	633 634 633 634 288, 289 288, 290 288, 291 288, 292 288, 289 288, 290 288, 291 288, 292 635 636

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
perfluorononanoic acid $\text{C}_9\text{HF}_{17}\text{O}_2$ [375-95-1] UZUFPBIDKMEQEQ-UHFFFAOYSA-N	4.3×10^{-2} 5.3×10^{-3}		Arp et al. (2006) Arp et al. (2006)	Q Q	635 636
2H,2H-perfluorodecanoic acid $\text{C}_{10}\text{H}_3\text{F}_{17}\text{O}_2$ (8:2 FTCA) [27854-31-5] XTBXSCIWOVSSGB-UHFFFAOYSA-N	5.8×10^{-4}		Abusallout et al. (2022)	M	
perfluorodecanoic acid $\text{C}_{10}\text{HF}_{19}\text{O}_2$ [335-76-2] PCIUEQPBYFRTEM-UHFFFAOYSA-N	2.5×10^{-2} 1.1×10^{-3}		Arp et al. (2006) Arp et al. (2006)	Q Q	635 636
perfluoroundecanoic acid $\text{C}_{11}\text{HF}_{21}\text{O}_2$ [2058-94-8] SIDINRCMMRKXGQ-UHFFFAOYSA-N	1.3×10^{-2} 1.9×10^{-4}		Arp et al. (2006) Arp et al. (2006)	Q Q	635 636
perfluorododecanoic acid $\text{C}_{12}\text{HF}_{23}\text{O}_2$ [307-55-1] CXGONMQFMIYUJR-UHFFFAOYSA-N	6.4×10^{-3}		Plassmann et al. (2011)	E	
perfluorotetradecanoic acid $\text{C}_{14}\text{HF}_{27}\text{O}_2$ [376-06-7] RUDINRUXCKIXAJ-UHFFFAOYSA-N	1.6×10^{-3}		Plassmann et al. (2011)	E	
1,1,1,3,3,3-hexafluoro-2-propanone $\text{C}_3\text{F}_6\text{O}$ [684-16-2] VBZWSGALLODQNC-UHFFFAOYSA-N	3.2×10^{-3}		HSDB (2015)	Q	100
desflurane $\text{C}_3\text{H}_2\text{F}_6\text{O}$ [57041-67-5] DPYMFVXJLLWWEU-UHFFFAOYSA-N	1.4×10^{-4} 9.0×10^{-5}		HSDB (2015) Abraham and Weathersby (1994)	Q ?	100 21
sevoflurane $\text{C}_4\text{H}_3\text{F}_7\text{O}$ [28523-86-6] DFEYYRMXOJXRJ-UHFFFAOYSA-N	5.2×10^{-5} 1.5×10^{-4}		HSDB (2015) Abraham and Weathersby (1994)	Q ?	100 21
ethyl 2,2,2-trifluoroethyl ether $\text{C}_4\text{H}_7\text{F}_3\text{O}$ [461-24-5] ZKNHDMXIUHLX-UHFFFAOYSA-N	7.2×10^{-4}		Hilal et al. (2008)	Q	

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
iso-indoklon $\text{C}_4\text{H}_4\text{F}_6\text{O}$ (1,1,1,3,3,3-hexafluoro-2-methoxypropane) [13171-18-1] VNXYDFNVQBICRO-UHFFFAOYSA-N	5.6×10^{-5}		Abraham and Weathersby (1994)	?	21
di(2,2,2-trifluoroethyl) ether $\text{C}_4\text{H}_4\text{F}_6\text{O}$ (flurothyl) [333-36-8] KGPPDNUWZNPWSI-UHFFFAOYSA-N	9.2×10^{-3} 3.0×10^{-4}	-390	Fukuchi et al. (2002) Abraham and Weathersby (1994)	V ?	33 21
(2,2,2-trifluoroethoxy)-ethene $\text{CF}_3\text{CH}_2\text{OCHCH}_2$ (fluoroxene; fluoxene) [406-90-6] DLEGDSLRSOURQ-UHFFFAOYSA-N	5.4×10^{-4} 3.3×10^{-4} 5.5×10^{-4} 5.5×10^{-4} 3.2×10^{-4} 3.3×10^{-4} 9.5×10^{-5} 3.6×10^{-4} 5.1×10^{-4}	4000 4000 4300	Fogg and Sangster (2003) Steward et al. (1973) Allott et al. (1973) Smith et al. (1981b) Stoelting and Longshore (1972) Munson et al. (1964) Hilal et al. (2008) Abraham and Weathersby (1994) Abraham et al. (1990)	L L L M M M Q ? ?	14 14 21
2,2,2-trifluoroethyl methanoate $\text{HCOOCH}_2\text{CF}_3$ [32042-38-9] CAFROQYMUICGNO-UHFFFAOYSA-N	5.4×10^{-3} 5.4×10^{-3} 5.4×10^{-3} 5.4×10^{-3}	4700 4700 4700 4700	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Kutsuna et al. (2005)	L L L M	
2,2,2-trifluoroethyl ethanoate $\text{CH}_3\text{COOCH}_2\text{CF}_3$ [406-95-1] ZOWSJJBQDQKOHI-UHFFFAOYSA-N	5.5×10^{-3} 5.5×10^{-3} 5.5×10^{-3} 5.7×10^{-3}	5200 5200 5200 5300 6400 5500	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Kutsuna et al. (2004) Kühne et al. (2005) Kühne et al. (2005)	L L L M Q ?	637 638
trifluoroethanoic acid, methyl ester $\text{CF}_3\text{COOCH}_3$ (methyl trifluoroacetate) [431-47-0] VMVNZNXAVJHNDJ-UHFFFAOYSA-N	1.1×10^{-3} 1.1×10^{-3} 1.1×10^{-3} 1.2×10^{-3} 6100 5800	5300 5300 5300 4900	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Kutsuna et al. (2004) Kühne et al. (2005) Kühne et al. (2005)	L L L M Q ?	639, 640 641, 642 643
trifluoroethanoic acid, ethyl ester $\text{CF}_3\text{COOC}_2\text{H}_5$ (ethyl trifluoroacetate) [383-63-1] STSCVKRWJPWALQ-UHFFFAOYSA-N	8.9×10^{-4} 8.9×10^{-4} 8.9×10^{-4} 7.1×10^{-4} 8.9×10^{-4}	4900 4900 4900 4900 4900	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Kutsuna and Kaneyasu (2021) Kutsuna et al. (2005)	L L L M M	

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
trifluoro(trifluoromethyl)-oxirane $\text{C}_3\text{F}_6\text{O}$ [428-59-1] PGFXOWRDDHCDTE-UHFFFAOYSA-N	9.3×10^{-6}	2400	Clever et al. (2005)	C	644, 645
3,3,4,4,4-pentafluorobutan-1-ol $\text{C}_4\text{H}_5\text{OF}_5$ [54949-74-5] JPMHUDBOKDBBLG-UHFFFAOYSA-N	5.1×10^{-2} 3.7×10^{-1} 4.0×10^{-2} 1.5×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1,1,1,3,3,3-hexafluoro-2-methyl-2-propanol $\text{C}_4\text{H}_4\text{F}_6\text{O}$ [1515-14-6] FQDXJYBXPOMIBX-UHFFFAOYSA-N	1.8×10^{-2}		Eger et al. (1999)	M	14
2,2,3,4,4,4-hexafluoro-1-butanol $\text{C}_4\text{H}_4\text{F}_6\text{O}$ [382-31-0] LVFXLZRISXUAIL-UHFFFAOYSA-N	3.2×10^{-1}		Eger et al. (1999)	M	14
2,2,3,3,4,4,4-heptafluoro-1-butanol $\text{C}_4\text{H}_3\text{F}_7\text{O}$ [375-01-9] WXJFKAZDSQLPBX-UHFFFAOYSA-N	2.1×10^{-2}		Eger et al. (1999)	M	14
3,3,4,4,5,5,5-heptafluoro-2-pentanol $\text{C}_5\text{H}_5\text{F}_7\text{O}$ [375-14-4] RBPBIMHZSTIDT-UHFFFAOYSA-N	9.0×10^{-3}		Eger et al. (1999)	M	14
2,2,3,3,4,4,5,5-octafluoro-1-pentanol $\text{C}_5\text{H}_4\text{F}_8\text{O}$ [355-80-6] JUGSKHLZINSXPQ-UHFFFAOYSA-N	2.5×10^{-1}		Eger et al. (1999)	M	14
1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxybutane $\text{C}_5\text{H}_3\text{F}_9\text{O}$ [163702-07-6] OKIYQFLILPKULA-UHFFFAOYSA-N	9.9×10^{-6} 1.3×10^{-5} 8.4×10^{-6} 3.9×10^{-6}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1-ethoxy-1,1,2,3,3,3-hexafluoro-2-(trifluoromethyl)propane $\text{C}_6\text{H}_5\text{F}_9\text{O}$ [163702-06-5] SQEGLLMNIBLLNQ-UHFFFAOYSA-N	7.5×10^{-6} 4.7×10^{-5} 8.0×10^{-6} 3.3×10^{-6}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1H,1H,2H,2H-perfluorohexan-1-ol $\text{C}_6\text{H}_5\text{F}_9\text{O}$ (4:2 FTOH) [2043-47-2] JCMNMOBHV PONLD-UHFFFAOYSA-N	1.3×10^{-3} 6.6×10^{-3} 1.3×10^{-2} 6.1×10^{-5} 5.6×10^{-1}	4500 5400	Abusallout et al. (2022) Wu and Chang (2011) Goss et al. (2006) Lei et al. (2004) Wu and Chang (2011)	M M M M V	11 329
	1.8×10^{-3} 1.8×10^{-3} 1.3×10^{-1} 8.2×10^{-3} 2.4×10^{-4} 4.3×10^{-4} 3.1×10^{-5} 7.2×10^{-3}	7200	Abusallout et al. (2022) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Arp et al. (2006) Arp et al. (2006) Goss et al. (2006)	Q Q Q Q Q Q Q Q	634 288, 289 288, 290 288, 291 288, 292 635 636
2,2,3,3,4,4,5,5,6,6,6-undecafluoro-1-hexanol $\text{C}_6\text{H}_3\text{F}_{11}\text{O}$ [423-46-1] QZFZPVVDBGXQTB-UHFFFAOYSA-N	1.7×10^{-3}		Eger et al. (1999)	M	14
1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane $\text{C}_6\text{H}_5\text{F}_9\text{O}$ [163702-05-4] DFUYAWQUODQGFF-UHFFFAOYSA-N	7.5×10^{-6} 1.2×10^{-5} 7.5×10^{-6} 3.0×10^{-6}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoro-1-heptanol $\text{C}_7\text{H}_4\text{F}_{12}\text{O}$ [335-99-9] BYKNGMLDSIEFFG-UHFFFAOYSA-N	6.4×10^{-2}		Eger et al. (1999)	M	14
2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoro-1-heptanol $\text{C}_7\text{H}_3\text{F}_{13}\text{O}$ [375-82-6] STLNAVFCIRZLL-UHFFFAOYSA-N	6.0×10^{-4}		Eger et al. (1999)	M	14
1H,1H,2H,2H-perfluoro-1-octanol $\text{C}_8\text{H}_5\text{F}_{13}\text{O}$ (6:2 FTOH) [647-42-7] GRJRKPMIRMSBNK-UHFFFAOYSA-N	3.3×10^{-4} 1.7×10^{-4} 1.5×10^{-3} 8.5×10^{-5} 9.4×10^{-4} 3.9×10^{-1} 6.6×10^{-5} 6.5×10^{-5} 9.5×10^{-3} 3.4×10^{-3} 9.9×10^{-6}	4700 2600 7000	Abusallout et al. (2022) Wu and Chang (2011) Goss et al. (2006) Lei et al. (2004) Eger et al. (1999) Wu and Chang (2011) Abusallout et al. (2022) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	M M M M M V Q Q Q Q Q	11 329 14 634 288, 289 288, 290 288, 291 288, 292

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.8×10^{-4}		Arp et al. (2006)	Q	635
	1.8×10^{-5}		Arp et al. (2006)	Q	636
	1.8×10^{-3}	8000	Goss et al. (2006)	Q	
2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- pentadecafluoro-1-octanol $\text{C}_8\text{H}_3\text{F}_{15}\text{O}$ [307-30-2] PJDOLCGOTSNFJM-UHFFFAOYSA-N	2.3×10^{-4}		Eger et al. (1999)	M	14
3-ethoxyperfluoro(2- methylhexane) $\text{C}_9\text{H}_5\text{F}_{15}\text{O}$ [297730-93-9] HHBBIOLEJRWIGU-UHFFFAOYSA-N	1.9×10^{-8}		Ebert et al. (2023)	?	367
methyl perfluoro(8-(fluoroformyl)- 5-methyl-4,7-dioxanonanoate) $\text{C}_{10}\text{H}_3\text{F}_{15}\text{O}_5$ [69116-73-0] JOMJXR TUQWIHQD-UHFFFAOYSA-N	5.8×10^{-2}		Zhang et al. (2010)	Q	288, 289
	5.1×10^{-4}		Zhang et al. (2010)	Q	288, 290
	2.6×10^{-4}		Zhang et al. (2010)	Q	288, 291
	1.3×10^{-1}		Zhang et al. (2010)	Q	288, 292
3,3,4,4,5,5,6,6,6-nonafluorohexyl methacrylate $\text{C}_{10}\text{H}_9\text{F}_9\text{O}_2$ [1799-84-4] TYNRPOFACABVSI-UHFFFAOYSA-N	3.4×10^{-5}		Zhang et al. (2010)	Q	288, 289
	1.6×10^{-3}		Zhang et al. (2010)	Q	288, 290
	6.5×10^{-4}		Zhang et al. (2010)	Q	288, 291
	3.4×10^{-5}		Zhang et al. (2010)	Q	288, 292
1H,1H,2H,2H-perfluorodecan-1-ol $\text{C}_{10}\text{H}_5\text{F}_{17}\text{O}$ (8:2 FTOH) [678-39-7] JJUBFBTUBACDHW-UHFFFAOYSA-N	2.0×10^{-4}		Abusallout et al. (2022)	M	
	2.0×10^{-4}	3100	Wu and Chang (2011)	M	11
	1.7×10^{-4}	8800	Lei et al. (2004)	M	329
	2.4×10^{-1}		Wu and Chang (2011)	V	
	1.1×10^{-4}		Goss et al. (2006)	V	
	2.4×10^{-6}		Abusallout et al. (2022)	Q	634
	2.4×10^{-6}		Zhang et al. (2010)	Q	288, 289
	2.6×10^{-4}		Zhang et al. (2010)	Q	288, 290
	7.3×10^{-4}		Zhang et al. (2010)	Q	288, 291
	4.3×10^{-7}		Zhang et al. (2010)	Q	288, 292
	5.7×10^{-5}		Arp et al. (2006)	Q	635
	1.6×10^{-5}		Arp et al. (2006)	Q	636
	3.8×10^{-4}	8600	Goss et al. (2006)	Q	
2-methoxyperfluoro(2,5-di(propan- 2-yl)oxolane) $\text{C}_{11}\text{H}_3\text{F}_{19}\text{O}_2$ [957209-18-6] YRGYOFYTTFLPQM-UHFFFAOYSA-N	1.0×10^{-8}		Ebert et al. (2023)	?	367

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl acrylate $C_{11}H_7F_{13}O_2$ [17527-29-6] VPKQPPJQTZJZDB-UHFFFAOYSA-N	1.9×10^{-6} 1.9×10^{-4} 2.9×10^{-4} 2.4×10^{-6}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2-(perfluorohexyl)ethyl methacrylate $C_{12}H_9F_{13}O_2$ [2144-53-8] CDXFIRXEAJABAZ-UHFFFAOYSA-N	1.2×10^{-6} 1.8×10^{-4} 1.3×10^{-4} 1.5×10^{-6}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1,1,2,2-tetrahydroperfluoro dodecanol $C_{12}H_5F_{21}O$ (10:2 FTOH) [865-86-1] FLXYIZWPNQYPIT-UHFFFAOYSA-N	1.4×10^{-4} 1.3×10^{-4} 2.5×10^{-1} 9.0×10^{-8} 8.6×10^{-8} 2.7×10^{-6} 1.5×10^{-4} 1.6×10^{-8} 4.6×10^{-5} 5.2×10^{-5} 1.0×10^{-4} 1.0×10^{-5}	2700 9600	Abusallout et al. (2022) Wu and Chang (2011) Wu and Chang (2011) Abusallout et al. (2022) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Arp et al. (2006) Arp et al. (2006) Goss et al. (2006) Arp et al. (2006)	M M V Q Q Q Q Q Q Q Q E	 634 288, 289 288, 290 288, 291 288, 292 635 636 646
3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl acrylate $C_{13}H_7F_{17}O_2$ [27905-45-9] QUKRIOLKOHUUBM-UHFFFAOYSA-N	1.3×10^{-3} 7.0×10^{-8} 1.1×10^{-5} 1.1×10^{-4} 9.9×10^{-8}		Abusallout et al. (2022) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	M Q Q Q Q	 288, 289 288, 290 288, 291 288, 292
3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl methacrylate $C_{14}H_9F_{17}O_2$ [1996-88-9] HBZFBSFGXQBQT-UHFFFAOYSA-N	4.4×10^{-8} 1.0×10^{-5} 5.4×10^{-5} 6.4×10^{-8}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosfluorotetradecan-1-ol $C_{14}H_5F_{25}O$ [39239-77-5] QBBJBWVKVJWYQK-UHFFFAOYSA-N	3.1×10^{-9} 1.1×10^{-8} 3.1×10^{-5} 6.9×10^{-10}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-(perfluorodecyl)ethyl acrylate $\text{C}_{15}\text{H}_7\text{F}_{21}\text{O}_2$ [17741-60-5] FIAHOPQKBBASOY-UHFFFAOYSA-N	2.5×10^{-9} 3.1×10^{-7} 2.4×10^{-5} 3.7×10^{-9}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1,1,2,2-tetrahydroperfluoro-1-hexadecanol $\text{C}_{16}\text{H}_5\text{OF}_{29}$ [60699-51-6] ZDUOTHMDVYXZBS-UHFFFAOYSA-N	1.1×10^{-10} 1.4×10^{-11} 6.1×10^{-6} 2.9×10^{-11}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2-(perfluorodecyl)ethyl methacrylate $\text{C}_{16}\text{H}_9\text{F}_{21}\text{O}_2$ [2144-54-9] FQHLOOXLDQLPF-UHFFFAOYSA-N	1.6×10^{-9} 3.1×10^{-7} 1.1×10^{-5} 2.4×10^{-9}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafuorotetradecyl prop-2-enoate $\text{C}_{17}\text{H}_7\text{F}_{25}\text{O}_2$ [34395-24-9] SWTZSHBOMGAQKX-UHFFFAOYSA-N	9.0×10^{-11} 5.0×10^{-9} 2.7×10^{-3} 1.6×10^{-10}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
profluthrin $\text{C}_{17}\text{H}_{18}\text{F}_4\text{O}_2$ [223419-20-3] AGMMRUPNXPWLG-AATRIKPKSA-N	2.5×10^{-2}		Ebert et al. (2023)	?	319
2-perfluorododecylethyl methacrylate $\text{C}_{18}\text{H}_9\text{F}_{25}\text{O}_2$ [6014-75-1] LFEGLDRNIDJMKB-UHFFFAOYSA-N	5.8×10^{-11} 5.0×10^{-9} 2.3×10^{-6} 9.9×10^{-11}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1,1,2,2-tetrahydroperfluoro-1-octadecanol $\text{C}_{18}\text{H}_5\text{OF}_{33}$ [65104-67-8] UYSGWTCTIRUHO-UHFFFAOYSA-N	4.1×10^{-12} 6.7×10^{-15} 1.2×10^{-6} 1.1×10^{-12}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
metofluthrin $\text{C}_{18}\text{H}_{20}\text{F}_4\text{O}_3$ [240494-70-6] KVIZNNVXXNFLMU-AATRIKPKSA-N	1.0		HSDB (2015)	V	

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1,2,2-tetrahydroperfluorohexadecyl acrylate $\text{C}_{19}\text{H}_7\text{F}_{29}\text{O}_2$ [34362-49-7] KLOHTAIHCCMZIL-UHFFFAOYSA-N	3.3×10^{-12}		Zhang et al. (2010)	Q	288, 289
fluoxymesterone $\text{C}_{20}\text{H}_{29}\text{FO}_3$ [76-43-7] YLRFCQOZQXIBAB-YXVJBPKESA-N	4.1×10^{-11}		Zhang et al. (2010)	Q	288, 290
	6.5×10^{-4}		Zhang et al. (2010)	Q	288, 291
	6.9×10^{-12}		Zhang et al. (2010)	Q	288, 292
dexamethasone $\text{C}_{22}\text{H}_{29}\text{FO}_5$ [50-02-2] UREBDLICKHMUKA-GCMAGEFQSA-N	1.4×10^2		HSDB (2015)	Q	100
1,1,2,2-tetrahydroperfluoroicosyl alcohol $\text{C}_{20}\text{H}_5\text{OF}_{37}$ [65104-65-6] FDCQNVKWWWMNQRN-UHFFFAOYSA-N	1.5×10^{-13}		Zhang et al. (2010)	Q	288, 289
	2.2×10^{-18}		Zhang et al. (2010)	Q	288, 290
	2.4×10^{-7}		Zhang et al. (2010)	Q	288, 291
2-hydroxyfluorobenzene $\text{C}_6\text{H}_5\text{FO}$ (<i>o</i> -fluorophenol) [367-12-4] HFHFGHLXUCOHLN-UHFFFAOYSA-N	4.6×10^{-14}		Zhang et al. (2010)	Q	288, 292
	3.1		Abraham et al. (1994a)	R	
	4.3		Keshavarz et al. (2022)	Q	
	5.1×10^1		Duchowicz et al. (2020)	Q	300
	2.3		Hilal et al. (2008)	Q	
	2.9		Modarresi et al. (2007)	Q	68
	3.1		Yaffe et al. (2003)	Q	249, 250
4-hydroxyfluorobenzene $\text{C}_6\text{H}_5\text{FO}$ (<i>p</i> -fluorophenol) [371-41-5] RHMPDJJXGPMEX-UHFFFAOYSA-N	2.1×10^2		Nirmalakhandan et al. (1997)	Q	
	3.1		Duchowicz et al. (2020)	?	186, 21
	1.4×10^1		Abraham et al. (1994a)	R	
	4.3		Keshavarz et al. (2022)	Q	
	1.3×10^2		Duchowicz et al. (2020)	Q	
	7.9		Hilal et al. (2008)	Q	
	3.3		Modarresi et al. (2007)	Q	68
	1.4×10^1		Yaffe et al. (2003)	Q	249, 250
3-fluorophenol $\text{C}_6\text{H}_5\text{FO}$ [372-20-3] SJTBRFHBDZMPS-UHFFFAOYSA-N	2.1×10^1		English and Carroll (2001)	Q	231, 232
	2.1×10^2		Nirmalakhandan et al. (1997)	Q	
	1.4×10^1		Duchowicz et al. (2020)	?	186, 21

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,6-difluorophenol $\text{C}_6\text{H}_4\text{F}_2\text{O}$ [28177-48-2] CKKOVFGIBXCEIJ-UHFFFAOYSA-N	7.0×10^{-1}		Hilal et al. (2008)	Q	
4,4'- (hexafluoroisopropylidene)diphenol $\text{C}_{15}\text{H}_{10}\text{F}_6\text{O}_2$ [1478-61-1] ZFVMWEVVKGLCIJ-UHFFFAOYSA-N	1.7×10^4		HSDB (2015)	Q	449
	1.7×10^4		Zhang et al. (2010)	Q	288, 289
	1.4×10^6		Zhang et al. (2010)	Q	288, 290
	2.1×10^5		Zhang et al. (2010)	Q	288, 291
	5.3×10^3		Zhang et al. (2010)	Q	288, 292
flocoumafen $\text{C}_{33}\text{H}_{25}\text{F}_3\text{O}_4$ [90035-08-8] KKBGNYHHEIAGOH-UHFFFAOYSA-N	1.4×10^7		HSDB (2015)	Q	100
2,3,3,3-tetrafluoro-2- (trifluoromethyl)propanenitrile $\text{C}_4\text{F}_7\text{N}$ [42532-60-5] AASDJASZOGYMM-UHFFFAOYSA-N	1.6×10^{-8}		Ebert et al. (2023)	?	367
2-fluoroaniline $\text{C}_6\text{H}_6\text{FN}$ [348-54-9] FTZXQXOJYPFINKJ-UHFFFAOYSA-N	1.4		Ebert et al. (2023)	?	319
4-fluoroaniline $\text{C}_6\text{H}_6\text{FN}$ [371-40-4] KRZCOLNOCZKSDF-UHFFFAOYSA-N	1.6		HSDB (2015)	Q	449
3-(trifluoromethyl)aniline $\text{C}_7\text{H}_6\text{F}_3\text{N}$ [98-16-8] VIUDTWATMPPKEL-UHFFFAOYSA-N	3.9×10^{-1}		Ebert et al. (2023)	?	317
perfluorotributylamine $\text{C}_{12}\text{F}_{27}\text{N}$ [311-89-7] RVZRBWKZFJCCIB-UHFFFAOYSA-N	1.8×10^{-10}		HSDB (2015)	Q	100
	1.8×10^{-10}		Zhang et al. (2010)	Q	288, 289
	3.4×10^{-10}		Zhang et al. (2010)	Q	288, 290
	1.8×10^{-9}		Zhang et al. (2010)	Q	288, 291
	2.7×10^{-10}		Zhang et al. (2010)	Q	288, 292

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N-ethyl-1-[3-(trifluoromethyl)phenyl]-2-propanamine $\text{C}_{12}\text{H}_{16}\text{F}_3\text{N}$ (fenfluramine) [458-24-2] DBGIVFWFUFKIQN-UHFFFAOYSA-N	3.7×10^{-1}		HSDB (2015)	Q	100
tris(undecafluoropentyl)amine $\text{C}_{15}\text{F}_{33}\text{N}$ [338-84-1] AQZYBQIAUSKCCS-UHFFFAOYSA-N	1.2×10^{-12} 1.0×10^{-12} 3.4×10^{-10} 2.1×10^{-12}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
indaziflam A $\text{C}_{16}\text{H}_{20}\text{FN}_5$ [730979-19-8] YFONKFDEZLYQDH-OPQQBVKSSA-N	1.8×10^5		Ebert et al. (2023)	?	319
indaziflam B $\text{C}_{16}\text{H}_{20}\text{FN}_5$ [730979-32-5] YFONKFDEZLYQDH-OUJBWJOFSA-N	5.3×10^5		Ebert et al. (2023)	?	319
cinacalcet $\text{C}_{22}\text{H}_{22}\text{F}_3\text{N}$ [226256-56-0] VDHAWDNDOKGFTD-MRXNPFEDSA-N	4.5×10^1		HSDB (2015)	Q	100
hydramethylnon $\text{C}_{25}\text{H}_{24}\text{F}_6\text{N}_4$ [67485-29-4] IQVNEKKSLOHHK-FNCQTZNRSA-N	4.5 4.5 2.7×10^6		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
2-fluoroacetamide $\text{C}_2\text{H}_4\text{FNO}$ [640-19-7] FVTWJXMFYOXOKK-UHFFFAOYSA-N	4.4×10^2		HSDB (2015)	Q	100
5-fluorouracil $\text{C}_4\text{H}_3\text{FN}_2\text{O}_2$ [51-21-8] GHASVSINZRGABV-UHFFFAOYSA-N	5.8×10^4		HSDB (2015)	Q	100
perfluoro-N-methylmorpholine $\text{C}_5\text{F}_{11}\text{NO}$ [382-28-5] PQMAKJUXOOVROI-UHFFFAOYSA-N	6.4×10^{-8}		Ebert et al. (2023)	?	367

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-fluoro-2,4-dinitrobenzene $\text{C}_6\text{H}_3\text{FN}_2\text{O}_4$ [70-34-8] LOTKRQAVGJMPNV-UHFFFAOYSA-N	1.0×10^2		HSDB (2015)	Q	449
5-fluoro-2-nitrophenol $\text{C}_6\text{H}_4\text{FNO}_3$ [446-36-6] QQURWFRNETXFTN-UHFFFAOYSA-N	5.0×10^{-1} 5.8	4100 6200	Tremp et al. (1993) Schwarzenbach et al. (1988) Kühne et al. (2005) Kühne et al. (2005)	M V Q ?	12 12
4-nitro-3-(trifluoromethyl)phenol $\text{C}_7\text{H}_4\text{F}_3\text{NO}_3$ [88-30-2] ZEFMBAFMCSYJOO-UHFFFAOYSA-N	5.2×10^2 5.2×10^2 6.7×10^3 3.9×10^4 1.2×10^3		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
1-nitro-3-(trifluoromethyl)benzene $\text{C}_7\text{H}_4\text{F}_3\text{NO}_2$ [98-46-4] WHNAMGUAXHGCHH-UHFFFAOYSA-N	5.3×10^{-2} 2.0×10^{-1} 5.7×10^{-2} 8.2×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1-isocyanato-3-(trifluoromethyl)-benzene $\text{C}_8\text{H}_4\text{F}_3\text{NO}$ [329-01-1] SXJYSIBLFGQAND-UHFFFAOYSA-N	4.8×10^{-3} 2.5 1.3×10^{-3} 6.4×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
flonicamid $\text{C}_9\text{H}_6\text{F}_3\text{N}_3\text{O}$ [158062-67-0] RLQJEEJISHYWON-UHFFFAOYSA-N	2.4×10^7 2.4×10^7		HSDB (2015) Maniere et al. (2011)	V ?	242, 166
trifluridine $\text{C}_{10}\text{H}_{11}\text{F}_3\text{N}_2\text{O}_5$ [70-00-8] VSQQLOSPVPRAZ-RRKCRQDMSA-N	1.0×10^{11}		HSDB (2015)	Q	100
N-(4-amino-2-hydroxyphenyl)-2,2,3,3,4,4,4-heptafluorobutanamide $\text{C}_{10}\text{H}_7\text{F}_7\text{N}_2\text{O}_2$ [847-51-8] STPOJASQXPXVMS-UHFFFAOYSA-N	2.0×10^8 2.3×10^7 1.5×10^5 5.7×10^6		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
fluometuron $\text{C}_{10}\text{H}_{11}\text{F}_3\text{N}_2\text{O}$ [2164-17-2] RZILCCPWPBTYDO-UHFFFAOYSA-N	5.8×10^3 3.8×10^3		Mackay et al. (2006d) HSDB (2015)	V C	

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dinitramine $\text{C}_{11}\text{H}_{13}\text{F}_3\text{N}_4\text{O}_4$ [29091-05-2] OFDYMSKSGFSLLM-UHFFFAOYSA-N	7.1 6.5 6.2		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988)	V V V	12
5-methyl-N-[4-(trifluoromethyl)phenyl]-4-isoxazolecarboxamide $\text{C}_{12}\text{H}_9\text{F}_3\text{N}_2\text{O}_2$ (leflunomide) [75706-12-6] VHOGYURTWQBHIL-UHFFFAOYSA-N	8.0×10^4		HSDB (2015)	Q	100
fludioxonil $\text{C}_{12}\text{H}_6\text{F}_2\text{N}_2\text{O}_2$ [131341-86-1] MUJOIMFVNIBMKC-UHFFFAOYSA-N	1.9×10^4 1.6×10^4 1.9×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	187 242, 166
fluconazole $\text{C}_{13}\text{H}_{12}\text{F}_2\text{N}_6\text{O}$ [86386-73-4] RFHAOTPXVQNOHP-UHFFFAOYSA-N	9.9×10^7		HSDB (2015)	Q	100
ethalfluralin $\text{C}_{13}\text{H}_{14}\text{F}_3\text{N}_3\text{O}_4$ [55283-68-6] PTFJIKYUEPBMS-UHFFFAOYSA-N	7.6×10^{-2}		HSDB (2015)	V	
benfluralin $\text{C}_{13}\text{H}_{16}\text{F}_3\text{N}_3\text{O}_4$ (benefin) [1861-40-1] SMDHCQAYESWHAU-UHFFFAOYSA-N	3.4×10^{-2} 7.5×10^{-1} 1.1×10^{-1}		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Maniere et al. (2011)	V V V ?	560 12 12, 166
trifluralin $\text{C}_{13}\text{H}_{16}\text{F}_3\text{N}_3\text{O}_4$ [1582-09-8] ZSDSQXJSNMTJDA-UHFFFAOYSA-N	9.5×10^{-2} 9.1×10^{-1} 1.9×10^{-1} 1.7×10^{-1} 2.5×10^{-1} 3.8 2.5×10^{-3} 9.6×10^{-2} 8.3×10^{-4} 1.7 2.6×10^{-1}		Rice et al. (1997b) Watanabe (1993) Fendinger et al. (1989) Fendinger et al. (1989) Mackay et al. (2006d) Suntio et al. (1988) Sanders and Seiber (1983) Barcelo and Hennion (1997) HSDB (2015) Goodarzi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Kühne et al. (2005)	M M M M V V V X C Q Q Q Q Q ?	12 73 647 560 12 88 569 570 68

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
prodiamine $\text{C}_{13}\text{H}_{17}\text{F}_3\text{N}_4\text{O}_4$ [29091-21-2] RSVPPPHXAASNOL-UHFFFAOYSA-N	1.3		Ebert et al. (2023)	?	317
fluorodifen $\text{C}_{13}\text{H}_7\text{F}_3\text{N}_2\text{O}_5$ [15457-05-3] HHMCAJWVGYGUEF-UHFFFAOYSA-N	6.5×10^2		Mackay et al. (2006d) MacBean (2012a)	V ?	560
profluralin $\text{C}_{14}\text{H}_{16}\text{F}_3\text{N}_3\text{O}_4$ [26399-36-0] ITVQAKZNYJEWKS-UHFFFAOYSA-N	3.4×10^{-2} 3.2×10^{-2} 2.6×10^{-2} 3.4×10^{-2}		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) MacBean (2012a)	V V V ?	12
flumequine $\text{C}_{14}\text{H}_{12}\text{FNO}_3$ [42835-25-6] DPSPPJIUMHPXMA-UHFFFAOYSA-N	3.7×10^7		HSDB (2015)	Q	100
fluazifop $\text{C}_{15}\text{H}_{12}\text{F}_3\text{NO}_4$ [69335-91-7] YUVKUEAFVKILW-UHFFFAOYSA-N	3.4×10^7		Ebert et al. (2023)	?	317
fluazifop-p $\text{C}_{15}\text{H}_{12}\text{F}_3\text{NO}_4$ [83066-88-0] YUVKUEAFVKILW-SECBINFHSA-N	1.0×10^6		Ebert et al. (2023)	?	317
prosulfuron $\text{C}_{15}\text{H}_{16}\text{F}_3\text{N}_5\text{O}_4\text{S}$ [94125-34-5] LTUNNEGNEKBSEH-UHFFFAOYSA-N	$> 3.3 \times 10^3$		Maniere et al. (2011)	?	166
flurprimidol $\text{C}_{15}\text{H}_{15}\text{N}_2\text{O}_2\text{F}_3$ [56425-91-3] VEVZCONIUDBCDC-UHFFFAOYSA-N	7.5×10^3 2.5×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
flutriafol $\text{C}_{16}\text{H}_{13}\text{F}_2\text{N}_3\text{O}$ [76674-21-0] JWUGHKBSVLQQCO-UHFFFAOYSA-N	6.1×10^7 7.6×10^4 7.9×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	187 12, 166
flunitrazepam $\text{C}_{16}\text{H}_{12}\text{FN}_3\text{O}_3$ [1622-62-4] PPTYJKAXVCCBDU-UHFFFAOYSA-N	4.3×10^5		HSDB (2015)	Q	100

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cyhalofop $\text{C}_{16}\text{H}_{12}\text{FNO}_4$ [122008-78-0] ROBSGBGTWRRYSK-SNVBAGLBSA-N	1.7×10^5		Ebert et al. (2023)	?	319
benzpyrimoxan $\text{C}_{16}\text{H}_{15}\text{F}_3\text{N}_2\text{O}_3$ [1449021-97-9] ZYXYTGQFPZEUFX-UHFFFAOYSA-N	1.1×10^3		Ebert et al. (2023)	?	319
tolprocarb $\text{C}_{16}\text{H}_{21}\text{F}_3\text{N}_2\text{O}_3$ [911499-62-2] RSOBJVBYZCMJOS-CYBMUJFWSA-N	6.5×10^4		Ebert et al. (2023)	?	319
flutolanil $\text{C}_{17}\text{H}_{16}\text{F}_3\text{NO}_2$ [66332-96-5] PTCGDEVVHUXTMP-UHFFFAOYSA-N	3.1×10^3 2.5 6.1×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	187 242, 166
beflubutamid $\text{C}_{18}\text{H}_{17}\text{F}_4\text{NO}_2$ [113614-08-7] FFQPZWRNXPX-UHFFFAOYSA-N	9.1×10^3		Maniere et al. (2011)	?	242, 166
fluxapyroxad $\text{C}_{18}\text{H}_{12}\text{F}_5\text{N}_3\text{O}$ [907204-31-3] SXSGXWCSHSPGB-UHFFFAOYSA-N	3.3×10^6		Maniere et al. (2011)	?	12, 166
flurtamone $\text{C}_{18}\text{H}_{14}\text{F}_3\text{NO}_2$ [96525-23-4] NYRMIJKDBAQCHC-UHFFFAOYSA-N	1.6×10^8		Ebert et al. (2023)	?	319
picoxystrobin $\text{C}_{18}\text{H}_{16}\text{F}_3\text{NO}_4$ [117428-22-5] IBSNKSODLGJUMQ-SDNWHVVSQSA-N	1.4×10^3		Ebert et al. (2023)	?	317
sedaxane $\text{C}_{18}\text{H}_{19}\text{F}_2\text{N}_3\text{O}$ [874967-67-6] XQJQCBDIXRIYRP-UHFFFAOYSA-N	2.5×10^5		Maniere et al. (2011)	?	166
penflufen $\text{C}_{18}\text{H}_{24}\text{FN}_3\text{O}$ [494793-67-8] GOFJDXZZHFNFLV-UHFFFAOYSA-N	3.2×10^4		Ebert et al. (2023)	?	319

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
fluazifop-p-butyl $\text{C}_{19}\text{H}_{20}\text{F}_3\text{NO}_4$ [79241-46-6] VAIZTNZGPYBOGF-CYBMUJFWSA-N	2.0×10^1		Maniere et al. (2011)	?	12, 166
picolinafen $\text{C}_{19}\text{H}_{12}\text{F}_4\text{N}_2\text{O}_2$ [137641-05-5] CWKFPEBMTGKLLX-UHFFFAOYSA-N	6.2×10^2		Maniere et al. (2011)	?	12, 166
diflufenican $\text{C}_{19}\text{H}_{11}\text{F}_5\text{N}_2\text{O}_2$ [83164-33-4] WYEHFWKAOXOVJD-UHFFFAOYSA-N	6.4×10^1 1.1×10^3 3.0×10^1 $< 8.5 \times 10^1$		Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	Q Q ? ?	186, 21 242, 166
fluazifop-butyl $\text{C}_{19}\text{H}_{20}\text{F}_3\text{NO}_4$ [69806-50-4] VAIZTNZGPYBOGF-UHFFFAOYSA-N	4.7×10^1		HSDB (2015)	V	
flumioxazin $\text{C}_{19}\text{H}_{15}\text{FN}_2\text{O}_4$ [103361-09-7] FOUWCSDKDDHKQP-UHFFFAOYSA-N	1.6×10^1 1.6×10^1		HSDB (2015) Maniere et al. (2011)	V ?	12, 166
fluridone $\text{C}_{19}\text{H}_{14}\text{F}_3\text{NO}$ [59756-60-4] YWBVHLJPRPCRSU-UHFFFAOYSA-N	1.2×10^3 2.8×10^3 1.9×10^2		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	187 560
cyhalofop-butyl $\text{C}_{20}\text{H}_{20}\text{FNO}_4$ [122008-85-9] TYIYMOAHACZAMQ-CQSZACIVSA-N	1.0×10^3 1.1×10^3		MacBean (2012b) Maniere et al. (2011)	X ?	352 242, 166
raltegravir $\text{C}_{20}\text{H}_{21}\text{FN}_6\text{O}_5$ [518048-05-0] CZFFBEXEKNGXKS-UHFFFAOYSA-N	1.1×10^{17}		HSDB (2015)	Q	100
fluacrypyrim $\text{C}_{20}\text{H}_{21}\text{N}_2\text{O}_5\text{F}_3$ [229977-93-9] MXWAGQASUDSFBG-RVDMUPIBSA-N	3.0×10^2		MacBean (2012a)	?	12
trifloxystrobin $\text{C}_{20}\text{H}_{19}\text{F}_3\text{N}_2\text{O}_4$ [141517-21-7] ONCZDRURRATYFI-UHFFFAOYSA-N	4.3×10^2 4.3×10^2		MacBean (2012b) Maniere et al. (2011)	X ?	352 166

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
isopyrazam $\text{C}_{20}\text{H}_{23}\text{F}_2\text{N}_3\text{O}$ [881685-58-1] XTDZGXBTXBEZDN-UHFFFAOYSA-N	5.3×10^3 2.7×10^4		Maniere et al. (2011) Maniere et al. (2011)	? ?	242, 166 242, 166
syn-isopyrazam $\text{C}_{20}\text{H}_{23}\text{F}_2\text{N}_3\text{O}$ [683777-13-1] XTDZGXBTXBEZDN-HEHGZKQESA-N	5.2×10^6		Ebert et al. (2023)	?	319
anti-isopyrazam $\text{C}_{20}\text{H}_{23}\text{F}_2\text{N}_3\text{O}$ [683777-14-2] XTDZGXBTXBEZDN-XEZPLFJOSA-N	2.6×10^6		Ebert et al. (2023)	?	319
etoxazole $\text{C}_{21}\text{H}_{23}\text{F}_2\text{NO}_2$ [153233-91-1] IXSZQYVWNJNRAL-UHFFFAOYSA-N	9.6×10^1 9.9×10^1 1.7×10^2 2.8×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	187 166
droperidol $\text{C}_{22}\text{H}_{22}\text{FN}_3\text{O}_2$ [548-73-2] RMEDXOLNCUSCGS-UHFFFAOYSA-N	3.7×10^{11}		HSDB (2015)	Q	100
paliperidone $\text{C}_{23}\text{H}_{27}\text{FN}_4\text{O}_3$ [144598-75-4] PMXMIIMHBWHSKN-UHFFFAOYSA-N	1.2×10^{15}		HSDB (2015)	Q	100
risperidone $\text{C}_{23}\text{H}_{27}\text{FN}_4\text{O}_2$ [106266-06-2] RAPZEAPATHNIPO-UHFFFAOYSA-N	4.5×10^{10}		HSDB (2015)	Q	100
ezetimibe $\text{C}_{24}\text{H}_{21}\text{F}_2\text{NO}_3$ [163222-33-1] OLNTVTPDXPETLC-XPWALMASSA-N	2.2×10^{12}		HSDB (2015)	Q	100
cyflumetofen $\text{C}_{24}\text{H}_{24}\text{F}_3\text{NO}_4$ [400882-07-7] AWSZRJQNBMEZOI-UHFFFAOYSA-N	$> 1.1 \times 10^1$		Maniere et al. (2011)	?	242, 166
acrinathrin $\text{C}_{26}\text{H}_{21}\text{F}_6\text{NO}_5$ [101007-06-1] YLFVIMMRPNPFK-WEQBUNFVSA-N	9.3×10^1		Maniere et al. (2011)	?	12, 166

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cerivastatin $\text{C}_{26}\text{H}_{34}\text{FNO}_5$ [145599-86-6] SEERZIQQUAZTOL-ANMDKAQQSA-N	1.7×10^{13}		HSDB (2015)	Q	100
flucythrinate, isomer 1 $\text{C}_{26}\text{H}_{23}\text{F}_2\text{NO}_4$ [70124-77-5] GBIHOLCMZGAKNG-UHFFFAOYSA-N	1.1×10^2 9.3×10^2		HSDB (2015) Mackay et al. (2006d)	V V	
PFBHA-methanal $\text{H}_2\text{C}=\text{NOCH}_2\text{C}_6\text{F}_5$ [86356-73-2] SRTQFRQWTUMMTC-UHFFFAOYSA-N	1.6×10^{-2}	7200	Destailats and Charles (2002)	M	
PFBHA-ethanal $\text{CH}_3\text{CH}=\text{NOCH}_2\text{C}_6\text{F}_5$ [114611-59-5] AKDRYEADQPNLOH-UHFFFAOYSA-N	1.9×10^{-2}	5400	Destailats and Charles (2002)	M	
PFBHA-propanone $(\text{CH}_3)_2\text{C}=\text{NOCH}_2\text{C}_6\text{F}_5$ [899828-53-6] DLIFNTQMBOCKTL-UHFFFAOYSA-N	1.1×10^{-2}	3800	Destailats and Charles (2002)	M	
PFBHA-butanone $(\text{C}_2\text{H}_5)(\text{CH}_3)\text{C}=\text{NOCH}_2\text{C}_6\text{F}_5$ LNDQFOSWZJYEIC-UHFFFAOYSA-N	4.7×10^{-3}	6000	Destailats and Charles (2002)	M	
PFBHA-2-pentanone $(\text{C}_3\text{H}_7)(\text{CH}_3)\text{C}=\text{NOCH}_2\text{C}_6\text{F}_5$ YKQOTQPNOJSJFA-UHFFFAOYSA-N	3.7×10^{-3}	2200	Destailats and Charles (2002)	M	
PFBHA-hexanal $\text{C}_5\text{H}_{11}\text{CH}=\text{NOCH}_2\text{C}_6\text{F}_5$ GPAVMFOMYSGJDM-UHFFFAOYSA-N	5.8×10^{-3}		Destailats and Charles (2002)	M	
PFBHA-octanal $\text{C}_7\text{H}_{15}\text{CH}=\text{NOCH}_2\text{C}_6\text{F}_5$ RLSQIXNUIITXKZ-UHFFFAOYSA-N	7.9×10^{-3}		Destailats and Charles (2002)	M	
PFBHA-decanal $\text{C}_9\text{H}_{19}\text{CH}=\text{NOCH}_2\text{C}_6\text{F}_5$ NUGDFCWVLOJWOP-UHFFFAOYSA-N	2.4×10^{-2}		Destailats and Charles (2002)	M	
PFBHA-propenal $\text{CH}_2\text{CHCH}=\text{NOCH}_2\text{C}_6\text{F}_5$ ICDUEGOPUWNJNF-UHFFFAOYSA-N	9.5×10^{-3}	5400	Destailats and Charles (2002)	M	

Table A5.1: Organic fluorine (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(<i>E</i>)-PFBHA-propenal $\text{C}_{10}\text{H}_6\text{F}_5\text{NO}$ [932710-55-9] ICDUEGOPUWNJNF-HQYXKAPLSA-N	9.5×10^{-3}		Ebert et al. (2023)	?	581
PFBHA-crotonaldehyde $\text{CH}_3\text{CHCHCH}=\text{NOCH}_2\text{C}_6\text{F}_5$ [932710-52-6] QNPFFCQTVXPCLD-UHFFFAOYSA-N	6.8×10^{-3}	3400	Destailats and Charles (2002)	M	
PFBHA-benzaldehyde $\text{C}_6\text{H}_5\text{CH}=\text{NOCH}_2\text{C}_6\text{F}_5$ UKSAZCDAGVHMRF-UHFFFAOYSA-N	5.0×10^{-3}	2000	Destailats and Charles (2002)	M	
PFBHA-4-methyl-benzaldehyde $\text{C}_8\text{H}_8=\text{NOCH}_2\text{C}_6\text{F}_5$ UCASBURGYXMQLW-UHFFFAOYSA-N	6.6×10^{-3}		Destailats and Charles (2002)	M	
PFBHA-9-fluorenone $\text{C}_{13}\text{H}_8=\text{NOCH}_2\text{C}_6\text{F}_5$ UABDVZDYKDIZFO-UHFFFAOYSA-N	1.1×10^{-2}		Destailats and Charles (2002)	M	
PFBHA-ethanedial $(\text{HC}=\text{NOCH}_2\text{C}_6\text{F}_5)_2$ [618858-54-1] VNVBOBJSRGZDCW-UHFFFAOYSA-N	1.6×10^{-2}		Destailats and Charles (2002)	M	
PFBHA-1-hydroxypropanone $(\text{CH}_2\text{OH})(\text{CH}_3)\text{C}=\text{NOCH}_2\text{C}_6\text{F}_5$ BCTASVPUYLXFBW-UHFFFAOYSA-N	2.7×10^{-2}		Destailats and Charles (2002)	M	
PFBHA-3-hydroxy-3-methyl-2-butanone $(\text{HOC}_3\text{H}_6)(\text{CH}_3)\text{C}=\text{NOCH}_2\text{C}_6\text{F}_5$ VNWJPJWLJGZUDTBZ-UHFFFAOYSA-N	1.2×10^{-2}		Destailats and Charles (2002)	M	

A6 Organic species with chlorine (Cl)

A6.1 Chlorocarbons (C, H, Cl)

Table A6.1: Chlorocarbons (C, H, Cl)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
chloromethane	1.0×10^{-3}	2900	Schwardt et al. (2021)	L	1
CH ₃ Cl	1.0×10^{-3}	2900	Burkholder et al. (2019)	L	1
(methyl chloride)	8.7×10^{-4}	3400	Burkholder et al. (2019)	L	71
[74-87-3]	1.1×10^{-3}	3300	Burkholder et al. (2015)	L	
NEHMKBQYUWJMIP-UHFFFAOYSA-N	8.7×10^{-4}	3400	Burkholder et al. (2015)	L	71
	1.0×10^{-3}	2800	Brockbank (2013)	L	1
	1.3×10^{-3}	3300	Sander et al. (2011)	L	648
	1.1×10^{-3}	3300	Warneck (2007)	L	
	1.3×10^{-3}	3300	Sander et al. (2006)	L	649
	1.1×10^{-3}	3300	Staudinger and Roberts (2001)	L	
	1.1×10^{-3}		Mackay and Shiu (1981)	L	
	1.0×10^{-3}	2800	Wilhelm et al. (1977)	L	
	7.9×10^{-4}	2400	Hiatt (2013)	M	
	9.1×10^{-4}	2000	Chen et al. (2012)	M	
	8.8×10^{-4}	3200	Moore (2000)	M	71
	9.3×10^{-4}	3300	Moore et al. (1995)	M	71
	8.5×10^{-4}	2800	Reichl (1995)	M	650
	1.1×10^{-3}	3000	Elliott and Rowland (1993)	M	
	1.2×10^{-3}	4200	Gossett (1987)	M	
	1.4×10^{-3}		Pearson and McConnell (1975)	M	651, 12
	1.1×10^{-3}	2600	Swain and Thornton (1962)	M	
	9.9×10^{-4}	2500	Boggs and Buck (1958)	M	
	1.0×10^{-3}	2900	Glew and Moelwyn-Hughes (1953)	M	652
	1.0×10^{-3}		Mackay et al. (2006b)	V	
	4.2×10^{-4}		Lide and Frederikse (1995)	V	
	1.0×10^{-3}		Mackay et al. (1993)	V	
	1.1×10^{-3}		Dilling (1977)	V	653
	1.2×10^{-3}		Dilling (1977)	V	12
	9.9×10^{-4}		Hine and Mookerjee (1975)	V	
	1.2×10^{-3}		Yaws (2003)	X	238
	2.9×10^{-4}	-630	Goldstein (1982)	X	299
	2.5×10^{-5}		Ryan et al. (1988)	C	
	1.1×10^{-3}		Hayer et al. (2022)	Q	20
	2.7×10^{-4}		Wang et al. (2017)	Q	81, 239
	1.4×10^{-3}		Wang et al. (2017)	Q	81, 240
	1.8×10^{-3}		Wang et al. (2017)	Q	81, 241
	9.9×10^{-4}		Li et al. (2014)	Q	242
	6.8×10^{-4}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	272, 244
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	1.0×10^{-3}		Gharagheizi et al. (2010)	Q	247

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.0×10^{-3}		Hilal et al. (2008)	Q	
	1.9×10^{-3}	2600	Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	
	1.1×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	8.6×10^{-4}		Yao et al. (2002)	Q	230
	1.0×10^{-3}		English and Carroll (2001)	Q	231, 232
	3.7×10^{-4}		Katritzky et al. (1998)	Q	
	8.6×10^{-4}		Suzuki et al. (1992)	Q	233
	3.9×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	8.6×10^{-4}		Irmann (1965)	Q	
	1.1×10^{-3}	2700	Mackay et al. (2006b)	?	
			Kühne et al. (2005)	?	
	1.2×10^{-3}		Yaws (1999)	?	21
	6.9×10^{-4}		Abraham and Weathersby (1994)	?	21
	1.2×10^{-3}		Yaws and Yang (1992)	?	21
	1.0×10^{-3}		Abraham et al. (1990)	?	
dichloromethane CH_2Cl_2 (methylene chloride) [75-09-2] YMWUJEATGCHHMB-UHFFFAOYSA-N	3.9×10^{-3}	3500	Schwardt et al. (2021)	L	1
	3.9×10^{-3}	3700	Burkholder et al. (2019)	L	
	3.5×10^{-3}	3900	Burkholder et al. (2019)	L	71
	3.9×10^{-3}	3700	Burkholder et al. (2015)	L	
	3.5×10^{-3}	3900	Burkholder et al. (2015)	L	71
	3.7×10^{-3}	3300	Brockbank (2013)	L	1
	3.6×10^{-3}	4100	Sander et al. (2011)	L	
	3.9×10^{-3}	3700	Warneck (2007)	L	
	3.6×10^{-3}	4100	Sander et al. (2006)	L	
	3.6×10^{-3}	4100	Staudinger and Roberts (2001)	L	
	3.6×10^{-3}	4100	Staudinger and Roberts (1996)	L	
	3.8×10^{-3}		Mackay and Shiu (1981)	L	
	4.0×10^{-3}	3900	Hiatt (2013)	M	
	3.5×10^{-3}	2300	Chen et al. (2012)	M	
	3.6×10^{-3}	3700	Ooki and Yokouchi (2011)	M	71
	3.2×10^{-3}		Helburn et al. (2008)	M	
	4.3×10^{-3}	3500	Lutsyk et al. (2005)	M	
	3.3×10^{-3}	4200	Moore (2000)	M	71
	3.9×10^{-3}		David et al. (2000)	M	73
	3.4×10^{-3}		McIntosh and Heffron (2000)	M	14
	4.1×10^{-3}		Ryu and Park (1999)	M	
	3.4×10^{-3}		Chiang et al. (1998)	M	654, 12
	3.7		Welke et al. (1998)	M	
	5.1×10^{-3}		Hovorka and Dohnal (1997)	M	12
	3.7×10^{-3}	3200	Kondoh and Nakajima (1997)	M	
	4.3×10^{-3}	3500	Park et al. (1997)	M	
	4.1×10^{-3}		Hoff et al. (1993)	M	
	3.8×10^{-3}		Li et al. (1993)	M	
	3.9×10^{-3}	3400	Wright et al. (1992)	M	655

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	3.9×10^{-3}	3500	Tse et al. (1992)	M	
	4.4×10^{-3}		Yu (1992)	M	12
	3.4×10^{-3}		Guitart et al. (1989)	M	14
	3.4×10^{-3}	4200	Ashworth et al. (1988)	M	279
	4.6×10^{-3}	3800	Gossett (1987)	M	
	5.7×10^{-3}		Hellmann (1987)	M	88
	5.2×10^{-3}		Yurteri et al. (1987)	M	12
	3.8×10^{-3}	4500	Gossett et al. (1985)	M	
	3.4×10^{-3}	4200	Lincoff and Gossett (1984)	M	
	3.0×10^{-3}	3600	Leighton and Calo (1981)	M	
	3.1×10^{-3}		Warner et al. (1980)	M	
	2.8×10^{-3}		Sato and Nakajima (1979b)	M	14
	3.3×10^{-3}		Pearson and McConnell (1975)	M	651, 12
	4.2×10^{-3}	4400	Hartkopf and Karger (1973)	M	
	4.1×10^{-3}	4000	Rex (1906)	M	
	2.7×10^{-3}		Mackay et al. (2006b)	V	
	3.5×10^{-3}	4100	Fogg and Sangster (2003)	V	
	4.0×10^{-3}		Park et al. (1997)	V	
	5.9×10^{-3}		Mackay et al. (1993)	V	
	2.9×10^{-3}		Hwang et al. (1992)	V	
	3.2×10^{-3}		Warner et al. (1980)	V	
	4.0×10^{-3}		Dilling (1977)	V	653
	1.2×10^{-2}		Dilling (1977)	V	154
	4.3×10^{-3}		Hine and Mookerjee (1975)	V	
	4.0×10^{-3}		Dilling et al. (1975)	V	
	4.0×10^{-3}		Yaws (2003)	X	238
	3.1×10^{-3}	3600	Goldstein (1982)	X	299
	4.2×10^{-3}		Harrison et al. (1993)	C	
	3.4×10^{-3}		Harrison et al. (1993)	C	
	4.7×10^{-3}		Ryan et al. (1988)	C	
	3.1×10^{-3}		Shen (1982)	C	
	3.7×10^{-3}		Dilling (1977)	C	
	3.7×10^{-3}		Dilling et al. (1975)	C	
	5.6×10^{-3}		Hayer et al. (2022)	Q	20
	8.8×10^{-3}		Keshavarz et al. (2022)	Q	
	2.6×10^{-3}		Duchowicz et al. (2020)	Q	
	6.2×10^{-4}		Wang et al. (2017)	Q	81, 239
	1.4×10^{-2}		Wang et al. (2017)	Q	81, 240
	9.3×10^{-3}		Wang et al. (2017)	Q	81, 241
	2.9×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	4.1×10^{-3}		Gharagheizi et al. (2010)	Q	247
	9.0×10^{-3}		Hilal et al. (2008)	Q	
	1.8×10^{-3}		Modarresi et al. (2007)	Q	68

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
		3000	Kühne et al. (2005)	Q	
	3.8×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	3.0×10^{-3}		Yao et al. (2002)	Q	230
	1.8×10^{-3}		English and Carroll (2001)	Q	231, 261
	6.4×10^{-4}		Katritzky et al. (1998)	Q	
	2.2×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	3.0×10^{-3}		Duchowicz et al. (2020)	?	186, 21
	3.3×10^{-3}		Mackay et al. (2006b)	?	
		3900	Kühne et al. (2005)	?	
	4.0×10^{-3}		Yaws (1999)	?	21
	2.9×10^{-3}		Abraham and Weathersby (1994)	?	21
	3.3×10^{-3}		Mackay et al. (1993)	?	
	4.0×10^{-3}		Yaws and Yang (1992)	?	21
	3.7×10^{-3}		Abraham et al. (1990)	?	
dichloromethane-d2 CD ₂ Cl ₂ (methylene chloride-d2) [1665-00-5] YMWUJEATGCHHMB-DICFDUPASA-N	3.8×10^{-3}	4600	Hiatt (2013)	M	
trichloromethane CHCl ₃ (chloroform) [67-66-3] HEDRZPFGACZZDS-UHFFFAOYSA-N	2.7×10^{-3}	4200	Schwardt et al. (2021)	L	1
	2.6×10^{-3}	4300	Burkholder et al. (2019)	L	
	2.0×10^{-3}	4400	Burkholder et al. (2019)	L	71
	2.6×10^{-3}	4300	Burkholder et al. (2015)	L	
	2.0×10^{-3}	4400	Burkholder et al. (2015)	L	71
	2.3×10^{-3}	4200	Brockbank (2013)	L	1, 656
	2.5×10^{-3}	4500	Sander et al. (2011)	L	
	2.6×10^{-3}	4300	Warneck (2007)	L	
	2.5×10^{-3}	4500	Sander et al. (2006)	L	
	2.5×10^{-3}	4500	Staudinger and Roberts (2001)	L	
	2.5×10^{-3}	4500	Staudinger and Roberts (1996)	L	
	2.6×10^{-3}		Mackay and Shiu (1981)	L	
	1.6×10^{-3}		Steward et al. (1973)	L	14
	2.6×10^{-3}	3900	Allott et al. (1973)	L	
	2.8×10^{-3}	4500	Hiatt (2013)	M	
	2.5×10^{-3}	3900	Chen et al. (2012)	M	
	3.1×10^{-3}		Ruiz-Bevia and Fernandez-Torres (2010)	M	
	2.7×10^{-3}	4500	Lutsyk et al. (2005)	M	
	1.4×10^{-3}		Zhang et al. (2002)	M	14
	2.3×10^{-3}	4200	Görgényi et al. (2002)	M	657
	2.0×10^{-3}	4600	Moore (2000)	M	71
	2.4×10^{-3}		David et al. (2000)	M	73
	2.7×10^{-3}		Ryu and Park (1999)	M	
	3.0×10^{-3}		Dohnal and Hovorka (1999)	M	12
	3.0×10^{-3}		Chiang et al. (1998)	M	12

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.4×10^{-3}		Welke et al. (1998)	M	
	3.2×10^{-3}		Hovorka and Dohnal (1997)	M	12
	2.7×10^{-3}	3400	Kondoh and Nakajima (1997)	M	
	2.6×10^{-3}	3400	Park et al. (1997)	M	
	2.2×10^{-3}	4700	Turner et al. (1996)	M	
	2.2×10^{-3}	4200	Moore et al. (1995)	M	658, 71
	2.6×10^{-3}	4400	Dewulf et al. (1995)	M	
	2.5×10^{-3}		Hoff et al. (1993)	M	
	2.4×10^{-3}		Li et al. (1993)	M	
	2.6×10^{-3}	4000	Wright et al. (1992)	M	659
	4.8×10^{-3}	7300	Tancrède and Yanagisawa (1990)	M	
	2.4×10^{-3}	2000	Lamarche and Droste (1989)	M	347
	2.1×10^{-3}		Guitart et al. (1989)	M	14
	2.3×10^{-3}	5000	Ashworth et al. (1988)	M	279
	2.7×10^{-3}	4600	Gossett (1987)	M	
	2.6×10^{-3}	4300	Munz and Roberts (1987)	M	
	2.9×10^{-3}		Hellmann (1987)	M	88
	3.3×10^{-3}		Munz and Roberts (1986)	M	
	2.5×10^{-3}	4300	Gossett et al. (1985)	M	
	2.5×10^{-3}	5200	Nicholson et al. (1984)	M	
	2.3×10^{-3}	4200	Lincoff and Gossett (1984)	M	
	2.0×10^{-3}	3900	Hunter-Smith et al. (1983)	M	71, 660
	2.5×10^{-3}	4000	Leighton and Calo (1981)	M	
	1.5×10^{-3}	5600	Ervin et al. (1980)	M	
	2.9×10^{-3}		Warner et al. (1980)	M	
	2.4×10^{-3}	7200	Balls (1980)	M	
	1.4×10^{-3}		Sato and Nakajima (1979b)	M	14
	3.5×10^{-3}		Pearson and McConnell (1975)	M	651, 12
	2.8×10^{-3}	5100	Hartkopf and Karger (1973)	M	
	1.6×10^{-3}		Bachofen and Farhi (1971)	M	14
	2.6×10^{-3}	4600	Rex (1906)	M	
	2.6×10^{-3}		Mackay et al. (2006b)	V	
	2.6×10^{-3}	4400	Fogg and Sangster (2003)	V	
	2.5×10^{-3}		Park et al. (1997)	V	
	2.6×10^{-3}		Mackay et al. (1993)	V	
	2.6×10^{-3}		Hwang et al. (1992)	V	
	5.5×10^{-3}		McLachlan et al. (1990)	V	375
	3.1×10^{-3}		Warner et al. (1980)	V	
	2.8×10^{-3}		Smith and Bomberger (1980)	V	24
	2.5×10^{-3}		Dilling (1977)	V	653
	9.0×10^{-3}		Dilling (1977)	V	154
	2.3×10^{-3}		Hine and Mookerjee (1975)	V	
	2.5×10^{-3}		Dilling et al. (1975)	V	
	2.2×10^{-3}	4700	Winkler (1906)	V	
	2.5×10^{-3}	4100	Barr and Newsham (1987)	X	299
	3.0×10^{-3}	4400	Goldstein (1982)	X	299

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.4×10^{-3}		Harrison et al. (1993)	C	
	3.4×10^{-3}		Harrison et al. (1993)	C	
	3.4×10^{-3}		Ryan et al. (1988)	C	
	2.7×10^{-3}		Nicholson et al. (1984)	C	
	2.1×10^{-3}		Nicholson et al. (1984)	C	12
	2.9×10^{-3}		Shen (1982)	C	
	3.1×10^{-3}		Dilling (1977)	C	
	3.1×10^{-3}		Dilling et al. (1975)	C	
	2.6×10^{-3}		Hayer et al. (2022)	Q	20
	1.1×10^{-3}		Wang et al. (2017)	Q	81, 239
	4.3×10^{-3}		Wang et al. (2017)	Q	81, 240
	4.5×10^{-3}		Wang et al. (2017)	Q	81, 241
	3.7×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	3.2×10^{-3}		Hilal et al. (2008)	Q	
	1.3×10^{-3}		Modarresi et al. (2007)	Q	68
		3300	Kühne et al. (2005)	Q	
	4.1×10^{-3}		Yao et al. (2002)	Q	230
	1.0×10^{-3}		English and Carroll (2001)	Q	231, 275
	2.6×10^{-4}		Katritzky et al. (1998)	Q	
	3.9×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	2.3×10^{-3}		Arbuckle (1983)	Q	
	2.3×10^{-3}		Mackay et al. (2006b)	?	
		4300	Kühne et al. (2005)	?	
	2.4×10^{-3}		Yaws (1999)	?	21
	1.6×10^{-3}		Abraham and Weathersby (1994)	?	21
	2.3×10^{-3}		Mackay et al. (1993)	?	
	2.4×10^{-3}		Yaws and Yang (1992)	?	21
	2.5×10^{-3}		Abraham et al. (1990)	?	
tetrachloromethane CCl ₄ (carbontetrachloride) [56-23-5] VZGDMQKNWNREIO-UHFFFAOYSA-N	3.4×10^{-4}	4200	Schwardt et al. (2021)	L	1
	3.6×10^{-4}	4300	Burkholder et al. (2019)	L	
	2.6×10^{-4}	4200	Burkholder et al. (2019)	L	71
	3.6×10^{-4}	4300	Burkholder et al. (2015)	L	
	2.6×10^{-4}	4200	Burkholder et al. (2015)	L	71
	3.5×10^{-4}	4200	Brockbank (2013)	L	1, 661
	3.4×10^{-4}	4200	Sander et al. (2011)	L	
	3.6×10^{-4}	4300	Warneck (2007)	L	
	3.4×10^{-4}	4200	Sander et al. (2006)	L	
	3.4×10^{-4}	4200	Staudinger and Roberts (2001)	L	
	3.4×10^{-4}	4200	Staudinger and Roberts (1996)	L	
	5.0×10^{-4}		Mackay and Shiu (1981)	L	
	5.0×10^{-4}	4500	Hiatt (2013)	M	
	3.0×10^{-4}	4400	Chen et al. (2012)	M	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.4×10^{-4}	3800	Lutsyk et al. (2005)	M	
	3.8×10^{-4}		Ryu and Park (1999)	M	
	4.0×10^{-4}		Chiang et al. (1998)	M	12
	2.9×10^{-4}	3700	Bullister and Wisegarver (1998)	M	662
	4.4×10^{-4}	1900	Kondoh and Nakajima (1997)	M	
	3.9×10^{-4}	2600	Park et al. (1997)	M	
	3.8×10^{-4}	4400	Dewulf et al. (1995)	M	
	3.6×10^{-4}		Hoff et al. (1993)	M	
	3.3×10^{-4}	3600	Hansen et al. (1993)	M	282
	2.3×10^{-4}		Li and Carr (1993)	M	
	2.9×10^{-4}	4500	Wright et al. (1992)	M	663
	3.8×10^{-4}	3600	Tse et al. (1992)	M	
	3.4×10^{-4}	4100	Tancrède and Yanagisawa (1990)	M	
	2.8×10^{-4}	5600	Bissonette et al. (1990)	M	
	3.3×10^{-4}	4000	Ashworth et al. (1988)	M	279
	3.3×10^{-4}	4400	Gossett (1987)	M	
	3.3×10^{-4}	4300	Munz and Roberts (1987)	M	
	3.3×10^{-4}		Hellmann (1987)	M	88
	4.3×10^{-4}		Yurteri et al. (1987)	M	12
	4.2×10^{-4}		Munz and Roberts (1986)	M	
	4.1×10^{-4}	3200	Hunter-Smith et al. (1983)	M	660
	3.6×10^{-4}	4400	Leighton and Calo (1981)	M	
	3.3×10^{-4}		Warner et al. (1980)	M	
	3.2×10^{-4}	3300	Balls (1980)	M	
	9.7×10^{-5}		Sato and Nakajima (1979b)	M	14
	4.5×10^{-4}		Pearson and McConnell (1975)	M	651, 12
	3.7×10^{-4}	5200	Hartkopf and Karger (1973)	M	
	3.5×10^{-4}	4400	Rex (1906)	M	
	3.4×10^{-4}		Mackay et al. (2006b)	V	
	3.6×10^{-4}	4200	Fogg and Sangster (2003)	V	
	4.3×10^{-4}		Park et al. (1997)	V	
	3.4×10^{-4}		Mackay et al. (1993)	V	
	3.4×10^{-4}		Hwang et al. (1992)	V	
	6.7×10^{-5}		Ballschmitter and Wittlinger (1991)	V	
	3.5×10^{-4}		Warner et al. (1980)	V	
	4.6×10^{-4}		Smith and Bomberger (1980)	V	24
	3.4×10^{-4}		Dilling (1977)	V	
	3.4×10^{-4}		Hine and Mookerjee (1975)	V	
	2.0×10^{-4}		Pierotti (1965)	T	
	3.4×10^{-4}		Yaws (2003)	X	238
	3.3×10^{-4}	1100	Goldstein (1982)	X	299
	3.8×10^{-4}		Harrison et al. (1993)	C	
	2.1×10^{-4}		Harrison et al. (1993)	C	
	4.5×10^{-4}		Ryan et al. (1988)	C	
	3.3×10^{-4}		Shen (1982)	C	
	4.6×10^{-4}		Dilling (1977)	C	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	3.7×10^{-4}		Liss and Slater (1974)	C	
	4.9×10^{-4}		Hayer et al. (2022)	Q	20
	5.4×10^{-4}		Keshavarz et al. (2022)	Q	
	6.3×10^{-4}		Duchowicz et al. (2020)	Q	
	3.4×10^{-4}		Li et al. (2014)	Q	242
	3.2×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.1×10^{-4}		Gharagheizi et al. (2010)	Q	247
	5.4×10^{-4}		Hilal et al. (2008)	Q	
	2.3×10^{-4}		Modarresi et al. (2007)	Q	68
		3700	Kühne et al. (2005)	Q	
	3.5×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	2.1×10^{-4}		English and Carroll (2001)	Q	231, 232
	3.4×10^{-5}		Katritzky et al. (1998)	Q	
	3.5×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	4.1×10^{-4}		Arbuckle (1983)	Q	
	3.6×10^{-4}		Duchowicz et al. (2020)	?	186, 21
	1.2×10^{-4}		MacBean (2012a)	?	
	3.3×10^{-4}		Mackay et al. (2006b)	?	
		4300	Kühne et al. (2005)	?	
	3.4×10^{-4}		Yaws (1999)	?	21
	1.0×10^{-4}		Abraham and Weathersby (1994)	?	21
	3.3×10^{-4}		Mackay et al. (1993)	?	
	3.3×10^{-4}		Yaws and Yang (1992)	?	21
	3.5×10^{-4}		Abraham et al. (1990)	?	
	4.3×10^{-4}		Mackay and Yeun (1983)	?	
	1.1×10^{-3}		Chiou et al. (1980)	?	80
chloroethane	8.1×10^{-4}	3000	Schwardt et al. (2021)	L	1
C ₂ H ₅ Cl	8.1×10^{-4}	2900	Burkholder et al. (2019)	L	1
[75-00-3]	8.3×10^{-4}	2800	Burkholder et al. (2015)	L	
HRYZWHHZPQKTII-UHFFFAOYSA-N	8.1×10^{-4}	2900	Brockbank (2013)	L	1
	8.3×10^{-4}	2800	Warneck (2007)	L	
	8.4×10^{-4}	2900	Staudinger and Roberts (2001)	L	
	8.3×10^{-4}	2900	Staudinger and Roberts (1996)	L	
	5.0×10^{-3}		Mackay and Shiu (1981)	L	
	4.7×10^{-4}		Steward et al. (1973)	L	14
	7.3×10^{-4}	3500	Allott et al. (1973)	L	
	8.5×10^{-4}	3200	Hiatt (2013)	M	
	7.6×10^{-4}	3100	Chen et al. (2012)	M	
	8.9×10^{-4}	3200	Maaßen (1995)	M	664
	9.3×10^{-4}	3300	Reichl (1995)	M	665
	7.9×10^{-4}	2600	Ashworth et al. (1988)	M	279
	8.8×10^{-4}	3100	Gossett (1987)	M	
	5.5×10^{-3}		Mackay et al. (2006b)	V	
	5.5×10^{-3}		Mackay et al. (1993)	V	
	5.6×10^{-4}		Hwang et al. (1992)	V	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	8.8×10^{-4}		Dilling (1977)	V	
	1.2×10^{-3}		Hine and Mookerjee (1975)	V	
	1.4×10^{-3}		Yaws (2003)	X	238, 12
	6.8×10^{-4}	750	Goldstein (1982)	X	299
	6.6×10^{-4}		Ryan et al. (1988)	C	
	6.3×10^{-4}		Irmann (1965)	C	
	8.0×10^{-4}		Hayer et al. (2022)	Q	20
	2.2×10^{-4}		Wang et al. (2017)	Q	81, 239
	1.4×10^{-3}		Wang et al. (2017)	Q	81, 240
	1.7×10^{-3}		Wang et al. (2017)	Q	81, 241
	7.9×10^{-4}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	272, 244
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	9.3×10^{-4}		Gharagheizi et al. (2010)	Q	247
	1.2×10^{-3}		Hilal et al. (2008)	Q	
	1.0×10^{-3}		Modarresi et al. (2007)	Q	68
		3000	Kühne et al. (2005)	Q	
	1.1×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	4.8×10^{-4}		Yao et al. (2002)	Q	230
	9.7×10^{-4}		English and Carroll (2001)	Q	231, 232
	9.0×10^{-4}		Katritzky et al. (1998)	Q	
	6.1×10^{-4}		Suzuki et al. (1992)	Q	233
	7.9×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	7.6×10^{-4}		Irmann (1965)	Q	
	9.8×10^{-4}		Mackay et al. (2006b)	?	
		2900	Kühne et al. (2005)	?	
	1.4×10^{-3}		Yaws (1999)	?	21, 12
	4.8×10^{-4}		Abraham and Weathersby (1994)	?	21
	9.8×10^{-4}		Mackay et al. (1993)	?	
	1.4×10^{-3}		Yaws and Yang (1992)	?	21, 12
	1.2×10^{-3}		Abraham et al. (1990)	?	
1,1-dichloroethane CHCl ₂ CH ₃ [75-34-3] SCYULBFZEHDVBN-UHFFFAOYSA-N	1.7×10^{-3}	3900	Schwardt et al. (2021)	L	1
	1.7×10^{-3}	4000	Burkholder et al. (2019)	L	1
	1.5×10^{-3}	3900	Burkholder et al. (2019)	L	71
	1.7×10^{-3}	4100	Burkholder et al. (2015)	L	
	1.5×10^{-3}	3900	Burkholder et al. (2015)	L	71
	1.7×10^{-3}	4000	Brockbank (2013)	L	1
	1.7×10^{-3}	4100	Warneck (2007)	L	
	1.8×10^{-3}	4100	Fogg and Sangster (2003)	L	
	1.6×10^{-3}	3700	Staudinger and Roberts (2001)	L	
	1.5×10^{-3}	3600	Staudinger and Roberts (1996)	L	
	1.7×10^{-3}		Mackay and Shiu (1981)	L	
	2.0×10^{-3}	3900	Hiatt (2013)	M	
	1.9×10^{-3}	3300	Chen et al. (2012)	M	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.0×10^{-3}		Bobadilla et al. (2003)	M	
	1.6×10^{-3}	3900	Görgényi et al. (2002)	M	666
	2.2×10^{-3}		Hovorka and Dohnal (1997)	M	12
	1.8×10^{-3}	2600	Kondoh and Nakajima (1997)	M	
	2.0×10^{-3}	4300	Dewulf et al. (1995)	M	
	1.5×10^{-3}	4900	Wright et al. (1992)	M	667
	1.7×10^{-3}	3700	Tse et al. (1992)	M	
	1.7×10^{-3}	2100	Lamarche and Droste (1989)	M	347
	1.5×10^{-3}	3100	Ashworth et al. (1988)	M	279
	1.8×10^{-3}	4100	Gossett (1987)	M	
	1.3×10^{-3}	4900	Ervin et al. (1980)	M	
	1.8×10^{-3}		Warner et al. (1980)	M	
	1.0×10^{-3}		Sato and Nakajima (1979b)	M	14
	1.8×10^{-3}	4400	Rex (1906)	M	
	1.7×10^{-3}		Mackay et al. (2006b)	V	
	1.6×10^{-3}		Mackay et al. (1993)	V	
	1.8×10^{-3}		Warner et al. (1980)	V	
	1.7×10^{-3}		Smith and Bomberger (1980)	V	24
	1.7×10^{-3}		Dilling (1977)	V	
	1.7×10^{-3}		Hine and Mookerjee (1975)	V	
	1.7×10^{-3}		Yaws (2003)	X	238
	1.7×10^{-3}	3800	Barr and Newsham (1987)	X	299
	1.8×10^{-3}	1700	Goldstein (1982)	X	299
	2.4×10^{-3}		Ryan et al. (1988)	C	
	1.8×10^{-3}		Shen (1982)	C	
	5.1×10^{-4}		Wang et al. (2017)	Q	81, 239
	4.2×10^{-3}		Wang et al. (2017)	Q	81, 240
	6.5×10^{-3}		Wang et al. (2017)	Q	81, 241
	2.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	1.6×10^{-3}		Gharagheizi et al. (2010)	Q	247
	3.2×10^{-3}		Hilal et al. (2008)	Q	
	1.4×10^{-3}		Modarresi et al. (2007)	Q	68
		3300	Kühne et al. (2005)	Q	
	1.8×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	5.0×10^{-4}		English and Carroll (2001)	Q	231, 275
	1.1×10^{-3}		Katritzky et al. (1998)	Q	
	1.4×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.8×10^{-3}		Mackay et al. (2006b)	?	
		3900	Kühne et al. (2005)	?	
	1.7×10^{-3}		Yaws (1999)	?	21
	1.1×10^{-3}		Abraham and Weathersby (1994)	?	21
	1.6×10^{-3}		Mackay et al. (1993)	?	
	1.7×10^{-3}		Yaws and Yang (1992)	?	21

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.7×10^{-3}		Abraham et al. (1990)	?	
1,2-dichloroethane CH ₂ ClCH ₂ Cl [107-06-2] WSLDOOZREJYCGB-UHFFFAOYSA-N	7.5×10^{-3}	4400	Schwardt et al. (2021)	L	1
	8.9×10^{-3}	4300	Burkholder et al. (2019)	L	
	7.6×10^{-3}	3700	Burkholder et al. (2019)	L	71
	8.9×10^{-3}	4300	Burkholder et al. (2015)	L	
	7.6×10^{-3}	3700	Burkholder et al. (2015)	L	71
	8.4×10^{-3}	4200	Brockbank (2013)	L	1
	8.9×10^{-3}	4300	Warneck (2007)	L	
	9.1×10^{-3}	4300	Fogg and Sangster (2003)	L	
	7.8×10^{-3}	4200	Staudinger and Roberts (2001)	L	
	7.1×10^{-3}	4200	Staudinger and Roberts (1996)	L	
	9.1×10^{-3}		Mackay and Shiu (1981)	L	
	8.2×10^{-3}	4400	Hiatt (2013)	M	
	9.1×10^{-3}	6100	Chen et al. (2012)	M	
	5.4×10^{-3}		Ayuttaya et al. (2001)	M	342
	5.7×10^{-4}		Ayuttaya et al. (2001)	M	343
	4.2×10^{-3}		Ayuttaya et al. (2001)	M	344
	8.1×10^{-3}		Ayuttaya et al. (2001)	M	345
	7.5×10^{-3}		Welke et al. (1998)	M	
	1.1×10^{-2}		Hovorka and Dohnal (1997)	M	12
	6.2×10^{-3}	3700	Kondoh and Nakajima (1997)	M	
	9.3×10^{-3}	4600	Dewulf et al. (1995)	M	
	8.3×10^{-3}		Hoff et al. (1993)	M	
	8.2×10^{-3}		Li et al. (1993)	M	
	8.4×10^{-3}	4300	Wright et al. (1992)	M	668
	8.0×10^{-3}	3600	Tse et al. (1992)	M	
	6.4×10^{-3}	4500	Bissonette et al. (1990)	M	
	5.8×10^{-3}	3000	Lamarche and Droste (1989)	M	347
	7.6×10^{-3}		Guitart et al. (1989)	M	14
	6.4×10^{-3}	1500	Ashworth et al. (1988)	M	33, 279
	8.4×10^{-3}	3500	Leighton and Calo (1981)	M	
	9.0×10^{-3}		Warner et al. (1980)	M	
	4.4×10^{-3}		Sato and Nakajima (1979b)	M	14
	1.1×10^{-2}		Pearson and McConnell (1975)	M	651, 12
	7.9×10^{-3}	4400	Hartkopf and Karger (1973)	M	
	7.2×10^{-3}		Saylor et al. (1938)	M	38
	8.6×10^{-3}	4400	Rex (1906)	M	
	8.2×10^{-3}		Mackay et al. (2006b)	V	
	8.3×10^{-3}		Mackay et al. (1993)	V	
	7.3×10^{-3}		Warner et al. (1980)	V	
	8.1×10^{-3}		Dilling (1977)	V	
	7.5×10^{-3}		Hine and Mookerjee (1975)	V	
	8.3×10^{-3}		Yaws (2003)	X	238
	8.5×10^{-3}	3700	Barr and Newsham (1987)	X	299
	9.0×10^{-3}	2400	Goldstein (1982)	X	299

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	8.6×10^{-3}		Harrison et al. (1993)	C	
	9.0×10^{-3}		Harrison et al. (1993)	C	
	1.1×10^{-2}		Ryan et al. (1988)	C	
	9.0×10^{-3}		Shen (1982)	C	
	1.0×10^{-2}		Dilling (1977)	C	
	1.1×10^{-2}		Hayer et al. (2022)	Q	20
	1.2×10^{-2}		Keshavarz et al. (2022)	Q	
	3.8×10^{-3}		Duchowicz et al. (2020)	Q	185
	1.5×10^{-3}		Wang et al. (2017)	Q	81, 239
	1.2×10^{-2}		Wang et al. (2017)	Q	81, 240
	2.0×10^{-2}		Wang et al. (2017)	Q	81, 241
	7.5×10^{-3}		Li et al. (2014)	Q	242
	6.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	272, 244
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	1.1×10^{-2}		Gharagheizi et al. (2010)	Q	247
	1.0×10^{-2}		Hilal et al. (2008)	Q	
	5.1×10^{-3}		Modarresi et al. (2007)	Q	68
		3300	Kühne et al. (2005)	Q	
	8.2×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	3.4×10^{-3}		English and Carroll (2001)	Q	231, 232
	2.2×10^{-3}		Katritzky et al. (1998)	Q	
	7.7×10^{-3}		Russell et al. (1992)	Q	280
	1.8×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	8.4×10^{-3}		Duchowicz et al. (2020)	?	186, 21
	4.2×10^{-3}		MacBean (2012a)	?	
	7.0×10^{-3}		Mackay et al. (2006b)	?	
		3600	Kühne et al. (2005)	?	
	8.4×10^{-3}		Yaws (1999)	?	21
	4.5×10^{-3}		Abraham and Weathersby (1994)	?	21
	7.0×10^{-3}		Mackay et al. (1993)	?	
	8.3×10^{-3}		Yaws and Yang (1992)	?	21
	8.2×10^{-3}		Abraham et al. (1990)	?	
	1.2×10^{-2}		Chiou et al. (1980)	?	80
1,2-dichloroethane-d4 CD ₂ ClCD ₂ Cl [17060-07-0] WSLDOOZREJYCGB-LNLMKGTSHA-N	8.7×10^{-3}	4300	Hiatt (2013)	M	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1,1-trichloroethane	6.0×10^{-4}	3800	Schwardt et al. (2021)	L	1
CH ₃ CCl ₃	6.0×10^{-4}	3700	Burkholder et al. (2019)	L	
(methylchloroform; MCF)	4.2×10^{-4}	4200	Burkholder et al. (2019)	L	71
[71-55-6]	6.0×10^{-4}	3700	Burkholder et al. (2015)	L	
UOCLXMDMGBRAIB-UHFFFAOYSA-N	4.2×10^{-4}	4200	Burkholder et al. (2015)	L	71
	5.8×10^{-4}	4100	Brockbank (2013)	L	1
	6.0×10^{-4}	3700	Warneck (2007)	L	
	6.2×10^{-4}	3900	Fogg and Sangster (2003)	L	
	5.9×10^{-4}	4000	Staudinger and Roberts (2001)	L	
	5.8×10^{-4}	3900	Staudinger and Roberts (1996)	L	
	3.6×10^{-4}		Mackay and Shiu (1981)	L	
	6.9×10^{-4}	4000	Hiatt (2013)	M	
	5.4×10^{-4}	4100	Chen et al. (2012)	M	
	6.2×10^{-4}	3500	Vane and Giroux (2000)	M	
	7.1×10^{-4}		Chiang et al. (1998)	M	12
	7.9×10^{-4}		Hovorka and Dohnal (1997)	M	12
	6.7×10^{-4}	1900	Kondoh and Nakajima (1997)	M	
	4.8×10^{-4}		Turner et al. (1996)	M	
	6.7×10^{-4}	4100	Dewulf et al. (1995)	M	
	5.5×10^{-4}	2500	Robbins et al. (1993)	M	669
	5.3×10^{-4}		Hoff et al. (1993)	M	
	5.9×10^{-4}	3100	Hansen et al. (1993)	M	282
	5.7×10^{-4}		Li et al. (1993)	M	
	6.0×10^{-4}	3300	Wright et al. (1992)	M	670
	6.3×10^{-4}	3700	Tse et al. (1992)	M	
	7.9×10^{-4}	1300	Kolb et al. (1992)	M	278
	5.1×10^{-4}	5200	Bissonette et al. (1990)	M	
	3.2×10^{-4}		Guitart et al. (1989)	M	14
	5.7×10^{-4}	3400	Ashworth et al. (1988)	M	279
	5.9×10^{-4}	4100	Gossett (1987)	M	
	5.8×10^{-4}	4100	Munz and Roberts (1987)	M	
	6.3×10^{-4}		Yurteri et al. (1987)	M	12
	5.7×10^{-4}	4200	Gossett et al. (1985)	M	
	5.9×10^{-4}	4300	Lincoff and Gossett (1984)	M	
	7.6×10^{-4}	3200	Hunter-Smith et al. (1983)	M	660
	4.9×10^{-4}	4400	Leighton and Calo (1981)	M	
	2.7×10^{-4}	7000	Ervin et al. (1980)	M	
	2.0×10^{-3}		Warner et al. (1980)	M	
	3.6×10^{-4}		Sato and Nakajima (1979b)	M	14
	2.9×10^{-4}		Pearson and McConnell (1975)	M	651, 12
	5.9×10^{-4}		Mackay et al. (2006b)	V	
	6.8×10^{-4}		Mackay et al. (1993)	V	
	7.0×10^{-4}	4700	McLinden (1989)	V	
	2.4×10^{-3}		Warner et al. (1980)	V	
	3.4×10^{-4}		Dilling (1977)	V	653
	4.0×10^{-4}		Dilling (1977)	V	12

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1×10^{-3}		Dilling (1977)	V	154
	6.1×10^{-4}		Hine and Mookerjee (1975)	V	
	5.9×10^{-4}		Dilling et al. (1975)	V	
	4.5×10^{-4}		Yaws (2003)	X	238
	5.8×10^{-4}	4000	Barr and Newsham (1987)	X	299
	2.2×10^{-3}	1700	Goldstein (1982)	X	299
	3.1×10^{-4}		Ryan et al. (1988)	C	
	2.0×10^{-3}		Shen (1982)	C	
	2.3×10^{-4}		Wang et al. (2017)	Q	81, 239
	7.6×10^{-4}		Wang et al. (2017)	Q	81, 240
	2.0×10^{-3}		Wang et al. (2017)	Q	81, 241
	2.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	4.9×10^{-4}		Gharagheizi et al. (2010)	Q	247
	9.0×10^{-4}		Hilal et al. (2008)	Q	
	1.3×10^{-3}		Modarresi et al. (2007)	Q	68
		3700	Kühne et al. (2005)	Q	
	6.1×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	7.9×10^{-4}		English and Carroll (2001)	Q	231, 261
	5.4×10^{-4}		Katritzky et al. (1998)	Q	
	2.3×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.6×10^{-3}		Arbuckle (1983)	Q	
	5.7×10^{-4}		Mackay et al. (2006b)	?	
		3700	Kühne et al. (2005)	?	
	4.6×10^{-4}		Yaws (1999)	?	21
	3.8×10^{-4}		Abraham and Weathersby (1994)	?	21
	5.7×10^{-4}		Mackay et al. (1993)	?	
	5.6×10^{-4}		Abraham et al. (1990)	?	
	1.6×10^{-3}		Chiou et al. (1980)	?	80
1,1,2-trichloroethane CHCl ₂ CH ₂ Cl [79-00-5] UBOXGVDUJQMTN-UHFFFAOYSA-N	1.1×10^{-2}	4400	Schwardt et al. (2021)	L	1
	1.1×10^{-2}	4100	Burkholder et al. (2019)	L	
	1.1×10^{-2}	4100	Burkholder et al. (2015)	L	
	1.1×10^{-2}	4400	Brockbank (2013)	L	1, 671
	1.1×10^{-2}	4100	Warneck (2007)	L	
	1.2×10^{-2}	4200	Fogg and Sangster (2003)	L	
	1.1×10^{-2}	4900	Staudinger and Roberts (2001)	L	
	1.1×10^{-2}	4900	Staudinger and Roberts (1996)	L	
	8.3×10^{-3}		Mackay and Shiu (1981)	L	
	7.3×10^{-3}	2400	Schwardt et al. (2021)	M	672, 11
	1.4×10^{-2}	5400	Hiatt (2013)	M	
	1.2×10^{-2}		Bobadilla et al. (2003)	M	
	1.1×10^{-2}	4700	Dewulf et al. (1999)	M	
	1.5×10^{-2}		Dohnal and Hovorka (1999)	M	12

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.5×10^{-2}		Hovorka and Dohnal (1997)	M	12
	1.1×10^{-2}	5100	Kondoh and Nakajima (1997)	M	
	1.2×10^{-2}	5900	Hansen et al. (1993)	M	282
	1.1×10^{-2}	4300	Wright et al. (1992)	M	673
	1.1×10^{-2}	4100	Tse et al. (1992)	M	
	1.0×10^{-2}	4800	Ashworth et al. (1988)	M	279
	1.2×10^{-2}	3700	Leighton and Calo (1981)	M	
	6.6×10^{-3}		Sato and Nakajima (1979b)	M	14
	1.1×10^{-2}		Mackay et al. (2006b)	V	
	1.0×10^{-2}		Mackay et al. (1993)	V	
	1.1×10^{-2}		Dilling (1977)	V	
	1.1×10^{-2}		Hine and Mookerjee (1975)	V	
	1.1×10^{-2}		Yaws (2003)	X	238
	1.1×10^{-2}	4300	Barr and Newsham (1987)	X	299
	1.2×10^{-2}	2700	Goldstein (1982)	X	299
	1.3×10^{-3}		Ryan et al. (1988)	C	
	1.2×10^{-2}		Keshavarz et al. (2022)	Q	
	7.7×10^{-3}		Duchowicz et al. (2020)	Q	
	4.9×10^{-3}		Wang et al. (2017)	Q	81, 239
	2.1×10^{-2}		Wang et al. (2017)	Q	81, 240
	4.1×10^{-2}		Wang et al. (2017)	Q	81, 241
	1.1×10^{-2}		Li et al. (2014)	Q	242
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	272, 244
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	1.0×10^{-2}		Gharagheizi et al. (2010)	Q	247
	1.5×10^{-2}		Hilal et al. (2008)	Q	
	6.7×10^{-3}		Modarresi et al. (2007)	Q	68
		3700	Kühne et al. (2005)	Q	
	8.6×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	1.9×10^{-3}		Katritzky et al. (1998)	Q	
	3.3×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	7.6×10^{-3}		Arbuckle (1983)	Q	
	1.2×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	1.1×10^{-2}		Mackay et al. (2006b)	?	
		4200	Kühne et al. (2005)	?	
	1.1×10^{-2}		Yaws (1999)	?	21
	6.9×10^{-3}		Abraham and Weathersby (1994)	?	21
	1.1×10^{-2}		Mackay et al. (1993)	?	
	1.0×10^{-2}		Yaws and Yang (1992)	?	21
	1.2×10^{-2}		Abraham et al. (1990)	?	
1,1,2-trichloroethane-d3 CDCl ₂ CD ₂ Cl [171086-93-4] UBOXGVDOUJQMTN-FUDHJZNOSA-N	1.3×10^{-2}	5100	Hiatt (2013)	M	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1,1,2-tetrachloroethane CCl ₃ CH ₂ Cl [630-20-6] QVLAWKAXOMEXPM-UHFFFAOYSA-N	5.0×10^{-3}	6700	Schwardt et al. (2021)	L	1
	4.2×10^{-3}	4600	Burkholder et al. (2019)	L	
	4.2×10^{-3}	4600	Burkholder et al. (2015)	L	
	4.2×10^{-3}	4900	Brockbank (2013)	L	
	4.2×10^{-3}	4600	Warneck (2007)	L	
	2.4×10^{-2}	3200	Staudinger and Roberts (2001)	L	
	3.6×10^{-3}		Mackay and Shiu (1981)	L	
	4.5×10^{-3}	11000	Schwardt et al. (2021)	M	674
	4.8×10^{-3}	4800	Hiatt (2013)	M	
	4.3×10^{-3}	4100	Kondoh and Nakajima (1997)	M	
	4.0×10^{-3}	4400	Wright et al. (1992)	M	675
	4.5×10^{-3}	4600	Tse et al. (1992)	M	
	2.1×10^{-3}		Sato and Nakajima (1979b)	M	14
	4.0×10^{-3}		Mackay et al. (2006b)	V	
	4.2×10^{-3}	5000	Fogg and Sangster (2003)	V	
	4.1×10^{-3}		Mackay et al. (1993)	V	
	3.7×10^{-3}		Dilling (1977)	V	
	4.1×10^{-3}		Yaws (2003)	X	238
	1.2×10^{-2}		Keshavarz et al. (2022)	Q	
	3.1×10^{-3}		Duchowicz et al. (2020)	Q	185
	1.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	272, 244
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	3.9×10^{-3}		Gharagheizi et al. (2010)	Q	247
	3.9×10^{-3}		Hilal et al. (2008)	Q	
	6.0×10^{-3}		Modarresi et al. (2007)	Q	68
		4100	Kühne et al. (2005)	Q	
	3.8×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	4.5×10^{-3}		English and Carroll (2001)	Q	231, 232
	1.2×10^{-3}		Katritzky et al. (1998)	Q	
	5.4×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	3.9×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		4600	Kühne et al. (2005)	?	
	4.1×10^{-3}		Yaws (1999)	?	21
	2.2×10^{-3}		Abraham and Weathersby (1994)	?	21
	3.5×10^{-3}		Abraham et al. (1990)	?	
1,1,2,2-tetrachloroethane CHCl ₂ CHCl ₂ [79-34-5] QPFMBZIOSGYJDE-UHFFFAOYSA-N	2.3×10^{-2}	3700	Schwardt et al. (2021)	L	1
	2.3×10^{-2}	4800	Burkholder et al. (2019)	L	
	2.3×10^{-2}	4800	Burkholder et al. (2015)	L	
	2.4×10^{-2}	5000	Brockbank (2013)	L	
	2.4×10^{-2}	4800	Warneck (2007)	L	
	2.4×10^{-2}	3200	Staudinger and Roberts (1996)	L	
	2.1×10^{-2}		Mackay and Shiu (1981)	L	
	3.3×10^{-2}	7200	Hiatt (2013)	M	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.0×10^{-2}		Hovorka and Dohnal (1997)	M	12
	2.3×10^{-2}	6800	Kondoh and Nakajima (1997)	M	676
	2.9×10^{-2}		Li and Carr (1993)	M	
	2.2×10^{-2}	3100	Wright et al. (1992)	M	677
	2.6×10^{-2}	4800	Tse et al. (1992)	M	
	2.2×10^{-2}	2900	Ashworth et al. (1988)	M	42, 279
	2.7×10^{-2}	3500	Leighton and Calo (1981)	M	
	1.4×10^{-2}		Sato and Nakajima (1979b)	M	14
	2.1×10^{-2}		Mackay et al. (2006b)	V	
	2.2×10^{-2}		Mackay et al. (1993)	V	
	2.1×10^{-2}		Dilling (1977)	V	
	2.2×10^{-2}		Hine and Mookerjee (1975)	V	
	2.8×10^{-2}		Yaws (2003)	X	238
	1.8×10^{-2}	4200	Barr and Newsham (1987)	X	299
	2.3×10^{-2}	3000	Goldstein (1982)	X	299
	2.5×10^{-2}		Ryan et al. (1988)	C	
	1.2×10^{-2}		Keshavarz et al. (2022)	Q	
	1.5×10^{-2}		Duchowicz et al. (2020)	Q	300
	1.6×10^{-2}		Wang et al. (2017)	Q	81, 239
	2.7×10^{-2}		Wang et al. (2017)	Q	81, 240
	9.3×10^{-2}		Wang et al. (2017)	Q	81, 241
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	272, 244
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	2.8×10^{-2}		Gharagheizi et al. (2010)	Q	247
	1.9×10^{-2}		Hilal et al. (2008)	Q	
	5.5×10^{-3}		Modarresi et al. (2007)	Q	68
		4100	Kühne et al. (2005)	Q	
	2.7×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	1.1×10^{-3}		Katritzky et al. (1998)	Q	
	6.1×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	2.7×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	3.9×10^{-2}		Mackay et al. (2006b)	?	
		4500	Kühne et al. (2005)	?	
	2.8×10^{-2}		Yaws (1999)	?	21
	1.4×10^{-2}		Abraham and Weathersby (1994)	?	21
	3.9×10^{-2}		Mackay et al. (1993)	?	
	3.0×10^{-2}		Yaws and Yang (1992)	?	21
	2.6×10^{-2}		Abraham et al. (1990)	?	
	3.0×10^{-2}		Chiou et al. (1980)	?	80

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pentachloroethane	4.1×10^{-3}	7700	Burkholder et al. (2019)	L	678
CHCl ₂ CCl ₃	4.2×10^{-3}	7700	Brockbank (2013)	L	
[76-01-7]	4.5×10^{-3}		Mackay and Shiu (1981)	L	
BNIXVQGCZULYKV-UHFFFAOYSA-N	5.9×10^{-3}	5400	Hiatt (2013)	M	
	5.1×10^{-3}		Duchowicz et al. (2020)	V	187
	5.2×10^{-3}		HSDB (2015)	V	
	4.1×10^{-3}		Mackay et al. (2006b)	V	
	4.0×10^{-3}		Mackay et al. (1993)	V	
	5.3×10^{-3}		Meylan and Howard (1991)	V	
	4.0×10^{-3}		Dilling (1977)	V	
	4.0×10^{-3}		Hine and Mookerjee (1975)	V	
	6.2×10^{-3}		Duchowicz et al. (2020)	Q	
	4.0×10^{-3}		Li et al. (2014)	Q	242
	2.0×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	6.1×10^{-3}		Hilal et al. (2008)	Q	
	3.6×10^{-3}		Modarresi et al. (2007)	Q	68
	4.0×10^{-4}		Katritzky et al. (1998)	Q	
	1.9×10^{-2}		Meylan and Howard (1991)	Q	
	1.0×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	5.1×10^{-3}		Yaws (1999)	?	21
	5.4×10^{-3}		Yaws and Yang (1992)	?	21
	4.2×10^{-3}		Abraham et al. (1990)	?	
hexachloroethane	2.7×10^{-3}	5700	Burkholder et al. (2019)	L	
C ₂ Cl ₆	2.6×10^{-3}	5600	Burkholder et al. (2015)	L	
[67-72-1]	2.8×10^{-3}	6100	Brockbank (2013)	L	
VHHHONWQHHLTI-UHFFFAOYSA-N	2.5×10^{-3}	5600	Staudinger and Roberts (1996)	L	
	1.2×10^{-3}	2600	Ashworth et al. (1988)	M	33, 279
	2.5×10^{-3}	5600	Munz and Roberts (1987)	M	
	3.4×10^{-3}		Munz and Roberts (1986)	M	
	1.0×10^{-3}		Warner et al. (1980)	M	
	4.2×10^{-3}		Mackay et al. (2006b)	V	
	3.6×10^{-3}		Lide and Frederikse (1995)	V	
	1.5×10^{-2}		Hwang et al. (1992)	V	
	2.2×10^{-4}		Ballschmiter and Wittlinger (1991)	V	
	7.7×10^{-4}		Mackay and Shiu (1981)	V	
	8.1×10^{-3}		Dilling (1977)	V	
	4.3×10^{-3}		Hine and Mookerjee (1975)	V	
	3.9×10^{-4}		Yaws (2003)	X	238
	1.0×10^{-3}	2100	Goldstein (1982)	X	299
	9.8×10^{-4}		Ryan et al. (1988)	C	
	1.0×10^{-3}		Shen (1982)	C	
	7.3×10^{-4}		Keshavarz et al. (2022)	Q	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	2.5×10^{-3}		Duchowicz et al. (2020)	Q	
	2.4×10^{-3}		Zhang et al. (2010)	Q	288, 289
	1.8×10^{-3}		Zhang et al. (2010)	Q	288, 290
	1.9×10^{-3}		Zhang et al. (2010)	Q	288, 291
	3.9×10^{-3}		Zhang et al. (2010)	Q	288, 292
	3.7×10^{-4}		Gharagheizi et al. (2010)	Q	247
	3.9×10^{-3}		Hilal et al. (2008)	Q	
	9.3×10^{-4}		Modarresi et al. (2007)	Q	68
	8.0×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	2.4×10^{-4}		Yao et al. (2002)	Q	230
	1.0×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	2.5×10^{-3}		Duchowicz et al. (2020)	?	186, 21
	1.2×10^{-3}		Mackay et al. (2006b)	?	
	3.9×10^{-4}		Yaws (1999)	?	21
	1.2×10^{-3}		Mackay et al. (1993)	?	
	4.4×10^{-4}		Yaws and Yang (1992)	?	21
<hr/>					
1-chloropropane $\text{C}_3\text{H}_7\text{Cl}$ [540-54-5] SNMVRZFUUCLYTO-UHFFFAOYSA-N	7.6×10^{-4}	4500	Brockbank (2013)	L	
	6.9×10^{-4}		Li et al. (1993)	M	
	4.3×10^{-4}		Sato and Nakajima (1979b)	M	14
	7.7×10^{-4}	4400	Rex (1906)	M	
	7.5×10^{-4}		Duchowicz et al. (2020)	V	187
	7.6×10^{-4}		HSDB (2015)	V	
	6.9×10^{-4}		Mackay et al. (2006b)	V	
	7.1×10^{-4}		Mackay et al. (1993)	V	
	7.1×10^{-4}		Abraham (1984)	V	
	7.3×10^{-4}		Hine and Mookerjee (1975)	V	
	9.2×10^{-4}		Yaws (2003)	X	238, 12
	1.3×10^{-3}		Duchowicz et al. (2020)	Q	
	7.3×10^{-4}		Li et al. (2014)	Q	242
	4.3×10^{-4}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	272, 244
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	6.8×10^{-4}		Gharagheizi et al. (2010)	Q	247
	1.1×10^{-3}		Hilal et al. (2008)	Q	
	1.0×10^{-3}		Modarresi et al. (2007)	Q	68
		3300	Kühne et al. (2005)	Q	
			Yaffe et al. (2003)	Q	358
	2.8×10^{-4}		Yao et al. (2002)	Q	230
	7.3×10^{-4}		English and Carroll (2001)	Q	231, 232
	1.2×10^{-3}		Katritzky et al. (1998)	Q	
	4.7×10^{-4}		Suzuki et al. (1992)	Q	233
	6.2×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
		3500	Kühne et al. (2005)	?	
	7.5×10^{-4}		Yaws (1999)	?	21, 12

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	4.4×10^{-4}		Abraham and Weathersby (1994)	?	21
	9.1×10^{-4}		Yaws and Yang (1992)	?	21, 12
	7.0×10^{-4}		Abraham et al. (1990)	?	
2-chloropropane $\text{C}_3\text{H}_7\text{Cl}$ [75-29-6] ULYZAYCEDJDHCC-UHFFFAOYSA-N	5.7×10^{-4}	4400	Brockbank (2013)	L	
	5.4×10^{-4}		Li et al. (1993)	M	
	5.6×10^{-4}	4300	Rex (1906)	M	
	5.6×10^{-4}		Duchowicz et al. (2020)	V	187
	5.5×10^{-4}		HSDB (2015)	V	
	5.6×10^{-4}		Mackay et al. (2006b)	V	
	5.5×10^{-4}		Mackay et al. (1993)	V	
	6.1×10^{-4}		Hine and Mookerjee (1975)	V	
	6.8×10^{-4}		Yaws (2003)	X	238, 12
	5.9×10^{-4}		Duchowicz et al. (2020)	Q	
	9.8×10^{-4}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	272, 244
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	4.8×10^{-4}		Gharagheizi et al. (2010)	Q	247
	6.0×10^{-4}		Hilal et al. (2008)	Q	
	8.1×10^{-4}		Modarresi et al. (2007)	Q	68
	6.1×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	6.2×10^{-4}		English and Carroll (2001)	Q	231, 261
	1.5×10^{-3}		Katritzky et al. (1998)	Q	
	9.5×10^{-4}		Russell et al. (1992)	Q	280
	4.1×10^{-4}		Suzuki et al. (1992)	Q	233
	5.1×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	5.6×10^{-4}		Yaws (1999)	?	21, 12
	6.8×10^{-4}		Yaws and Yang (1992)	?	21, 12
	6.1×10^{-4}		Abraham et al. (1990)	?	
1,1-dichloropropane $\text{C}_3\text{H}_6\text{Cl}_2$ [78-99-9] WIHMGGWNMISDNJ-UHFFFAOYSA-N	2.6×10^{-3}		Duchowicz et al. (2020)	V	187
	3.3×10^{-3}		Duchowicz et al. (2020)	V	187
	2.6×10^{-3}		HSDB (2015)	V	
	2.7×10^{-3}		Duchowicz et al. (2020)	Q	
	2.7×10^{-3}		Duchowicz et al. (2020)	Q	
1,2-dichloropropane $\text{C}_3\text{H}_6\text{Cl}_2$ [78-87-5] KNKRKFALVUDBJE-UHFFFAOYSA-N	3.7×10^{-3}	4100	Schwardt et al. (2021)	L	1
	3.4×10^{-3}	4300	Burkholder et al. (2019)	L	
	3.4×10^{-3}	4300	Burkholder et al. (2015)	L	
	3.4×10^{-3}	4000	Brockbank (2013)	L	1
	3.4×10^{-3}	4300	Staudinger and Roberts (2001)	L	
	3.4×10^{-3}	4300	Staudinger and Roberts (1996)	L	
	4.3×10^{-3}	4400	Hiatt (2013)	M	
	4.2×10^{-3}		Bobadilla et al. (2003)	M	
	3.5×10^{-3}	4300	Dewulf et al. (1999)	M	
	4.4×10^{-3}		Dohnal and Hovorka (1999)	M	12

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.5×10^{-3}		Welke et al. (1998)	M	
	4.6×10^{-3}		Hovorka and Dohnal (1997)	M	12
	4.3×10^{-3}	3700	Kondoh and Nakajima (1997)	M	
	3.6×10^{-3}	4200	Wright et al. (1992)	M	679
	3.8×10^{-3}	3800	Tse et al. (1992)	M	
	3.0×10^{-3}	3800	Bissonette et al. (1990)	M	
	3.8×10^{-3}	4700	Ashworth et al. (1988)	M	33, 279
	4.9×10^{-3}		Albanese et al. (1987)	M	
	3.4×10^{-3}	4300	Leighton and Calo (1981)	M	
	3.5×10^{-3}		Warner et al. (1980)	M	
	2.1×10^{-3}		Sato and Nakajima (1979b)	M	14
	3.7×10^{-3}		Mackay et al. (2006b)	V	
	3.7×10^{-3}		Mackay et al. (1993)	V	
	3.6×10^{-3}		Warner et al. (1980)	V	
	3.4×10^{-3}		Hine and Mookerjee (1975)	V	
	3.5×10^{-3}		Yaws (2003)	X	238
	3.4×10^{-3}	2100	Goldstein (1982)	X	299
	3.5×10^{-3}		Horvath and Getzen (1999)	C	
	3.4×10^{-3}		Ryan et al. (1988)	C	
	3.5×10^{-3}		Shen (1982)	C	
	1.6×10^{-2}		Keshavarz et al. (2022)	Q	
	1.8×10^{-3}		Duchowicz et al. (2020)	Q	185
	1.4×10^{-3}		Wang et al. (2017)	Q	81, 239
	6.2×10^{-3}		Wang et al. (2017)	Q	81, 240
	8.9×10^{-3}		Wang et al. (2017)	Q	81, 241
	4.7×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	4.1×10^{-3}		Gharagheizi et al. (2010)	Q	247
	5.4×10^{-3}		Hilal et al. (2008)	Q	
	3.6×10^{-3}		Modarresi et al. (2007)	Q	68
		3700	Kühne et al. (2005)	Q	
	3.8×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	2.1×10^{-3}		English and Carroll (2001)	Q	231, 232
	2.8×10^{-3}		Katritzky et al. (1998)	Q	
	1.2×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	3.5×10^{-3}		Duchowicz et al. (2020)	?	186, 21
	8.5×10^{-4}		MacBean (2012a)	?	
	3.5×10^{-3}		Mackay et al. (2006b)	?	
		4000	Kühne et al. (2005)	?	
	3.5×10^{-3}		Yaws (1999)	?	21
	2.2×10^{-3}		Abraham and Weathersby (1994)	?	21
	3.5×10^{-3}		Mackay et al. (1993)	?	
	3.7×10^{-3}		Yaws and Yang (1992)	?	21
	3.4×10^{-3}		Abraham et al. (1990)	?	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.8×10^{-3}		Mackay and Yeun (1983)	?	
	5.9×10^{-3}		Chiou et al. (1980)	?	80
1,2-dichloropropane-d6 $\text{C}_3\text{D}_6\text{Cl}_2$ [93952-08-0] KNKRKFALVUDBJE-LIDOUZCJSA-N	3.6×10^{-3}	4600	Hiatt (2013)	M	
1,3-dichloropropane $\text{C}_3\text{H}_6\text{Cl}_2$ [142-28-9] YHRUOJUYPBZOS-UHFFFAOYSA-N	1.0×10^{-2}	3900	Burkholder et al. (2019)	L	
	1.0×10^{-2}	3900	Burkholder et al. (2015)	L	
	1.2×10^{-2}	3100	Brockbank (2013)	L	
	1.3×10^{-2}	5300	Hiatt (2013)	M	
	1.1×10^{-2}	5000	Kondoh and Nakajima (1997)	M	
	8.5×10^{-3}		Albanese et al. (1987)	M	
	1.0×10^{-2}	3900	Leighton and Calo (1981)	M	
	9.9×10^{-3}		Hine and Mookerjee (1975)	V	
	1.6×10^{-2}		Keshavarz et al. (2022)	Q	
	3.6×10^{-3}		Duchowicz et al. (2020)	Q	300
	1.8×10^{-2}		Hilal et al. (2008)	Q	
	5.8×10^{-3}		Modarresi et al. (2007)	Q	68
		3700	Kühne et al. (2005)	Q	
	5.6×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	3.0×10^{-3}		Katritzky et al. (1998)	Q	
	1.4×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.0×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		3900	Kühne et al. (2005)	?	
	1.0×10^{-2}		Yaws (1999)	?	21
	9.9×10^{-3}		Yaws and Yang (1992)	?	21
	9.9×10^{-3}		Abraham et al. (1990)	?	
2,2-dichloropropane $\text{C}_3\text{H}_6\text{Cl}_2$ [594-20-7] ZEOVXNVKXIPWMS-UHFFFAOYSA-N	4.4×10^{-4}	7400	Hiatt (2013)	M	
	8.1×10^{-4}	3900	Bakierowska and Trzeszczyński (2003)	M	
	7.1×10^{-4}	630	Kondoh and Nakajima (1997)	M	
		3700	Kühne et al. (2005)	Q	
		3900	Kühne et al. (2005)	?	
1,1,1-trichloropropane $\text{C}_3\text{H}_5\text{Cl}_3$ [7789-89-1] AVGQTJUPLKNPQP-UHFFFAOYSA-N	3.1×10^{-3}		Duchowicz et al. (2020)	V	187
	3.8×10^{-3}		Yaws et al. (2005)	X	448
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	1.1×10^{-3}		Hilal et al. (2008)	Q	
	3.1×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	6.5×10^{-4}		Katritzky et al. (1998)	Q	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1,2-trichloropropane $\text{C}_3\text{H}_5\text{Cl}_3$ [598-77-6] GRSQYISVQKPZCW-UHFFFAOYSA-N	3.1×10^{-2}		Duchowicz et al. (2020)	V	187
	1.4×10^{-2}		Yaws et al. (2005)	X	448
	4.0×10^{-3}		Duchowicz et al. (2020)	Q	
	7.9×10^{-3}		Hilal et al. (2008)	Q	
	3.1×10^{-2} 2.4×10^{-3}		Yaffe et al. (2003) Katritzky et al. (1998)	Q Q	249, 250
1,2,3-trichloropropane $\text{C}_3\text{H}_5\text{Cl}_3$ [96-18-4] CFXQEHVCMCRXUSD-UHFFFAOYSA-N	3.6×10^{-2}	3700	Burkholder et al. (2019)	L	
	3.6×10^{-2}	3700	Burkholder et al. (2015)	L	
	3.3×10^{-2}	1900	Brockbank (2013)	L	
	3.6×10^{-2}	3700	Staudinger and Roberts (2001)	L	
	3.4×10^{-2}	3700	Staudinger and Roberts (1996)	L	
	4.2×10^{-2}	7200	Hiatt (2013)	M	
	2.8×10^{-2}	5300	Kondoh and Nakajima (1997)	M	
	4.4×10^{-2}	4000	Tancrède and Yanagisawa (1990)	M	
	3.3×10^{-2}		Albanese et al. (1987)	M	
	2.9×10^{-2}	3500	Leighton and Calo (1981)	M	
	2.6×10^{-2}		Mackay et al. (2006b)	V	
	2.6×10^{-2}		Mackay et al. (1993)	V	
	3.1×10^{-2}		Dilling (1977)	V	
	2.6×10^{-2}		Yaws (2003)	X	238
	2.2×10^{-2}		Yaws et al. (2005)	X	448
	1.6×10^{-2}		Keshavarz et al. (2022)	Q	
	5.3×10^{-3}		Duchowicz et al. (2020)	Q	
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	2.2×10^{-2}		Gharagheizi et al. (2010)	Q	247
	3.9×10^{-2}		Hilal et al. (2008)	Q	
1.4×10^{-2}		Modarresi et al. (2007)	Q	68	
	4000	Kühne et al. (2005)	Q		
		Yaffe et al. (2003)	Q	249, 250	
		Katritzky et al. (1998)	Q		
		Duchowicz et al. (2020)	?	186, 21	
	4100	Kühne et al. (2005)	?		
		Yaws (1999)	?	21	
		Yaws and Yang (1992)	?	21	
1,1,2,2,3-pentachloropropane $\text{C}_3\text{H}_3\text{Cl}_5$ [16714-68-4] IYFMQUDCYNWFTL-UHFFFAOYSA-N	1.4×10^{-2}		Zhang et al. (2010)	Q	288, 289
	7.3×10^{-2}		Zhang et al. (2010)	Q	288, 290
	6.2×10^{-1}		Zhang et al. (2010)	Q	288, 291
	8.6×10^{-3}		Zhang et al. (2010)	Q	288, 292

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-chloro-2-methylpropane $\text{C}_4\text{H}_9\text{Cl}$ [513-36-0] QTBFPMKWQKYFLR-UHFFFAOYSA-N	8.3×10^{-3}		Mackay and Shiu (1981)	L	
	5.0×10^{-4}		Duchowicz et al. (2020)	V	187
	5.0×10^{-4}		Duchowicz et al. (2020)	Q	
	3.9×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	7.3×10^{-4}		Hilal et al. (2008)	Q	
	8.5×10^{-4}		Modarresi et al. (2007)	Q	68
	8.6×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	6.3×10^{-4}		Yaws and Yang (1992)	?	21, 12
2-chloro-2-methylpropane $\text{C}_4\text{H}_9\text{Cl}$ (<i>tert</i> -butyl chloride) [507-20-0] NBRKLOOSMBRFMH-UHFFFAOYSA-N	1.6×10^{-4}	5600	Clarke et al. (1962)	M	
	7.7×10^{-4}		Duchowicz et al. (2020)	V	187
	1.2×10^{-3}		Yaws (2003)	X	238, 81
	2.2×10^{-4}		Duchowicz et al. (2020)	Q	
	1.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-4}		Raventos-Duran et al. (2010)	Q	272, 244
	2.5×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	1.2×10^{-3}		Gharagheizi et al. (2010)	Q	247
	2.2×10^{-4}		Hilal et al. (2008)	Q	
	6.5×10^{-4}		Modarresi et al. (2007)	Q	68
	6.9×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	3.1×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	7.7×10^{-4}		Yaws (1999)	?	21, 81
	6.4×10^{-5}		Abraham et al. (1990)	?	
1-chlorobutane $\text{C}_4\text{H}_9\text{Cl}$ (butyl chloride) [109-69-3] VFWCMGCRMGJXDK-UHFFFAOYSA-N	5.6×10^{-4}	4500	Brockbank (2013)	L	
	6.7×10^{-4}		Dohnal and Hovorka (1999)	M	12
	5.3×10^{-4}		Li et al. (1993)	M	
	5.9×10^{-4}	3500	Leighton and Calo (1981)	M	
	3.3×10^{-4}		Sato and Nakajima (1979b)	M	14
	4.8×10^{-4}		Mackay et al. (2006b)	V	
	4.8×10^{-4}		Mackay et al. (1993)	V	
	5.3×10^{-4}		Abraham (1984)	V	
	5.1×10^{-4}		Hine and Mookerjee (1975)	V	
	5.9×10^{-4}		Yaws (2003)	X	238
	4.4×10^{-4}		Keshavarz et al. (2022)	Q	
	1.3×10^{-3}		Duchowicz et al. (2020)	Q	
	3.1×10^{-4}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	4.5×10^{-4}		Gharagheizi et al. (2010)	Q	247
9.0×10^{-4}		Hilal et al. (2008)	Q		
8.7×10^{-4}		Modarresi et al. (2007)	Q	68	
		3700	Kühne et al. (2005)	Q	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	6.1×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	1.9×10^{-4}		Yao et al. (2002)	Q	230
	5.4×10^{-4}		English and Carroll (2001)	Q	231, 232
	1.4×10^{-3}		Katritzky et al. (1998)	Q	
	1.3×10^{-3}		Russell et al. (1992)	Q	280
	3.6×10^{-4}		Suzuki et al. (1992)	Q	233
	5.0×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	5.9×10^{-4}		Duchowicz et al. (2020)	?	186, 21
	6.5×10^{-4}		Mackay et al. (2006b)	?	
		3700	Kühne et al. (2005)	?	
	5.9×10^{-4}		Yaws (1999)	?	21
	3.4×10^{-4}		Abraham and Weathersby (1994)	?	21
	6.5×10^{-4}		Mackay et al. (1993)	?	
	5.6×10^{-4}		Hoff et al. (1993)	?	21
	5.8×10^{-4}		Yaws and Yang (1992)	?	21
	5.3×10^{-4}		Abraham et al. (1990)	?	
2-chlorobutane $\text{C}_4\text{H}_9\text{Cl}$ (<i>sec</i> -butyl chloride) [78-86-4] BSPCSKHALVHRSR-UHFFFAOYSA-N	4.1×10^{-4}	4500	Brockbank (2013)	L	
	4.1×10^{-4}	4500	Leighton and Calo (1981)	M	
	5.3×10^{-4}		Mackay et al. (2006b)	V	
	5.3×10^{-4}		Mackay et al. (1993)	V	
	5.1×10^{-4}		Yaws (2003)	X	238
	4.4×10^{-4}		Keshavarz et al. (2022)	Q	
	5.9×10^{-4}		Duchowicz et al. (2020)	Q	300
	5.3×10^{-4}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	3.7×10^{-4}		Gharagheizi et al. (2010)	Q	247
	6.2×10^{-4}		Hilal et al. (2008)	Q	
	8.2×10^{-4}		Modarresi et al. (2007)	Q	68
		3700	Kühne et al. (2005)	Q	
	4.2×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	1.3×10^{-4}		Yao et al. (2002)	Q	230
	4.7×10^{-4}		English and Carroll (2001)	Q	231, 275
	1.9×10^{-3}		Katritzky et al. (1998)	Q	
	4.2×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	4.1×10^{-4}		Duchowicz et al. (2020)	?	186, 21
	4.4×10^{-4}		Mackay et al. (2006b)	?	
		4500	Kühne et al. (2005)	?	
	5.2×10^{-4}		Yaws (1999)	?	21
	4.4×10^{-4}		Mackay et al. (1993)	?	
	5.3×10^{-4}		Yaws and Yang (1992)	?	21
	4.0×10^{-4}		Abraham et al. (1990)	?	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1-dichlorobutane $\text{C}_4\text{H}_8\text{Cl}_2$ [541-33-3] SEQRDAAUNCRFIT-UHFFFAOYSA-N	1.3×10^{-3}		Duchowicz et al. (2020)	V	187
	1.3×10^{-3}		Hine and Mookerjee (1975)	V	
	2.7×10^{-3}		Duchowicz et al. (2020)	Q	
	2.5×10^{-3}		Hilal et al. (2008)	Q	
	9.2×10^{-4}		Modarresi et al. (2007)	Q	68
	1.4×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	1.6×10^{-3}		English and Carroll (2001)	Q	231, 261
	1.3×10^{-3}		Katritzky et al. (1998)	Q	
	9.2×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
1,4-dichlorobutane $\text{C}_4\text{H}_8\text{Cl}_2$ [110-56-5] KJDRSWPQXHESDQ-UHFFFAOYSA-N	2.0×10^{-2}	3600	Brockbank (2013)	L	
	1.2×10^{-2}		Albanese et al. (1987)	M	
	2.0×10^{-2}	3100	Leighton and Calo (1981)	M	
	2.2×10^{-2}		Keshavarz et al. (2022)	Q	
	3.6×10^{-3}		Duchowicz et al. (2020)	Q	300
	2.6×10^{-2}		Hilal et al. (2008)	Q	
	4.5×10^{-3}		Modarresi et al. (2007)	Q	68
		4000	Kühne et al. (2005)	Q	
	2.0×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	1.9×10^{-3}		English and Carroll (2001)	Q	231, 232
	3.9×10^{-3}		Katritzky et al. (1998)	Q	
	1.1×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	2.0×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		3700	Kühne et al. (2005)	?	
	2.0×10^{-2}		Abraham et al. (1990)	?	
2,3-dichlorobutane $\text{C}_4\text{H}_8\text{Cl}_2$ [7581-97-7] RMISVOPUIFJTEO-UHFFFAOYSA-N	1.4×10^{-3}		Duchowicz et al. (2020)	V	187
	2.5×10^{-3}		Yaws et al. (2005)	X	448
	8.4×10^{-4}		Duchowicz et al. (2020)	Q	
	2.8×10^{-3}		Hilal et al. (2008)	Q	
	2.5×10^{-3}		Modarresi et al. (2007)	Q	68
	1.4×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	3.1×10^{-3}		Katritzky et al. (1998)	Q	
1-chloropentane $\text{C}_5\text{H}_{11}\text{Cl}$ [543-59-9] SQCZQTSZSLZIQ-UHFFFAOYSA-N	4.1×10^{-4}	4000	Brockbank (2013)	L	1
	4.2×10^{-4}		Li et al. (1993)	M	
	4.1×10^{-4}	4700	Leighton and Calo (1981)	M	
	2.7×10^{-4}		Sato and Nakajima (1979b)	M	14
	4.5×10^{-4}		Mackay et al. (2006b)	V	
	4.5×10^{-4}		Mackay et al. (1993)	V	
	4.5×10^{-4}		Abraham (1984)	V	
	4.3×10^{-4}		Amoore and Buttery (1978)	V	
	4.5×10^{-4}		Hine and Mookerjee (1975)	V	
	1.9×10^{-4}		Yaws (2003)	X	238
	5.9×10^{-4}		Keshavarz et al. (2022)	Q	
	1.3×10^{-3}		Duchowicz et al. (2020)	Q	300
	2.5×10^{-4}		Gharagheizi et al. (2012)	Q	

Table A6.1: Chlorocarbons (C, H, Cl) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	2.9×10^{-4}		Gharagheizi et al. (2010)	Q	247
	7.3×10^{-4}		Hilal et al. (2008)	Q	
	7.1×10^{-4}	4000	Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	
	4.2×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	4.1×10^{-4}		English and Carroll (2001)	Q	231, 232
	1.6×10^{-3}		Katritzky et al. (1998)	Q	
	2.8×10^{-4}		Suzuki et al. (1992)	Q	233
	3.9×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	4.1×10^{-4}		Duchowicz et al. (2020)	?	186, 21
	4.2×10^{-4}	4400	Mackay et al. (2006b)	?	
			Kühne et al. (2005)	?	
	1.9×10^{-4}		Yaws (1999)	?	21
	2.8×10^{-4}		Abraham and Weathersby (1994)	?	21
	4.2×10^{-4}		Mackay et al. (1993)	?	
	2.0×10^{-4}		Yaws and Yang (1992)	?	21
	4.5×10^{-4}		Abraham et al. (1990)	?	
2-chloropentane $C_5H_{11}Cl$ [625-29-6] NFRKUDYZEVQXTE-UHFFFAOYSA-N	6.7×10^{-4}		Duchowicz et al. (2020)	V	187
	3.6×10^{-4}		Hine and Mookerjee (1975)	V	
	5.8×10^{-4}		Duchowicz et al. (2020)	Q	
	4.8×10^{-4}		Hilal et al. (2008)	Q	
	6.0×10^{-4}		Modarresi et al. (2007)	Q	68
	6.7×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	3.6×10^{-4}		English and Carroll (2001)	Q	231, 275
	2.2×10^{-3}		Katritzky et al. (1998)	Q	
	2.5×10^{-4}		Suzuki et al. (1992)	Q	233
	3.3×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	3.6×10^{-4}		Abraham et al. (1990)	?	
3-chloropentane $C_5H_{11}Cl$ [616-20-6] CXQSCYIVCSCSES-UHFFFAOYSA-N	3.8×10^{-4}		Duchowicz et al. (2020)	V	187
	3.8×10^{-4}		Meylan and Howard (1991)	V	
	3.8×10^{-4}		Hine and Mookerjee (1975)	V	
	5.8×10^{-4}		Duchowicz et al. (2020)	Q	
	4.7×10^{-4}		Hilal et al. (2008)	Q	
	5.9×10^{-4}		Modarresi et al. (2007)	Q	68
	4.5×10^{-4}		English and Carroll (2001)	Q	231, 261
	2.5×10^{-4}		Suzuki et al. (1992)	Q	233
	3.9×10^{-4}		Meylan and Howard (1991)	Q	
	3.4×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	3.8×10^{-4}		Abraham et al. (1990)	?	
1,2-dichloropentane $C_5H_{10}Cl_2$ [1674-33-5] PPLBPDUKNRCHGG-UHFFFAOYSA-N	4.8×10^{-3}		Yaws et al. (2005)	X	448
	3.1×10^{-3}		Hilal et al. (2008)	Q	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,5-dichloropentane $C_5H_{10}Cl_2$ [628-76-2] LBKDGROORAKTLC-UHFFFAOYSA-N	1.0×10^{-2} 1.8×10^{-2} 2.9×10^{-2} 3.6×10^{-3} 2.0×10^{-2} 3.8×10^{-3}	4000 1600	Brockbank (2013) Leighton and Calo (1981) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Yaffe et al. (2003) Katritzky et al. (1998) Duchowicz et al. (2020) Kühne et al. (2005)	L M Q Q Q Q Q Q ? ?	185 68 249, 250 186, 21
2,3-dichloropentane $C_5H_{10}Cl_2$ [600-11-3] HVFJQRZGBBKTPL-UHFFFAOYSA-N	2.9×10^{-3} 2.8×10^{-3}		Yaws et al. (2005) Hilal et al. (2008)	X Q	448
2-chloro-2-methylbutane $C_5H_{11}Cl$ [594-36-5] CRNIHJHMEQZAAS-UHFFFAOYSA-N	3.1×10^{-3} 3.0×10^{-3}		Yaws (1999) Yaws and Yang (1992)	? ?	21 21
1-chlorohexane $C_6H_{13}Cl$ [544-10-5] MLRVZFYXUZQSRU-UHFFFAOYSA-N	3.1×10^{-4} 4.1×10^{-4} 8.0×10^{-4} 1.3×10^{-3} 6.1×10^{-4} 6.1×10^{-4} 3.5×10^{-4} 3.1×10^{-4} 1.7×10^{-3} 3.1×10^{-4} 4.1×10^{-4} 4.0×10^{-4}	4500 4300 4400	Li et al. (1993) Leighton and Calo (1981) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Yaffe et al. (2003) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Duchowicz et al. (2020) Kühne et al. (2005) Abraham et al. (1990)	M M Q Q Q Q Q Q Q Q ? ? ?	300 68 249, 250 231, 232 186, 21
2-chlorohexane $C_6H_{13}Cl$ [638-28-8] GLCIPJOIEVLTTPR-UHFFFAOYSA-N	5.0×10^{-4} 4.2×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	448
3-chlorohexane $C_6H_{13}Cl$ [2346-81-8] BXSMMAVTEURRGU-UHFFFAOYSA-N	5.0×10^{-4} 5.0×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	448

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-chloroheptane $C_7H_{15}Cl$ [629-06-1] DZMDPHNGKBEVRE-UHFFFAOYSA-N	2.5×10^{-4} 5.1×10^{-4} 5.1×10^{-4} 2.3×10^{-4} 2.4×10^{-4} 2.5×10^{-4}		Abraham (1984) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhandan et al. (1997) Abraham et al. (1990)	V Q Q Q Q ?	68 231, 232
2-chloroheptane $C_7H_{15}Cl$ [1001-89-4] PTSLUOSUHFGQHV-UHFFFAOYSA-N	3.9×10^{-4} 3.4×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	448
3-chloroheptane $C_7H_{15}Cl$ [999-52-0] DMKNOEJJJSHSML-UHFFFAOYSA-N	3.6×10^{-4} 3.4×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	448
4-chloroheptane $C_7H_{15}Cl$ [998-95-8] MSGGWAXIEMEWCQ-UHFFFAOYSA-N	3.6×10^{-4} 3.5×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	448
1-chlorooctane $C_8H_{17}Cl$ [111-85-3] CNDHHGUSRIZDSL-UHFFFAOYSA-N	2.6×10^{-4} 1.9×10^{-4} 2.6×10^{-4} 1.3×10^{-3} 1.6×10^{-4} 4.2×10^{-4} 2.6×10^{-4} 1.8×10^{-3}	6100	Duchowicz et al. (2020) Sarraute et al. (2004) Yaws et al. (2005) Duchowicz et al. (2020) HSDB (2015) Hilal et al. (2008) Yaffe et al. (2003) Katritzky et al. (1998)	V V X Q Q Q Q Q	187 448 249, 250
2-chlorooctane $C_8H_{17}Cl$ [628-61-5] HKDCIIMOALDWHF-UHFFFAOYSA-N	2.7×10^{-4} 3.1×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	448
3-(chloromethyl)-heptane $C_8H_{17}Cl$ [123-04-6] WLVCBAMXYMWGLJ-UHFFFAOYSA-N	4.5×10^{-4} 4.9×10^{-4}		Hilal et al. (2008) Modarresi et al. (2007)	Q Q	68
1,8-dichlorooctane $C_8H_{16}Cl_2$ [2162-99-4] WXYMNDVFLNUIA-UHFFFAOYSA-N	7.1×10^{-3}	7100	Sarraute et al. (2006)	M	680
1-chlorononane $C_9H_{19}Cl$ [2473-01-0] RKAMCQVGHFRILV-UHFFFAOYSA-N	1.6×10^{-4} 3.5×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	448

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-chlorononane $\text{C}_9\text{H}_{19}\text{Cl}$ [2216-36-6] DTWJISBCMBWFNY-UHFFFAOYSA-N	2.7×10^{-4} 3.0×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	448
5-chlorononane $\text{C}_9\text{H}_{19}\text{Cl}$ [28123-70-8] GHLDSOWZIOPTMC-UHFFFAOYSA-N	2.2×10^{-4} 2.6×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	448
1-chlorodecane $\text{C}_{10}\text{H}_{21}\text{Cl}$ [1002-69-3] ZTEHOZMYMCEYRM-UHFFFAOYSA-N	1.6×10^{-4} 2.5×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	448
1,10-dichlorodecane $\text{C}_{10}\text{H}_{20}\text{Cl}_2$ [2162-98-3] RBBNTRDPSVZESY-UHFFFAOYSA-N	2.0×10^{-3} 5.3×10^{-3}		Drouillard et al. (1998) Hilal et al. (2008)	V Q	
1,2,9,10-tetrachlorodecane $\text{C}_{10}\text{H}_{18}\text{Cl}_4$ [205646-11-3] VXBHNYIEBLRXAW-UHFFFAOYSA-N	5.6×10^{-2} 6.2×10^{-2} 3.9×10^{-2} 6.2×10^{-4} 1.4×10^{-2}		Drouillard et al. (1998) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008)	M Q Q Q Q	243, 244 245 246
pentachlorodecane isomers $\text{C}_{10}\text{H}_{17}\text{Cl}_5$ [175801-37-3] AMKBEJYNNQNKGD-UHFFFAOYSA-N	2.0×10^{-1} 3.8×10^{-1}		Drouillard et al. (1998) Drouillard et al. (1998)	M M	
1-chloroundecane $\text{C}_{11}\text{H}_{23}\text{Cl}$ [2473-03-2] ZHKKNUKCXPWZOP-UHFFFAOYSA-N	1.7×10^{-4} 2.3×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	448
1,2,10,11-tetrachloroundecane $\text{C}_{11}\text{H}_{20}\text{Cl}_4$ [210049-49-3] VVAAXDBMZVCVPA-UHFFFAOYSA-N	1.6×10^{-1} 4.9×10^{-2} 3.1×10^{-2} 4.9×10^{-4} 1.1×10^{-2}		Drouillard et al. (1998) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008)	M Q Q Q Q	243, 244 245 246
pentachloroundecane isomers $\text{C}_{11}\text{H}_{19}\text{Cl}_5$ [210175-48-7] BBCUCNDIXLWBNQ-UHFFFAOYSA-N	6.8×10^{-1} 1.5		Drouillard et al. (1998) Drouillard et al. (1998)	M M	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-chlorododecane $\text{C}_{12}\text{H}_{25}\text{Cl}$ [112-52-7] YAYNEUUHHLGGAH-UHFFFAOYSA-N	2.3×10^{-4} 1.9×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	448
1,12-dichlorododecane $\text{C}_{12}\text{H}_{24}\text{Cl}_2$ [3922-28-9] RNXPZVYZVHJVHM-UHFFFAOYSA-N	1.5×10^{-3} 3.1×10^{-3}		Drouillard et al. (1998) Hilal et al. (2008)	V Q	
1-chlorotridecane $\text{C}_{13}\text{H}_{27}\text{Cl}$ [822-13-9] ASZMYJSJEOGSBR-UHFFFAOYSA-N	2.9×10^{-4} 1.4×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	448
1-chlorotetradecane $\text{C}_{14}\text{H}_{29}\text{Cl}$ [2425-54-9] RNHWYOLIEJIAMV-UHFFFAOYSA-N	3.9×10^{-4} 1.2×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	448
tetrachlorocyclopentane $\text{C}_5\text{H}_6\text{Cl}_4$ [59808-78-5] ZFMWDTNZPKDVBU-UHFFFAOYSA-N	6.4×10^{-3} 4.1×10^{-1} 1.5 2.9×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1,1,2,3,3,4-hexachlorocyclopentane $\text{C}_5\text{H}_4\text{Cl}_6$ [68258-91-3] RPUFWOAXMFQSDJ-UHFFFAOYSA-N	5.1×10^{-2} 1.9×10^{-1} 1.6 2.2×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1,1,2,3,3,4,5-heptachlorocyclopentane $\text{C}_5\text{H}_3\text{Cl}_7$ [68258-90-2] XCEUTYGYMGYCBG-UHFFFAOYSA-N	1.5×10^{-1} 7.9×10^{-1} 1.6 8.6×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1,2,3,3,4,5-hexachlorocyclopentene $\text{C}_5\text{H}_2\text{Cl}_6$ OSRFTCIVMWPVNP-UHFFFAOYSA-N	1.4×10^{-2} 4.4×10^{-2} 4.4×10^{-1} 6.4×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
heptachlorocyclopentene C_5HCl_7 [62111-47-1] AJUXFTIOMRYFRL-UHFFFAOYSA-N	3.9×10^{-2} 3.5×10^{-2} 8.4×10^{-2} 5.4×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
chlorocyclohexane	2.8×10^{-3}	3300	Bakierowska and Trzeszczyński (2003)	M	
$\text{C}_6\text{H}_{11}\text{Cl}$ [542-18-7] UNFUWWDGSDHCW-UHFFFAOYSA-N	3.2×10^{-3}	4200	Hilal et al. (2008)	Q	
		3200	Kühne et al. (2005)	Q	
			Kühne et al. (2005)	?	
α -1,2,3,4,5,6-hexachlorocyclohexane $\text{C}_6\text{H}_6\text{Cl}_6$ (α -lindane; α -HCH) [319-84-6] JLYXXMFPNIAWKQ-SHFUYGGZSA-N	1.5		Xiao et al. (2004)	L	368
	1.4		Xiao et al. (2004)	L	369
	3.0	5500	Cetin et al. (2006)	M	
	1.7	7500	Sahsuvar et al. (2003)	M	
	8.1×10^{-1}		Altschuh et al. (1999)	M	
	1.3	6500	Kucklick et al. (1991)	M	
	4.2×10^{-1}		Atlas et al. (1982)	M	681
	1.1		Mackay et al. (2006d)	V	
	9.1×10^{-1}		Ballschmiter and Wittlinger (1991)	V	
	2.3		Calamari et al. (1991)	V	12
	1.1		Suntio et al. (1988)	V	12
	5.9×10^{-3}	3900	Paasivirta et al. (1999)	T	
	1.8		Suntio et al. (1988)	C	682
	3.9×10^{-2}		Zhang et al. (2010)	Q	288, 289
	7.7		Zhang et al. (2010)	Q	288, 290
	4.0×10^1		Zhang et al. (2010)	Q	288, 291
	3.8×10^{-1}		Zhang et al. (2010)	Q	288, 292
	1.1		Modarresi et al. (2007)	Q	68
		7100	Kühne et al. (2005)	Q	
		7100	Kühne et al. (2005)	?	
β -1,2,3,4,5,6-hexachlorocyclohexane $\text{C}_6\text{H}_6\text{Cl}_6$ (β -lindane; β -HCH) [319-85-7] JLYXXMFPNIAWKQ-CDRYSYESSA-N	2.7×10^1		Xiao et al. (2004)	L	368
	2.7×10^1		Xiao et al. (2004)	L	369
	2.8×10^1	7800	Sahsuvar et al. (2003)	M	
	2.2×10^1		Altschuh et al. (1999)	M	
	8.6		Mackay et al. (2006d)	V	
	1.4×10^1		Ballschmiter and Wittlinger (1991)	V	
	8.3		Suntio et al. (1988)	V	12
	5.6×10^1		Suntio et al. (1988)	C	683
	6.7×10^{-1}		Ryan et al. (1988)	C	
	5.8		Keshavarz et al. (2022)	Q	
	3.0×10^{-2}		Duchowicz et al. (2020)	Q	185
	1.1		Modarresi et al. (2007)	Q	68
		7100	Kühne et al. (2005)	Q	
	2.2×10^1		Duchowicz et al. (2020)	?	186, 21
		7800	Kühne et al. (2005)	?	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
γ -1,2,3,4,5,6-hexachlorocyclohexane C ₆ H ₆ Cl ₆ (γ -lindane; lindane; γ -HCH) [58-89-9] JLYXXMFPNIAWKQ-GNIYUCBRSA-N	3.7		Xiao et al. (2004)	L	368
	3.3		Xiao et al. (2004)	L	369
	3.1		Mackay and Shiu (1981)	L	
	3.1		Chao et al. (2017)	M	
	3.9	3300	Cetin et al. (2006)	M	
	6.0	6200	Xie et al. (2004)	M	
	4.3	7500	Sahsuvar et al. (2003)	M	
	1.9		Altschuh et al. (1999)	M	
	2.8	5500	Kucklick et al. (1991)	M	
	4.9		Fendinger et al. (1989)	M	73
	5.0		Fendinger and Glotfelty (1988)	M	73
	6.7		Mackay et al. (2006d)	V	
	3.3		Siebers et al. (1994)	V	
	1.0×10^1		Ballschmitter and Wittlinger (1991)	V	
	5.9		Calamari et al. (1991)	V	12
	3.7		McLachlan et al. (1990)	V	375
	7.7		Suntio et al. (1988)	V	12
	6.7×10^{-1}		Caron et al. (1985)	V	
	7.9		Burkhard and Guth (1981)	V	
	3.1		Chiou et al. (1980)	V	
	2.0×10^1		Mackay and Leinonen (1975)	V	
	6.2×10^{-2}	7100	Paasivirta et al. (1999)	T	
	3.1×10^1		McCarty (1980)	X	370
	2.0×10^1		Suntio et al. (1988)	C	12
	5.0		Suntio et al. (1988)	C	683
	1.4		Suntio et al. (1988)	C	
	5.8		Keshavarz et al. (2022)	Q	
	3.0×10^{-2}		Duchowicz et al. (2020)	Q	
	3.9×10^{-2}		Zhang et al. (2010)	Q	288, 289
	7.7		Zhang et al. (2010)	Q	288, 290
	4.7×10^1		Zhang et al. (2010)	Q	288, 291
	3.8×10^{-1}		Zhang et al. (2010)	Q	288, 292
	5.3		Hilal et al. (2008)	Q	
	1.1		Modarresi et al. (2007)	Q	68
		7100	Kühne et al. (2005)	Q	
	1.9		Duchowicz et al. (2020)	?	186, 21
		6200	Kühne et al. (2005)	?	
	2.2×10^1		Brimblecombe (1986)	?	81

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
δ -1,2,3,4,5,6-hexachlorocyclohexane $C_6H_6Cl_6$ (δ -lindane; δ -HCH) [319-86-8] JLYXXMFPNIAWKQ-GPIVLXJGSA-N	2.3×10^1 2.3×10^1 1.4×10^1 1.4×10^1 5.6×10^1 3.0×10^{-2} 1.1		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Suntio et al. (1988) Duchowicz et al. (2020) Modarresi et al. (2007)	V V V V C Q Q	187 12 683 68
4,5,6,7,8,8-hexachloro-3a,4,7,7a-tetrahydro-4,7-methano-1H-indene $C_{10}H_6Cl_6$ [3734-48-3] XCJXQCUIJXDUNDN-UHFFFAOYSA-N	2.0×10^{-2} 2.0×10^{-2} 6.2×10^{-3} 2.2 4.2×10^{-1}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
dienochlor $C_{10}Cl_{10}$ [2227-17-0] LWLJUMBEZJHXHV-UHFFFAOYSA-N	1.8×10^{-1} 1.2×10^{-2}		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
mirex $C_{10}Cl_{12}$ (dodecachloropentacyclodecane) [2385-85-5] GVYLCNUFSDAAW-UHFFFAOYSA-N	1.2×10^{-2} 1.2×10^{-3} 5.8×10^{-2} 1.2×10^{-3} 5.2×10^{-2} 9.9×10^{-4} 1.3×10^{-1} 4.3 3.9×10^{-3} 1.2×10^{-2}	11000 10000 11000	Yin and Hassett (1986) Mackay et al. (2006d) McLachlan et al. (1990) Suntio et al. (1988) Smith and Bomberger (1980) Suntio et al. (1988) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Kühne et al. (2005) Duchowicz et al. (2020) Kühne et al. (2005)	M V V V V C Q Q Q Q ? ?	 375 12 24 12 186, 21
dechlorane plus $C_{18}H_{12}Cl_{12}$ [13560-89-9] UGQQAJOXWXCOPY-UHFFFAOYSA-N	1.3 1.3 7.0×10^{-2} 2.1×10^3 4.6×10^1		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
chloroethene CH_2CHCl (vinyl chloride) [75-01-4] BZHJMEXRYGGRV-UHFFFAOYSA-N	4.1×10^{-4} 3.8×10^{-4} 3.8×10^{-4} 4.3×10^{-4} 3.8×10^{-4} 3.9×10^{-4} 3.9×10^{-4} 4.5×10^{-4} 3.9×10^{-4}	2500 3100 3100 3000 3100 3100 3100 3000 2400	Schwardt et al. (2021) Burkholder et al. (2019) Burkholder et al. (2015) Brockbank (2013) Warneck (2007) Staudinger and Roberts (2001) Staudinger and Roberts (1996) Wilhelm et al. (1977) Schwardt et al. (2021)	L L L L L L L L M	1 1 684, 11

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	3.9×10^{-4}	3200	Hiatt (2013)	M	
	4.1×10^{-4}	2300	Chen et al. (2012)	M	
			Chiang et al. (1998)	M	654
	4.0×10^{-4}	2900	Ashworth et al. (1988)	M	279
	3.7×10^{-4}	3300	Gossett (1987)	M	
	8.5×10^{-6}		Pearson and McConnell (1975)	M	651, 375
			Mackay et al. (2006b)	V	685
	9.1×10^{-4}		Lide and Frederikse (1995)	V	
	1.2×10^{-4}		Mackay et al. (1993)	V	
	1.1×10^{-4}		Hwang et al. (1992)	V	
	5.4×10^{-4}		Smith and Bomberger (1980)	V	24
	9.4×10^{-6}		Dilling (1977)	V	
	4.2×10^{-4}		Dilling (1977)	V	
	1.8×10^{-4}		Hine and Mookerjee (1975)	V	
	4.4×10^{-4}		Yaws (2003)	X	238
	6.5×10^{-4}		Ryan et al. (1988)	C	
	6.0×10^{-4}		Wang et al. (2017)	Q	81, 239
	2.4×10^{-4}		Wang et al. (2017)	Q	81, 240
	6.3×10^{-4}		Wang et al. (2017)	Q	81, 241
	3.4×10^{-3}		Li et al. (2014)	Q	242
	4.9×10^{-4}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	272, 244
	2.5×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	2.6×10^{-4}		Gharagheizi et al. (2010)	Q	247
	2.1×10^{-4}		Hilal et al. (2008)	Q	
	1.2×10^{-3}		Modarresi et al. (2007)	Q	68
	4.2×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	1.4×10^{-3}		Yao et al. (2002)	Q	230
	2.4×10^{-3}		Suzuki et al. (1992)	Q	233
	2.0×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	8.1×10^{-4}		Irmann (1965)	Q	
	3.7×10^{-4}		Mackay et al. (2006b)	?	
	4.4×10^{-4}		Yaws (1999)	?	21
	3.9×10^{-4}	2700	Yaws et al. (1999)	?	21
	3.7×10^{-4}		Mackay et al. (1993)	?	
	4.4×10^{-4}		Yaws and Yang (1992)	?	21
	4.5×10^{-4}		Abraham et al. (1990)	?	
chloroethene-d3 CD ₂ CDCI (vinyl chloride-d3) [6745-35-3] BZHJMEDXRYGGRV-FUDHJZNOSA-N	3.8×10^{-4}	3100	Hiatt (2013)	M	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
1,1-dichloroethene	3.7×10^{-4}	3500	Schwardt et al. (2021)	L	1
CH ₂ CCl ₂	3.7×10^{-4}	3400	Burkholder et al. (2019)	L	
[75-35-4]	3.7×10^{-4}	3400	Burkholder et al. (2015)	L	
LGXVIGDEPROXKC-UHFFFAOYSA-N	3.1×10^{-4}	3900	Brockbank (2013)	L	1, 686
	3.7×10^{-4}	3400	Warneck (2007)	L	
	4.0×10^{-4}	3800	Fogg and Sangster (2003)	L	
	3.4×10^{-4}	4000	Staudinger and Roberts (2001)	L	
	3.4×10^{-4}	3900	Staudinger and Roberts (1996)	L	
	4.0×10^{-4}	3400	Schwardt et al. (2021)	M	687
	4.1×10^{-4}	4600	Hiatt (2013)	M	
	3.7×10^{-4}	4200	Dewulf et al. (1999)	M	
	4.4×10^{-4}		Chiang et al. (1998)	M	12
	4.6×10^{-4}	1600	Kondoh and Nakajima (1997)	M	
	3.5×10^{-4}	3300	Tse et al. (1992)	M	
	3.4×10^{-4}	4500	Bissonette et al. (1990)	M	
	3.7×10^{-4}	2900	Ashworth et al. (1988)	M	279, 688
	3.8×10^{-4}	3700	Gossett (1987)	M	
	1.3×10^{-4}		Yurteri et al. (1987)	M	12
	2.6×10^{-4}	4600	Leighton and Calo (1981)	M	
	1.4×10^{-4}	6600	Ervin et al. (1980)	M	
	6.6×10^{-4}		Warner et al. (1980)	M	
	6.6×10^{-5}		Pearson and McConnell (1975)	M	651, 12
	4.3×10^{-4}		Mackay et al. (2006b)	V	
	3.3×10^{-4}		Lide and Frederikse (1995)	V	
	4.3×10^{-4}		Mackay et al. (1993)	V	
	7.5×10^{-5}		Mackay and Shiu (1981)	V	
	6.5×10^{-4}		Warner et al. (1980)	V	
	5.2×10^{-5}		Dilling (1977)	V	653
	6.1×10^{-5}		Dilling (1977)	V	12
	4.3×10^{-4}		Yaws (2003)	X	238
	6.4×10^{-4}	1200	Goldstein (1982)	X	299
	2.2×10^{-3}		Ryan et al. (1988)	C	
	6.6×10^{-4}		Shen (1982)	C	
	1.0×10^{-3}		Wang et al. (2017)	Q	81, 239
	1.3×10^{-4}		Wang et al. (2017)	Q	81, 240
	4.5×10^{-4}		Wang et al. (2017)	Q	81, 241
	1.3×10^{-3}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	1.6×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	1.8×10^{-4}		Gharagheizi et al. (2010)	Q	247
	1.3×10^{-4}		Hilal et al. (2008)	Q	
	8.9×10^{-4}		Modarresi et al. (2007)	Q	68
		3300	Kühne et al. (2005)	Q	
	3.8×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	2.6×10^{-3}		Yao et al. (2002)	Q	230, 268

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.7×10^{-4}		Katritzky et al. (1998)	Q	
	3.8×10^{-4}	3700	Mackay et al. (2006b)	?	
			Kühne et al. (2005)	?	
	4.3×10^{-4}		Yaws (1999)	?	21
	3.8×10^{-4}		Mackay et al. (1993)	?	
	4.3×10^{-4}		Yaws and Yang (1992)	?	21
	2.7×10^{-4}		Abraham et al. (1990)	?	
1,2-dichloroethene $\text{C}_2\text{H}_2\text{Cl}_2$ [540-59-0] KFUSEUYYWQURPO-UHFFFAOYSA-N	1.2×10^{-2}		Keshavarz et al. (2022)	Q	
	5.1×10^{-3}		Duchowicz et al. (2020)	Q	300
	3.7×10^{-4}		Hilal et al. (2008)	Q	
	2.3×10^{-3}		Modarresi et al. (2007)	Q	68
	1.4×10^{-3}		Yaffe et al. (2003)	Q	249, 273
	6.2×10^{-4}		Katritzky et al. (1998)	Q	
	4.5×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	2.4×10^{-3}		Duchowicz et al. (2020)	?	186, 21
(Z)-1,2-dichloroethene CHClCHCl (cis-1,2-dichloroethene) [156-59-2] KFUSEUYYWQURPO-UPHRSURJSA-N	2.3×10^{-3}	3400	Schwardt et al. (2021)	L	1
	2.6×10^{-3}	3700	Burkholder et al. (2019)	L	
	2.6×10^{-3}	3700	Burkholder et al. (2015)	L	
	2.4×10^{-3}	4000	Brockbank (2013)	L	1
	2.6×10^{-3}	3700	Warneck (2007)	L	
	2.5×10^{-3}	4000	Fogg and Sangster (2003)	L	
	2.3×10^{-3}	3900	Staudinger and Roberts (2001)	L	
	2.3×10^{-3}	3900	Staudinger and Roberts (1996)	L	
	2.7×10^{-3}	3800	Hiatt (2013)	M	
	2.5×10^{-3}	3900	Chen et al. (2012)	M	
	2.2×10^{-3}	3100	Shimotori and Arnold (2003)	M	
	1.5×10^{-3}		Ryu and Park (1999)	M	
	3.2×10^{-3}		Hovorka and Dohnal (1997)	M	12
	2.5×10^{-3}	3000	Kondoh and Nakajima (1997)	M	
	1.3×10^{-3}	3100	Park et al. (1997)	M	
	2.4×10^{-3}	4000	Wright et al. (1992)	M	689
	2.5×10^{-3}	3800	Tse et al. (1992)	M	
	2.5×10^{-3}	4200	Bissonette et al. (1990)	M	
	2.1×10^{-3}	3200	Ashworth et al. (1988)	M	279
	2.6×10^{-3}	4200	Gossett (1987)	M	
	2.2×10^{-3}		Yurteri et al. (1987)	M	12
	2.2×10^{-3}	4100	Ervin et al. (1980)	M	
	1.1×10^{-3}		Sato and Nakajima (1979b)	M	14
	1.3×10^{-3}		Mackay et al. (2006b)	V	
	1.3×10^{-3}		Park et al. (1997)	V	
	1.3×10^{-3}		Mackay et al. (1993)	V	
	1.3×10^{-3}		Mackay and Shiu (1981)	V	
	1.3×10^{-3}		Dilling (1977)	V	
	2.9×10^{-3}		Hine and Mookerjee (1975)	V	
	1.3×10^{-3}		Yaws (2003)	X	238

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.8×10^{-3}		Wang et al. (2017)	Q	315, 81, 239
	4.9×10^{-4}		Wang et al. (2017)	Q	315, 81, 240
	1.1×10^{-3}		Wang et al. (2017)	Q	315, 81, 241
	3.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-3}		Gharagheizi et al. (2010)	Q	247
	2.3×10^{-3}		Modarresi et al. (2007)	Q	68
		3300	Kühne et al. (2005)	Q	
	1.4×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	5.2×10^{-3}		Yao et al. (2002)	Q	230
	2.7×10^{-3}		English and Carroll (2001)	Q	231, 232
	2.2×10^{-3}		Mackay et al. (2006b)	?	
		4200	Kühne et al. (2005)	?	
	1.3×10^{-3}		Yaws (1999)	?	21
	1.2×10^{-3}		Abraham and Weathersby (1994)	?	21
	2.2×10^{-3}		Mackay et al. (1993)	?	
	1.3×10^{-3}		Yaws and Yang (1992)	?	21
	1.3×10^{-3}		Abraham et al. (1990)	?	
(<i>E</i>)-1,2-dichloroethene CHClCHCl	9.9×10^{-4}	3600	Schwardt et al. (2021)	L	1
(<i>trans</i> -1,2-dichloroethene) [156-60-5] KFUSEUYWQURPO-OWOJBTEDSA-N	1.0×10^{-3}	3600	Burkholder et al. (2019)	L	
	1.0×10^{-3}	3600	Burkholder et al. (2015)	L	
	1.0×10^{-3}	3900	Brockbank (2013)	L	
	1.0×10^{-3}	3500	Warneck (2007)	L	
	1.1×10^{-3}	4200	Fogg and Sangster (2003)	L	
	9.0×10^{-4}	4100	Staudinger and Roberts (2001)	L	
	9.0×10^{-4}	4100	Staudinger and Roberts (1996)	L	
	9.2×10^{-4}	2600	Schwardt et al. (2021)	M	690, 11
	1.0×10^{-3}	4000	Hiatt (2013)	M	
	1.0×10^{-3}	3500	Shimotori and Arnold (2003)	M	
	1.6×10^{-3}		Ryu and Park (1999)	M	
	1.3×10^{-3}		Hovorka and Dohnal (1997)	M	12
	1.1×10^{-3}	2200	Kondoh and Nakajima (1997)	M	
	1.8×10^{-3}	6200	Park et al. (1997)	M	
	9.3×10^{-4}	4900	Khalfaoui and Newsham (1994b)	M	691
	9.8×10^{-4}	3400	Hansen et al. (1993)	M	282
	1.0×10^{-3}	4200	Wright et al. (1992)	M	692
	1.0×10^{-3}	3700	Tse et al. (1992)	M	
	9.7×10^{-4}	5000	Cooling et al. (1992)	M	693
	8.4×10^{-4}	4800	Bissonette et al. (1990)	M	
	9.9×10^{-4}	3000	Ashworth et al. (1988)	M	279, 688
	1.1×10^{-3}	4200	Gossett (1987)	M	
	1.1×10^{-3}		Yurteri et al. (1987)	M	12
	7.0×10^{-4}	5400	Ervin et al. (1980)	M	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.9×10^{-3}		Warner et al. (1980)	M	
	8.1×10^{-4}		Sato and Nakajima (1979b)	M	14
	1.5×10^{-3}		Mackay et al. (2006b)	V	
	1.5×10^{-3}		Park et al. (1997)	V	
	1.5×10^{-3}		Mackay et al. (1993)	V	
	1.5×10^{-3}		Hwang et al. (1992)	V	
	1.5×10^{-3}		Mackay and Shiu (1981)	V	
	2.4×10^{-3}		Warner et al. (1980)	V	
	1.5×10^{-3}		Dilling (1977)	V	
	1.5×10^{-3}		Hine and Mookerjee (1975)	V	
	1.5×10^{-3}		Yaws (2003)	X	238
	1.9×10^{-3}	1700	Goldstein (1982)	X	299
	1.5×10^{-3}		Ryan et al. (1988)	C	
	1.9×10^{-3}		Shen (1982)	C	
	1.8×10^{-3}		Wang et al. (2017)	Q	315, 81, 239
	4.9×10^{-4}		Wang et al. (2017)	Q	315, 81, 240
	1.1×10^{-3}		Wang et al. (2017)	Q	315, 81, 241
	2.1×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-3}		Gharagheizi et al. (2010)	Q	247
	2.3×10^{-3}		Modarresi et al. (2007)	Q	68
		3300	Kühne et al. (2005)	Q	
	2.2×10^{-3}		Yao et al. (2002)	Q	230
	2.3×10^{-3}		English and Carroll (2001)	Q	231, 232
	1.0×10^{-3}		Mackay et al. (2006b)	?	
		4300	Kühne et al. (2005)	?	
	1.5×10^{-3}		Yaws (1999)	?	21
	8.4×10^{-4}		Abraham and Weathersby (1994)	?	21
	1.0×10^{-3}		Mackay et al. (1993)	?	
	1.5×10^{-3}		Yaws and Yang (1992)	?	21
	1.5×10^{-3}		Abraham et al. (1990)	?	
trichloroethene C_2HCl_3 (trichloroethylene) [79-01-6] XSTXAVWGXDQKEL-UHFFFAOYSA-N	1.1×10^{-3}	4100	Schwardt et al. (2021)	L	1
	1.1×10^{-3}	4300	Burkholder et al. (2019)	L	
	8.6×10^{-4}	4200	Burkholder et al. (2019)	L	71
	1.1×10^{-3}	4300	Burkholder et al. (2015)	L	
	8.6×10^{-4}	4200	Burkholder et al. (2015)	L	71
	1.0×10^{-3}	4200	Brockbank (2013)	L	1
	1.1×10^{-3}	4300	Warneck (2007)	L	
	1.0×10^{-3}	4300	Fogg and Sangster (2003)	L	
	1.0×10^{-3}	4600	Staudinger and Roberts (2001)	L	
	9.9×10^{-4}	4600	Staudinger and Roberts (1996)	L	
	6.6×10^{-4}		Steward et al. (1973)	L	14
	1.1×10^{-3}	4100	Allott et al. (1973)	L	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	1.0×10^{-3}	4200	Schwardt et al. (2021)	M	694
	1.2×10^{-3}	4700	Hiatt (2013)	M	
	1.6×10^{-3}	2800	Zhang et al. (2013)	M	326
	1.3×10^{-3}		Zhang et al. (2013)	M	327
	1.0×10^{-3}	3900	Chen et al. (2012)	M	
	9.4×10^{-4}		Helburn et al. (2008)	M	
	1.0×10^{-3}	3900	Shimotori and Arnold (2003)	M	
	9.5×10^{-4}	4300	Görgényi et al. (2002)	M	695
	1.2×10^{-3}	3600	Bierwagen and Keller (2001)	M	
	7.6×10^{-4}	4900	Moore (2000)	M	71
	1.0×10^{-3}		David et al. (2000)	M	73
	1.1×10^{-3}	3900	Vane and Giroux (2000)	M	
	1.1×10^{-3}	4800	Knauss et al. (2000)	M	696
	9.5×10^{-4}	4900	Dewulf et al. (1999)	M	
	9.5×10^{-4}		Ryu and Park (1999)	M	
	9.3×10^{-4}	3700	Heron et al. (1998)	M	
	1.1×10^{-3}		Chiang et al. (1998)	M	12
	1.4×10^{-3}		Peng and Wan (1998)	M	
	8.7×10^{-4}	4000	Peng and Wan (1998)	M	71
	1.1×10^{-3}	3800	Peng and Wan (1997)	M	
	1.3×10^{-3}		Hovorka and Dohnal (1997)	M	12
	1.1×10^{-3}	2200	Kondoh and Nakajima (1997)	M	
	8.8×10^{-4}	3600	Park et al. (1997)	M	
	8.5×10^{-4}		Turner et al. (1996)	M	
	8.3×10^{-4}		Ramachandran et al. (1996)	M	
	1.2×10^{-3}	3900	Dewulf et al. (1995)	M	
	1.3×10^{-3}		Nielsen et al. (1994)	M	
	9.5×10^{-4}	5000	Khalfaoui and Newsham (1994b)	M	697
	9.4×10^{-4}	3100	Robbins et al. (1993)	M	698
	1.1×10^{-3}		Hoff et al. (1993)	M	
	1.0×10^{-3}		Li et al. (1993)	M	
	1.1×10^{-3}	3700	Wright et al. (1992)	M	699
	1.1×10^{-3}	4200	Tse et al. (1992)	M	
	9.7×10^{-4}	4900	Cooling et al. (1992)	M	700
	1.3×10^{-3}	5200	Tancredi and Yanagisawa (1990)	M	
	1.0×10^{-3}	5200	Bissonette et al. (1990)	M	
	9.7×10^{-4}	2000	Lamarche and Droste (1989)	M	347
	5.5×10^{-4}		Guitart et al. (1989)	M	14
	9.5×10^{-4}	3700	Ashworth et al. (1988)	M	279
	1.0×10^{-3}	4800	Gossett (1987)	M	
	9.6×10^{-4}	4700	Munz and Roberts (1987)	M	
	9.8×10^{-4}		Hellmann (1987)	M	88
	9.4×10^{-4}		Yurteri et al. (1987)	M	12
	9.0×10^{-4}	5400	Schoene and Steinhanses (1985)	M	
	1.1×10^{-3}	4300	Gossett et al. (1985)	M	
	1.0×10^{-3}		Garbarini and Lion (1985)	M	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	9.7×10^{-4}	4900	Lincoff and Gossett (1984)	M	
	1.0×10^{-3}	4600	Leighton and Calo (1981)	M	
	7.4×10^{-4}	4800	Ervin et al. (1980)	M	
	8.4×10^{-4}		Warner et al. (1980)	M	
	5.0×10^{-4}		Sato and Nakajima (1979b)	M	14
	1.1×10^{-3}		Pearson and McConnell (1975)	M	651, 12
	8.5×10^{-4}		Mackay et al. (2006b)	V	
	9.9×10^{-4}		Park et al. (1997)	V	
	8.4×10^{-4}		Mackay et al. (1993)	V	
	1.1×10^{-3}		Hwang et al. (1992)	V	
	8.1×10^{-4}		Mackay and Shiu (1981)	V	
	8.4×10^{-4}		Warner et al. (1980)	V	
	8.2×10^{-4}		Dilling (1977)	V	653
	1.0×10^{-3}		Dilling (1977)	V	12
	2.4×10^{-3}		Dilling (1977)	V	154
	8.4×10^{-4}		Hine and Mookerjee (1975)	V	
	8.4×10^{-4}		Dilling et al. (1975)	V	
	8.6×10^{-4}		Yaws (2003)	X	259
	8.5×10^{-4}		Yaws (2003)	X	238
	8.8×10^{-4}	1600	Goldstein (1982)	X	299
	1.1×10^{-3}		Ryan et al. (1988)	C	
	8.4×10^{-4}		Shen (1982)	C	
	6.2×10^{-4}		Dupeux et al. (2022)	Q	260
	2.2×10^{-3}		Keshavarz et al. (2022)	Q	
	2.9×10^{-3}		Duchowicz et al. (2020)	Q	185
	2.9×10^{-3}		Wang et al. (2017)	Q	81, 239
	2.2×10^{-4}		Wang et al. (2017)	Q	81, 240
	6.9×10^{-4}		Wang et al. (2017)	Q	81, 241
	8.4×10^{-4}		Li et al. (2014)	Q	242
	5.5×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-4}		Raventos-Duran et al. (2010)	Q	272, 244
	2.0×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	8.7×10^{-4}		Gharagheizi et al. (2010)	Q	247
	3.0×10^{-4}		Hilal et al. (2008)	Q	
	1.8×10^{-3}		Modarresi et al. (2007)	Q	68
		3600	Kühne et al. (2005)	Q	
	1.1×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	1.1×10^{-3}		English and Carroll (2001)	Q	231, 275
	4.0×10^{-4}		Katritzky et al. (1998)	Q	
	8.4×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.0×10^{-3}		Duchowicz et al. (2020)	?	186, 21
	9.7×10^{-4}		Mackay et al. (2006b)	?	
		4200	Kühne et al. (2005)	?	
	8.5×10^{-4}		Yaws (1999)	?	21
	5.2×10^{-4}		Abraham and Weathersby (1994)	?	21

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	9.7×10^{-4}		Mackay et al. (1993)	?	
	8.4×10^{-4}		Yaws and Yang (1992)	?	21
	8.4×10^{-4}		Abraham et al. (1990)	?	
tetrachloroethene C_2Cl_4 (tetrachloroethylene) [127-18-4] CYTYCFOTNPOANT-UHFFFAOYSA-N	5.7×10^{-4}	4700	Schwardt et al. (2021)	L	1
	5.5×10^{-4}	4500	Burkholder et al. (2019)	L	
	4.6×10^{-4}	4400	Burkholder et al. (2019)	L	71
	5.5×10^{-4}	4500	Burkholder et al. (2015)	L	
	4.6×10^{-4}	4400	Burkholder et al. (2015)	L	71
	5.6×10^{-4}	4700	Brockbank (2013)	L	1
	6.2×10^{-4}	4500	Warneck (2007)	L	
	6.0×10^{-4}	4200	Fogg and Sangster (2003)	L	
	5.9×10^{-4}	4800	Staudinger and Roberts (2001)	L	
	5.8×10^{-4}	4800	Staudinger and Roberts (1996)	L	
	4.3×10^{-4}		Mackay and Shiu (1981)	L	
	5.8×10^{-4}	4500	Schwardt et al. (2021)	M	701
	9.9×10^{-4}	4600	Hiatt (2013)	M	
	6.2×10^{-4}	4200	Chen et al. (2012)	M	
	5.8×10^{-4}	4200	Shimotori and Arnold (2003)	M	
	4.1×10^{-4}	5300	Moore (2000)	M	71
	6.0×10^{-4}	4100	Vane and Giroux (2000)	M	
	4.8×10^{-4}	4400	Knauss et al. (2000)	M	702
	5.3×10^{-4}		Ryu and Park (1999)	M	
	8.6×10^{-4}		Dohnal and Hovorka (1999)	M	12
	6.2×10^{-4}		Chiang et al. (1998)	M	12
	7.8×10^{-4}		Peng and Wan (1998)	M	
	4.7×10^{-4}	4100	Peng and Wan (1998)	M	71
	6.1×10^{-4}	4200	Peng and Wan (1997)	M	
	8.4×10^{-4}		Hovorka and Dohnal (1997)	M	12
	6.9×10^{-4}	2200	Kondoh and Nakajima (1997)	M	
	5.5×10^{-4}	4200	Park et al. (1997)	M	
	6.9×10^{-4}	4800	Dewulf et al. (1995)	M	
	5.8×10^{-4}	5200	Robbins et al. (1993)	M	703
	6.3×10^{-4}		Hoff et al. (1993)	M	
	6.3×10^{-4}		Li et al. (1993)	M	
	8.1×10^{-4}	2100	Kolb et al. (1992)	M	33, 278
	5.9×10^{-4}	5500	Tancrède and Yanagisawa (1990)	M	
	6.2×10^{-4}	5300	Bissonette et al. (1990)	M	
	5.4×10^{-4}	4400	Ashworth et al. (1988)	M	279
	5.6×10^{-4}	4900	Gossett (1987)	M	
	5.4×10^{-4}	4400	Munz and Roberts (1987)	M	
	7.7×10^{-4}		Hellmann (1987)	M	88
	7.5×10^{-4}		Yurteri et al. (1987)	M	12
	6.5×10^{-4}	4600	Gossett et al. (1985)	M	
	5.7×10^{-4}	5100	Lincoff and Gossett (1984)	M	
	6.1×10^{-4}	4700	Leighton and Calo (1981)	M	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	5.7×10^{-4}	5200	Ervin et al. (1980)	M	
	3.4×10^{-4}		Warner et al. (1980)	M	
	1.1×10^{-3}	4300	Gossett (1980)	M	
	1.7×10^{-4}		Sato and Nakajima (1979b)	M	14
	5.0×10^{-4}		Pearson and McConnell (1975)	M	651, 12
	3.7×10^{-4}		Mackay et al. (2006b)	V	
	3.4×10^{-4}		Park et al. (1997)	V	
	3.7×10^{-4}		Mackay et al. (1993)	V	
	3.6×10^{-4}		Hwang et al. (1992)	V	
	9.1×10^{-4}		Addison et al. (1983)	V	
	3.5×10^{-4}		Warner et al. (1980)	V	
	3.4×10^{-4}		Dilling (1977)	V	653
	4.0×10^{-4}		Dilling (1977)	V	12
	1.2×10^{-3}		Dilling (1977)	V	154
	3.7×10^{-4}		Hine and Mookerjee (1975)	V	
	9.8×10^{-4}		Dilling et al. (1975)	V	
	3.6×10^{-4}		Yaws (2003)	X	238
	3.6×10^{-4}	1500	Goldstein (1982)	X	299
	6.3×10^{-4}		Ryan et al. (1988)	C	
	3.4×10^{-4}		Shen (1982)	C	
	8.1×10^{-4}		Dilling (1977)	C	
	8.1×10^{-4}		Dilling et al. (1975)	C	
	4.4×10^{-3}		Wang et al. (2017)	Q	81, 239
	1.2×10^{-4}		Wang et al. (2017)	Q	81, 240
	2.5×10^{-4}		Wang et al. (2017)	Q	81, 241
	1.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-4}		Gharagheizi et al. (2010)	Q	247
	1.7×10^{-4}		Hilal et al. (2008)	Q	
	1.2×10^{-3}		Modarresi et al. (2007)	Q	68
		3900	Kühne et al. (2005)	Q	
	5.6×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	3.1×10^{-4}		English and Carroll (2001)	Q	231, 232
	9.9×10^{-5}		Katritzky et al. (1998)	Q	
	8.8×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	5.8×10^{-4}		Mackay et al. (2006b)	?	
		5100	Kühne et al. (2005)	?	
	3.7×10^{-4}		Yaws (1999)	?	21
	1.7×10^{-4}		Abraham and Weathersby (1994)	?	21
	5.8×10^{-4}		Mackay et al. (1993)	?	
	3.7×10^{-4}		Yaws and Yang (1992)	?	21
	3.4×10^{-4}		Abraham et al. (1990)	?	
	2.9×10^{-3}		Chiou et al. (1980)	?	80

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
1,3-dichloropropene $\text{C}_3\text{H}_4\text{Cl}_2$ [542-75-6] UOORRWUZONOOLO-UHFFFAOYSA-N	6.4×10^{-3}	4300	Wright et al. (1992)	M	704	
	2.8×10^{-3}		Warner et al. (1980)	M		
	7.3×10^{-3}		Warner et al. (1980)	V		
	2.4×10^{-5}		Barcelo and Hennion (1997)	X		569
	2.8×10^{-3}		Goldstein (1982)	X		299
	5.8×10^{-3}		Hilal et al. (2008)	C		
	2.8×10^{-3}		Horvath and Getzen (1999)	C		
	8.1×10^{-3}		Ryan et al. (1988)	C		
	2.8×10^{-3}		Shen (1982)	C		
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q		243, 244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q		245
	3.9×10^{-4}		Raventos-Duran et al. (2010)	Q		246
	5.1×10^{-5}		Goodarzi et al. (2010)	Q		570
	5.7×10^{-3}		Hilal et al. (2008)	Q		
5.1×10^{-3}	Modarresi et al. (2007)	Q	68			
<i>cis</i> -1,3-dichloropropene $\text{C}_3\text{H}_4\text{Cl}_2$ [10061-01-5] UOORRWUZONOOLO-UPHRSURJSA-N	4.2×10^{-3}	5500	Mackay and Shiu (1981)	L	155, 705	
	9.5×10^{-3}		Hiatt (2013)	M		
	1.0×10^{-2}		Thomas et al. (2006)	M		
	6.3×10^{-3}		Kondoh and Nakajima (1997)	M		
	4.2×10^{-3}		Albanese et al. (1987)	M		
	5.0×10^{-3}		Leistra (1970)	M		
	4.2×10^{-3}		Dilling (1977)	V		
	8.7×10^{-3}		Thomas et al. (2006)	?		155, 706
5.5×10^{-3}	Yates and Gan (1998)	?				
<i>trans</i> -1,3-dichloropropene $\text{C}_3\text{H}_4\text{Cl}_2$ [10061-02-6] UOORRWUZONOOLO-OWOJBTEDSA-N	5.6×10^{-3}	4800	Mackay and Shiu (1981)	L	155, 705	
	5.8×10^{-3}		Hiatt (2013)	M		
	1.5×10^{-2}		Thomas et al. (2006)	M		
	1.0×10^{-2}		Kondoh and Nakajima (1997)	M		
	5.6×10^{-3}		Albanese et al. (1987)	M		
	8.1×10^{-3}		Leistra (1970)	M		
	5.6×10^{-3}		Dilling (1977)	V		
	1.5×10^{-2}		Thomas et al. (2006)	?		155, 706
9.4×10^{-3}	Yates and Gan (1998)	?				
2,3-dichloropropene $\text{C}_3\text{H}_4\text{Cl}_2$ [78-88-6] FALCMQXTWHPRIH-UHFFFAOYSA-N	2.8×10^{-3}	5700	Mackay and Shiu (1981)	L	187	
	3.5×10^{-3}		Albanese et al. (1987)	M		
	2.4×10^{-3}		Duchowicz et al. (2020)	V		
	2.7×10^{-3}		Dilling (1977)	V		
	2.4×10^{-3}		Yaws (2003)	X		238
	4.0×10^{-3}		Duchowicz et al. (2020)	Q		
	4.6×10^{-3}		Gharagheizi et al. (2012)	Q		
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q		243, 244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q		245
	3.9×10^{-4}		Raventos-Duran et al. (2010)	Q		246
2.4×10^{-3}	Gharagheizi et al. (2010)	Q	247			

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.8×10^{-3}		Hilal et al. (2008)	Q	
	3.8×10^{-3}		Modarresi et al. (2007)	Q	68
	2.9×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	1.8×10^{-3}		Yao et al. (2002)	Q	230, 268
	2.0×10^{-3}		Katritzky et al. (1998)	Q	
	2.4×10^{-3}		Yaws (1999)	?	21
1,2,3-trichloro-1-propene $\text{C}_3\text{H}_3\text{Cl}_3$ [96-19-5] HIILBTHBHCLUER-UHFFFAOYSA-N	5.5×10^{-4}		HSDB (2015)	Q	100
1,1,2,3,3,3-hexachloro-1-propene C_3Cl_6 [1888-71-7] VFDYKPARTDCDCU-UHFFFAOYSA-N	2.1×10^{-3}		Duchowicz et al. (2020)	V	187
	1.3×10^{-3}		Duchowicz et al. (2020)	Q	
	6.2×10^{-3}		HSDB (2015)	Q	100
	9.9×10^{-4}		Hilal et al. (2008)	Q	
	3.8×10^{-3}		Modarresi et al. (2007)	Q	68
	2.1×10^{-3}		Yaffe et al. (2003)	Q	249, 250
3-chloro-1-butene $\text{C}_4\text{H}_7\text{Cl}$ [563-52-0] VZGLVCFVUREVDP-UHFFFAOYSA-N	5.6×10^{-4}		Ebert et al. (2023)	?	317
3-chloro-2-methyl-1-propene $\text{C}_4\text{H}_7\text{Cl}$ [563-47-3] OHXAOPZTJOUYKM-UHFFFAOYSA-N	1.1×10^{-3}		Duchowicz et al. (2020)	V	187
	1.1×10^{-3}		HSDB (2015)	V	
	1.5×10^{-3}		Duchowicz et al. (2020)	Q	
1-chloro-2-butene $\text{C}_4\text{H}_7\text{Cl}$ (crotyl chloride) [591-97-9] YTKRILODNOEPPX-UHFFFAOYSA-N	9.5×10^{-4}		Ebert et al. (2023)	?	319
(Z)-1-chloro-2-butene $\text{C}_4\text{H}_7\text{Cl}$ (<i>cis</i> -1-chloro-2-butene) [4628-21-1] YTKRILODNOEPPX-IHWYPQMZSA-N	1.2×10^{-3}	2800	Bakierowska and Trzeszczyński (2003)	M	
		3800	Kühne et al. (2005)	Q	
		2800	Kühne et al. (2005)	?	
(E)-1-chloro-2-butene $\text{C}_4\text{H}_7\text{Cl}$ (<i>trans</i> -1-chloro-2-butene) [4894-61-5] YTKRILODNOEPPX-NSCUHMNSA-N	3.1×10^{-3}	3000	Bakierowska and Trzeszczyński (2003)	M	
		3800	Kühne et al. (2005)	Q	
		3000	Kühne et al. (2005)	?	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3-dichloro-2-butene $\text{C}_4\text{H}_6\text{Cl}_2$ [926-57-8] WLIADPFXSACYLS-UHFFFAOYSA-N	2.6×10^{-4}		HSDB (2015)	Q	100
1,4-dichloro-2-butene $\text{C}_4\text{H}_6\text{Cl}_2$ [764-41-0] FQDIANVAWVHZIR-UHFFFAOYSA-N	1.2×10^{-3} 1.7×10^{-2} 4.2×10^{-3} 8.9×10^{-3}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Modarresi et al. (2007)	V V Q Q	187 68
(Z)-1,4-dichloro-2-butene $\text{C}_4\text{H}_6\text{Cl}_2$ [1476-11-5] FQDIANVAWVHZIR-UPHR SURJSA-N	3.0×10^{-2} 1.0×10^{-2} 8.5×10^{-3} 8.2×10^{-3} 4.2×10^{-3}	9400	Hiatt (2013) Albanese et al. (1987) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	M M V V Q	187
(E)-1,4-dichloro-2-butene $\text{C}_4\text{H}_6\text{Cl}_2$ [110-57-6] FQDIANVAWVHZIR-OWOJBTEDSA-N	3.5×10^{-2} 1.7×10^{-2} 1.5×10^{-2} 1.5×10^{-2} 4.2×10^{-3} 7.2×10^{-2} 8.9×10^{-3}	6600	Hiatt (2013) Albanese et al. (1987) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	M M V V Q Q Q	187 68
3,4-dichloro-1-butene $\text{C}_4\text{H}_6\text{Cl}_2$ [760-23-6] XVEASTGLHPVZNA-UHFFFAOYSA-N	1.2×10^{-3} 1.1×10^{-3} 6.4×10^{-3}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
1-chloro-2-methylpropene $\text{C}_4\text{H}_7\text{Cl}$ (dimethylvinyl chloride) [513-37-1] KWISWUFGPUH DRY-UHFFFAOYSA-N	5.2×10^{-4}		HSDB (2015) Haynes (2014)	V W	707
2-chloro-1,3-butadiene $\text{C}_4\text{H}_5\text{Cl}$ [126-99-8] YAQLQRRMGMJLV-UHFFFAOYSA-N	4.7×10^{-2} 1.8×10^{-4}		Mackay et al. (1993) HSDB (2015)	V Q	100
hexachlorobutadiene $\text{CCl}_2\text{CCICCClCl}_2$ [87-68-3] RWNKSTSCBHKHTB-UHFFFAOYSA-N	5.6×10^{-4} 8.3×10^{-4} 2.3×10^{-3} 6.2×10^{-4} 7.0×10^{-4} 2.3×10^{-3} 9.6×10^{-4} 4.0×10^{-4} 6.1×10^{-4} 6.5×10^{-4}	5500 3100 6200 4900 2500	Brockbank (2013) Fogg and Sangster (2003) Hiatt (2013) Dewulf et al. (1999) Kondoh and Nakajima (1997) Oliver (1985) Warner et al. (1980) Pearson and McConnell (1975) Mackay et al. (2006b) Mackay et al. (1993)	L L M M M M M M V V	651, 12

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	9.1×10^{-4}		Ballschmiter and Wittlinger (1991)	V	
	3.8×10^{-4}		Warner et al. (1980)	V	
	4.2×10^{-4}		Yaws (2003)	X	238
	9.8×10^{-4}	4600	Goldstein (1982)	X	299
	9.7×10^{-4}		Hilal et al. (2008)	C	
	9.6×10^{-4}		Horvath and Getzen (1999)	C	
	9.4×10^{-4}		Ryan et al. (1988)	C	
	9.6×10^{-4}		Shen (1982)	C	
	9.0×10^{-4}		Zhang et al. (2010)	Q	288, 289
	5.0×10^{-4}		Zhang et al. (2010)	Q	288, 290
	2.3×10^{-3}		Zhang et al. (2010)	Q	288, 291
	1.7×10^{-2}		Zhang et al. (2010)	Q	288, 292
	4.3×10^{-4}		Gharagheizi et al. (2010)	Q	247
	6.2×10^{-4}		Hilal et al. (2008)	Q	
	7.6×10^{-3}		Modarresi et al. (2007)	Q	68
		5300	Kühne et al. (2005)	Q	
	2.7×10^{-4}		Yao et al. (2002)	Q	230
		3500	Kühne et al. (2005)	?	
	4.2×10^{-4}		Yaws (1999)	?	21
hexachlorocyclopentadiene C_5Cl_6 [77-47-4] VUNCWTMEJYMOOR-UHFFFAOYSA-N	3.7×10^{-4}		Wolfe et al. (1982)	M	
	6.0×10^{-4}		Warner et al. (1980)	M	
	6.1×10^{-4}		Mackay et al. (2006b)	V	
	6.0×10^{-4}		Mackay et al. (1993)	V	
	6.2×10^{-4}		Wolfe et al. (1982)	V	
	2.7×10^{-4}		Warner et al. (1980)	V	
	6.0×10^{-4}	1500	Goldstein (1982)	X	299
	2.7×10^{-4}		Ryan et al. (1988)	C	
	6.0×10^{-4}		Shen (1982)	C	
	4.6×10^{-3}		Zhang et al. (2010)	Q	288, 289
	5.3×10^{-3}		Zhang et al. (2010)	Q	288, 290
	1.4×10^{-2}		Zhang et al. (2010)	Q	288, 291
	1.6×10^{-2}		Zhang et al. (2010)	Q	288, 292
	2.3×10^{-3}		Hilal et al. (2008)	Q	
	2.2×10^{-2}		Modarresi et al. (2007)	Q	68
	3.7×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	2.4×10^{-3}		Katritzky et al. (1998)	Q	
chlordan $C_{10}H_6Cl_8$ [57-74-9] BIWJNBZANLAXMG-UHFFFAOYSA-N	1.8×10^{-1}		Fendinger et al. (1989)	M	73
	1.2×10^{-1}		Fendinger et al. (1989)	M	647
	2.1×10^{-1}		Warner et al. (1980)	M	
	1.1×10^{-1}		Suntio et al. (1988)	V	12
	1.1×10^{-3}		Barcelo and Hennion (1997)	X	569
	2.0×10^{-1}		Suntio et al. (1988)	C	
	1.1×10^{-1}		Suntio et al. (1988)	C	
	1.0×10^{-1}		Ryan et al. (1988)	C	
	2.1×10^{-1}		Shen (1982)	C	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.3×10^{-1}		Keshavarz et al. (2022)	Q	
	3.6×10^{-2}		Duchowicz et al. (2020)	Q	185
	1.4×10^{-1}		Zhang et al. (2010)	Q	288, 289
	4.8×10^{-2}		Zhang et al. (2010)	Q	288, 290
	2.4×10^1		Zhang et al. (2010)	Q	288, 291
	1.5		Zhang et al. (2010)	Q	288, 292
	2.1×10^{-4}		Goodarzi et al. (2010)	Q	570, 571
	5.3×10^{-2}		Hilal et al. (2008)	Q	
	2.0×10^{-1}		Duchowicz et al. (2020)	?	186, 21
<i>cis</i> -chlordanes $\text{C}_{10}\text{H}_6\text{Cl}_8$ (α -chlordanes) [5103-71-9] BIWJNBZANLAXMG-KMMBHOGFSA-N	1.7×10^{-1}		Shen and Wania (2005)	L	368
	1.8×10^{-1}		Shen and Wania (2005)	L	369
	3.7×10^{-2}	4100	Jantunen and Bidleman (2006)	M	
	1.5×10^{-1}	6100	Cetin et al. (2006)	M	
	1.1×10^{-2}		Atlas et al. (1982)	M	681
	2.8×10^{-2}		Duchowicz et al. (2020)	V	187
			Mackay et al. (2006d)	V	560
	4.8×10^{-3}	7300	Paasivirta et al. (1999)	T	
	3.6×10^{-2}		Duchowicz et al. (2020)	Q	
<i>trans</i> -chlordanes $\text{C}_{10}\text{H}_6\text{Cl}_8$ (β -chlordanes) [5103-74-2] BIWJNBZANLAXMG-OESJLNMISA-N	1.7×10^{-1}		Shen and Wania (2005)	L	368
	1.5×10^{-1}		Shen and Wania (2005)	L	369
	3.4×10^{-2}	3500	Jantunen and Bidleman (2006)	M	
	6.3×10^{-2}	7600	Cetin et al. (2006)	M	
	7.4×10^{-3}		Atlas et al. (1982)	M	681
	2.0×10^{-2}		Duchowicz et al. (2020)	V	187
			Mackay et al. (2006d)	V	560
	3.6×10^{-3}	7100	Paasivirta et al. (1999)	T	
	3.6×10^{-2}		Duchowicz et al. (2020)	Q	
	1.0		Modarresi et al. (2007)	Q	68
γ -chlordanes $\text{C}_{10}\text{H}_6\text{Cl}_8$ [5566-34-7] JBZJEPYXXVKOKF-UHFFFAOYSA-N	6.3×10^{-2}		Ebert et al. (2023)	?	581
<i>cis</i> -nonachlor $\text{C}_{10}\text{H}_5\text{Cl}_9$ [5103-73-1] OCHOKXCPKDPNQU-BBXWSCHTSA-N	1.4	5100	Cetin et al. (2006)	M	
<i>trans</i> -nonachlor $\text{C}_{10}\text{H}_5\text{Cl}_9$ [39765-80-5] OCHOKXCPKDPNQU-FLVMBEMLSA-N	3.1×10^{-2}	4800	Jantunen and Bidleman (2006)	M	
	8.8×10^{-2}	8000	Cetin et al. (2006)	M	
	7.9×10^{-4}	7600	Paasivirta et al. (1999)	T	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
chlorobenzene	2.4×10^{-3}	3700	Schwardt et al. (2021)	L	1, 708
$\text{C}_6\text{H}_5\text{Cl}$	2.6×10^{-3}	3600	Brockbank (2013)	L	1
[108-90-7]	2.7×10^{-3}	3800	Staudinger and Roberts (2001)	L	
MVPPADPHJFYWMZ-UHFFFAOYSA-N	2.7×10^{-3}	3800	Staudinger and Roberts (1996)	L	
	2.9×10^{-3}		Mackay and Shiu (1981)	L	
	2.0×10^{-3}	3800	Schwardt et al. (2021)	M	709
	3.7×10^{-3}	4400	Hiatt (2013)	M	
	1.7×10^{-3}	1300	Lau et al. (2010)	M	33, 11
	2.4×10^{-3}		Li et al. (2008)	M	
	1.5×10^{-3}	2300	Lei et al. (2004)	M	329
	2.5×10^{-3}	4300	Dewulf et al. (1999)	M	
	1.9×10^{-3}		Ryu and Park (1999)	M	
	3.6×10^{-3}		Dohnal and Hovorka (1999)	M	12
	3.4×10^{-3}		de Wolf and Lieder (1998)	M	88
	2.7×10^{-3}		Welke et al. (1998)	M	
	3.2×10^{-3}		Shiu and Mackay (1997)	M	
	3.5×10^{-3}		Hovorka and Dohnal (1997)	M	12
	3.0×10^{-3}	3600	Kondoh and Nakajima (1997)	M	
	1.9×10^{-3}	1700	Park et al. (1997)	M	
	2.9×10^{-3}		Ramachandran et al. (1996)	M	
	3.0×10^{-3}	2900	Khalfaoui and Newsham (1994b)	M	710
	2.6×10^{-3}		Hoff et al. (1993)	M	
	3.1×10^{-3}	2900	Ettre et al. (1993)	M	11
	2.5×10^{-3}		Li and Carr (1993)	M	
	3.0×10^{-3}	3100	Cooling et al. (1992)	M	711
	2.4×10^{-3}	4700	Bissonette et al. (1990)	M	
	2.5×10^{-3}	2700	Ashworth et al. (1988)	M	279
	2.9×10^{-3}		Hellmann (1987)	M	88
	3.1×10^{-3}		Yurteri et al. (1987)	M	12
	3.2×10^{-3}		Mackay and Shiu (1981)	M	
	3.0×10^{-3}	3500	Leighton and Calo (1981)	M	
	2.9×10^{-3}	4200	Ervin et al. (1980)	M	
	2.5×10^{-3}		Warner et al. (1980)	M	
	2.6×10^{-3}		Mackay et al. (1979)	M	
	1.6×10^{-3}		Sato and Nakajima (1979b)	M	14
	2.8×10^{-3}	4900	Hartkopf and Karger (1973)	M	
	2.7×10^{-3}		Mackay et al. (2006b)	V	
	2.9×10^{-3}	2400	Fogg and Sangster (2003)	V	
	2.7×10^{-3}		Shiu and Mackay (1997)	V	
	2.8×10^{-3}		Park et al. (1997)	V	
	2.9×10^{-3}		Lide and Frederikse (1995)	V	
	2.7×10^{-3}		Mackay et al. (1993)	V	
	2.7×10^{-3}		Mackay et al. (1992a)	V	
	2.5×10^{-3}		Hwang et al. (1992)	V	
	2.7×10^{-3}		Bobra et al. (1985)	V	
	2.7×10^{-3}		Yoshida et al. (1983)	V	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.7×10^{-3}		Cabani et al. (1981)	V	
	2.7×10^{-3}		Warner et al. (1980)	V	
	2.2×10^{-3}		Hine and Mookerjee (1975)	V	
	2.7×10^{-3}		Mackay et al. (1979)	T	
	2.2×10^{-3}		Yaws (2003)	X	238
	2.5×10^{-3}	2100	Goldstein (1982)	X	299
	2.7×10^{-3}		Schüürmann (2000)	C	21
	2.7×10^{-3}		Ryan et al. (1988)	C	
	2.5×10^{-3}		Shen (1982)	C	
	2.4×10^{-2}		Hayer et al. (2022)	Q	20
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	8.6×10^{-3}		Duchowicz et al. (2020)	Q	
	1.5×10^{-2}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	272, 244
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	1.5×10^{-3}		Gharagheizi et al. (2010)	Q	247
	4.0×10^{-3}		Hilal et al. (2008)	Q	
	8.6×10^{-3}		Modarresi et al. (2007)	Q	68
		4000	Kühne et al. (2005)	Q	
	2.9×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	2.8×10^{-3}		Delgado and Alderete (2002)	Q	
	3.6×10^{-3}		Yao et al. (2002)	Q	230
	4.0×10^{-3}		English and Carroll (2001)	Q	231, 232
	1.7×10^{-3}		Katritzky et al. (1998)	Q	
	1.5×10^{-3}		Myrdal and Yalkowsky (1994)	Q	
	2.2×10^{-3}		Suzuki et al. (1992)	Q	233
	4.2×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.8×10^{-3}		Arbuckle (1983)	Q	
	3.2×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		4000	Kühne et al. (2005)	?	
	2.2×10^{-3}		Yaws (1999)	?	21
	1.6×10^{-3}		Abraham and Weathersby (1994)	?	21
	2.6×10^{-3}		Mackay et al. (1993)	?	
	2.2×10^{-3}		Yaws and Yang (1992)	?	21
	2.8×10^{-3}		Abraham et al. (1990)	?	
	3.8×10^{-3}		Mackay and Yeun (1983)	?	
chlorobenzene-d5 C_6D_5Cl [3114-55-4] MVPPADPHJFYWMZ-RALIUCGRSA-N	3.6×10^{-3}	4500	Hiatt (2013)	M	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2-dichlorobenzene	5.6×10^{-3}	3700	Schwardt et al. (2021)	L	1
$\text{C}_6\text{H}_4\text{Cl}_2$	5.9×10^{-3}	5200	Brockbank (2013)	L	1, 712
(<i>o</i> -dichlorobenzene)	6.8×10^{-3}	5300	Fogg and Sangster (2003)	L	713
[95-50-1]	5.4×10^{-3}	5900	Staudinger and Roberts (2001)	L	
RFFLAFLAYXFSW-UHFFFAOYSA-N	5.4×10^{-3}	5900	Staudinger and Roberts (1996)	L	
	5.3×10^{-3}		Mackay and Shiu (1981)	L	
	8.0×10^{-3}	4200	Hiatt (2013)	M	
	6.3×10^{-3}		Li et al. (2008)	M	
	4.7×10^{-3}		Ryu and Park (1999)	M	
	5.1×10^{-3}		Shiu and Mackay (1997)	M	
	7.2×10^{-3}		Hovorka and Dohnal (1997)	M	12
	6.2×10^{-3}	5000	Kondoh and Nakajima (1997)	M	
	4.9×10^{-3}	4400	Park et al. (1997)	M	
	4.8×10^{-3}		Li and Carr (1993)	M	
	3.5×10^{-3}		Yu (1992)	M	12
	4.9×10^{-3}	5100	Bissonette et al. (1990)	M	
	5.3×10^{-3}	1400	Ashworth et al. (1988)	M	42, 279
	8.2×10^{-3}		Oliver (1985)	M	
	5.9×10^{-3}	6700	Gossett et al. (1985)	M	
	5.2×10^{-3}		Mackay and Shiu (1981)	M	
	5.1×10^{-3}		Warner et al. (1980)	M	
	3.5×10^{-3}		Sato and Nakajima (1979b)	M	14
	5.6×10^{-3}		Mackay et al. (2006b)	V	
	4.1×10^{-3}		Shiu and Mackay (1997)	V	
	8.6×10^{-3}		Park et al. (1997)	V	
	8.3×10^{-3}		Lide and Frederikse (1995)	V	
	4.1×10^{-3}		Mackay et al. (1992a)	V	
	6.0×10^{-3}		Hwang et al. (1992)	V	
	4.1×10^{-3}		Bobra et al. (1985)	V	
	4.9×10^{-3}		Warner et al. (1980)	V	
	4.0×10^{-3}		Hine and Mookerjee (1975)	V	
	3.5×10^{-3}		Yaws (2003)	X	238
	5.2×10^{-3}	2800	Goldstein (1982)	X	299
	5.2×10^{-3}		Schüürmann (2000)	C	21
	2.7×10^{-3}		Ryan et al. (1988)	C	
	5.1×10^{-3}		Shen (1982)	C	
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	1.5×10^{-2}		Duchowicz et al. (2020)	Q	185
	4.0×10^{-3}		Li et al. (2014)	Q	242
	4.7×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	3.0×10^{-3}		Gharagheizi et al. (2010)	Q	247
	8.2×10^{-3}		Hilal et al. (2008)	Q	
	4.5×10^{-3}		Modarresi et al. (2007)	Q	68

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note				
			4400	Kühne et al. (2005)	Q				
			5.6×10^{-3}	Yaffe et al. (2003)	Q	249, 250			
			7.1×10^{-3}	Delgado and Alderete (2002)	Q				
			8.0×10^{-3}	Yao et al. (2002)	Q	230			
			4.7×10^{-3}	English and Carroll (2001)	Q	231, 232			
			3.3×10^{-3}	Katritzky et al. (1998)	Q				
			2.3×10^{-3}	Myrdal and Yalkowsky (1994)	Q				
			8.4×10^{-3}	Nirmalakhandan and Speece (1988)	Q				
			5.1×10^{-3}	Duchowicz et al. (2020)	?	186, 21			
						4800	Kühne et al. (2005)	?	
						3.5×10^{-3}	Yaws (1999)	?	21
						3.6×10^{-3}	Abraham and Weathersby (1994)	?	21
						3.3×10^{-3}	Yaws and Yang (1992)	?	21
						5.1×10^{-3}	Abraham et al. (1990)	?	
6.2×10^{-3}	Chiou et al. (1980)	?	80						
1,2-dichlorobenzene-d4 $\text{C}_6\text{D}_4\text{Cl}_2$ (<i>o</i> -dichlorobenzene-d4) [2199-69-1] RFFLAFLAYXFSW-RHQRLBAQSA-N	8.2×10^{-3}	4200	Hiatt (2013)	M					
1,3-dichlorobenzene $\text{C}_6\text{H}_4\text{Cl}_2$ (<i>m</i> -dichlorobenzene) [541-73-1] ZPQOPVIELGIULI-UHFFFAOYSA-N	3.1×10^{-3}	3700	Schwardt et al. (2021)	L	1				
	3.1×10^{-3}	4400	Brockbank (2013)	L					
	3.4×10^{-3}	4300	Fogg and Sangster (2003)	L					
	2.8×10^{-3}		Mackay and Shiu (1981)	L					
	5.2×10^{-3}	4800	Hiatt (2013)	M					
	2.9×10^{-3}		Li et al. (2008)	M					
	3.7×10^{-3}		de Wolf and Lieder (1998)	M	88				
	4.7×10^{-3}		Hovorka and Dohnal (1997)	M	12				
	3.8×10^{-3}	4400	Kondoh and Nakajima (1997)	M					
	3.4×10^{-3}		Hoff et al. (1993)	M					
	3.0×10^{-3}	2600	Ashworth et al. (1988)	M	33, 279				
	5.5×10^{-3}		Oliver (1985)	M					
	3.8×10^{-3}		Warner et al. (1980)	M					
	2.1×10^{-3}		Sato and Nakajima (1979b)	M	14				
	3.1×10^{-3}		Mackay et al. (2006b)	V					
	2.7×10^{-3}		Shiu and Mackay (1997)	V					
	5.6×10^{-3}		Lide and Frederikse (1995)	V					
	2.7×10^{-3}		Mackay et al. (1992a)	V					
	2.7×10^{-3}		Bobra et al. (1985)	V					
	3.3×10^{-3}		Warner et al. (1980)	V					
2.1×10^{-3}		Hine and Mookerjee (1975)	V						
2.9×10^{-3}		Yaws (2003)	X	238					
3.9×10^{-3}	2400	Goldstein (1982)	X	299					
3.7×10^{-3}		Ryan et al. (1988)	C						
3.8×10^{-3}		Shen (1982)	C						

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	9.2×10^{-3}		Duchowicz et al. (2020)	Q	300
	3.9×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	272, 244
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	3.0×10^{-3}		Gharagheizi et al. (2010)	Q	247
	4.7×10^{-3}		Hilal et al. (2008)	Q	
	3.2×10^{-3}		Modarresi et al. (2007)	Q	68
		4100	Kühne et al. (2005)	Q	
	3.8×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	4.5×10^{-3}		Delgado and Alderete (2002)	Q	
	5.0×10^{-3}		Yao et al. (2002)	Q	230, 268
	3.7×10^{-3}		English and Carroll (2001)	Q	231, 275
	4.2×10^{-3}		Katritzky et al. (1998)	Q	
	2.3×10^{-3}		Myrdal and Yalkowsky (1994)	Q	
	8.4×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	3.8×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		4500	Kühne et al. (2005)	?	
	2.9×10^{-3}		Yaws (1999)	?	21
	2.2×10^{-3}		Abraham and Weathersby (1994)	?	21
	3.0×10^{-3}		Yaws and Yang (1992)	?	21
	2.7×10^{-3}		Abraham et al. (1990)	?	
1,4-dichlorobenzene $\text{C}_6\text{H}_4\text{Cl}_2$ (<i>p</i> -dichlorobenzene) [106-46-7] OCJBOOLMMGQPQU-UHFFFAOYSA-N	3.2×10^{-3}	3800	Schwardt et al. (2021)	L	1
	3.8×10^{-3}	6000	Brockbank (2013)	L	1
	4.5×10^{-3}	4400	Fogg and Sangster (2003)	L	
	6.3×10^{-3}		Mackay and Shiu (1981)	L	
	5.8×10^{-3}	4600	Hiatt (2013)	M	
	3.3×10^{-3}		Li et al. (2008)	M	
	2.5×10^{-3}		Chiang et al. (1998)	M	12
	4.1×10^{-3}		Shiu and Mackay (1997)	M	
	5.4×10^{-3}		Hovorka and Dohnal (1997)	M	12
	4.7×10^{-3}	4800	Kondoh and Nakajima (1997)	M	
	3.1×10^{-3}	2700	Ashworth et al. (1988)	M	279
	5.2×10^{-3}		Yurteri et al. (1987)	M	12
	6.6×10^{-3}		Oliver (1985)	M	
	4.2×10^{-3}		Mackay and Shiu (1981)	M	
	3.6×10^{-3}		Warner et al. (1980)	M	
	4.1×10^{-3}		Mackay et al. (2006b)	V	
	6.3×10^{-3}		Shiu and Mackay (1997)	V	
	6.7×10^{-3}		Lide and Frederikse (1995)	V	
	6.3×10^{-3}		Mackay et al. (1992a)	V	
	3.8×10^{-3}		Suntio et al. (1988)	V	12
	5.8×10^{-3}		Bobra et al. (1985)	V	
	2.2×10^{-3}		Hine and Mookerjee (1975)	V	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.3×10^{-3}		Yaws (2003)	X	238
	3.7×10^{-3}	2700	Goldstein (1982)	X	299
	4.1×10^{-3}		Schüürmann (2000)	C	21
	4.1×10^{-3}		Ryan et al. (1988)	C	
	3.6×10^{-3}		Shen (1982)	C	
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	8.4×10^{-3}		Duchowicz et al. (2020)	Q	185
	3.9×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	272, 244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	3.0×10^{-3}		Gharagheizi et al. (2010)	Q	247
	6.5×10^{-3}		Hilal et al. (2008)	Q	
	3.0×10^{-3}		Modarresi et al. (2007)	Q	68
		4100	Kühne et al. (2005)	Q	
	4.1×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	4.1×10^{-3}		Delgado and Alderete (2002)	Q	
	4.3×10^{-3}		Katritzky et al. (1998)	Q	
	2.3×10^{-3}		Myrdal and Yalkowsky (1994)	Q	
	8.4×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	2.1×10^{-3}		Arbuckle (1983)	Q	
	4.1×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		3700	Kühne et al. (2005)	?	
	2.3×10^{-3}		Yaws and Yang (1992)	?	21
	3.8×10^{-3}		Abraham et al. (1990)	?	
1,2,3-trichlorobenzene $\text{C}_6\text{H}_3\text{Cl}_3$ [87-61-6] RELMFMZEBKVZJC-UHFFFAOYSA-N	6.2×10^{-3}	4600	Brockbank (2013)	L	
	1.5×10^{-2}	4800	Hiatt (2013)	M	
	6.3×10^{-3}	4600	Brockbank et al. (2013)	M	
	8.0×10^{-3}		Lee et al. (2012)	M	
	3.6×10^{-3}	4200	Dewulf et al. (1999)	M	
	7.9×10^{-3}		Shiu and Mackay (1997)	M	
	1.5×10^{-2}	7300	Kondoh and Nakajima (1997)	M	
	1.4×10^{-2}		ten Hulscher et al. (1992)	M	12
	1.1×10^{-2}		Oliver (1985)	M	
	7.9×10^{-3}		Mackay and Shiu (1981)	M	
	4.1×10^{-3}		Mackay et al. (2006b)	V	
	5.8×10^{-3}		Fogg and Sangster (2003)	V	
	2.1×10^{-3}		Fogg and Sangster (2003)	V	
	4.1×10^{-3}		Shiu and Mackay (1997)	V	
	3.3×10^{-3}		Abraham et al. (1994a)	V	
	4.1×10^{-3}		Mackay et al. (1992a)	V	
	4.2×10^{-3}		Bobra et al. (1985)	V	
	4.3×10^{-3}		Mackay and Shiu (1981)	V	
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	2.1×10^{-2}		Duchowicz et al. (2020)	Q	300

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.0×10^{-3}		Abraham et al. (2019)	Q	
	8.0×10^{-3}		Li et al. (2014)	Q	242
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	272, 244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	4.5×10^{-3}		Zhang et al. (2010)	Q	288, 289
	6.9×10^{-3}		Zhang et al. (2010)	Q	288, 290
	1.6×10^{-2}		Zhang et al. (2010)	Q	288, 291
	5.2×10^{-3}		Zhang et al. (2010)	Q	288, 292
	8.0×10^{-3}		Hilal et al. (2008)	Q	
	4.6×10^{-3}		Modarresi et al. (2007)	Q	68
		4800	Kühne et al. (2005)	Q	
	1.1×10^{-2}		Delgado and Alderete (2002)	Q	
	3.4×10^{-3}		English and Carroll (2001)	Q	231, 232
	4.4×10^{-3}		Katritzky et al. (1998)	Q	
	3.5×10^{-3}		Myrdal and Yalkowsky (1994)	Q	
	1.8×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	7.9×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		4200	Kühne et al. (2005)	?	
1,2,3-trichlorobenzene-d3 $\text{C}_6\text{D}_3\text{Cl}_3$ [3907-98-0] SMNOERSLNYGGOU-UHFFFAOYSA-N	1.5×10^{-2}	4600	Hiatt (2013)	M	
1,2,4-trichlorobenzene $\text{C}_6\text{H}_3\text{Cl}_3$ [120-82-1] PBKONEOXTCPAFI-UHFFFAOYSA-N	3.9×10^{-3}	3100	Schwardt et al. (2021)	L	1
	4.2×10^{-3}	6400	Brockbank (2013)	L	
	1.1×10^{-2}	5100	Hiatt (2013)	M	
	5.8×10^{-3}		Lee et al. (2012)	M	
	2.4×10^{-3}	3500	Dewulf et al. (1999)	M	714
	2.7×10^{-3}		Ryu and Park (1999)	M	
	6.5×10^{-3}	5500	Kondoh and Nakajima (1997)	M	
	9.9×10^{-3}		ten Hulscher et al. (1992)	M	12
	4.6×10^{-3}	3900	Ashworth et al. (1988)	M	33, 279
	8.2×10^{-3}		Oliver (1985)	M	
	7.0×10^{-3}		Warner et al. (1980)	M	
			Mackay et al. (2006b)	V	685
	7.1×10^{-3}		Fogg and Sangster (2003)	V	
	8.6×10^{-3}		Fogg and Sangster (2003)	V	
	3.6×10^{-3}		Shiu and Mackay (1997)	V	
	7.1×10^{-3}		Lide and Frederikse (1995)	V	
	3.6×10^{-3}		Mackay et al. (1992a)	V	
	4.8×10^{-3}		McLachlan et al. (1990)	V	375
	3.6×10^{-3}		Bobra et al. (1985)	V	
	2.5×10^{-3}		Yoshida et al. (1983)	V	
	2.6×10^{-3}		Mackay and Shiu (1981)	V	
	4.3×10^{-3}		Warner et al. (1980)	V	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.3×10^{-3}		Yaws (2003)	X	238
	7.0×10^{-3}		Goldstein (1982)	X	448
	7.0×10^{-3}	2500	Goldstein (1982)	X	299
	6.9×10^{-3}		Meylan and Howard (1991)	C	
	4.2×10^{-4}		Ryan et al. (1988)	C	
	7.0×10^{-3}		Shen (1982)	C	
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	1.2×10^{-2}		Duchowicz et al. (2020)	Q	
	2.5×10^{-3}		Abraham et al. (2019)	Q	
	4.5×10^{-3}		Zhang et al. (2010)	Q	288, 289
	7.7×10^{-3}		Zhang et al. (2010)	Q	288, 290
	1.5×10^{-2}		Zhang et al. (2010)	Q	288, 291
	4.6×10^{-3}		Zhang et al. (2010)	Q	288, 292
	2.9×10^{-3}		Gharagheizi et al. (2010)	Q	247
	9.9×10^{-3}		Hilal et al. (2008)	Q	
	4.2×10^{-3}		Modarresi et al. (2007)	Q	68
		4500	Kühne et al. (2005)	Q	
	2.4×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	6.7×10^{-3}		Delgado and Alderete (2002)	Q	
	7.4×10^{-3}		Yao et al. (2002)	Q	230
	3.4×10^{-3}		English and Carroll (2001)	Q	231, 261
	6.4×10^{-3}		Katritzky et al. (1998)	Q	
	1.6×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	3.5×10^{-3}		Myrdal and Yalkowsky (1994)	Q	
	4.5×10^{-3}		Meylan and Howard (1991)	Q	
	6.9×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		3200	Kühne et al. (2005)	?	
	3.3×10^{-3}		Yaws (1999)	?	21
1,2,4-trichlorobenzene-d3 $C_6D_3Cl_3$ [2199-72-6] PBKONEOXTCPAFI-CBYSEHNBSA-N	9.8×10^{-3}	4600	Hiatt (2013)	M	
1,3,5-trichlorobenzene $C_6H_3Cl_3$ [108-70-3] XKEFYDZQGKAQCN-UHFFFAOYSA-N	1.8×10^{-3}	4100	Dewulf et al. (1999)	M	715
	5.2×10^{-3}		ten Hulscher et al. (1992)	M	12
	3.5×10^{-2}		Hellmann (1987)	M	88
	5.2×10^{-3}		Oliver (1985)	M	
			Mackay et al. (2006b)	V	685
	1.4×10^{-3}		Fogg and Sangster (2003)	V	
	8.5×10^{-4}		Fogg and Sangster (2003)	V	
	9.1×10^{-4}		Shiu and Mackay (1997)	V	
	1.0×10^{-2}		Lide and Frederikse (1995)	V	
	1.5×10^{-3}		Abraham et al. (1994a)	V	
	9.1×10^{-4}		Mackay et al. (1992a)	V	
	9.1×10^{-4}		Bobra et al. (1985)	V	
	6.2×10^{-3}		Mackay and Shiu (1981)	V	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	7.5×10^{-3}		Duchowicz et al. (2020)	Q	185
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	4.6×10^{-3}		Hilal et al. (2008)	Q	
	4.2×10^{-3}		Modarresi et al. (2007)	Q	68
		4200	Kühne et al. (2005)	Q	
	4.5×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	4.6×10^{-3}		Delgado and Alderete (2002)	Q	
	1.6×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	3.5×10^{-3}		Myrdal and Yalkowsky (1994)	Q	
	4.5×10^{-3}		Meylan and Howard (1991)	Q	
	1.8×10^{-3}		Rumble (2021)	?	716
	5.2×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		4400	Kühne et al. (2005)	?	
1,2,3,4-tetrachlorobenzene $\text{C}_6\text{H}_2\text{Cl}_4$ [634-66-2] GBDZXPJXOMHESU-UHFFFAOYSA-N	3.5×10^{-3}		Ryu and Park (1999)	M	
	1.3×10^{-2}	4800	ten Hulscher et al. (1992)	M	
	5.7×10^{-2}		Hellmann (1987)	M	88
	1.4×10^{-2}		Oliver (1985)	M	
	9.0×10^{-3}		Mackay et al. (2006b)	V	
	6.9×10^{-3}		Shiu and Mackay (1997)	V	
	6.9×10^{-3}		Mackay et al. (1992a)	V	
	5.8×10^{-3}		McLachlan et al. (1990)	V	375
	6.9×10^{-3}		Bobra et al. (1985)	V	
	3.8×10^{-3}		Mackay and Shiu (1981)	V	
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	2.0×10^{-2}		Duchowicz et al. (2020)	Q	300
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	6.1×10^{-3}		Zhang et al. (2010)	Q	288, 289
	7.7×10^{-3}		Zhang et al. (2010)	Q	288, 290
	2.1×10^{-2}		Zhang et al. (2010)	Q	288, 291
	4.6×10^{-3}		Zhang et al. (2010)	Q	288, 292
	8.6×10^{-3}		Hilal et al. (2008)	Q	
	5.7×10^{-3}		Modarresi et al. (2007)	Q	68
		5200	Kühne et al. (2005)	Q	
	1.1×10^{-2}		Delgado and Alderete (2002)	Q	
	4.2×10^{-3}		English and Carroll (2001)	Q	231, 232
	5.7×10^{-3}		Myrdal and Yalkowsky (1994)	Q	
	6.1×10^{-3}		Meylan and Howard (1991)	Q	
	1.3×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		4500	Kühne et al. (2005)	?	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,5-tetrachlorobenzene $\text{C}_6\text{H}_2\text{Cl}_4$ [634-90-2] QZYNWJQFTJXIRN-UHFFFAOYSA-N	6.3×10^{-3}		Shiu and Mackay (1997)	M	
	1.0×10^{-2}		ten Hulscher et al. (1992)	M	12
	6.3×10^{-3}		Mackay and Shiu (1981)	M	
	1.7×10^{-3}		Mackay et al. (2006b)	V	
	2.1×10^{-3}		Fogg and Sangster (2003)	V	
	1.8×10^{-3}		Fogg and Sangster (2003)	V	
	1.7×10^{-3}		Shiu and Mackay (1997)	V	
	1.7×10^{-3}		Mackay et al. (1992a)	V	
	1.7×10^{-3}		Bobra et al. (1985)	V	
	1.7×10^{-3}		Mackay and Shiu (1981)	V	
	6.3×10^{-3}		Meylan and Howard (1991)	C	
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	1.2×10^{-2}		Duchowicz et al. (2020)	Q	
	1.7×10^{-3}		Li et al. (2014)	Q	242
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	7.7×10^{-3}		Hilal et al. (2008)	Q	
	5.4×10^{-3}		Modarresi et al. (2007)	Q	68
	7.1×10^{-3}		Delgado and Alderete (2002)	Q	
4.2×10^{-3}		English and Carroll (2001)	Q	231, 275	
3.2×10^{-2}		Nirmalakhandan et al. (1997)	Q		
5.7×10^{-3}		Myrdal and Yalkowsky (1994)	Q		
6.1×10^{-3}		Meylan and Howard (1991)	Q		
2.4×10^{-2}		Nirmalakhandan and Speece (1988)	Q		
6.2×10^{-3}		Duchowicz et al. (2020)	?	186, 21	
1,2,4,5-tetrachlorobenzene $\text{C}_6\text{H}_2\text{Cl}_4$ [95-94-3] JHBKHLUZVFWLAG-UHFFFAOYSA-N	1.8×10^{-2}		McPhedran et al. (2013)	M	
	6.6×10^{-3}		Lee et al. (2012)	M	
	9.9×10^{-3}		Oliver (1985)	M	
	8.2×10^{-3}		Mackay et al. (2006b)	V	
	2.8×10^{-4}		Fogg and Sangster (2003)	V	
	1.1×10^{-3}		Fogg and Sangster (2003)	V	
	8.2×10^{-3}		Shiu and Mackay (1997)	V	
	8.2×10^{-3}		Mackay et al. (1992a)	V	
	8.2×10^{-3}		Bobra et al. (1985)	V	
	3.8×10^{-3}		Mackay and Shiu (1981)	V	
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	6.1×10^{-3}		Zhang et al. (2010)	Q	288, 289
	8.4×10^{-3}		Zhang et al. (2010)	Q	288, 290
	1.8×10^{-2}		Zhang et al. (2010)	Q	288, 291
4.8×10^{-3}		Zhang et al. (2010)	Q	288, 292	
9.2×10^{-3}		Hilal et al. (2008)	Q		
6.1×10^{-3}		Modarresi et al. (2007)	Q	68	

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	6.8×10^{-3}		Delgado and Alderete (2002)	Q	
	4.2×10^{-3}		English and Carroll (2001)	Q	231, 232
	3.2×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	5.7×10^{-3}		Myrdal and Yalkowsky (1994)	Q	
	6.1×10^{-3}		Meylan and Howard (1991)	Q	
pentachlorobenzene C_6HCl_5 [608-93-5] CEOCDNVZRAIQZ-UHFFFAOYSA-N	1.4×10^{-2}	5400	Schwardt et al. (2021)	L	1
	1.4×10^{-2}	5200	Shen and Wania (2005)	L	368
	1.4×10^{-2}	5600	Shen and Wania (2005)	L	369
	3.0×10^{-2}		McPhedran et al. (2013)	M	
	5.6×10^{-3}		Lee et al. (2012)	M	
	1.4×10^{-2}	5200	ten Hulscher et al. (1992)	M	
	2.0×10^{-1}		Hellmann (1987)	M	88
	1.4×10^{-2}		Oliver (1985)	M	
	1.2×10^{-2}		Mackay et al. (2006b)	V	
	3.5×10^{-2}		Fogg and Sangster (2003)	V	
	2.4×10^{-2}		Fogg and Sangster (2003)	V	
	1.2×10^{-2}		Shiu and Mackay (1997)	V	
	1.2×10^{-2}		Mackay et al. (1992a)	V	
	1.2×10^{-2}		Bobra et al. (1985)	V	
	1.0×10^{-3}		Mackay and Shiu (1981)	V	
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	1.5×10^{-2}		Duchowicz et al. (2020)	Q	300
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	272, 244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	8.2×10^{-3}		Zhang et al. (2010)	Q	288, 289
	6.9×10^{-3}		Zhang et al. (2010)	Q	288, 290
	1.8×10^{-2}		Zhang et al. (2010)	Q	288, 291
	7.0×10^{-3}		Zhang et al. (2010)	Q	288, 292
	7.2×10^{-3}		Hilal et al. (2008)	Q	
	1.1×10^{-2}		Modarresi et al. (2007)	Q	68
		5700	Kühne et al. (2005)	Q	
	1.0×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	7.9×10^{-3}		Delgado and Alderete (2002)	Q	
	9.4×10^{-3}		Myrdal and Yalkowsky (1994)	Q	
	1.4×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		5100	Kühne et al. (2005)	?	
hexachlorobenzene C_6Cl_6 [118-74-1] CKAPSXZOOQJIBF-UHFFFAOYSA-N	6.5×10^{-3}	6600	Brockbank (2013)	L	
	1.9×10^{-2}	6000	Shen and Wania (2005)	L	368
	1.5×10^{-2}	6400	Shen and Wania (2005)	L	369
	3.3×10^{-2}		McPhedran et al. (2013)	M	
	7.6×10^{-3}		Lee et al. (2012)	M	
	3.0×10^{-2}	6900	Jantunen and Bidleman (2006)	M	
	4.2×10^{-2}		Altschuh et al. (1999)	M	
	3.8×10^{-5}	570	Hansen et al. (1993)	M	282

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.0×10^{-2}	5700	ten Hulscher et al. (1992)	M	
	2.6		Hellmann (1987)	M	88
	2.1×10^{-2}		Oliver (1985)	M	
	1.4×10^{-2}		Atlas et al. (1983)	M	73
	7.5×10^{-3}		Atlas et al. (1982)	M	681
	5.8×10^{-3}		Warner et al. (1980)	M	
	7.6×10^{-3}		Mackay et al. (2006b)	V	
	7.6×10^{-3}		Shiu and Mackay (1997)	V	
	7.7×10^{-3}		Lide and Frederikse (1995)	V	
	7.6×10^{-3}		Mackay et al. (1992a)	V	
	7.1×10^{-3}		Ballschmiter and Wittlinger (1991)	V	
	1.1×10^{-2}		Calamari et al. (1991)	V	12
	1.4×10^{-1}		Riederer (1990)	V	
	2.5×10^{-2}		McLachlan et al. (1990)	V	375
	1.4×10^{-1}		Suntio et al. (1988)	V	12
	7.2×10^{-3}		Bobra et al. (1985)	V	
	1.6×10^{-2}		Yoshida et al. (1983)	V	
	2.0×10^{-1}		Mackay and Shiu (1981)	V	
	3.0×10^{-3}	3700	Paasivirta et al. (1999)	T	
	2.6×10^{-3}		Yaws (2003)	X	238
	5.8×10^{-3}	1600	Goldstein (1982)	X	299
	1.0×10^{-2}		Hilal et al. (2008)	C	
	1.5×10^{-2}		Suntio et al. (1988)	C	12
	5.8×10^{-3}		Ryan et al. (1988)	C	
	5.8×10^{-3}		Shen (1982)	C	
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	1.4×10^{-2}		Duchowicz et al. (2020)	Q	185
	1.1×10^{-2}		Zhang et al. (2010)	Q	288, 289
	6.1×10^{-3}		Zhang et al. (2010)	Q	288, 290
	1.6×10^{-2}		Zhang et al. (2010)	Q	288, 291
	1.0×10^{-2}		Zhang et al. (2010)	Q	288, 292
	2.3×10^{-3}		Gharagheizi et al. (2010)	Q	247
	2.0×10^{-2}		Hilal et al. (2008)	Q	
	1.4×10^{-2}		Modarresi et al. (2007)	Q	68
		6400	Kühne et al. (2005)	Q	
	2.1×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	6.5×10^{-3}		Delgado and Alderete (2002)	Q	
	1.6×10^{-2}		Myrdal and Yalkowsky (1994)	Q	
	8.6×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	5.8×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		7200	Kühne et al. (2005)	?	
	2.4×10^{-5}		Yaws and Yang (1992)	?	21

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(chloromethyl)-benzene $\text{C}_6\text{H}_5\text{CH}_2\text{Cl}$ (benzylchloride) [100-44-7] KCXMKQUNVWSEMD-UHFFFAOYSA-N	2.2×10^{-2}	4400	Brockbank (2013)	L	
	2.0×10^{-2}	7200	Hiatt (2013)	M	
	2.8×10^{-2}		Hovorka and Dohnal (1997)	M	12
	1.2×10^{-2}		Li and Carr (1993)	M	
	2.4×10^{-2}		Duchowicz et al. (2020)	V	187
	2.4×10^{-2}		HSDB (2015)	V	
	2.9×10^{-2}		Lide and Frederikse (1995)	V	
	1.6×10^{-2}		Mackay and Shiu (1981)	V	
	8.6×10^{-3}		Duchowicz et al. (2020)	Q	
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	272, 244
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	3.0×10^{-2}		Hilal et al. (2008)	Q	
	1.9×10^{-2}		Modarresi et al. (2007)	Q	68
1.6×10^{-2}		Yaffe et al. (2003)	Q	249, 250	
2.3×10^{-2}		Katritzky et al. (1998)	Q		
1.0×10^{-2}		Abraham et al. (1990)	?		
1-chloro-2-methylbenzene $\text{C}_7\text{H}_7\text{Cl}$ (<i>o</i> -chlorotoluene) [95-49-8] IBSQPLPBRSHHTG-UHFFFAOYSA-N	2.2×10^{-3}	4500	Brockbank (2013)	L	
	3.2×10^{-3}	4100	Hiatt (2013)	M	
	2.4×10^{-3}	3400	Kondoh and Nakajima (1997)	M	
	2.8×10^{-3}	3500	Leighton and Calo (1981)	M	
	1.9×10^{-2}	3000	Goldstein (1982)	X	299
	2.8×10^{-3}		Schüürmann (2000)	C	21
	5.3×10^{-2}		Keshavarz et al. (2022)	Q	
	4.3×10^{-3}		Duchowicz et al. (2020)	Q	300
	4.3×10^{-3}		Hilal et al. (2008)	Q	
	5.4×10^{-3}		Modarresi et al. (2007)	Q	68
		4400	Kühne et al. (2005)	Q	
	5.7×10^{-3}		Katritzky et al. (1998)	Q	
	3.1×10^{-3}		Nirmalakhandan et al. (1997)	Q	
2.8×10^{-3}		Duchowicz et al. (2020)	?	186, 21	
2.8×10^{-3}	4900	Kühne et al. (2005)	?		
2.8×10^{-3}		Abraham et al. (1990)	?		
1-chloro-3-methylbenzene $\text{C}_7\text{H}_7\text{Cl}$ (<i>m</i> -chlorotoluene) [108-41-8] OSOUNOBYRMOXQQ-UHFFFAOYSA-N	6.1×10^{-4}		Duchowicz et al. (2020)	V	187
	6.2×10^{-4}		Schüürmann (2000)	V	
	4.3×10^{-3}		Duchowicz et al. (2020)	Q	
	3.8×10^{-3}		Hilal et al. (2008)	Q	
	6.4×10^{-3}		Modarresi et al. (2007)	Q	68
		4400	Kühne et al. (2005)	Q	
	6.1×10^{-4}		Yaffe et al. (2003)	Q	249, 250
4.8×10^{-3}		Katritzky et al. (1998)	Q		
	4800	Kühne et al. (2005)	?		

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-chloro-4-methylbenzene C_7H_7Cl (<i>p</i> -chlorotoluene) [106-43-4] NPDACUSDTOMAMK-UHFFFAOYSA-N	2.7×10^{-3}	4900	Brockbank (2013)	L	
	4.1×10^{-3}	4200	Hiatt (2013)	M	
	2.9×10^{-3}	3900	Kondoh and Nakajima (1997)	M	
	2.3×10^{-3}		Duchowicz et al. (2020)	V	187
	2.2×10^{-3}		HSDB (2015)	V	
	3.1×10^{-3}		Yaws (2003)	X	238, 12
	4.3×10^{-3}		Duchowicz et al. (2020)	Q	
	8.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.3×10^{-3}		Gharagheizi et al. (2010)	Q	247
	4.0×10^{-3}		Hilal et al. (2008)	Q	
	6.8×10^{-3}		Modarresi et al. (2007)	Q	68
		4400	Kühne et al. (2005)	Q	
	5.1×10^{-3}		Yao et al. (2002)	Q	230
	4.8×10^{-3}		Katritzky et al. (1998)	Q	
		4300	Kühne et al. (2005)	?	
	2.3×10^{-3}		Yaws (1999)	?	21, 12
(dichloromethyl)-benzene $C_7H_6Cl_2$ [98-87-3] CAHQGWAXKLQREW-UHFFFAOYSA-N	2.5×10^{-2}		Duchowicz et al. (2020)	V	187
	1.8×10^{-2}		Duchowicz et al. (2020)	Q	
	1.3×10^{-2}		Zhang et al. (2010)	Q	288, 289
	3.4×10^{-2}		Zhang et al. (2010)	Q	288, 290
	1.1×10^{-1}		Zhang et al. (2010)	Q	288, 291
	1.0×10^{-2}		Zhang et al. (2010)	Q	288, 292
	3.9×10^{-2}		Hilal et al. (2008)	Q	
	2.0×10^{-2}		Modarresi et al. (2007)	Q	68
1,2-dichloro-4-methylbenzene $C_7H_6Cl_2$ (3,4-dichlorotoluene) [95-75-0] WYUIWKFIJOJKW-UHFFFAOYSA-N	3.8×10^{-3}		Duchowicz et al. (2020)	V	187
	7.9×10^{-3}		Duchowicz et al. (2020)	Q	
	7.9×10^{-3}		Hilal et al. (2008)	Q	
	4.1×10^{-3}		Modarresi et al. (2007)	Q	68
	4.1×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	9.0×10^{-3}		Katritzky et al. (1998)	Q	
1,3-dichloro-2-methylbenzene $C_7H_6Cl_2$ (2,6-dichlorotoluene) [118-69-4] DMEDNTFWIHCBRK-UHFFFAOYSA-N	2.3×10^{-3}		HSDB (2015)	Q	100
	3.1×10^{-3}		Zhang et al. (2010)	Q	288, 289
	8.6×10^{-3}		Zhang et al. (2010)	Q	288, 290
	4.2×10^{-3}		Zhang et al. (2010)	Q	288, 291
	1.8×10^{-3}		Zhang et al. (2010)	Q	288, 292
2,4-dichloro-1-methylbenzene $C_7H_6Cl_2$ (2,4-dichlorotoluene) [95-73-8] FUNUTBJJKQIVSY-UHFFFAOYSA-N	2.7×10^{-3}	5000	Schwardt et al. (2021)	L	1
	2.7×10^{-3}	5000	Brockbank (2013)	L	
	2.7×10^{-3}	4900	Brockbank et al. (2013)	M	
	2.3×10^{-3}		HSDB (2015)	Q	100
	3.1×10^{-3}		Zhang et al. (2010)	Q	288, 289
	5.4×10^{-3}		Zhang et al. (2010)	Q	288, 290
	6.7×10^{-3}		Zhang et al. (2010)	Q	288, 291
	1.8×10^{-3}		Zhang et al. (2010)	Q	288, 292
	4400	Kühne et al. (2005)	Q		

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
		5500	Kühne et al. (2005)	?	
2,3,6-trichloromethylbenzene $C_7H_5Cl_3$ (2,3,6-trichlorotoluene) [2077-46-5] UZYYBZNZSSNYSU-UHFFFAOYSA-N	6.6×10^{-3} 1.4×10^{-2} 6.0×10^{-3} 4.1×10^{-3}		Oliver (1985) Hilal et al. (2008) Modarresi et al. (2007) Meylan and Howard (1991)	M Q Q Q	68
2,4,5-trichloromethylbenzene $C_7H_5Cl_3$ (2,4,5-trichlorotoluene) [6639-30-1] ZCXHZKNWIYVQNC-UHFFFAOYSA-N	6.6×10^{-3} 1.2×10^{-2} 6.2×10^{-3} 4.1×10^{-3}		Oliver (1985) Hilal et al. (2008) Modarresi et al. (2007) Meylan and Howard (1991)	M Q Q Q	68
2,4,6-trichloromethylbenzene $C_7H_5Cl_3$ (2,4,6-trichlorotoluene) [23749-65-7] RCTKUIOMKBEGTG-UHFFFAOYSA-N	6.5×10^{-3}		Ebert et al. (2023)	?	367
pentachloromethylbenzene $C_7H_3Cl_5$ (2,3,4,5,6-pentachlorotoluene) [877-11-2] AVSIMRGRHWKCAY-UHFFFAOYSA-N	1.3×10^{-2} 1.6×10^{-2} 1.7×10^{-2} 7.4×10^{-3}		Oliver (1985) Hilal et al. (2008) Modarresi et al. (2007) Meylan and Howard (1991)	M Q Q Q	68
1-chloro-2-(chloromethyl)benzene $C_7H_6Cl_2$ [611-19-8] BASMANVIUSSIM-UHFFFAOYSA-N	6.4×10^{-3} 7.2×10^{-2} 2.1×10^{-1} 6.1×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1-chloro-4-(chloromethyl)benzene $C_7H_6Cl_2$ [104-83-6] JQZAEUFPPSRDOP-UHFFFAOYSA-N	2.9×10^{-2} 6.4×10^{-3} 7.5×10^{-2} 8.2×10^{-2} 6.1×10^{-3}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
chloro(dichloromethyl)benzene $C_7H_5Cl_3$ [88-66-4] BXSVMYKOUULJCL-UHFFFAOYSA-N	1.8×10^{-2} 7.3×10^{-2} 5.4×10^{-2} 1.3×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
(trichloromethyl)-benzene $C_7H_5Cl_3$ [98-07-7] XEMRAKSQROQPBR-UHFFFAOYSA-N	3.8×10^{-2} 3.8×10^{-2} 7.2×10^{-3} 2.0×10^{-2} 4.7×10^{-3}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-chloro-4-(trichloromethyl)benzene $C_7H_4Cl_4$ [5216-25-1] LVZPKYYPLUECL-UHFFFAOYSA-N	5.1×10^{-2}		Zhang et al. (2010)	Q	288, 289
	1.8×10^{-2}		Zhang et al. (2010)	Q	288, 290
	3.4×10^{-2}		Zhang et al. (2010)	Q	288, 291
	6.9×10^{-3}		Zhang et al. (2010)	Q	288, 292
1-chloro-3-ethenylbenzene C_8H_7Cl [2039-85-2] BOVQCIDBZXNFEJ-UHFFFAOYSA-N	4.7×10^{-3}		HSDB (2015)	Q	100
1-chloro-4-ethenylbenzene C_8H_7Cl [1073-67-2] KTZVZZJJVJQZHV-UHFFFAOYSA-N	4.7×10^{-3}		HSDB (2015)	Q	100
1,4-dichloro-2,5-dimethylbenzene $C_8H_8Cl_2$ [1124-05-6] UTGSRNVBAFCOEU-UHFFFAOYSA-N	2.7×10^{-3}		Zhang et al. (2010)	Q	288, 289
	1.2×10^{-2}		Zhang et al. (2010)	Q	288, 290
	4.6×10^{-3}		Zhang et al. (2010)	Q	288, 291
	2.3×10^{-3}		Zhang et al. (2010)	Q	288, 292
1,4-bis(trichloromethyl)benzene $C_8H_4Cl_6$ [68-36-0] OTEKOJQFKOIXMU-UHFFFAOYSA-N	7.9×10^{-1}		Zhang et al. (2010)	Q	288, 289
	3.7×10^{-2}		Zhang et al. (2010)	Q	288, 290
	1.1×10^{-1}		Zhang et al. (2010)	Q	288, 291
	5.8×10^{-3}		Zhang et al. (2010)	Q	288, 292
α,α -dichloro- <i>o</i> -xylene $C_8H_8Cl_2$ [612-12-4] FMGGHNGKHCJLL-UHFFFAOYSA-N	1.0×10^{-1}	11000	Hiatt (2013)	M	
2-chlorostyrene C_8H_7Cl [2039-87-4] ISRGONDNXBCDBM-UHFFFAOYSA-N	4.7×10^{-3}		HSDB (2015)	Q	100
	6.2×10^{-3}		Hilal et al. (2008)	Q	
octachlorostyrene C_8Cl_8 [29082-74-4] RUYUCCQRWINUHE-UHFFFAOYSA-N	7.6×10^{-2}		Oliver (1985)	M	
	4.3×10^{-2}		HSDB (2015)	Q	100
	1.6×10^{-2}		Hilal et al. (2008)	Q	
	4.3×10^{-2}		Meylan and Howard (1991)	Q	
heptachlor $C_{10}H_5Cl_7$ [76-44-8] FRCCEHPWNOQAEU-UHFFFAOYSA-N	3.3×10^{-2}		Shen and Wania (2005)	L	368
	2.6×10^{-2}		Shen and Wania (2005)	L	369
	1.9×10^{-2}	4300	Cetin et al. (2006)	M	
	3.4×10^{-2}		Altschuh et al. (1999)	M	
	6.7×10^{-3}		Warner et al. (1980)	M	
	2.8×10^{-3}		Mackay et al. (2006d)	V	
	8.9×10^{-3}		Suntio et al. (1988)	V	12
	8.8×10^{-5}		Barcelo and Hennion (1997)	X	569
	4.3×10^{-3}		McCarty (1980)	X	370

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.7×10^{-3}		Meylan and Howard (1991)	C	
	6.5×10^{-3}		Ryan et al. (1988)	C	
	6.7×10^{-3}		Shen (1982)	C	
	1.3×10^{-1}		Keshavarz et al. (2022)	Q	
	2.9×10^{-2}		Duchowicz et al. (2020)	Q	
	2.0×10^{-4}		Goodarzi et al. (2010)	Q	570
	2.4×10^{-2}		Hilal et al. (2008)	Q	
	5.8×10^{-1}		Modarresi et al. (2007)	Q	68
	5.6×10^{-2}		Meylan and Howard (1991)	Q	
	3.4×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	2.8×10^{-3}		MacBean (2012a)	?	
1-chloro-2-methyl-2-phenylpropane $C_{10}H_{13}Cl$ [515-40-2] DNXXUUPUQXSUFH-UHFFFAOYSA-N	2.0×10^{-3}		Zhang et al. (2010)	Q	288, 289
	9.5×10^{-3}		Zhang et al. (2010)	Q	288, 290
	1.6×10^{-2}		Zhang et al. (2010)	Q	288, 291
	1.6×10^{-3}		Zhang et al. (2010)	Q	288, 292
1,3-dichloro-5-[(2S)-2,4,4,4-tetrachlorobutan-2-yl]benzene $C_{10}H_8Cl_6$ [73588-42-8] DELZPCKTBPIBEE-VIFPVBQESA-N	8.4×10^{-2}		Zhang et al. (2010)	Q	288, 289
	6.1×10^{-2}		Zhang et al. (2010)	Q	288, 290
	1.5		Zhang et al. (2010)	Q	288, 291
	2.9×10^{-3}		Zhang et al. (2010)	Q	288, 292
1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-4,7-methano-1H-indene $C_{10}H_5Cl_9$ (nonachlor) [3734-49-4] OCHOKXCPKDPNQU-UHFFFAOYSA-N	3.9×10^{-1}		HSDB (2015)	Q	100
1,1-dichloro-2,2-bis-(4-chlorophenyl)-ethane $C_{14}H_{10}Cl_4$ (p,p'-DDD) [72-54-8] AHJKRLASYNVKDZ-UHFFFAOYSA-N	1.5		Shen and Wania (2005)	L	368
	2.0		Shen and Wania (2005)	L	369
	7.6×10^{-1}		Chao et al. (2017)	M	
	9.1×10^{-1}	5100	Cetin et al. (2006)	M	
	1.5		Altschuh et al. (1999)	M	
			Mackay et al. (2006d)	V	560
	1.1×10^{-1}		Ballschmiter and Wittlinger (1991)	V	
	1.6		Suntio et al. (1988)	V	12
	4.6×10^{-1}		Yoshida et al. (1983)	V	
	2.9×10^{-2}	7300	Paasivirta et al. (1999)	T	
	8.1×10^{-4}		Ryan et al. (1988)	C	
	4.3×10^{-1}		Keshavarz et al. (2022)	Q	
	9.5×10^{-2}		Duchowicz et al. (2020)	Q	185
	2.1		Hilal et al. (2008)	Q	
	3.1×10^{-1}		Modarresi et al. (2007)	Q	68

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.5		Duchowicz et al. (2020)	?	186, 21
mitotane $\text{C}_{14}\text{H}_{10}\text{Cl}_4$ (o,p'-DDD) [53-19-0] JWBOIMRXGHLCP- UHFFFAOYSA-N	1.2 1.2 1.6 5.6×10^2 9.5×10^{-2} 2.3×10^{-1} 1.6 1.1×10^1 3.9×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Suntio et al. (1988) Suntio et al. (1988) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V V V C Q Q Q Q Q	187 12 717 288, 289 288, 290 288, 291 288, 292
1,1-dichloro-2,2-bis-(4-chlorophenyl)-ethene $\text{C}_{14}\text{H}_8\text{Cl}_4$ (p,p'-DDE) [72-55-9] UCNVFOCBFJQAL- UHFFFAOYSA-N	2.4×10^{-1} 2.4×10^{-1} 2.9×10^{-2} 1.6×10^{-1} 2.4×10^{-1} 8.1×10^{-3} 2.9×10^{-2} 1.6×10^{-1} 7.6×10^{-1} 1.3×10^{-1} 5.1×10^{-2} 1.2×10^{-1} 2.6×10^{-2} 4.5×10^{-1} 4.5×10^{-1} 8.1×10^{-2} 4.2×10^{-2} 1.8×10^{-1} 2.1×10^{-1} 2.4×10^{-1}	4700 7700 7600	Shen and Wania (2005) Shen and Wania (2005) Jantunen and Bidleman (2006) Cetin et al. (2006) Altschuh et al. (1999) Atlas et al. (1982) Mackay et al. (2006d) Ballschmiter and Wittlinger (1991) Calamari et al. (1991) McLachlan et al. (1990) Suntio et al. (1988) Yoshida et al. (1983) Addison et al. (1983) Paasivirta et al. (1999) Suntio et al. (1988) Ryan et al. (1988) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	L L M M M M V V V V V V T C C Q Q Q Q Q Q ?	368 369 681 560 12 375 12 683 68 186, 21
o,p'-DDE $\text{C}_{14}\text{H}_8\text{Cl}_4$ [3424-82-6] ZDYJWDIWLRLXDB- UHFFFAOYSA-N	5.3×10^{-1} 3.9×10^{-1} 3.9×10^{-1} 1.4×10^{-1} 4.2×10^{-2}		Duchowicz et al. (2020) Mackay et al. (2006d) Suntio et al. (1988) Suntio et al. (1988) Duchowicz et al. (2020)	V V V C Q	187 12 12
1,1,1-trichloro-2-(2-chlorophenyl)-2-(4-chlorophenyl)ethane $\text{C}_{14}\text{H}_9\text{Cl}_5$ (o,p'-DDT) [789-02-6] CVUGPAFCQJIYDT- UHFFFAOYSA-N	1.3 2.9 1.9×10^{-2} 4.4×10^{-2}		Duchowicz et al. (2020) Mackay et al. (2006d) Calamari et al. (1991) Duchowicz et al. (2020)	V V V Q	187 12

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1,1-trichloro-2,2-bis-(4-chlorophenyl)-ethane $\text{C}_{14}\text{H}_9\text{Cl}_5$ (DDT; p,p'-DDT) [50-29-3] YVGGHNCTFXOJCH-UHFFFAOYSA-N	9.1×10^{-1}		Shen and Wania (2005)	L	368
	9.1×10^{-1}		Shen and Wania (2005)	L	369
	1.9×10^{-1}		Mackay and Shiu (1981)	L	
	9.0×10^{-1}	7500	Cetin et al. (2006)	M	
	1.2		Altschuh et al. (1999)	M	
	7.7×10^{-1}		Fendinger et al. (1989)	M	73
	1.2		Fendinger et al. (1989)	M	647
			Mackay et al. (2006d)	V	560
	1.7×10^{-1}		Ballschmitter and Wittlinger (1991)	V	
	3.4×10^{-1}		Calamari et al. (1991)	V	12
	4.2×10^{-1}		Suntio et al. (1988)	V	12
	6.1×10^{-1}		Caron et al. (1985)	V	
	3.7×10^{-1}		Yoshida et al. (1983)	V	
	1.3×10^{-1}		Burkhard and Guth (1981)	V	
	2.5×10^{-1}		Mackay and Leinonen (1975)	V	
	1.9×10^{-2}	7800	Paasivirta et al. (1999)	T	
	4.2×10^{-3}		Barcelo and Hennion (1997)	X	569
	1.7×10^{-1}		Suntio et al. (1988)	C	683
	2.0×10^{-1}		Ryan et al. (1988)	C	
	4.3×10^{-1}		Keshavarz et al. (2022)	Q	
	4.4×10^{-2}		Duchowicz et al. (2020)	Q	300
	6.4×10^{-1}		Zhang et al. (2010)	Q	288, 289
	6.2×10^{-1}		Zhang et al. (2010)	Q	288, 290
	1.6×10^1		Zhang et al. (2010)	Q	288, 291
	2.0×10^{-1}		Zhang et al. (2010)	Q	288, 292
	7.7×10^{-3}		Goodarzi et al. (2010)	Q	570
	6.7×10^{-1}		Hilal et al. (2008)	Q	
	3.5×10^{-1}		Modarresi et al. (2007)	Q	68
	1.2		Duchowicz et al. (2020)	?	186, 21
	2.8×10^{-1}		Brimblecombe (1986)	?	81
aldrin $\text{C}_{12}\text{H}_8\text{Cl}_6$ [309-00-2] QBYJBZPUGVGKQQ-SJJAEHHWSA-N	6.7×10^{-2}		Shen and Wania (2005)	L	368
	4.3×10^{-2}		Shen and Wania (2005)	L	369
	3.6×10^{-1}		Mackay and Shiu (1981)	L	
	2.6×10^{-1}		Chao et al. (2017)	M	
	2.2×10^{-2}	3900	Cetin et al. (2006)	M	
	2.2×10^{-1}		Altschuh et al. (1999)	M	
	2.0×10^{-2}		Warner et al. (1980)	M	
	1.1×10^{-2}		Mackay et al. (2006d)	V	
	1.1×10^{-2}		Suntio et al. (1988)	V	12
	6.9×10^{-1}		Mackay and Leinonen (1975)	V	
	1.1×10^{-4}		Barcelo and Hennion (1997)	X	569
	2.0×10^{-2}		Hilal et al. (2008)	C	
	2.0×10^{-2}		Meylan and Howard (1991)	C	
	7.0×10^{-1}		Suntio et al. (1988)	C	12

Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.1×10^{-1}		Suntio et al. (1988)	C	
	2.6×10^{-2}		Suntio et al. (1988)	C	683
	2.0×10^{-2}		Suntio et al. (1988)	C	12
	8.2×10^{-1}		Ryan et al. (1988)	C	
	2.0×10^{-2}		Shen (1982)	C	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	2.3×10^{-2}		Duchowicz et al. (2020)	Q	185
	6.4×10^{-4}		Goodarzi et al. (2010)	Q	570, 571
	8.6×10^{-3}		Hilal et al. (2008)	Q	
	1.6×10^{-1}		Modarresi et al. (2007)	Q	68
	2.6×10^{-2}		Meylan and Howard (1991)	Q	
	2.2×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	8.4×10^{-1}		Brimblecombe (1986)	?	81
isodrin $\text{C}_{12}\text{H}_8\text{Cl}_6$ [465-73-6] QBYJBZPUGVGKQQ-DIFDVCDBSA-N	2.5×10^{-2}		HSDB (2015)	Q	100
1,1'-(2,2-dichloroethylidene)bis[4-ethylbenzene $\text{C}_{18}\text{H}_{20}\text{Cl}_2$ (perthane) [72-56-0] QFMDFTQOJHFNVR-UHFFFAOYSA-N	5.8×10^{-2}		HSDB (2015)	Q	100

A6.2 Polychlorinated naphthalenes (PCNs)

Table A6.2: Polychlorinated naphthalenes (PCNs)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-chloronaphthalene $\text{C}_{10}\text{H}_7\text{Cl}$ (PCN-1) [90-13-1] JTPNRXUCIXHOKM-UHFFFAOYSA-N	2.8×10^{-2} 2.8×10^{-3} 5.0×10^{-2} 4.7×10^{-2} 2.4×10^{-2} 3.3×10^{-2} 1.1×10^{-2} 3.1×10^{-1} 5.3×10^{-2} 5.7×10^{-2} 7.3×10^{-2} 3.1×10^{-2} 1.1×10^{-2} 6.5×10^{-2} 2.8×10^{-2} 5.1×10^{-2}		Shiu and Mackay (1997) Mackay and Shiu (1981) Yaws (2003) Yaws et al. (2005) Keshavarz et al. (2022) Duchowicz et al. (2020) Li et al. (2014) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998) Nirmalakhandan and Speece (1988) Duchowicz et al. (2020) Yaws (1999)	M M X X Q Q Q Q Q Q Q Q Q Q ?	238 448 242 247 68 249, 273 186, 21
2-chloronaphthalene $\text{C}_{10}\text{H}_7\text{Cl}$ (PCN-2) [91-58-7] CGYGETOMCSJHJU-UHFFFAOYSA-N	3.0×10^{-2} 3.1×10^{-2} 1.5×10^{-2} 1.6×10^{-2} 3.1×10^{-2} 2.4×10^{-2} 3.3×10^{-2} 6.0×10^{-2} 1.0×10^{-1} 3.1×10^{-2} 6.5×10^{-2} 3.1×10^{-2}	3800	Shiu and Mackay (1997) Mackay and Shiu (1981) Hwang et al. (1992) Goldstein (1982) Ryan et al. (1988) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Nirmalakhandan and Speece (1988) Duchowicz et al. (2020)	M M V X C Q Q Q Q Q Q ?	299 185 68 249, 250 186, 21
1,2-dichloronaphthalene $\text{C}_{10}\text{H}_6\text{Cl}_2$ (PCN-3) [2050-69-3] MOXLHAPKZWTHEX-UHFFFAOYSA-N	1.2×10^{-1}		Ebert et al. (2023)	?	718
1,3-dichloronaphthalene $\text{C}_{10}\text{H}_6\text{Cl}_2$ (PCN-4) [2198-75-6] AMCBMCWLCDERHY-UHFFFAOYSA-N	3.4×10^{-2} 7.0×10^{-2} 4.2×10^{-2} 4.7×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A6.2: Polychlorinated naphthalenes (PCNs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,4-dichloronaphthalene $\text{C}_{10}\text{H}_6\text{Cl}_2$ (PCN-5) [1825-31-6] JDPKCYMVSKDOGS-UHFFFAOYSA-N	2.4×10^{-2} 3.2×10^{-2}		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
1,5-dichloronaphthalene $\text{C}_{10}\text{H}_6\text{Cl}_2$ (PCN-6) [1825-30-5] ZBQZXTBAGBTUAD-UHFFFAOYSA-N	4.0×10^{-2}		Ebert et al. (2023)	?	718
2,7-dichloronaphthalene $\text{C}_{10}\text{H}_6\text{Cl}_2$ (PCN-12) [2198-77-8] DWBQZSYTSNYEEJ-UHFFFAOYSA-N	3.1×10^{-2}		Ebert et al. (2023)	?	719
1,2,4-trichloronaphthalene $\text{C}_{10}\text{H}_5\text{Cl}_3$ (PCN-14) [50402-51-2] MRJBOPVWPORBKZ-UHFFFAOYSA-N	8.3×10^{-2}		Ebert et al. (2023)	?	367
1,2,5-trichloronaphthalene $\text{C}_{10}\text{H}_5\text{Cl}_3$ (PCN-15) [55720-33-7] MMHZKSMAFILONG-UHFFFAOYSA-N	1.1×10^{-1}	5300	Odabasi and Adali (2016)	M	720
1,2,6-trichloronaphthalene $\text{C}_{10}\text{H}_5\text{Cl}_3$ (PCN-16) [51570-44-6] AAUJSCRITBXDJH-UHFFFAOYSA-N	1.7×10^{-1}	6500	Odabasi and Adali (2016)	M	720
1,2,7-trichloronaphthalene $\text{C}_{10}\text{H}_5\text{Cl}_3$ (PCN-17) [55720-34-8] QYYUVUXSJZJCLQ-UHFFFAOYSA-N	1.5×10^{-1}		Ebert et al. (2023)	?	367
1,3,5-trichloronaphthalene $\text{C}_{10}\text{H}_5\text{Cl}_3$ (PCN-19) [51570-43-5] DZHZYPCCEISGSQ-UHFFFAOYSA-N	7.1×10^{-2}	5500	Odabasi and Adali (2016)	M	720

Table A6.2: Polychlorinated naphthalenes (PCNs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,4,5-trichloronaphthalene $\text{C}_{10}\text{H}_5\text{Cl}_3$ (PCN-23) [2437-55-0] VQSNXLCFFHGXTI-UHFFFAOYSA-N	2.2×10^{-1}	5400	Odabasi and Adali (2016)	M	720
1,4,6-trichloronaphthalene $\text{C}_{10}\text{H}_5\text{Cl}_3$ (PCN-24) [2437-54-9] RLTTZFDRZKJVKJ-UHFFFAOYSA-N	8.3×10^{-2}		Ebert et al. (2023)	?	367
1,6,7-trichloronaphthalene $\text{C}_{10}\text{H}_5\text{Cl}_3$ (PCN-25) [55720-39-3] FUEZTEBYLIMNHN-UHFFFAOYSA-N	1.5×10^{-1}		Ebert et al. (2023)	?	367
1,2,3,4-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-27) [20020-02-4] NAQWICRLNQSPPW-UHFFFAOYSA-N	4.1×10^{-2} 4.1×10^{-2} 8.3×10^{-2}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
1,2,3,5-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-28) [53555-63-8] HJJKSUVYQCAMBG-UHFFFAOYSA-N	1.3×10^{-1}		Ebert et al. (2023)	?	718
1,2,4,5-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-32) [6733-54-6] BIVDISPRSYAHQQ-UHFFFAOYSA-N	1.5×10^{-1}	5900	Odabasi and Adali (2016)	M	720
1,2,4,6-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-33) [51570-45-7] GLVVZPZGCNEVEM-UHFFFAOYSA-N	7.8×10^{-2}		Ebert et al. (2023)	?	367
1,2,4,7-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-34) [67922-21-8] PWXOBMRJWBBEED-UHFFFAOYSA-N	7.8×10^{-2}		Ebert et al. (2023)	?	367

Table A6.2: Polychlorinated naphthalenes (PCNs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,4,8-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-35) [6529-87-9] WCMSFBRREKZZFL-UHFFFAOYSA-N	1.8×10^{-1}	6000	Odabasi and Adali (2016)	M	720
1,2,5,6-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-36) [67922-22-9] ZPUUGNBIBWHBXM-UHFFFAOYSA-N	1.0×10^{-1}		Ebert et al. (2023)	?	367
1,2,5,7-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-37) [67922-23-0] KQZUIOXHRIVQGR-UHFFFAOYSA-N	7.8×10^{-2}		Ebert et al. (2023)	?	367
1,2,5,8-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-38) [149864-80-2] DLTBLLHAQLBHDR-UHFFFAOYSA-N	2.2×10^{-1}		Ebert et al. (2023)	?	367
1,2,6,8-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-40) [67922-24-1] OVAYDYKVLHHIDQ-UHFFFAOYSA-N	2.2×10^{-1}		Ebert et al. (2023)	?	367
1,3,5,7-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-42) [53555-64-9] OTTCXKPQKOLSJN-UHFFFAOYSA-N	5.6×10^{-2}	5600	Odabasi and Adali (2016)	M	720
1,3,5,8-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-43) [31604-28-1] VFTLNRFrxwCJJK-UHFFFAOYSA-N	1.3×10^{-1}		Ebert et al. (2023)	?	719
1,3,6,8-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-45) [150224-15-0] XXWQPOHDPJIYIN-UHFFFAOYSA-N	1.0×10^{-1}		Ebert et al. (2023)	?	367

Table A6.2: Polychlorinated naphthalenes (PCNs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,4,5,8-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-46) [3432-57-3] LITCKAVLJAKHOE-UHFFFAOYSA-N	3.5×10^{-1}	5700	Odabasi and Adali (2016)	M	720
1,4,6,7-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-47) [55720-43-9] VJZRCIYSYVGDMU-UHFFFAOYSA-N	9.2×10^{-2}	5800	Odabasi and Adali (2016)	M	720
1,2,3,4,6-pentachloronaphthalene $\text{C}_{10}\text{H}_3\text{Cl}_5$ (PCN-50) [67922-26-3] BAOLNVSMVTYGDA-UHFFFAOYSA-N	7.8×10^{-2}	9000	Odabasi and Adali (2016)	M	720
1,2,3,5,7-pentachloronaphthalene $\text{C}_{10}\text{H}_3\text{Cl}_5$ (PCN-52) [53555-65-0] OVSKLQPHXHPXDR-UHFFFAOYSA-N	6.9×10^{-2}		Ebert et al. (2023)	?	367
1,2,3,5,8-pentachloronaphthalene $\text{C}_{10}\text{H}_3\text{Cl}_5$ (PCN-53) [150224-24-1] HVYRFNJXZVEGFK-UHFFFAOYSA-N	1.7×10^{-1}	9700	Odabasi and Adali (2016)	M	720
1,2,4,5,6-pentachloronaphthalene $\text{C}_{10}\text{H}_3\text{Cl}_5$ (PCN-57) [150224-20-7] KPOZENRUJCHWOA-UHFFFAOYSA-N	1.4×10^{-1}	9500	Odabasi and Adali (2016)	M	720
1,2,4,5,7-pentachloronaphthalene $\text{C}_{10}\text{H}_3\text{Cl}_5$ (PCN-58) [150224-19-4] WYLDWCYZCFRVRH-UHFFFAOYSA-N	8.9×10^{-2}	8700	Odabasi and Adali (2016)	M	720
1,2,4,5,8-pentachloronaphthalene $\text{C}_{10}\text{H}_3\text{Cl}_5$ (PCN-59) [150224-25-2] FEIKEVSWLMYFFF-UHFFFAOYSA-N	2.6×10^{-1}	9100	Odabasi and Adali (2016)	M	720

Table A6.2: Polychlorinated naphthalenes (PCNs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,4,6,7-pentachloronaphthalene $\text{C}_{10}\text{H}_3\text{Cl}_5$ (PCN-60) [150224-17-2] GXQU DLBNLKOIQB-UHFFFAOYSA-N	6.9×10^{-2}		Ebert et al. (2023)	?	367
1,2,4,6,8-pentachloronaphthalene $\text{C}_{10}\text{H}_3\text{Cl}_5$ (PCN-61) [150224-22-9] HGSDQSUMXKHGTH-UHFFFAOYSA-N	1.0×10^{-1}	8800	Odabasi and Adali (2016)	M	720
1,2,4,7,8-pentachloronaphthalene $\text{C}_{10}\text{H}_3\text{Cl}_5$ (PCN-62) [150224-21-8] LBCOXKFWBDTJTF-UHFFFAOYSA-N	1.7×10^{-1}	9200	Odabasi and Adali (2016)	M	720
1,2,3,4,5,6-hexachloronaphthalene $\text{C}_{10}\text{H}_2\text{Cl}_6$ (PCN-63) [58877-88-6] CTLMCQOGOWNFHA-UHFFFAOYSA-N	7.8×10^{-1}	12000	Odabasi and Adali (2016)	M	720
1,2,3,4,5,7-hexachloronaphthalene $\text{C}_{10}\text{H}_2\text{Cl}_6$ (PCN-64) [67922-27-4] SWRNUKWDDYPZGV-UHFFFAOYSA-N	3.7×10^{-1}		Ebert et al. (2023)	?	367
1,2,3,4,5,8-hexachloronaphthalene $\text{C}_{10}\text{H}_2\text{Cl}_6$ (PCN-65) [103426-93-3] PGGDNPENWGYMA-UHFFFAOYSA-N	9.3×10^{-1}	10000	Odabasi and Adali (2016)	M	720
1,2,3,4,6,7-hexachloronaphthalene $\text{C}_{10}\text{H}_2\text{Cl}_6$ (PCN-66) [103426-96-6] ZRNSVEOEIWQEMU-UHFFFAOYSA-N	4.3×10^{-1}		Ebert et al. (2023)	?	718
1,2,3,5,6,7-hexachloronaphthalene $\text{C}_{10}\text{H}_2\text{Cl}_6$ (PCN-67) [103426-97-7] XZLJCGGEQLNWDT-UHFFFAOYSA-N	2.5×10^{-1}		Ebert et al. (2023)	?	367

Table A6.2: Polychlorinated naphthalenes (PCNs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,5,6,8-hexachloronaphthalene $\text{C}_{10}\text{H}_2\text{Cl}_6$ (PCN-68) [103426-95-5] FQELOCOACCYGLL-UHFFFAOYSA-N	3.7×10^{-1}		Ebert et al. (2023)	?	367
1,2,3,5,7,8-hexachloronaphthalene $\text{C}_{10}\text{H}_2\text{Cl}_6$ (PCN-69) [103426-94-4] JPQLLIUTUFJWMH-UHFFFAOYSA-N	4.3×10^{-1}	12000	Odabasi and Adali (2016)	M	720
1,2,4,5,6,8-hexachloronaphthalene $\text{C}_{10}\text{H}_2\text{Cl}_6$ (PCN-71) [90948-28-0] JHKLUFTHIWTKX-UHFFFAOYSA-N	4.5×10^{-1}		Ebert et al. (2023)	?	367
1,2,4,5,7,8-hexachloronaphthalene $\text{C}_{10}\text{H}_2\text{Cl}_6$ (PCN-72) [103426-92-2] SFZREMCYQNYZMZ-UHFFFAOYSA-N	4.5×10^{-1}		Ebert et al. (2023)	?	367
1,2,3,4,5,6,7-heptachloronaphthalene $\text{C}_{10}\text{HCl}_7$ (PCN-73) [58863-14-2] NDZIBNJHNBHUKW-UHFFFAOYSA-N	3.6	10000	Odabasi and Adali (2016)	M	720
1,2,3,4,5,6,8-heptachloronaphthalene $\text{C}_{10}\text{HCl}_7$ (PCN-74) [58863-15-3] QYEGXUUXWMKHHS-UHFFFAOYSA-N	2.4	10000	Odabasi and Adali (2016)	M	720
octachloronaphthalene C_{10}Cl_8 (PCN-75) [2234-13-1] RTNLUFLDZOAXIC-UHFFFAOYSA-N	1.2 1.4×10^{-2} 1.4×10^{-2} 7.8×10^{-2}	7800	Odabasi and Adali (2016) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	M V V Q	720 187

A6.3 Polychlorinated biphenyls (PCBs)

Table A6.3: Polychlorinated biphenyls (PCBs)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-chlorobiphenyl	3.0×10^{-2}		Lau et al. (2006)	M	721
$\text{C}_{12}\text{H}_9\text{Cl}$	2.3×10^{-2}		Lau et al. (2006)	M	722
(PCB-1)	3.0×10^{-2}	5300	Charles and Destailats (2005)	M	
[2051-60-7]	4.9×10^{-2}	5100	Bamford et al. (2000)	M	
LAXBNTIAOJWAOP-UHFFFAOYSA-N	1.7×10^{-2}	5300	Paasivirta and Sinkkonen (2009)	V	
	1.4×10^{-2}		Mackay et al. (2006b)	V	
	1.4×10^{-2}		Mackay et al. (1992a)	V	
	2.7×10^{-3}		Hwang et al. (1992)	V	
	1.4×10^{-2}		Shiu and Mackay (1986)	V	
	3.5×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	3.9×10^{-2}		Duchowicz et al. (2020)	Q	185
	2.3×10^{-2}		Hilal et al. (2008)	Q	
	7.0×10^{-2}		Modarresi et al. (2007)	Q	68
	1.7×10^{-2}		Lee (2007)	Q	723
	2.2×10^{-2}		Lee (2007)	Q	724
		4600	Kühne et al. (2005)	Q	
	3.3×10^{-2}		Dunnivant et al. (1992)	Q	
	1.3×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		5400	Kühne et al. (2005)	?	
3-chlorobiphenyl	3.2×10^{-2}	5400	Paasivirta and Sinkkonen (2009)	V	
$\text{C}_{12}\text{H}_9\text{Cl}$	1.3×10^{-2}		Mackay et al. (2006b)	V	
(PCB-2)	1.3×10^{-2}		Mackay et al. (1992a)	V	
[2051-61-8]	1.3×10^{-2}		Shiu and Mackay (1986)	V	
NMWSKOLWZZWHPL-UHFFFAOYSA-N	6.9×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	3.9×10^{-2}		Duchowicz et al. (2020)	Q	300
	3.7×10^{-2}		Hilal et al. (2008)	Q	
	1.3×10^{-1}		Modarresi et al. (2007)	Q	68
	3.7×10^{-2}		Lee (2007)	Q	723
	3.1×10^{-2}		Lee (2007)	Q	724
	3.5×10^{-2}		Dunnivant et al. (1992)	Q	
	1.6×10^{-2}		Duchowicz et al. (2020)	?	186, 21
4-chlorobiphenyl	2.8×10^{-2}	5700	Li et al. (2003)	L	368
$\text{C}_{12}\text{H}_9\text{Cl}$	4.2×10^{-2}	6100	Li et al. (2003)	L	369
(PCB-3)	3.6×10^{-2}		Lau et al. (2006)	M	721
[2051-62-9]	2.9×10^{-2}		Lau et al. (2006)	M	722
FPWNLURCHDRMHC-UHFFFAOYSA-N	3.5×10^{-2}	6700	Charles and Destailats (2005)	M	
	5.6×10^{-2}	6700	Bamford et al. (2002)	M	
	1.4×10^{-2}	5100	Paasivirta and Sinkkonen (2009)	V	
	2.3×10^{-2}		Mackay et al. (2006b)	V	
	2.3×10^{-2}		Mackay et al. (1992a)	V	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	2.3×10^{-2}		Shiu and Mackay (1986)	V	
	7.7×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	3.9×10^{-2}		Duchowicz et al. (2020)	Q	300
	3.9×10^{-2}		Hilal et al. (2008)	Q	
	1.4×10^{-1}		Modarresi et al. (2007)	Q	68
	2.1×10^{-2}		Lee (2007)	Q	723
	3.4×10^{-2}		Lee (2007)	Q	724
	3.6×10^{-2}		Dunnivant et al. (1992)	Q	
	1.7×10^{-2}		Duchowicz et al. (2020)	?	186, 21
2,2'-dichlorobiphenyl $C_{12}H_8Cl_2$ (PCB-4) [13029-08-8] JAYCNKDKIKZTAF-UHFFFAOYSA-N	4.6×10^{-2}	6000	Bamford et al. (2002)	M	
	4.0×10^{-2}		Fendinger and Glotfelty (1990)	M	
	2.9×10^{-2}		Dunnivant et al. (1988)	M	
	2.9×10^{-2}		Dunnivant and Elzerman (1988)	M	725
	3.3×10^{-2}		Murphy et al. (1987)	M	12
	4.5×10^{-2}		Murphy et al. (1983a)	M	24
	7.1×10^{-3}	5500	Paasivirta and Sinkkonen (2009)	V	
	1.7×10^{-2}		Mackay et al. (2006b)	V	
	1.7×10^{-2}		Mackay et al. (1992a)	V	
	1.7×10^{-2}		Shiu and Mackay (1986)	V	
	1.8×10^{-2}		Burkhard et al. (1985)	V	
	2.6×10^{-2}		Chiou et al. (1980)	V	
	4.5×10^{-2}		Murphy et al. (1983b)	X	726, 24
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	5.5×10^{-2}		Duchowicz et al. (2020)	Q	300
	2.5×10^{-2}		Hilal et al. (2008)	Q	
	6.9×10^{-2}		Modarresi et al. (2007)	Q	68
	2.7×10^{-2}		Lee (2007)	Q	723
	2.1×10^{-2}		Lee (2007)	Q	724
	4.8×10^{-2}		English and Carroll (2001)	Q	231, 232
	3.0×10^{-2}		Dunnivant et al. (1992)	Q	
	4.3×10^{-2}		Duchowicz et al. (2020)	?	186, 21
2,3-dichlorobiphenyl $C_{12}H_8Cl_2$ (PCB-5) [16605-91-7] XOMKZKJEJZBJJ-UHFFFAOYSA-N	4.3×10^{-2}	5800	Bamford et al. (2002)	M	
	2.1×10^{-2}	5500	Paasivirta and Sinkkonen (2009)	V	
	5.1×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	7.1×10^{-2}		Duchowicz et al. (2020)	Q	185
	4.7×10^{-2}		Hilal et al. (2008)	Q	
	8.2×10^{-2}		Modarresi et al. (2007)	Q	68
	3.8×10^{-2}		Lee (2007)	Q	723
	4.1×10^{-2}		Lee (2007)	Q	724
		5000	Kühne et al. (2005)	Q	
	4.3×10^{-2}		Yaffe et al. (2003)	Q	249, 273
	4.1×10^{-2}		Dunnivant et al. (1992)	Q	
	3.5×10^{-2}		Sabljić and Güsten (1989)	Q	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4'-dichlorobiphenyl $\text{C}_{12}\text{H}_8\text{Cl}_2$ (PCB-8) [34883-43-7] UFNIBRDIUNVOMX-UHFFFAOYSA-N	3.8×10^{-2}	6000	Li et al. (2003)	L	368
	4.4×10^{-2}	6300	Li et al. (2003)	L	369
	2.6×10^{-2}		Lau et al. (2006)	M	721
	1.9×10^{-2}		Lau et al. (2006)	M	722
	2.3×10^{-2}	5300	Charles and Destailats (2005)	M	
	4.0×10^{-2}	5300	Bamford et al. (2000)	M	
	3.5×10^{-2}		Murphy et al. (1987)	M	12
	5.7×10^{-2}		Brownawell (1986)	M	295
	4.5×10^{-2}		Murphy et al. (1983a)	M	24
	1.0×10^{-2}		Atlas et al. (1982)	M	681
	2.2×10^{-2}	5600	Paasivirta and Sinkkonen (2009)	V	
	1.1×10^{-2}		Shiu and Mackay (1986)	V	
	4.0×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	5.5×10^{-2}		Duchowicz et al. (2020)	Q	300
	5.7×10^{-2}		Hilal et al. (2008)	Q	
	8.4×10^{-2}		Modarresi et al. (2007)	Q	68
	1.7×10^{-2}		Lee (2007)	Q	723
	3.4×10^{-2}		Lee (2007)	Q	724
		4700	Kühne et al. (2005)	Q	
	4.3×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	3.3×10^{-2}		Dunnivant et al. (1992)	Q	
	3.2×10^{-2}		Sabljić and Güsten (1989)	Q	
	4.3×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		5600	Kühne et al. (2005)	?	
2,5-dichlorobiphenyl $\text{C}_{12}\text{H}_8\text{Cl}_2$ (PCB-9) [34883-39-1] KKQWHYGECTYFIA-UHFFFAOYSA-N	2.3×10^{-2}	5700	ten Hulscher et al. (1992)	M	
	2.5×10^{-2}		Dunnivant et al. (1988)	M	
	2.5×10^{-2}		Dunnivant and Elzerman (1988)	M	725
	2.0×10^{-2}	5600	Paasivirta and Sinkkonen (2009)	V	
	5.0×10^{-2}		Mackay et al. (2006b)	V	
	5.0×10^{-2}		Mackay et al. (1992a)	V	
	5.0×10^{-2}		Shiu and Mackay (1986)	V	
	3.0×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	3.8×10^{-2}		Duchowicz et al. (2020)	Q	185
	4.1×10^{-2}		Hilal et al. (2008)	Q	
	7.0×10^{-2}		Modarresi et al. (2007)	Q	68
	3.1×10^{-2}		Lee (2007)	Q	723
	2.6×10^{-2}		Lee (2007)	Q	724
		4700	Kühne et al. (2005)	Q	
	3.4×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	3.0×10^{-2}		Dunnivant et al. (1992)	Q	
	3.5×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		5800	Kühne et al. (2005)	?	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,6-dichlorobiphenyl $C_{12}H_8Cl_2$ (PCB-10) [33146-45-1] IYZWUWBAFUBNCH-UHFFFAOYSA-N	1.2×10^{-2}	5700	Paasivirta and Sinkkonen (2009)	V	
	2.1×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	4.2×10^{-2}		Duchowicz et al. (2020)	Q	300
	3.0×10^{-2}		Hilal et al. (2008)	Q	
	5.8×10^{-2}		Modarresi et al. (2007)	Q	68
	1.9×10^{-2}		Lee (2007)	Q	723
	2.3×10^{-2}		Lee (2007)	Q	724
	4.3×10^{-2}		Yaffe et al. (2003)	Q	249, 273
	2.3×10^{-2}		Dunnivant et al. (1992)	Q	
	2.1×10^{-2}		Sabljić and Güsten (1989)	Q	
4.3×10^{-2}	Duchowicz et al. (2020)	?	186, 21		
3,3'-dichlorobiphenyl $C_{12}H_8Cl_2$ (PCB-11) [2050-67-1] KTXUOWUHFBLBZPW-UHFFFAOYSA-N	4.2×10^{-2}	5700	Dunnivant et al. (1988)	M	
	4.2×10^{-2}		Dunnivant and Elzerman (1988)	M	725
	3.4×10^{-2}		Paasivirta and Sinkkonen (2009)	V	
	5.9×10^{-2}		Mackay et al. (2006b)	V	
	5.8×10^{-2}		Mackay et al. (1992a)	V	
	7.4×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	5.5×10^{-2}		Duchowicz et al. (2020)	Q	185
	9.0×10^{-2}		Hilal et al. (2008)	Q	
	2.0×10^{-1}		Modarresi et al. (2007)	Q	68
	7.4×10^{-2}		Lee (2007)	Q	723
4.3×10^{-2}	Lee (2007)	Q	724		
3.4×10^{-2}	Dunnivant et al. (1992)	Q			
4.3×10^{-2}	Meylan and Howard (1991)	Q			
4.2×10^{-2}	Duchowicz et al. (2020)	?	186, 21		
3,4-dichlorobiphenyl $C_{12}H_8Cl_2$ (PCB-12) [2974-92-7] ZGHQUYZPMWMLBM-UHFFFAOYSA-N	7.0×10^{-2}	5300	Brunner et al. (1990)	M	
	4.8×10^{-2}		Dunnivant et al. (1988)	M	
	4.8×10^{-2}		Dunnivant and Elzerman (1988)	M	725
	2.0×10^{-2}		Paasivirta and Sinkkonen (2009)	V	
	1.0×10^{-1}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	7.1×10^{-2}		Duchowicz et al. (2020)	Q	185
	7.7×10^{-2}		Hilal et al. (2008)	Q	
	1.1×10^{-1}		Modarresi et al. (2007)	Q	68
	4.8×10^{-2}		Lee (2007)	Q	723
	4.3×10^{-2}		Lee (2007)	Q	724
7.3×10^{-2}	Yaffe et al. (2003)	Q	249, 250		
4.2×10^{-2}	Dunnivant et al. (1992)	Q			
7.0×10^{-2}	Duchowicz et al. (2020)	?	186, 21		

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
3,4'-dichlorobiphenyl $C_{12}H_8Cl_2$ (PCB-13) [2974-90-5] CJDNEKOMKXLSBN-UHFFFAOYSA-N	4.9×10^{-2}	6100	Bamford et al. (2002)	M	
	8.5×10^{-2}	5900	Paasivirta and Sinkkonen (2009)	V	
	8.1×10^{-2}		Burkhard et al. (1985)	V	
	9.5×10^{-2}		Hilal et al. (2008)	Q	
	3.7×10^{-2}		Lee (2007)	Q	723
	4.4×10^{-2}		Lee (2007)	Q	724
	3.9×10^{-2}		Dunnivant et al. (1992)	Q	
	3.1×10^{-2}		Sabljić and Güsten (1989)	Q	
3,5-dichlorobiphenyl $C_{12}H_8Cl_2$ (PCB-14) [34883-41-5] QHZSDTDMQZPUKC-UHFFFAOYSA-N	2.7×10^{-2}	5500	Paasivirta and Sinkkonen (2009)	V	
	6.0×10^{-2}		Burkhard et al. (1985)	V	
	5.0×10^{-2}		Hilal et al. (2008)	Q	
	9.4×10^{-2}		Modarresi et al. (2007)	Q	68
	6.7×10^{-2}		Lee (2007)	Q	723
	3.2×10^{-2}		Lee (2007)	Q	724
	2.3×10^{-2}		Dunnivant et al. (1992)	Q	
	2.0×10^{-2}		Sabljić and Güsten (1989)	Q	
4,4'-dichlorobiphenyl $C_{12}H_8Cl_2$ (PCB-15) [2050-68-2] YTBRNEUEFCNVHC-UHFFFAOYSA-N	7.0×10^{-2}	6000	Li et al. (2003)	L	368
	7.5×10^{-2}	6700	Li et al. (2003)	L	369
	5.0×10^{-2}		Lau et al. (2006)	M	721
	3.3×10^{-2}		Lau et al. (2006)	M	722
	3.5×10^{-2}	5300	Charles and Destailats (2005)	M	33
	1.0×10^{-1}		Fendinger and Glotfelty (1990)	M	
	5.0×10^{-2}		Dunnivant et al. (1988)	M	
	5.0×10^{-2}		Dunnivant and Elzerman (1988)	M	725
	3.3×10^{-3}	4900	Paasivirta and Sinkkonen (2009)	V	
	5.6×10^{-2}		Mackay et al. (2006b)	V	
	5.9×10^{-2}		Mackay et al. (1992a)	V	
	5.9×10^{-2}		Shiu and Mackay (1986)	V	
	9.1×10^{-2}		Burkhard et al. (1985)	V	
	1.0×10^{-1}		Chiou et al. (1980)	V	
	3.3×10^{-2}		Murphy et al. (1983b)	X	726, 24
	6.8×10^{-2}		Dunnivant et al. (1988)	C	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	5.5×10^{-2}		Duchowicz et al. (2020)	Q	185
	9.7×10^{-2}		Hilal et al. (2008)	Q	
	1.8×10^{-1}		Modarresi et al. (2007)	Q	68
2.1×10^{-2}		Lee (2007)	Q	723	
4.8×10^{-2}		Lee (2007)	Q	724	
4.4×10^{-2}		Dunnivant et al. (1992)	Q		
4.3×10^{-2}		Meylan and Howard (1991)	Q		
5.0×10^{-2}		Duchowicz et al. (2020)	?	186, 21	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3-trichlorobiphenyl $\text{C}_{12}\text{H}_7\text{Cl}_3$ (PCB-16) [38444-78-9] XVIZMMSINIOIQP-UHFFFAOYSA-N	4.2×10^{-2}	5700	Bamford et al. (2002)	M	
	4.1×10^{-2}		Murphy et al. (1987)	M	12
	1.2×10^{-2}	5800	Atlas et al. (1982)	M	681
	1.5×10^{-2}		Paasivirta and Sinkkonen (2009)	V	
	1.3×10^{-2}		Shiu and Mackay (1986)	V	
	2.8×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	1.0×10^{-1}		Duchowicz et al. (2020)	Q	300
	5.6×10^{-2}		Hilal et al. (2008)	Q	
	6.9×10^{-2}		Modarresi et al. (2007)	Q	68
	6.1×10^{-2}		Lee (2007)	Q	723
	4.4×10^{-2}		Lee (2007)	Q	724
		4500	Kühne et al. (2005)	Q	
	3.9×10^{-2}		Dunnivant et al. (1992)	Q	
3.6×10^{-2}	Sabljić and Güsten (1989)		Q		
	4700	Duchowicz et al. (2020)	?	186, 21	
4.9×10^{-2}		Kühne et al. (2005)	?		
2,2',4-trichlorobiphenyl $\text{C}_{12}\text{H}_7\text{Cl}_3$ (PCB-17) [37680-66-3] YKKYCYQDUUXNLN-UHFFFAOYSA-N	3.3×10^{-2}	4700	Bamford et al. (2002)	M	
	3.0×10^{-2}		Murphy et al. (1987)	M	12
	4.0×10^{-2}	6200	Paasivirta and Sinkkonen (2009)	V	
	1.9×10^{-2}		Burkhard et al. (1985)	V	
	3.7×10^{-2}		Hilal et al. (2008)	Q	
	3.5×10^{-2}		Lee (2007)	Q	723
	3.2×10^{-2}		Lee (2007)	Q	724
	2.6×10^{-2}		Dunnivant et al. (1992)	Q	
2.5×10^{-2}	Sabljić and Güsten (1989)	Q			
2,2',5-trichlorobiphenyl $\text{C}_{12}\text{H}_7\text{Cl}_3$ (PCB-18) [37680-65-2] DCMURXAZTZQAFB-UHFFFAOYSA-N	2.9×10^{-1}	4200	Bhangare et al. (2019)	M	727
	9.0×10^{-2}		Bhangare et al. (2019)	M	728
	3.9×10^{-2}	5800	Bamford et al. (2000)	M	
	3.9×10^{-2}		Brunner et al. (1990)	M	
	2.6×10^{-2}		Dunnivant and Elzerman (1988)	M	
	3.3×10^{-2}		Murphy et al. (1987)	M	12
	4.9×10^{-2}		Oliver (1985)	M	
	4.9×10^{-2}		Murphy et al. (1983a)	M	24
	9.9×10^{-3}		Atlas et al. (1982)	M	681
	9.8×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	1.1×10^{-2}		Mackay et al. (2006b)	V	
	1.1×10^{-2}		Mackay et al. (1992a)	V	
	1.1×10^{-2}	Shiu and Mackay (1986)	V		
	1.7×10^{-2}	Burkhard et al. (1985)	V		
	4.5×10^{-2}	Keshavarz et al. (2022)	Q		
	5.5×10^{-2}	Duchowicz et al. (2020)	Q	300	
4.6×10^{-2}	Hilal et al. (2008)	Q			
6.4×10^{-2}	Modarresi et al. (2007)	Q	68		
4.9×10^{-2}	Lee (2007)	Q	723		

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	3.0×10^{-2}	4200	Lee (2007)	Q	724
	5.8×10^{-2}		Kühne et al. (2005)	Q	
	6.0×10^{-2}		Yaffe et al. (2003)	Q	249, 273
	3.1×10^{-2}		English and Carroll (2001)	Q	231, 275
	3.9×10^{-2}		Dunnivant et al. (1992)	Q	
		4500	Duchowicz et al. (2020)	?	186, 21
			Kühne et al. (2005)	?	
2,2',6-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-19) [38444-73-4] MVXIJRBBCDLNLX-UHFFFAOYSA-N	3.3×10^{-2}	5400	Bamford et al. (2002)	M	
	4.3×10^{-2}		Brunner et al. (1990)	M	
	3.3×10^{-2}		Murphy et al. (1987)	M	12
	4.7×10^{-2}		Murphy et al. (1983a)	M	24
	2.5×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	8.0×10^{-3}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	6.0×10^{-2}		Duchowicz et al. (2020)	Q	
	5.4×10^{-2}		Hilal et al. (2008)	Q	
	6.0×10^{-2}		Modarresi et al. (2007)	Q	68
	3.0×10^{-2}		Lee (2007)	Q	723
	2.4×10^{-2}		Lee (2007)	Q	724
	2.2×10^{-2}		Kühne et al. (2005)	Q	
	2.2×10^{-2}		Dunnivant et al. (1992)	Q	
	2.2×10^{-2}	Sabljić and Güsten (1989)	Q		
	4.3×10^{-2}	Duchowicz et al. (2020)	?	186, 21	
		3100	Kühne et al. (2005)	?	
2,3,3'-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-20) [38444-84-7] SXHLTVKPNQVZGL-UHFFFAOYSA-N	1.2×10^{-2}	5800	Atlas et al. (1982)	M	681
	2.0×10^{-2}		Paasivirta and Sinkkonen (2009)	V	
	1.2×10^{-2}		Shiu and Mackay (1986)	V	
	5.8×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	1.0×10^{-1}		Duchowicz et al. (2020)	Q	300
	1.2×10^{-1}		Hilal et al. (2008)	Q	
	8.4×10^{-2}		Modarresi et al. (2007)	Q	68
	7.6×10^{-2}		Lee (2007)	Q	723
	6.5×10^{-2}		Lee (2007)	Q	724
	4.5×10^{-2}		Dunnivant et al. (1992)	Q	
	3.3×10^{-2}		Sabljić and Güsten (1989)	Q	
	6.2×10^{-2}		Duchowicz et al. (2020)	?	186, 21
			5200		
2,3,4-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-21) [55702-46-0] IUYPHQGMSZOPDZ-UHFFFAOYSA-N	4.3×10^{-3}	Paasivirta and Sinkkonen (2009)		V	
	6.8×10^{-2}	Burkhard et al. (1985)		V	
	7.9×10^{-2}	Hilal et al. (2008)		Q	
	5.0×10^{-2}	Lee (2007)		Q	723
	5.9×10^{-2}	Lee (2007)		Q	724
	4.3×10^{-2}	Dunnivant et al. (1992)	Q		
	4.7×10^{-2}	Sabljić and Güsten (1989)	Q		

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,4'-trichlorobiphenyl $\text{C}_{12}\text{H}_7\text{Cl}_3$ (PCB-22) [38444-85-8] ZMHWQAHZKUPENF-UHFFFAOYSA-N	3.4×10^{-2}	4800	Bamford et al. (2002)	M	
	5.0×10^{-2}		Murphy et al. (1987)	M	12
	5.5×10^{-2}		Murphy et al. (1983a)	M	24
	1.3×10^{-2}	5600	Paasivirta and Sinkkonen (2009)	V	
	6.5×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	1.0×10^{-1}		Duchowicz et al. (2020)	Q	185
	1.2×10^{-1}		Hilal et al. (2008)	Q	
	1.0×10^{-1}		Modarresi et al. (2007)	Q	68
	3.8×10^{-2}		Lee (2007)	Q	723
2,3,5-trichlorobiphenyl $\text{C}_{12}\text{H}_7\text{Cl}_3$ (PCB-23) [55720-44-0] GBUCDGDROYMOAN-UHFFFAOYSA-N	6.4×10^{-2}		Lee (2007)	Q	724
	5.2×10^{-2}		Dunnivant et al. (1992)	Q	
	4.4×10^{-2}		Sabljić and Güsten (1989)	Q	
	7.0×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	1.5×10^{-2}	5700	Paasivirta and Sinkkonen (2009)	V	
	3.9×10^{-2}		Burkhard et al. (1985)	V	
	6.9×10^{-2}		Lee (2007)	Q	723
	4.7×10^{-2}		Lee (2007)	Q	724
	3.1×10^{-2}		Dunnivant et al. (1992)	Q	
	2.8×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3,6-trichlorobiphenyl $\text{C}_{12}\text{H}_7\text{Cl}_3$ (PCB-24) [55702-45-9] LVROLHVSYNLFBF-UHFFFAOYSA-N	3.3×10^{-2}	4700	Bamford et al. (2002)	M	
	4.5×10^{-2}		Brunner et al. (1990)	M	
	3.1×10^{-2}		Murphy et al. (1987)	M	12
	7.7×10^{-3}	5600	Paasivirta and Sinkkonen (2009)	V	
	2.3×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	5.3×10^{-2}		Duchowicz et al. (2020)	Q	300
	4.7×10^{-2}		Hilal et al. (2008)	Q	
	8.5×10^{-2}		Modarresi et al. (2007)	Q	68
	4.2×10^{-2}		Lee (2007)	Q	723
	4.4×10^{-2}		Lee (2007)	Q	724
		4500	Kühne et al. (2005)	Q	
	3.2×10^{-2}		Dunnivant et al. (1992)	Q	
2.9×10^{-2}		Sabljić and Güsten (1989)	Q		
4.5×10^{-2}		Duchowicz et al. (2020)	?	186, 21	
	2800	Kühne et al. (2005)	?		
2,3',4-trichlorobiphenyl $\text{C}_{12}\text{H}_7\text{Cl}_3$ (PCB-25) [55712-37-3] XBBZAULFUPBZSP-UHFFFAOYSA-N	3.3×10^{-2}	4700	Bamford et al. (2002)	M	
	2.4×10^{-2}		Murphy et al. (1987)	M	12
	6.2×10^{-2}		Murphy et al. (1983a)	M	24
	2.8×10^{-2}	5900	Paasivirta and Sinkkonen (2009)	V	
	3.9×10^{-2}		Burkhard et al. (1985)	V	
	4.4×10^{-2}		Lee (2007)	Q	723
	4.5×10^{-2}		Lee (2007)	Q	724
	4800	Kühne et al. (2005)	Q		

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	3.1×10^{-2}		Dunnivant et al. (1992)	Q	
	2.3×10^{-2}		Sabljić and Güsten (1989)	Q	
		5700	Kühne et al. (2005)	?	
2,3',5-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-26) [38444-81-4] ONNCPBRWFSKDMQ-UHFFFAOYSA-N	3.5×10^{-2}	4900	Bamford et al. (2002)	M	
	3.0×10^{-2}		Dunnivant et al. (1988)	M	
	3.0×10^{-2}		Dunnivant and Elzerman (1988)	M	725
	2.9×10^{-2}		Murphy et al. (1987)	M	12
	2.2×10^{-2}	5900	Paasivirta and Sinkkonen (2009)	V	
	3.5×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	5.5×10^{-2}		Duchowicz et al. (2020)	Q	300
	9.9×10^{-2}		Hilal et al. (2008)	Q	
	7.3×10^{-2}		Modarresi et al. (2007)	Q	68
	6.1×10^{-2}		Lee (2007)	Q	723
	4.3×10^{-2}		Lee (2007)	Q	724
	3.3×10^{-2}		Dunnivant et al. (1992)	Q	
	5.9×10^{-2}		Meylan and Howard (1991)	Q	
	4.9×10^{-2}		Duchowicz et al. (2020)	?	186, 21
2,3',6-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-27) [38444-76-7] VQOFJPFYTCHPTR-UHFFFAOYSA-N	3.5×10^{-2}		Murphy et al. (1987)	M	12
	3.1×10^{-2}	6100	Paasivirta and Sinkkonen (2009)	V	
	2.4×10^{-2}		Burkhard et al. (1985)	V	
	3.7×10^{-2}		Lee (2007)	Q	723
	4.2×10^{-2}		Lee (2007)	Q	724
	2.4×10^{-2}		Dunnivant et al. (1992)	Q	
	2.0×10^{-2}		Sabljić and Güsten (1989)	Q	
2,4,4'-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-28) [7012-37-5] BZTYNSQSZHARAZ-UHFFFAOYSA-N	3.0×10^{-2}	6300	Li et al. (2003)	L	368
	3.3×10^{-2}	6600	Li et al. (2003)	L	369
	5.9×10^{-3}		Bhangare et al. (2019)	M	727
	5.0×10^{-2}		Bhangare et al. (2019)	M	728
	2.3×10^{-2}		Lau et al. (2006)	M	721
	1.4×10^{-2}		Lau et al. (2006)	M	722
	1.8×10^{-2}	2300	Charles and Destailats (2005)	M	33
	2.6×10^{-2}	3900	Bamford et al. (2000)	M	
	3.6×10^{-2}	6100	ten Hulscher et al. (1992)	M	
	4.9×10^{-2}		Brunner et al. (1990)	M	
	3.1×10^{-2}		Dunnivant and Elzerman (1988)	M	
	3.7×10^{-2}		Murphy et al. (1987)	M	12
	6.9×10^{-2}		Brownawell (1986)	M	295
	2.7×10^{-2}	5900	Paasivirta and Sinkkonen (2009)	V	
	4.4×10^{-2}		Burkhard et al. (1985)	V	
	2.7×10^{-2}	7100	Paasivirta et al. (1999)	T	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	6.0×10^{-2}		Duchowicz et al. (2020)	Q	
	1.0×10^{-1}		Hilal et al. (2008)	Q	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	9.9×10^{-2}		Modarresi et al. (2007)	Q	68
	2.2×10^{-2}		Lee (2007)	Q	723
	4.7×10^{-2}		Lee (2007)	Q	724
		4800	Kühne et al. (2005)	Q	
	5.2×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	3.5×10^{-2}		Dunnivant et al. (1992)	Q	
	4.9×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		4800	Kühne et al. (2005)	?	
2,4,5-trichlorobiphenyl $\text{C}_{12}\text{H}_7\text{Cl}_3$ (PCB-29) [15862-07-4] VGVIVCCUATMNG-UHFFFAOYSA-N	3.1×10^{-2}	6500	Schwardt et al. (2021)	L	1
	3.1×10^{-2}	6300	Li et al. (2003)	L	368
	3.3×10^{-2}	6700	Li et al. (2003)	L	369
	2.6×10^{-2}	4200	Bamford et al. (2000)	M	
	4.9×10^{-2}		Brunner et al. (1990)	M	
	7.7×10^{-3}	5500	Paasivirta and Sinkkonen (2009)	V	
	4.1×10^{-3}		Mackay et al. (2006b)	V	
	4.1×10^{-2}		Mackay et al. (1992a)	V	
	4.2×10^{-2}		Shiu and Mackay (1986)	V	
	3.9×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	5.3×10^{-2}		Duchowicz et al. (2020)	Q	
	4.5×10^{-2}		Bhangare et al. (2019)	Q	
	7.9×10^{-2}		Hilal et al. (2008)	Q	
	1.3×10^{-1}		Modarresi et al. (2007)	Q	68
	4.0×10^{-2}		Lee (2007)	Q	723
	4.2×10^{-2}		Lee (2007)	Q	724
		5100	Kühne et al. (2005)	Q	
	3.3×10^{-2}		Dunnivant et al. (1992)	Q	
	3.7×10^{-2}		Sabljić and Güsten (1989)	Q	
	4.9×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		4500	Kühne et al. (2005)	?	
2,4,6-trichlorobiphenyl $\text{C}_{12}\text{H}_7\text{Cl}_3$ (PCB-30) [35693-92-6] MTLMVEWEYZFYTH-UHFFFAOYSA-N	1.5×10^{-2}		Dunnivant et al. (1988)	M	
	1.5×10^{-2}		Dunnivant and Elzerman (1988)	M	725
	1.0×10^{-2}		Duchowicz et al. (2020)	V	187
	8.5×10^{-3}	5600	Paasivirta and Sinkkonen (2009)	V	
	2.0×10^{-2}		Mackay et al. (2006b)	V	
	2.0×10^{-2}		Mackay et al. (1992a)	V	
	2.0×10^{-2}		Shiu and Mackay (1986)	V	
	1.6×10^{-2}		Burkhard et al. (1985)	V	
	3.5×10^{-2}		Duchowicz et al. (2020)	Q	
	2.9×10^{-2}		Hilal et al. (2008)	Q	
	2.4×10^{-2}		Lee (2007)	Q	723
	2.5×10^{-2}		Lee (2007)	Q	724
	1.7×10^{-2}		Dunnivant et al. (1992)	Q	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,4',5-trichlorobiphenyl $\text{C}_{12}\text{H}_7\text{Cl}_3$ (PCB-31) [16606-02-3] VAHKBZSAUKPEOV-UHFFFAOYSA-N	2.7×10^{-2}	6100	Li et al. (2003)	L	368
	2.9×10^{-2}	6600	Li et al. (2003)	L	369
	3.4×10^{-2}	4900	Bamford et al. (2002)	M	
	5.2×10^{-2}		Brunner et al. (1990)	M	
	3.7×10^{-2}		Murphy et al. (1987)	M	12
	4.9×10^{-2}		Murphy et al. (1983a)	M	24
	1.1×10^{-2}		Atlas et al. (1982)	M	681
	1.3×10^{-2}	5700	Paasivirta and Sinkkonen (2009)	V	
	1.8×10^{-2}		Shiu and Mackay (1986)	V	
	3.9×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	5.5×10^{-2}		Duchowicz et al. (2020)	Q	
	1.0×10^{-1}		Hilal et al. (2008)	Q	
	9.1×10^{-2}		Modarresi et al. (2007)	Q	68
	3.0×10^{-2}		Lee (2007)	Q	723
	4.1×10^{-2}		Lee (2007)	Q	724
	3.6×10^{-2}		Dunnivant et al. (1992)	Q	
	3.5×10^{-2}		Sabljić and Güsten (1989)	Q	
	5.2×10^{-2}		Duchowicz et al. (2020)	?	186, 21
2,4',6-trichlorobiphenyl $\text{C}_{12}\text{H}_7\text{Cl}_3$ (PCB-32) [38444-77-8] IHIDFKLAWYPTKB-UHFFFAOYSA-N	1.2×10^{-2}	5700	Paasivirta and Sinkkonen (2009)	V	
	2.7×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	6.0×10^{-2}		Duchowicz et al. (2020)	Q	300
	7.5×10^{-2}		Hilal et al. (2008)	Q	
	6.9×10^{-2}		Modarresi et al. (2007)	Q	68
	1.8×10^{-2}		Lee (2007)	Q	723
	4.1×10^{-2}		Lee (2007)	Q	724
	2.5×10^{-2}		Dunnivant et al. (1992)	Q	
	2.4×10^{-2}		Sabljić and Güsten (1989)	Q	
	4.9×10^{-2}		Duchowicz et al. (2020)	?	186, 21
2,3',4'-trichlorobiphenyl $\text{C}_{12}\text{H}_7\text{Cl}_3$ (PCB-33) [38444-86-9] RIMXLXBUOQMDHV-UHFFFAOYSA-N	3.6×10^{-2}	5100	Bamford et al. (2002)	M	
	4.4×10^{-2}		Murphy et al. (1987)	M	12
	6.6×10^{-2}		Murphy et al. (1983a)	M	24
	2.5×10^{-2}		Westcott et al. (1981)	M	
	1.3×10^{-2}	5600	Paasivirta and Sinkkonen (2009)	V	
			Mackay et al. (2006b)	V	685
	2.3×10^{-2}		Mackay et al. (1992a)	V	
	2.3×10^{-2}		Shiu and Mackay (1986)	V	
	5.9×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	1.0×10^{-1}		Duchowicz et al. (2020)	Q	300
	1.1×10^{-1}		Hilal et al. (2008)	Q	
	7.0×10^{-2}		Modarresi et al. (2007)	Q	68
	7.7×10^{-2}		Lee (2007)	Q	723
	5.0×10^{-2}		Lee (2007)	Q	724

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	4.1×10^{-2}		Dunnivant et al. (1992)	Q	
	4.5×10^{-2}		Sabljić and Güsten (1989)	Q	
	6.2×10^{-2}		Duchowicz et al. (2020)	?	186, 21
2,3',5'-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-34) [37680-68-5] GXVMAQACUOSFJF-UHFFFAOYSA-N	1.3×10^{-2}	5800	Paasivirta and Sinkkonen (2009)	V	
	3.4×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	6.0×10^{-2}		Duchowicz et al. (2020)	Q	185
	7.3×10^{-2}		Hilal et al. (2008)	Q	
	7.1×10^{-2}		Modarresi et al. (2007)	Q	68
	1.1×10^{-1}		Lee (2007)	Q	723
	3.9×10^{-2}		Lee (2007)	Q	724
	2.3×10^{-2}		Dunnivant et al. (1992)	Q	
	2.0×10^{-2}		Sabljić and Güsten (1989)	Q	
	4.9×10^{-2}		Duchowicz et al. (2020)	?	186, 21
3,3',4-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-35) [37680-69-6] JHBVPKZLIBDTJR-UHFFFAOYSA-N	1.8×10^{-2}	5600	Paasivirta and Sinkkonen (2009)	V	
	1.2×10^{-1}		Burkhard et al. (1985)	V	
	9.5×10^{-2}		Lee (2007)	Q	723
	5.9×10^{-2}		Lee (2007)	Q	724
	5.5×10^{-2}		Dunnivant et al. (1992)	Q	
	4.4×10^{-2}		Sabljić and Güsten (1989)	Q	
3,3',5-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-36) [38444-87-0] RIBGNAJQTOXRDK-UHFFFAOYSA-N	5.8×10^{-2}	5600	Brunner et al. (1990)	M	
	1.3×10^{-2}		Paasivirta and Sinkkonen (2009)	V	
	7.2×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	6.0×10^{-2}		Duchowicz et al. (2020)	Q	300
	1.2×10^{-1}		Hilal et al. (2008)	Q	
	8.8×10^{-2}		Modarresi et al. (2007)	Q	68
	1.3×10^{-1}		Lee (2007)	Q	723
	4.7×10^{-2}		Lee (2007)	Q	724
	5.8×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	2.9×10^{-2}		Dunnivant et al. (1992)	Q	
	1.9×10^{-2}		Sabljić and Güsten (1989)	Q	
	5.8×10^{-2}		Duchowicz et al. (2020)	?	186, 21
3,4,4'-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-37) [38444-90-5] YZANRISAORXTHU-UHFFFAOYSA-N	9.9×10^{-2}	5400	Brunner et al. (1990)	M	
	6.5×10^{-2}		Murphy et al. (1987)	M	12
	1.2×10^{-2}		Atlas et al. (1982)	M	681
	1.3×10^{-2}		Paasivirta and Sinkkonen (2009)	V	
	1.2×10^{-2}		Shiu and Mackay (1986)	V	
	1.4×10^{-1}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	1.0×10^{-1}		Duchowicz et al. (2020)	Q	185
	1.8×10^{-1}		Hilal et al. (2008)	Q	
	1.3×10^{-1}		Modarresi et al. (2007)	Q	68
	4.8×10^{-2}		Lee (2007)	Q	723

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	6.1×10^{-2}		Lee (2007)	Q	724
	6.5×10^{-2}		Dunnivant et al. (1992)	Q	
	6.9×10^{-2}		Sabljić and Güsten (1989)	Q	
	9.9×10^{-2}		Duchowicz et al. (2020)	?	186, 21
3,4,5-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-38) [53555-66-1] BSFZSQRJGZHMV-UHFFFAOYSA-N	1.2×10^{-2} 1.3×10^{-1} 8.8×10^{-2} 5.2×10^{-2} 4.2×10^{-2} 4.8×10^{-2}	5400	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljić and Güsten (1989)	V V Q Q Q Q	 723 724
3,4',5-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-39) [38444-88-1] SYSBNFJJSJLZMM-UHFFFAOYSA-N	1.2×10^{-2} 8.0×10^{-2} 6.6×10^{-2} 4.4×10^{-2} 3.3×10^{-2} 2.3×10^{-2}	5600	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljić and Güsten (1989)	V V Q Q Q Q	 723 724
2,2',3,3'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-40) [38444-93-8] VTLYHLREPCPKX-UHFFFAOYSA-N	3.6×10^{-2} 9.9×10^{-2} 4.9×10^{-2} 4.9×10^{-2} 6.1×10^{-2} 8.2×10^{-2} 1.8×10^{-3} 4.6×10^{-2} 4.6×10^{-2} 4.5×10^{-2} 4.9×10^{-2} 2.4×10^{-1} 1.9×10^{-1} 1.1×10^{-1} 6.8×10^{-2} 1.2×10^{-1} 9.7×10^{-2} 2.3×10^{-1} 6.5×10^{-2} 5.4×10^{-2} 9.9×10^{-2}	3600 5300	Bamford et al. (2002) Brunner et al. (1990) Dunnivant et al. (1988) Dunnivant and Elzerman (1988) Murphy et al. (1987) Oliver (1985) Paasivirta and Sinkkonen (2009) Mackay et al. (2006b) Mackay et al. (1992a) Shiu and Mackay (1986) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Lee (2007) Lee (2007) Yaffe et al. (2003) English and Carroll (2001) Dunnivant et al. (1992) Duchowicz et al. (2020)	M M M M M M V V V V V Q Q Q Q Q Q Q Q Q Q Q ?	 725 12 300 68 723 724 249, 273 231, 232 186, 21
2,2',3,4-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-41) [52663-59-9] SEWHDNLIHDBVDZ-UHFFFAOYSA-N	4.9×10^{-2} 1.6×10^{-2} 4.2×10^{-2} 2.4×10^{-1} 1.4×10^{-1} 6.9×10^{-2} 8.7×10^{-2}	6200	Murphy et al. (1987) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	M V V Q Q Q Q	12 185 68

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	7.9×10^{-2}		Lee (2007)	Q	723
	7.1×10^{-2}		Lee (2007)	Q	724
	4.0×10^{-2}		Dunnivant et al. (1992)	Q	
	4.8×10^{-2}		Sabljić and Güsten (1989)	Q	
	7.0×10^{-2}		Duchowicz et al. (2020)	?	186, 21
2,2',3,4'-tetrachlorobiphenyl $\text{C}_{12}\text{H}_6\text{Cl}_4$ (PCB-42) [36559-22-5] ALFHIHDQSYXSGP-UHFFFAOYSA-N	2.8×10^{-2}	3100	Bamford et al. (2002)	M	
	5.0×10^{-2}		Murphy et al. (1987)	M	12
	8.6×10^{-3}	5900	Paasivirta and Sinkkonen (2009)	V	
	3.4×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.1×10^{-1}		Duchowicz et al. (2020)	Q	300
	7.2×10^{-2}		Hilal et al. (2008)	Q	
	8.1×10^{-2}		Modarresi et al. (2007)	Q	68
	6.0×10^{-2}		Lee (2007)	Q	723
	6.7×10^{-2}		Lee (2007)	Q	724
	3.9×10^{-2}		Dunnivant et al. (1992)	Q	
	3.1×10^{-2}		Sabljić and Güsten (1989)	Q	
	7.0×10^{-2}		Duchowicz et al. (2020)	?	186, 21
2,2',3,5-tetrachlorobiphenyl $\text{C}_{12}\text{H}_6\text{Cl}_4$ (PCB-43) [70362-46-8] NRBNBYFPJCKTO-UHFFFAOYSA-N	1.3×10^{-2}	6300	Paasivirta and Sinkkonen (2009)	V	
	2.4×10^{-2}		Burkhard et al. (1985)	V	
	1.1×10^{-1}		Lee (2007)	Q	723
	6.1×10^{-2}		Lee (2007)	Q	724
	2.9×10^{-2}		Dunnivant et al. (1992)	Q	
	2.8×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,5'-tetrachlorobiphenyl $\text{C}_{12}\text{H}_6\text{Cl}_4$ (PCB-44) [41464-39-5] ALDJIKXAHSDLLB-UHFFFAOYSA-N	5.4×10^{-3}		Bhangare et al. (2019)	M	727
	3.4×10^{-2}		Bhangare et al. (2019)	M	728
	3.6×10^{-2}	3100	Bamford et al. (2000)	M	
	5.2×10^{-2}		Murphy et al. (1987)	M	12
	4.1×10^{-2}		Murphy et al. (1983a)	M	24
	1.3×10^{-2}		Atlas et al. (1982)	M	681
	1.1×10^{-2}	6000	Paasivirta and Sinkkonen (2009)	V	
	2.0×10^{-2}		Shiu and Mackay (1986)	V	
	3.0×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.0×10^{-1}		Duchowicz et al. (2020)	Q	185
	9.7×10^{-2}		Hilal et al. (2008)	Q	
	7.7×10^{-2}		Modarresi et al. (2007)	Q	68
	1.2×10^{-1}		Lee (2007)	Q	723
	6.7×10^{-2}		Lee (2007)	Q	724
	4.3×10^{-2}	4600	Kühne et al. (2005)	Q	
	3.9×10^{-2}		Dunnivant et al. (1992)	Q	
	3.9×10^{-2}		Sabljić and Güsten (1989)	Q	
	7.0×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		3400	Kühne et al. (2005)	?	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,6-tetrachlorobiphenyl $\text{C}_{12}\text{H}_6\text{Cl}_4$ (PCB-45) [70362-45-7] VHGHHZZTMJLTJX-UHFFFAOYSA-N	2.5×10^{-2}	2900	Bamford et al. (2002)	M	
	3.8×10^{-3}	6000	Paasivirta and Sinkkonen (2009)	V	
	9.9×10^{-3}		Burkhard et al. (1985)	V	
	6.7×10^{-2}		Lee (2007)	Q	723
	5.1×10^{-2}		Lee (2007)	Q	724
	2.8×10^{-2} 3.1×10^{-2}		Dunnivant et al. (1992) Sabljic and Güsten (1989)	Q Q	
2,2',3,6'-tetrachlorobiphenyl $\text{C}_{12}\text{H}_6\text{Cl}_4$ (PCB-46) [41464-47-5] CUGLICQCTXWQNF-UHFFFAOYSA-N	3.0×10^{-2}	3400	Bamford et al. (2002)	M	
	3.8×10^{-2}		Murphy et al. (1987)	M	12
	9.1×10^{-4}	5300	Paasivirta and Sinkkonen (2009)	V	
	1.4×10^{-2}		Burkhard et al. (1985)	V	
	6.7×10^{-2}		Lee (2007)	Q	723
	5.7×10^{-2}		Lee (2007)	Q	724
	2.9×10^{-2} 2.7×10^{-2}		Dunnivant et al. (1992) Sabljic and Güsten (1989)	Q Q	
2,2',4,4'-tetrachlorobiphenyl $\text{C}_{12}\text{H}_6\text{Cl}_4$ (PCB-47) [2437-79-8] QORAVNMWUNPXAO-UHFFFAOYSA-N	2.1×10^{-1}		Lau et al. (2006)	M	721
	9.1×10^{-3}		Lau et al. (2006)	M	722
	1.8×10^{-1}	-6000	Charles and Destailats (2005)	M	
	5.2×10^{-2}		Brunner et al. (1990)	M	
	2.0×10^{-2}	6200	Paasivirta and Sinkkonen (2009)	V	
	5.7×10^{-2}		Mackay et al. (2006b)	V	
	5.8×10^{-2}		Mackay et al. (1992a)	V	
	2.0×10^{-3}		Hwang et al. (1992)	V	
	5.9×10^{-2}		Shiu and Mackay (1986)	V	
	2.3×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	6.6×10^{-2}		Duchowicz et al. (2020)	Q	300
	5.0×10^{-2}		Hilal et al. (2008)	Q	
	8.2×10^{-2}		Modarresi et al. (2007)	Q	68
	3.5×10^{-2}		Lee (2007)	Q	723
4.8×10^{-2}		Lee (2007)	Q	724	
2.7×10^{-2}		Dunnivant et al. (1992)	Q		
2.2×10^{-2}		Sabljic and Güsten (1989)	Q		
5.2×10^{-2}		Duchowicz et al. (2020)	?	186, 21	
2,2',4,5-tetrachlorobiphenyl $\text{C}_{12}\text{H}_6\text{Cl}_4$ (PCB-48) [70362-47-9] XBTHILIDLBRPM-UHFFFAOYSA-N	2.7×10^{-2}	3000	Bamford et al. (2002)	M	
	3.9×10^{-2}		Murphy et al. (1987)	M	12
	6.1×10^{-3}	6100	Paasivirta and Sinkkonen (2009)	V	
	2.5×10^{-2}		Burkhard et al. (1985)	V	
	6.3×10^{-2}		Lee (2007)	Q	723
	5.3×10^{-2} 3.3×10^{-2} 3.8×10^{-2}		Lee (2007) Dunnivant et al. (1992) Sabljic and Güsten (1989)	Q Q Q	724

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note	
2,2',4,5'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-49) [41464-40-8] ZWPVHELAAQPIZHOU-UHFFFAOYSA-N	2.7×10^{-2}	3000	Bamford et al. (2002)	M		
	3.6×10^{-2}		Murphy et al. (1987)	M	12	
	4.9×10^{-2}	5900	Murphy et al. (1983a)	M	24	
	8.3×10^{-3}		Paasivirta and Sinkkonen (2009)	V		
	5.0×10^{-2}		Shiu and Mackay (1986)	V		
	2.1×10^{-2}		Burkhard et al. (1985)	V		
	2.4×10^{-1}		Keshavarz et al. (2022)	Q		
	6.1×10^{-2}		Duchowicz et al. (2020)	Q	300	
	6.1×10^{-2}		Hilal et al. (2008)	Q		
	7.6×10^{-2}		Modarresi et al. (2007)	Q	68	
	7.0×10^{-2}		Lee (2007)	Q	723	
	4.5×10^{-2}		Lee (2007)	Q	724	
2.8×10^{-2}	Dunnivant et al. (1992)	Q				
2.6×10^{-2}	Sabljić and Güsten (1989)	Q				
4.7×10^{-2}	Duchowicz et al. (2020)	?	186, 21			
2,2',4,6-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-50) [62796-65-0] VLLVZDKBSYMGU-UHFFFAOYSA-N	1.6×10^{-2}	2900	Bamford et al. (2000)	M		
	1.3×10^{-2}		Atlas et al. (1982)	M	681	
	9.9×10^{-3}	6300	Paasivirta and Sinkkonen (2009)	V		
	1.3×10^{-2}		Shiu and Mackay (1986)	V		
	7.3×10^{-3}		Burkhard et al. (1985)	V		
	3.1×10^{-2}		Bhangare et al. (2019)	Q		
	3.9×10^{-2}		Lee (2007)	Q	723	
	2.8×10^{-2}		Lee (2007)	Q	724	
			3600	Kühne et al. (2005)	Q	
	1.6×10^{-2}			Dunnivant et al. (1992)	Q	
	1.7×10^{-2}			Sabljić and Güsten (1989)	Q	
	3100		Kühne et al. (2005)	?		
2,2',4,6'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-51) [68194-04-7] WVHNUGRFECMVLU-UHFFFAOYSA-N	2.5×10^{-2}	6300	Paasivirta and Sinkkonen (2009)	V		
	9.9×10^{-3}		Burkhard et al. (1985)	V		
	2.4×10^{-1}		Keshavarz et al. (2022)	Q		
	6.6×10^{-2}		Duchowicz et al. (2020)	Q	185	
	7.3×10^{-2}		Hilal et al. (2008)	Q		
	5.9×10^{-2}		Modarresi et al. (2007)	Q	68	
	3.8×10^{-2}		Lee (2007)	Q	723	
	4.0×10^{-2}		Lee (2007)	Q	724	
	1.9×10^{-2}		Dunnivant et al. (1992)	Q		
	2.0×10^{-2}		Sabljić and Güsten (1989)	Q		
7.0×10^{-2}	Duchowicz et al. (2020)	?	186, 21			

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note	
2,2',5,5'-tetrachlorobiphenyl $\text{C}_{12}\text{H}_6\text{Cl}_4$ (PCB-52) [35693-99-3] HCWZEPKLWVAEOV-UHFFFAOYSA-N	3.5×10^{-2}	6600	Li et al. (2003)	L	368	
	4.0×10^{-2}	6800	Li et al. (2003)	L	369	
	4.9×10^{-3}		Bhangare et al. (2019)	M	727	
	2.9×10^{-2}		Bhangare et al. (2019)	M	728	
	3.2×10^{-2}	3700	Bamford et al. (2000)	M		
	4.2×10^{-2}	6200	ten Hulscher et al. (1992)	M		
	4.9×10^{-2}		Brunner et al. (1990)	M		
	2.9×10^{-2}		Dunnivant et al. (1988)	M		
	2.9×10^{-2}		Dunnivant and Elzerman (1988)	M	725	
	4.1×10^{-2}		Murphy et al. (1987)	M	12	
	8.2×10^{-2}		Oliver (1985)	M		
	4.5×10^{-2}		Murphy et al. (1983a)	M	24	
	1.1×10^{-2}		Atlas et al. (1982)	M	681	
			Westcott et al. (1981)	M	729	
		3.7×10^{-3}	5700	Paasivirta and Sinkkonen (2009)	V	
		2.1×10^{-2}		Mackay et al. (2006b)	V	
		2.1×10^{-2}		Mackay et al. (1992a)	V	
		1.2×10^{-1}		McLachlan et al. (1990)	V	375
		2.1×10^{-2}		Shiu and Mackay (1986)	V	
		1.9×10^{-2}		Burkhard et al. (1985)	V	
	1.2×10^{-2}	7700	Paasivirta et al. (1999)	T		
	3.8×10^{-2}		Murphy et al. (1983b)	X	726, 24	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q		
	5.6×10^{-2}		Duchowicz et al. (2020)	Q	185	
	7.9×10^{-2}		Hilal et al. (2008)	Q		
	6.5×10^{-2}		Modarresi et al. (2007)	Q	68	
	9.7×10^{-2}		Lee (2007)	Q	723	
	4.6×10^{-2}		Lee (2007)	Q	724	
		4200	Kühne et al. (2005)	Q		
	3.1×10^{-2}		Dunnivant et al. (1992)	Q		
	4.9×10^{-2}		Duchowicz et al. (2020)	?	186, 21	
		4900	Kühne et al. (2005)	?		
2,2',5,6'-tetrachlorobiphenyl $\text{C}_{12}\text{H}_6\text{Cl}_4$ (PCB-53) [41464-41-9] SFTUSTXGTCCSHX-UHFFFAOYSA-N	2.4×10^{-2}		Dunnivant et al. (1988)	M		
	2.4×10^{-2}		Dunnivant and Elzerman (1988)	M	725	
	3.5×10^{-2}		Murphy et al. (1987)	M	12	
	3.3×10^{-2}		Murphy et al. (1983a)	M	24	
	5.4×10^{-2}		Duchowicz et al. (2020)	V	187	
	1.6×10^{-3}	5500	Paasivirta and Sinkkonen (2009)	V		
	3.3×10^{-2}		Shiu and Mackay (1986)	V		
	8.9×10^{-3}		Burkhard et al. (1985)	V		
	6.1×10^{-2}		Duchowicz et al. (2020)	Q		
	8.8×10^{-2}		Hilal et al. (2008)	Q		
	5.9×10^{-2}		Modarresi et al. (2007)	Q	68	
	5.3×10^{-2}		Lee (2007)	Q	723	
	4.1×10^{-2}		Lee (2007)	Q	724	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	2.3×10^{-2}		Dunnivant et al. (1992)	Q	
2,2',6,6'-tetrachlorobiphenyl $\text{C}_{12}\text{H}_6\text{Cl}_4$ (PCB-54) [15968-05-5] PXAGFNRKXSYIHU-UHFFFAOYSA-N	4.9×10^{-2} 1.8×10^{-2} 1.8×10^{-2} 1.0×10^{-4} 5.3×10^{-3} 6.7×10^{-2} 2.4×10^{-1} 6.6×10^{-2} 1.2×10^{-1} 6.5×10^{-2} 3.3×10^{-2} 2.7×10^{-2} 5.2×10^{-2} 1.7×10^{-2} 4.9×10^{-2}	4800	Brunner et al. (1990) Dunnivant et al. (1988) Dunnivant and Elzerman (1988) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Dunnivant et al. (1988) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Lee (2007) Lee (2007) Yaffe et al. (2003) Dunnivant et al. (1992) Duchowicz et al. (2020)	M M M V V C Q Q Q Q Q Q Q Q Q ?	725 185 68 723 724 249, 250 186, 21
2,3,3',4-tetrachlorobiphenyl $\text{C}_{12}\text{H}_6\text{Cl}_4$ (PCB-55) [74338-24-2] ZKGSEEWIVLAUNH-UHFFFAOYSA-N	9.6×10^{-3} 8.7×10^{-2} 9.9×10^{-2} 9.3×10^{-2} 5.4×10^{-2} 4.3×10^{-2}	5900	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljic and Güsten (1989)	V V Q Q Q Q	723 724
2,3,3',4'-tetrachlorobiphenyl $\text{C}_{12}\text{H}_6\text{Cl}_4$ (PCB-56) [41464-43-1] UNCGJRRROFURDV-UHFFFAOYSA-N	3.8×10^{-2} 6.1×10^{-2} 4.9×10^{-3} 1.1×10^{-1} 7.5×10^{-2} 9.7×10^{-2} 6.5×10^{-2} 7.5×10^{-2}	3800 5400	Bamford et al. (2002) Murphy et al. (1987) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljic and Güsten (1989)	M M V V Q Q Q Q	12 723 724
2,3,3',5-tetrachlorobiphenyl $\text{C}_{12}\text{H}_6\text{Cl}_4$ (PCB-57) [70424-67-8] DHDBTLFALXRTLBUHFFFAOYSA-N	8.9×10^{-3} 5.1×10^{-2} 1.4×10^{-1} 7.8×10^{-2} 3.6×10^{-2} 2.7×10^{-2}	6100	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljic and Güsten (1989)	V V Q Q Q Q	723 724
2,3,3',5'-tetrachlorobiphenyl $\text{C}_{12}\text{H}_6\text{Cl}_4$ (PCB-58) [41464-49-7] IOPBNBSKOPJKEG-UHFFFAOYSA-N	2.3×10^{-3} 6.2×10^{-2} 1.5×10^{-1} 8.1×10^{-2} 3.9×10^{-2} 2.4×10^{-2}	5400	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljic and Güsten (1989)	V V Q Q Q Q	723 724

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3',6-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-59) [74472-33-6] WZNAMGYIQPAXDH-UHFFFAOYSA-N	4.4×10^{-2}	6600	Paasivirta and Sinkkonen (2009)	V	
	2.9×10^{-2}		Burkhard et al. (1985)	V	
	8.3×10^{-2}		Lee (2007)	Q	723
	8.3×10^{-2}		Lee (2007)	Q	724
	3.2×10^{-2}		Dunnivant et al. (1992)	Q	
	2.7×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3,4,4'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-60) [33025-41-1] XLDBTRJKXLKYTC-UHFFFAOYSA-N	6.1×10^{-2}	5500	Murphy et al. (1987)	M	12
	1.2×10^{-2}		Atlas et al. (1982)	M	681
	2.9×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	9.7×10^{-2}		Burkhard et al. (1985)	V	
	4.9×10^{-2}		Lee (2007)	Q	723
	9.2×10^{-2}		Lee (2007)	Q	724
	6.5×10^{-2}		Dunnivant et al. (1992)	Q	
	6.5×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3,4,5-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-61) [33284-53-6] HLQDGCWIOSMDP-UHFFFAOYSA-N	4.9×10^{-2}	6600	Li et al. (2003)	L	368
	5.0×10^{-2}	7200	Li et al. (2003)	L	369
	9.6×10^{-3}	5600	Duchowicz et al. (2020)	V	187
	4.9×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	8.7×10^{-2}		Burkhard et al. (1985)	V	
	9.6×10^{-2}		Duchowicz et al. (2020)	Q	
	9.0×10^{-2}		Lee (2007)	Q	723
	8.4×10^{-2}		Lee (2007)	Q	724
	4.1×10^{-2}		Dunnivant et al. (1992)	Q	
5.7×10^{-2}	Sabljić and Güsten (1989)		Q		
2,3,4,6-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-62) [54230-22-7] HOBRTVXSIVSXIA-UHFFFAOYSA-N	4.7×10^{-2}	6000	Brunner et al. (1990)	M	
	7.1×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	3.3×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	5.7×10^{-2}		Duchowicz et al. (2020)	Q	300
	4.0×10^{-2}		Hilal et al. (2008)	Q	
	1.8×10^{-1}		Modarresi et al. (2007)	Q	68
	5.5×10^{-2}		Lee (2007)	Q	723
	6.4×10^{-2}		Lee (2007)	Q	724
	2.7×10^{-2}		Dunnivant et al. (1992)	Q	
	2.7×10^{-2}		Sabljić and Güsten (1989)	Q	
4.7×10^{-2}	Duchowicz et al. (2020)	?	186, 21		
2,3,4',5-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-63) [74472-34-7] CITMYAMXIZQCJD-UHFFFAOYSA-N	2.5×10^{-2}	3000	Bamford et al. (2002)	M	
	3.4×10^{-2}	6100	Murphy et al. (1987)	M	12
	9.4×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	5.6×10^{-2}		Burkhard et al. (1985)	V	
	6.8×10^{-2}		Lee (2007)	Q	723
	7.1×10^{-2}		Lee (2007)	Q	724
	4.1×10^{-2}		Dunnivant et al. (1992)	Q	
3.4×10^{-2}	Sabljić and Güsten (1989)		Q		

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,4',6-tetrachlorobiphenyl $\text{C}_{12}\text{H}_6\text{Cl}_4$ (PCB-64) [52663-58-8] FXRXQYZZALWWGA-UHFFFAOYSA-N	2.5×10^{-2}	2900	Bamford et al. (2002)	M	
	5.8×10^{-2}		Murphy et al. (1987)	M	12
	7.9×10^{-3}	6000	Paasivirta and Sinkkonen (2009)	V	
	3.2×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	7.7×10^{-2}		Duchowicz et al. (2020)	Q	300
	1.1×10^{-1}		Hilal et al. (2008)	Q	
	1.3×10^{-1}		Modarresi et al. (2007)	Q	68
	4.2×10^{-2}		Lee (2007)	Q	723
	7.7×10^{-2}		Lee (2007)	Q	724
2,3,5,6-tetrachlorobiphenyl $\text{C}_{12}\text{H}_6\text{Cl}_4$ (PCB-65) [33284-54-7] BLAYIQLVUNIICD-UHFFFAOYSA-N	3.6×10^{-2}		Dunnivant et al. (1992)	Q	
	3.5×10^{-2}		Sabljić and Güsten (1989)	Q	
	7.0×10^{-2}		Duchowicz et al. (2020)	?	186, 21
	4.9×10^{-3}	5800	Paasivirta and Sinkkonen (2009)	V	
	3.7×10^{-2}		Burkhard et al. (1985)	V	
	5.3×10^{-2}		Hilal et al. (2008)	Q	
	1.4×10^{-1}		Modarresi et al. (2007)	Q	68
	7.6×10^{-2}		Lee (2007)	Q	723
2,3',4,4'-tetrachlorobiphenyl $\text{C}_{12}\text{H}_6\text{Cl}_4$ (PCB-66) [32598-10-0] RKLLTEAEZIJBAU-UHFFFAOYSA-N	9.9×10^{-2}		Lee (2007)	Q	724
	2.9×10^{-2}		Dunnivant et al. (1992)	Q	
	3.2×10^{-2}		Sabljić and Güsten (1989)	Q	
	2.7×10^{-2}	3500	Bamford et al. (2000)	M	
	4.9×10^{-2}		Murphy et al. (1987)	M	12
	3.0×10^{-3}	5300	Paasivirta and Sinkkonen (2009)	V	
	1.2×10^{-2}		Shiu and Mackay (1986)	V	
	7.3×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.1×10^{-1}		Duchowicz et al. (2020)	Q	300
	2.9×10^{-2}		Bhangare et al. (2019)	Q	
	2.1×10^{-1}		Hilal et al. (2008)	Q	
	8.5×10^{-2}		Modarresi et al. (2007)	Q	68
	4.3×10^{-2}		Lee (2007)	Q	723
6.8×10^{-2}		Lee (2007)	Q	724	
		5200	Kühne et al. (2005)	Q	
	4.9×10^{-2}		Dunnivant et al. (1992)	Q	
	3.9×10^{-2}		Sabljić and Güsten (1989)	Q	
	8.2×10^{-2}		Duchowicz et al. (2020)	?	186, 21
		3800	Kühne et al. (2005)	?	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,3',4,5-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-67) [73575-53-8] LOEGJNOKOZHBBZ-UHFFFAOYSA-N	9.9×10^{-2}	6200	Brunner et al. (1990)	M	
	1.6×10^{-2}		Paasivirta and Sinkkonen (2009)	V	
	5.2×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	7.7×10^{-2}		Duchowicz et al. (2020)	Q	300
	1.9×10^{-1}		Hilal et al. (2008)	Q	
	1.2×10^{-1}		Modarresi et al. (2007)	Q	68
	7.9×10^{-2}		Lee (2007)	Q	723
	6.8×10^{-2}		Lee (2007)	Q	724
	4.2×10^{-2}		Dunnivant et al. (1992)	Q	
3.4×10^{-2}	Sabljić and Güsten (1989)	Q			
9.9×10^{-2}	Duchowicz et al. (2020)	?	186, 21		
2,3',4,5'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-68) [73575-52-7] KTTXLLZIBIDUCR-UHFFFAOYSA-N	7.2×10^{-3}	5800	Paasivirta and Sinkkonen (2009)	V	
	4.3×10^{-2}		Burkhard et al. (1985)	V	
	8.7×10^{-2}		Lee (2007)	Q	723
	5.2×10^{-2}		Lee (2007)	Q	724
	2.6×10^{-2}		Dunnivant et al. (1992)	Q	
	1.8×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3',4,6-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-69) [60233-24-1] CKUBKYSLNCKBOI-UHFFFAOYSA-N	1.9×10^{-2}	6500	Paasivirta and Sinkkonen (2009)	V	
	2.1×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	5.0×10^{-2}		Duchowicz et al. (2020)	Q	
	7.9×10^{-2}		Hilal et al. (2008)	Q	
	1.2×10^{-1}		Modarresi et al. (2007)	Q	68
	4.8×10^{-2}		Lee (2007)	Q	723
	4.5×10^{-2}		Lee (2007)	Q	724
	2.0×10^{-2}		Dunnivant et al. (1992)	Q	
	1.6×10^{-2}		Sabljić and Güsten (1989)	Q	
4.7×10^{-2}	Duchowicz et al. (2020)	?	186, 21		
2,3',4',5-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-70) [32598-11-1] KENZYIHFBRWMOD-UHFFFAOYSA-N	3.3×10^{-2}	3500	Bamford et al. (2002)	M	
	9.9×10^{-2}		Brunner et al. (1990)	M	
	5.2×10^{-2}		Murphy et al. (1987)	M	12
	1.1×10^{-1}	5400	Brownawell (1986)	M	295
	4.9×10^{-2}		Murphy et al. (1983a)	M	24
	4.0×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	5.0×10^{-2}		Shiu and Mackay (1986)	V	
	6.5×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.0×10^{-1}		Duchowicz et al. (2020)	Q	300
	2.0×10^{-1}		Hilal et al. (2008)	Q	
	7.2×10^{-2}		Modarresi et al. (2007)	Q	68
	6.0×10^{-2}		Lee (2007)	Q	723
	6.4×10^{-2}		Lee (2007)	Q	724
	4.9×10^{-2}		Dunnivant et al. (1992)	Q	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	5.2×10^{-2}		Sabljić and Güsten (1989)	Q	
	9.9×10^{-2}		Duchowicz et al. (2020)	?	186, 21
2,3',4',6-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-71) [41464-46-4] WYVBETQIUHPLFO-UHFFFAOYSA-N	1.8×10^{-2} 4.4×10^{-2} 3.6×10^{-2} 7.0×10^{-2} 3.1×10^{-2} 3.1×10^{-2}	6000	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljić and Güsten (1989)	V V Q Q Q Q	723 724
2,3',5,5'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-72) [41464-42-0] WBTMFEPLVQOWFI-UHFFFAOYSA-N	4.0×10^{-3} 3.9×10^{-2} 1.2×10^{-1} 5.3×10^{-2} 2.7×10^{-2} 2.1×10^{-2}	5700	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljić and Güsten (1989)	V V Q Q Q Q	723 724
2,3',5',6-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-73) [74338-23-1] HDULUCZRGWMTZ-UHFFFAOYSA-N	6.4×10^{-3} 2.6×10^{-2} 7.4×10^{-2} 6.0×10^{-2} 1.9×10^{-2} 1.6×10^{-2}	5900	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljić and Güsten (1989)	V V Q Q Q Q	723 724
2,4,4',5-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-74) [32690-93-0] TULCXSBAHPCWCF-UHFFFAOYSA-N	2.6×10^{-2} 9.9×10^{-2} 4.7×10^{-2} 4.8×10^{-3} 5.8×10^{-2} 4.5×10^{-2} 7.7×10^{-2} 2.0×10^{-1} 1.3×10^{-1} 3.9×10^{-2} 6.5×10^{-2} 4.6×10^{-2} 4.7×10^{-2} 9.9×10^{-2}	3000 5800	Bamford et al. (2002) Brunner et al. (1990) Murphy et al. (1987) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljić and Güsten (1989) Duchowicz et al. (2020)	M M M V V Q Q Q Q Q Q Q Q Q	12 185 68 723 724 186, 21
2,4,4',6-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-75) [32598-12-2] RZFBHKDGHISSH-UHFFFAOYSA-N	2.1×10^{-2} 2.4×10^{-2} 2.4×10^{-2} 4.4×10^{-2} 2.1×10^{-2} 1.8×10^{-2}	6400	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljić and Güsten (1989)	V V Q Q Q Q	723 724

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,3',4',5'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-76) [70362-48-0] QILUYCYPNYWMIL-UHFFFAOYSA-N	7.7×10^{-2}		Murphy et al. (1987)	M	12
	2.3×10^{-3}	5500	Paasivirta and Sinkkonen (2009)	V	
	8.2×10^{-2}		Burkhard et al. (1985)	V	
	1.4×10^{-1}		Lee (2007)	Q	723
	7.0×10^{-2}		Lee (2007)	Q	724
	4.1×10^{-2} 4.4×10^{-2}		Dunnivant et al. (1992) Sabljić and Güsten (1989)	Q Q	
3,3',4,4'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-77) [32598-13-3] UQMGJOKDKOLIDP-UHFFFAOYSA-N	1.2×10^{-2}		Bhangare et al. (2019)	M	727
	7.1×10^{-2}		Bhangare et al. (2019)	M	728
	3.1×10^{-2}		Lau et al. (2006)	M	721
	1.8×10^{-2}		Lau et al. (2006)	M	722
	9.1×10^{-2}		Fang et al. (2006)	M	
	2.9×10^{-2}	13000	Charles and Destailats (2005)	M	33
	6.2×10^{-2}	4800	Bamford et al. (2000)	M	
	1.0×10^{-1}		Dunnivant et al. (1988)	M	
	1.0×10^{-1}		Dunnivant and Elzerman (1988)	M	725
	6.0×10^{-4}	4600	Paasivirta and Sinkkonen (2009)	V	
	5.8×10^{-2}		Mackay et al. (2006b)	V	
	5.8×10^{-1}		Mackay et al. (1992a)	V	
	5.9×10^{-1}		Shiu and Mackay (1986)	V	
	2.3×10^{-1}		Burkhard et al. (1985)	V	
	8.3×10^{-3}	7400	Paasivirta et al. (1999)	T	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.9×10^{-1}		Duchowicz et al. (2020)	Q	
	3.6×10^{-1}		Hilal et al. (2008)	Q	
	1.2×10^{-1}		Modarresi et al. (2007)	Q	68
	9.4×10^{-2}		Lee (2007)	Q	723
8.0×10^{-2}		Lee (2007)	Q	724	
	6100	Kühne et al. (2005)	Q		
		Dunnivant et al. (1992)	Q		
		Meylan and Howard (1991)	Q		
		Duchowicz et al. (2020)	?	186, 21	
	5600	Kühne et al. (2005)	?		
3,3',4,5-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-78) [70362-49-1] SXFLURRQRFKBNB-UHFFFAOYSA-N	5.1×10^{-3}	5600	Paasivirta and Sinkkonen (2009)	V	
	1.7×10^{-1}		Burkhard et al. (1985)	V	
	1.7×10^{-1}		Lee (2007)	Q	723
	7.5×10^{-2}		Lee (2007)	Q	724
	6.0×10^{-2}		Dunnivant et al. (1992)	Q	
	4.4×10^{-2}		Sabljić and Güsten (1989)	Q	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note			
3,3',4,5'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-79) [41464-48-6] QLCTXEMDCZGPCG-UHFFFAOYSA-N	3.8×10^{-3}	5400	Paasivirta and Sinkkonen (2009)	V				
	1.4×10^{-1}		Burkhard et al. (1985)	V				
	2.4×10^{-1}		Keshavarz et al. (2022)	Q				
	1.1×10^{-1}		Duchowicz et al. (2020)	Q	300			
	2.5×10^{-1}		Hilal et al. (2008)	Q				
	8.2×10^{-2}		Modarresi et al. (2007)	Q	68			
	1.9×10^{-1}		Lee (2007)	Q	723			
	6.3×10^{-2}		Lee (2007)	Q	724			
	5.0×10^{-2}		Dunnivant et al. (1992)	Q				
	2.9×10^{-2}		Sabljić and Güsten (1989)	Q				
3,3',5,5'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-80) [33284-52-5] UTMWFJSRHLRYPY-UHFFFAOYSA-N	9.4×10^{-4}	5100	Paasivirta and Sinkkonen (2009)	V				
	8.0×10^{-2}		Burkhard et al. (1985)	V				
	2.6×10^{-1}		Lee (2007)	Q	723			
	5.2×10^{-2}		Lee (2007)	Q	724			
	2.6×10^{-2}		Dunnivant et al. (1992)	Q				
	1.6×10^{-2}		Sabljić and Güsten (1989)	Q				
	3,4,4',5-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-81) [70362-50-4] BHWVLZJTVIYLIV-UHFFFAOYSA-N		8.8×10^{-2}	4000	Fang et al. (2006)	M		
			4.1×10^{-2}		Bamford et al. (2002)	M		
			2.0×10^{-3}		5300	Paasivirta and Sinkkonen (2009)	V	
			1.9×10^{-1}		Burkhard et al. (1985)	V		
8.6×10^{-2}		Lee (2007)	Q		723			
7.2×10^{-2}		Lee (2007)	Q		724			
6.9×10^{-2}		Dunnivant et al. (1992)	Q					
6.7×10^{-2}		Sabljić and Güsten (1989)	Q					
2,2',3,3',4-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-82) [52663-62-4] AUGNBQPSMWGAJE-UHFFFAOYSA-N	2.7×10^{-2}	5100	Bamford et al. (2002)	M				
	8.4×10^{-2}		Murphy et al. (1987)	M	12			
	4.9×10^{-2}		Murphy et al. (1983a)	M	24			
	3.2×10^{-3}		5800	Paasivirta and Sinkkonen (2009)	V			
	5.0×10^{-2}		Shiu and Mackay (1986)	V				
	8.0×10^{-2}		Burkhard et al. (1985)	V				
	1.6×10^{-1}		Lee (2007)	Q	723			
	1.5×10^{-1}		Lee (2007)	Q	724			
	6.7×10^{-2}		Dunnivant et al. (1992)	Q				
	8.1×10^{-2}		Sabljić and Güsten (1989)	Q				
2,2',3,3',5-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-83) [60145-20-2] SUBRHHYLRGOTHL-UHFFFAOYSA-N	2.3×10^{-2}	3600	Bamford et al. (2002)	M				
	6.0×10^{-2}		Murphy et al. (1987)	M	12			
	7.7×10^{-3}		6300	Paasivirta and Sinkkonen (2009)	V			
	4.7×10^{-2}		Burkhard et al. (1985)	V				
	2.2×10^{-1}		Lee (2007)	Q	723			
	1.4×10^{-1}		Lee (2007)	Q	724			
	4.7×10^{-2}		Dunnivant et al. (1992)	Q				
3.8×10^{-2}	Sabljić and Güsten (1989)	Q						

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',6-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-84) [52663-60-2] QVWUJLANSDKRAH-UHFFFAOYSA-N	5.7×10^{-2}	6000	Murphy et al. (1987)	M	12
	2.3×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	1.9×10^{-2}		Burkhard et al. (1985)	V	
	1.3×10^{-1}		Lee (2007)	Q	723
	1.2×10^{-1}		Lee (2007)	Q	724
	3.9×10^{-2}		Dunnivant et al. (1992)	Q	
	4.3×10^{-2}	Sabljić and Güsten (1989)	Q		
2,2',3,4,4'-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-85) [65510-45-4] LACXVZHAJMVESG-UHFFFAOYSA-N	2.3×10^{-2}	3100	Bamford et al. (2002)	M	
	1.5×10^{-1}		Brunner et al. (1990)	M	
	6.0×10^{-2}	6600	Murphy et al. (1987)	M	12
	2.8×10^{-2}		Paasivirta and Sinkkonen (2009)	V	
	5.6×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.6×10^{-1}		Duchowicz et al. (2020)	Q	
	9.2×10^{-2}		Hilal et al. (2008)	Q	
	1.2×10^{-1}		Modarresi et al. (2007)	Q	68
	7.8×10^{-2}		Lee (2007)	Q	723
	1.1×10^{-1}		Lee (2007)	Q	724
	5.1×10^{-2}		Dunnivant et al. (1992)	Q	
4.0×10^{-2}	Sabljić and Güsten (1989)	Q			
	1.5×10^{-1}	Duchowicz et al. (2020)	?	186, 21	
2,2',3,4,5-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-86) [55312-69-1] AIURIRUDHVDRFQ-UHFFFAOYSA-N	3.2×10^{-3}	6500	Duchowicz et al. (2020)	V	187
	8.9×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	6.6×10^{-3}		Mackay et al. (2006b)	V	
	6.6×10^{-3}		Mackay et al. (1992a)	V	
	6.6×10^{-3}		Shiu and Mackay (1986)	V	
	1.2×10^{-2}		Burkhard et al. (1985)	V	
	1.4×10^{-1}		Duchowicz et al. (2020)	Q	
	7.5×10^{-2}		Hilal et al. (2008)	Q	
	1.4×10^{-1}		Lee (2007)	Q	723
	1.2×10^{-1}		Lee (2007)	Q	724
	4.1×10^{-2}	Dunnivant et al. (1992)	Q		
	5.8×10^{-2}	Sabljić and Güsten (1989)	Q		
2,2',3,4,5'-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-87) [38380-02-8] OPKYDBFRKPCQS-UHFFFAOYSA-N	2.7×10^{-2}	3900	Bamford et al. (2000)	M	
	7.8×10^{-2}		Murphy et al. (1987)	M	12
	1.4×10^{-1}	6000	Brownawell (1986)	M	295
	3.0×10^{-2}		Murphy et al. (1983a)	M	24
	4.1×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	4.0×10^{-2}		Mackay et al. (2006b)	V	
	4.0×10^{-2}		Mackay et al. (1992a)	V	
	4.0×10^{-2}		Shiu and Mackay (1986)	V	
	5.0×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.5×10^{-1}	Duchowicz et al. (2020)	Q	300	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	2.3×10^{-2}		Bhangare et al. (2019)	Q	
	1.2×10^{-1}		Hilal et al. (2008)	Q	
	1.6×10^{-1}		Lee (2007)	Q	723
	1.0×10^{-1}		Lee (2007)	Q	724
		5000	Kühne et al. (2005)	Q	
	5.4×10^{-2}		Dunnivant et al. (1992)	Q	
	5.5×10^{-2}		Sabljić and Güsten (1989)	Q	
	1.3×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		4200	Kühne et al. (2005)	?	
2,2',3,4,6-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-88) [55215-17-3] QGDKRLQRLFUJPP-UHFFFAOYSA-N	9.6×10^{-3} 7.3×10^{-3} 1.2×10^{-1} 7.8×10^{-2} 2.6×10^{-2} 2.9×10^{-2}	6800	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljić and Güsten (1989)	V V Q Q Q Q	 723 724
2,2',3,4,6'-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-89) [73575-57-2] GLOOIONSKMZYQZ-UHFFFAOYSA-N	2.2×10^{-2} 4.3×10^{-3} 2.4×10^{-2} 8.7×10^{-2} 9.8×10^{-2} 3.3×10^{-2} 3.4×10^{-2}	2500 6100	Bamford et al. (2002) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljić and Güsten (1989)	M V V Q Q Q Q	 723 724
2,2',3,4',5-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-90) [68194-07-0] SUOAMBOBSWRMNQ-UHFFFAOYSA-N	2.1×10^{-2} 3.3×10^{-2} 1.1×10^{-1} 8.8×10^{-2} 3.4×10^{-2} 2.6×10^{-2}	6600	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljić and Güsten (1989)	V V Q Q Q Q	 723 724
2,2',3,4',6-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-91) [68194-05-8] CXKIGWXPPVZSQK-UHFFFAOYSA-N	1.9×10^{-2} 3.6×10^{-2} 1.1×10^{-2} 1.4×10^{-2} 6.6×10^{-2} 8.3×10^{-2} 2.9×10^{-2} 2.8×10^{-2}	1200 6500	Bamford et al. (2002) Murphy et al. (1987) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljić and Güsten (1989)	M M V V Q Q Q Q	 12 723 724
2,2',3,5,5'-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-92) [52663-61-3] CRCBRZBVCDKPGA-UHFFFAOYSA-N	2.2×10^{-2} 1.2×10^{-2} 3.0×10^{-2} 2.2×10^{-1} 9.5×10^{-2} 3.8×10^{-2} 3.1×10^{-2}	2900 6500	Bamford et al. (2002) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljić and Güsten (1989)	M V V Q Q Q Q	 723 724

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,5,6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-93) [73575-56-1] BMXRLHMJGHJGLR-UHFFFAOYSA-N	4.1×10^{-3}	6500	Paasivirta and Sinkkonen (2009)	V	
	8.3×10^{-3}		Burkhard et al. (1985)	V	
	1.2×10^{-1}		Lee (2007)	Q	723
	1.3×10^{-1}		Lee (2007)	Q	724
	2.9×10^{-2}		Dunnivant et al. (1992)	Q	
	3.5×10^{-2}	Sabljić and Güsten (1989)	Q		
2,2',3,5,6'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-94) [73575-55-0] FJUVPYPYNSDTRQV-UHFFFAOYSA-N	4.5×10^{-3}	6300	Paasivirta and Sinkkonen (2009)	V	
	1.4×10^{-2}		Burkhard et al. (1985)	V	
	1.2×10^{-1}		Lee (2007)	Q	723
	9.1×10^{-2}		Lee (2007)	Q	724
	2.5×10^{-2}		Dunnivant et al. (1992)	Q	
	2.3×10^{-2}	Sabljić and Güsten (1989)	Q		
2,2',3,5',6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-95) [38379-99-6] GXNNLIMMEXHBKV-UHFFFAOYSA-N	2.1×10^{-2}	2500	Bamford et al. (2002)	M	
	5.0×10^{-2}		Murphy et al. (1987)	M	12
	3.3×10^{-3}	6200	Paasivirta and Sinkkonen (2009)	V	
	1.2×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	7.9×10^{-2}		Duchowicz et al. (2020)	Q	
	1.3×10^{-1}		Lee (2007)	Q	723
	9.0×10^{-2}		Lee (2007)	Q	724
	3.3×10^{-2}		Dunnivant et al. (1992)	Q	
	3.4×10^{-2}		Sabljić and Güsten (1989)	Q	
8.2×10^{-2}	Duchowicz et al. (2020)	?	186, 21		
2,2',3,6,6'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-96) [73575-54-9] QQFGAXUIQVKBKU-UHFFFAOYSA-N	8.7×10^{-4}	5800	Paasivirta and Sinkkonen (2009)	V	
	7.2×10^{-3}		Burkhard et al. (1985)	V	
	7.4×10^{-2}		Lee (2007)	Q	723
	6.5×10^{-2}		Lee (2007)	Q	724
	2.4×10^{-2}		Dunnivant et al. (1992)	Q	
	2.6×10^{-2}	Sabljić and Güsten (1989)	Q		
2,2',3,4',5'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-97) [41464-51-1] JTUSORDQZVOEAS-UHFFFAOYSA-N	2.3×10^{-2}	3600	Bamford et al. (2002)	M	
	1.3×10^{-1}		Brunner et al. (1990)	M	
	6.6×10^{-2}		Murphy et al. (1987)	M	12
	8.6×10^{-3}	6300	Paasivirta and Sinkkonen (2009)	V	
	4.8×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.5×10^{-1}		Duchowicz et al. (2020)	Q	
	1.5×10^{-1}		Hilal et al. (2008)	Q	
	1.4×10^{-1}		Modarresi et al. (2007)	Q	68
	1.2×10^{-1}		Lee (2007)	Q	723
	1.1×10^{-1}		Lee (2007)	Q	724
	5.5×10^{-2}		Dunnivant et al. (1992)	Q	
	5.5×10^{-2}		Sabljić and Güsten (1989)	Q	
	1.3×10^{-1}		Duchowicz et al. (2020)	?	186, 21

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note	
2,2',3,4',6'-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-98) [60233-25-2] GOFFZTAPOOICFT-UHFFFAOYSA-N	5.5×10^{-3}	6300	Paasivirta and Sinkkonen (2009)	V		
	1.5×10^{-2}		Burkhard et al. (1985)	V		
	7.6×10^{-2}		Lee (2007)	Q	723	
	6.5×10^{-2}		Lee (2007)	Q	724	
	2.5×10^{-2}		Dunnivant et al. (1992)	Q		
	2.0×10^{-2}		Sabljić and Güsten (1989)	Q		
2,2',4,4',5-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-99) [38380-01-7] LMQJBFRGXHMNOX-UHFFFAOYSA-N	2.2×10^{-2}	8700 1900 6600	Lau et al. (2006)	M	721	
	4.2×10^{-3}		Lau et al. (2006)	M	722	
	8.8×10^{-3}		Charles and Destailats (2005)	M	33	
	2.1×10^{-2}		Bamford et al. (2002)	M		
	1.3×10^{-1}		Brunner et al. (1990)	M		
	4.6×10^{-2}		Murphy et al. (1987)	M	12	
	2.1×10^{-2}		Paasivirta and Sinkkonen (2009)	V		
	3.4×10^{-2}		Burkhard et al. (1985)	V		
	2.4×10^{-1}		Keshavarz et al. (2022)	Q		
	8.6×10^{-2}		Duchowicz et al. (2020)	Q	300	
	6.2×10^{-2}		Lee (2007)	Q	723	
	7.9×10^{-2}		Lee (2007)	Q	724	
	4.0×10^{-2}		Dunnivant et al. (1992)	Q		
	3.3×10^{-2}		Sabljić and Güsten (1989)	Q		
	1.3×10^{-1}		Duchowicz et al. (2020)	?	186, 21	
2,2',4,4',6-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-100) [39485-83-1] RKUAZJIXKHPFRK-UHFFFAOYSA-N	9.7×10^{-3}	6600	Paasivirta and Sinkkonen (2009)	V		
	1.0×10^{-2}		Burkhard et al. (1985)	V		
	3.8×10^{-2}		Lee (2007)	Q	723	
	4.6×10^{-2}		Lee (2007)	Q	724	
	1.8×10^{-2}		Dunnivant et al. (1992)	Q		
	1.6×10^{-2}		Sabljić and Güsten (1989)	Q		
2,2',4,5,5'-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-101) [37680-73-2] LAHWLEDBADHJGA-UHFFFAOYSA-N	3.2×10^{-2}	6800	Li et al. (2003)	L	368	
	4.1×10^{-2}	7500	Li et al. (2003)	L	369	
	6.9×10^{-3}		Bhangare et al. (2019)	M	727	
	2.0×10^{-2}		Bhangare et al. (2019)	M	728	
	2.4×10^{-2}	3600	Bamford et al. (2000)	M		
	3.9×10^{-2}		Dunnivant et al. (1988)	M		
	3.9×10^{-2}		Dunnivant and Elzerman (1988)	M	725	
	5.5×10^{-2}		Murphy et al. (1987)	M	12	
	1.4×10^{-1}		Oliver (1985)	M		
			Westcott et al. (1981)	M	730	
		8.9×10^{-3}	6400	Paasivirta and Sinkkonen (2009)	V	
	2.8×10^{-2}	Mackay et al. (2006b)		V		
	2.8×10^{-2}	Mackay et al. (1992a)		V		
	2.9×10^{-2}	Shiu and Mackay (1986)		V		
	3.1×10^{-2}	Burkhard et al. (1985)		V		
	2.0×10^{-2}	8100	Paasivirta et al. (1999)	T		
	2.4×10^{-1}		Keshavarz et al. (2022)	Q		

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	7.9×10^{-2}		Duchowicz et al. (2020)	Q	185
	1.2×10^{-1}		Hilal et al. (2008)	Q	
	1.2×10^{-1}		Modarresi et al. (2007)	Q	68
	1.3×10^{-1}		Lee (2007)	Q	723
	7.9×10^{-2}		Lee (2007)	Q	724
		4600	Kühne et al. (2005)	Q	
	1.2×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	6.1×10^{-2}		English and Carroll (2001)	Q	231, 232
	4.0×10^{-2}		Dunnivant et al. (1992)	Q	
	1.1×10^{-1}		Meylan and Howard (1991)	Q	
	1.1×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		3900	Kühne et al. (2005)	?	
2,2',4,5,6'-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-102) [68194-06-9] BWWVXHRLMPBDCK-UHFFFAOYSA-N	1.1×10^{-1}		Brunner et al. (1990)	M	
	6.3×10^{-3}	6300	Paasivirta and Sinkkonen (2009)	V	
	1.5×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	8.6×10^{-2}		Duchowicz et al. (2020)	Q	
	8.8×10^{-2}		Hilal et al. (2008)	Q	
	1.3×10^{-1}		Modarresi et al. (2007)	Q	68
	6.9×10^{-2}		Lee (2007)	Q	723
	7.7×10^{-2}		Lee (2007)	Q	724
	2.7×10^{-2}		Dunnivant et al. (1992)	Q	
	2.8×10^{-2}		Sabljić and Güsten (1989)	Q	
	1.1×10^{-1}		Duchowicz et al. (2020)	?	186, 21
2,2',4,5',6-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-103) [60145-21-3] PQHZWWBJPCNNGI-UHFFFAOYSA-N	8.1×10^{-3}	6600	Paasivirta and Sinkkonen (2009)	V	
	9.1×10^{-3}		Burkhard et al. (1985)	V	
	7.7×10^{-2}		Lee (2007)	Q	723
	4.6×10^{-2}		Lee (2007)	Q	724
	2.0×10^{-2}		Dunnivant et al. (1992)	Q	
	1.8×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',4,6,6'-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-104) [56558-16-8] MTCZPNVSDFCBBE-UHFFFAOYSA-N	1.5×10^{-2}	1700	Bamford et al. (2000)	M	
	1.1×10^{-2}		Dunnivant et al. (1988)	M	
	1.1×10^{-2}		Dunnivant and Elzerman (1988)	M	725
	2.8×10^{-3}	6300	Paasivirta and Sinkkonen (2009)	V	
	4.3×10^{-2}		Mackay et al. (2006b)	V	
	7.2×10^{-2}		Mackay et al. (1992a)	V	
	5.4×10^{-3}		Burkhard et al. (1985)	V	
	2.0×10^{-2}		Bhangare et al. (2019)	Q	
	4.2×10^{-2}		Lee (2007)	Q	723
	3.4×10^{-2}		Lee (2007)	Q	724
		3100	Kühne et al. (2005)	Q	
	1.3×10^{-2}		Dunnivant et al. (1992)	Q	
		2000	Kühne et al. (2005)	?	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3',4,4'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-105) [32598-14-4] WIDHRBRBACOVVOY-UHFFFAOYSA-N	3.0×10^{-2} 7.2×10^{-2} 1.8×10^{-1} 3.0×10^{-2} 1.2×10^{-2}	6800 7500 9100	Li et al. (2003) Li et al. (2003) Fang et al. (2006) Bamford et al. (2000)	L L M M	368 369
	5.0×10^{-3} 1.8×10^{-1} 2.9×10^{-2} 2.7×10^{-1} 2.0×10^{-2} 9.7×10^{-2} 1.4×10^{-1} 9.9×10^{-2} 1.6×10^{-1}	5700 8300	Duchowicz et al. (2020) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Paasivirta et al. (1999) Duchowicz et al. (2020) Bhangare et al. (2019) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljic and Gusten (1989)	V V V T Q Q Q Q Q Q	187 723 724
2,3,3',4,5-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-106) [70424-69-0] BQENMISTWGTJJIJ-UHFFFAOYSA-N	1.3×10^{-2} 2.5×10^{-2} 1.8×10^{-1} 1.4×10^{-1} 6.0×10^{-2} 5.1×10^{-2}	6500	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljic and Gusten (1989)	V V Q Q Q Q	723 724
2,3,3',4',5-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-107) [70424-68-9] PVYBHVJTMRRXLG-UHFFFAOYSA-N	4.3×10^{-2} 1.7×10^{-1} 9.1×10^{-3} 1.0×10^{-1} 2.0×10^{-1} 1.2×10^{-1} 6.2×10^{-2} 4.9×10^{-2}	2200 6200	Bamford et al. (2002) Murphy et al. (1987) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljic and Gusten (1989)	M M V V Q Q Q Q	12 723 724
2,3,3',4,5'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-108) [70362-41-3] MPCDNZSLJWJDNW-UHFFFAOYSA-N	4.1×10^{-3} 1.0×10^{-1} 1.1×10^{-1} 1.1×10^{-1} 5.6×10^{-2} 2.8×10^{-2}	5800	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljic and Gusten (1989)	V V Q Q Q Q	723 724
2,3,3',4,6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-109) [74472-35-8] XGQBSVVYMVILEL-UHFFFAOYSA-N	1.5×10^{-2} 2.1×10^{-2} 1.4×10^{-1} 1.2×10^{-1} 3.5×10^{-2} 2.5×10^{-2}	6600	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljic and Gusten (1989)	V V Q Q Q Q	723 724

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note	
2,3,3',4',6-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-110) [38380-03-9] ARXHIJMGSIYYRZ-UHFFFAOYSA-N	2.3×10^{-2}	5200	Bamford et al. (2002)	M		
	9.3×10^{-2}		Murphy et al. (1987)	M	12	
	2.7×10^{-2}	6400	Murphy et al. (1983a)	M	24	
	1.8×10^{-2}		Paasivirta and Sinkkonen (2009)	V		
	5.8×10^{-2}		Burkhard et al. (1985)	V		
	8.3×10^{-2}		Lee (2007)	Q	723	
	1.4×10^{-1}		Lee (2007)	Q	724	
			5000	Kühne et al. (2005)	Q	
	5.0×10^{-2}		Dunnivant et al. (1992)	Q		
5.2×10^{-2}	Sabljić and Güsten (1989)	Q				
	4300	Kühne et al. (2005)	?			
2,3,3',5,5'-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-111) [39635-32-0] QMUDLTGWHLKHH-UHFFFAOYSA-N	6.5×10^{-3}	6200	Paasivirta and Sinkkonen (2009)	V		
	6.2×10^{-2}		Burkhard et al. (1985)	V		
	2.7×10^{-1}	Lee (2007)	Q	723		
	7.8×10^{-2}	Lee (2007)	Q	724		
	3.7×10^{-2}	Dunnivant et al. (1992)	Q			
	2.0×10^{-2}	Sabljić and Güsten (1989)	Q			
2,3,3',5,6-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-112) [74472-36-9] NTKSJAPQYKCFPP-UHFFFAOYSA-N	7.8×10^{-3}	6600	Paasivirta and Sinkkonen (2009)	V		
	2.4×10^{-2}		Burkhard et al. (1985)	V		
	1.5×10^{-1}	Lee (2007)	Q	723		
	2.0×10^{-1}	Lee (2007)	Q	724		
	3.7×10^{-2}	Dunnivant et al. (1992)	Q			
	3.0×10^{-2}	Sabljić and Güsten (1989)	Q			
2,3,3',5',6-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-113) [68194-10-5] YDGFMDPEJJCZEV-UHFFFAOYSA-N	1.5×10^{-2}	6500	Paasivirta and Sinkkonen (2009)	V		
	3.5×10^{-2}		Burkhard et al. (1985)	V		
	1.7×10^{-1}	Lee (2007)	Q	723		
	1.2×10^{-1}	Lee (2007)	Q	724		
	3.0×10^{-2}	Dunnivant et al. (1992)	Q			
	2.1×10^{-2}	Sabljić and Güsten (1989)	Q			
2,3,4,4',5-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-114) [74472-37-0] SXZSFWHOSHAKMN-UHFFFAOYSA-N	5.3×10^{-2}	6400	Fang et al. (2006)	M		
	1.4×10^{-1}		Murphy et al. (1987)	M	12	
	1.2×10^{-2}		Paasivirta and Sinkkonen (2009)	V		
	2.8×10^{-2}		Burkhard et al. (1985)	V		
	8.9×10^{-2}		Lee (2007)	Q	723	
	1.3×10^{-1}		Lee (2007)	Q	724	
	6.9×10^{-2}		Dunnivant et al. (1992)	Q		
	8.7×10^{-2}		Sabljić and Güsten (1989)	Q		
2,3,4,4',6-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-115) [74472-38-1] IOVARPVVZDOPGQ-UHFFFAOYSA-N	2.6×10^{-2}	6900	Paasivirta and Sinkkonen (2009)	V		
	2.3×10^{-2}		Burkhard et al. (1985)	V		
	5.4×10^{-2}	Lee (2007)	Q	723		
	1.1×10^{-1}	Lee (2007)	Q	724		
	4.0×10^{-2}	Dunnivant et al. (1992)	Q			
	3.2×10^{-2}	Sabljić and Güsten (1989)	Q			

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,4,5,6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-116) [18259-05-7] GGMPTLAAIUQMIE-UHFFFAOYSA-N	4.3×10^{-3}	6500	Paasivirta and Sinkkonen (2009)	V	
	5.5×10^{-2}		Burkhard et al. (1985)	V	
	9.9×10^{-2}		Lee (2007)	Q	723
	1.8×10^{-1}		Lee (2007)	Q	724
	3.3×10^{-2} 4.3×10^{-2}		Dunnivant et al. (1992) Sabljic and Gsten (1989)	Q Q	
2,3,4',5,6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-117) [68194-11-6] ZDDZPDTVVCZLFFC-UHFFFAOYSA-N	1.5×10^{-3}	5900	Paasivirta and Sinkkonen (2009)	V	
	2.7×10^{-2}		Burkhard et al. (1985)	V	
	7.5×10^{-2}		Lee (2007)	Q	723
	1.7×10^{-1}		Lee (2007)	Q	724
	4.1×10^{-2} 4.0×10^{-2}		Dunnivant et al. (1992) Sabljic and Gsten (1989)	Q Q	
2,3',4,4',5-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-118) [31508-00-6] IUTPYMGCWINGEY-UHFFFAOYSA-N	3.1×10^{-2}	6800	Li et al. (2003)	L	368
	6.9×10^{-2}	7600	Li et al. (2003)	L	369
	4.6×10^{-3}		Bhangare et al. (2019)	M	727
	1.9×10^{-2}		Bhangare et al. (2019)	M	728
	1.1×10^{-2}		Lau et al. (2006)	M	721
	5.6×10^{-3}		Lau et al. (2006)	M	722
	5.7×10^{-2}		Fang et al. (2006)	M	
	1.8×10^{-2}	14000	Charles and Destailats (2005)	M	33
	2.8×10^{-2}	6000	Bamford et al. (2000)	M	
	1.2×10^{-1}		Murphy et al. (1987)	M	12
	2.5×10^{-2}		Murphy et al. (1983a)	M	24
	3.4×10^{-2}		Duchowicz et al. (2020)	V	187
	6.6×10^{-3}	6000	Paasivirta and Sinkkonen (2009)	V	
	1.1×10^{-1}		Burkhard et al. (1985)	V	
	2.6×10^{-2}	8100	Paasivirta et al. (1999)	T	
	1.5×10^{-1}		Duchowicz et al. (2020)	Q	
	7.8×10^{-2}		Lee (2007)	Q	723
1.0×10^{-1}		Lee (2007)	Q	724	
	5600	Khne et al. (2005)	Q		
	7.9×10^{-2}	Dunnivant et al. (1992)	Q		
	8.5×10^{-2}	Sabljic and Gsten (1989)	Q		
	6300	Khne et al. (2005)	?		
2,3',4,4',6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-119) [56558-17-9] OAEQTHQGPZKTQP-UHFFFAOYSA-N	1.5×10^{-2}	4600	Bamford et al. (2002)	M	
	1.5×10^{-2}	6500	Paasivirta and Sinkkonen (2009)	V	
	4.4×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	9.4×10^{-2}		Duchowicz et al. (2020)	Q	185
	1.6×10^{-1}		Hilal et al. (2008)	Q	
	1.4×10^{-1}		Modarresi et al. (2007)	Q	68
	4.7×10^{-2}		Lee (2007)	Q	723
	7.4×10^{-2} 3.2×10^{-2}		Lee (2007) Dunnivant et al. (1992)	Q Q	724

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	2.2×10^{-2}		Sabljić and Güsten (1989)	Q	
	1.3×10^{-1}		Duchowicz et al. (2020)	?	186, 21
2,3',4,5,5'-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-120) [68194-12-7] ZLGYJAIAPVCNF-UHFFFAOYSA-N	1.8×10^{-1}	6000	Brunner et al. (1990)	M	
	3.9×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	6.4×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	8.6×10^{-2}		Duchowicz et al. (2020)	Q	300
	2.5×10^{-1}		Hilal et al. (2008)	Q	
	1.2×10^{-1}		Modarresi et al. (2007)	Q	68
	1.6×10^{-1}		Lee (2007)	Q	723
	8.3×10^{-2}		Lee (2007)	Q	724
	4.0×10^{-2}		Dunnivant et al. (1992)	Q	
	2.4×10^{-2}		Sabljić and Güsten (1989)	Q	
	1.8×10^{-1}		Duchowicz et al. (2020)	?	186, 21
2,3',4,5',6-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-121) [56558-18-0] XBVSGJGMWSKAKL-UHFFFAOYSA-N	8.5×10^{-3}	6500	Paasivirta and Sinkkonen (2009)	V	
	2.6×10^{-2}		Burkhard et al. (1985)	V	
	9.6×10^{-2}		Lee (2007)	Q	723
	6.2×10^{-2}		Lee (2007)	Q	724
	1.8×10^{-2}		Dunnivant et al. (1992)	Q	
	1.3×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3,3',4',5'-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-122) [76842-07-4] GWOWBISZHLPEYK-UHFFFAOYSA-N	1.6×10^{-1}	5800	Murphy et al. (1987)	M	12
	4.3×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	1.6×10^{-1}		Burkhard et al. (1985)	V	
	2.8×10^{-1}		Lee (2007)	Q	723
	1.4×10^{-1}		Lee (2007)	Q	724
	7.9×10^{-2}		Dunnivant et al. (1992)	Q	
	7.2×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3',4,4',5'-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-123) [65510-44-3] YAHNWSSFVMVPOU-UHFFFAOYSA-N	4.6×10^{-2}	5800	Fang et al. (2006)	M	
	3.7×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	1.1×10^{-1}		Burkhard et al. (1985)	V	
	1.4×10^{-1}		Lee (2007)	Q	723
	9.3×10^{-2}		Lee (2007)	Q	724
	5.7×10^{-2}		Dunnivant et al. (1992)	Q	
	3.8×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3',4',5,5'-pentachlorobiphenyl $\text{C}_{12}\text{H}_5\text{Cl}_5$ (PCB-124) [70424-70-3] PIVBPZFQXKMHBD-UHFFFAOYSA-N	1.9×10^{-1}	5900	Murphy et al. (1987)	M	12
	4.5×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	1.0×10^{-1}		Burkhard et al. (1985)	V	
	2.8×10^{-1}		Lee (2007)	Q	723
	9.4×10^{-2}		Lee (2007)	Q	724
	5.8×10^{-2}		Dunnivant et al. (1992)	Q	
	5.1×10^{-2}		Sabljić and Güsten (1989)	Q	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,3',4',5',6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-125) [74472-39-2] WAZUWHGJMMZVHH-UHFFFAOYSA-N	2.3×10^{-3}	5800	Paasivirta and Sinkkonen (2009)	V	
	6.7×10^{-2}		Burkhard et al. (1985)	V	
	1.5×10^{-1}		Lee (2007)	Q	723
	1.1×10^{-1}		Lee (2007)	Q	724
	3.4×10^{-2}		Dunnivant et al. (1992)	Q	
	3.0×10^{-2}		Sabljić and Güsten (1989)	Q	
3,3',4,4',5-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-126) [57465-28-8] REHONNLQRWTIFF-UHFFFAOYSA-N	1.0×10^{-1}	12000	Fang et al. (2006)	M	
	4.8×10^{-2}		Bamford et al. (2000)	M	
	1.6×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	3.6×10^{-1}		Burkhard et al. (1985)	V	
	6.5×10^{-2}		Paasivirta et al. (1999)	T	
	1.8×10^{-2}		Bhangare et al. (2019)	Q	
	1.7×10^{-1}		Lee (2007)	Q	723
	1.0×10^{-1}		Lee (2007)	Q	724
	1.2×10^{-1}		Dunnivant et al. (1992)	Q	
	1.8×10^{-1}		Sabljić and Güsten (1989)	Q	
3,3',4,5,5'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-127) [39635-33-1] MXVAYAXIPRGORY-UHFFFAOYSA-N	2.2×10^{-3}	5600	Paasivirta and Sinkkonen (2009)	V	
	2.2×10^{-1}		Burkhard et al. (1985)	V	
	3.4×10^{-1}		Lee (2007)	Q	723
	8.4×10^{-2}		Lee (2007)	Q	724
	6.3×10^{-2}		Dunnivant et al. (1992)	Q	
	2.9×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,3',4,4'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-128) [38380-07-3] BTAGRXXWGMYPBY-UHFFFAOYSA-N	2.8×10^{-2}	14000	Bamford et al. (2000)	M	
	7.6×10^{-1}		Brunner et al. (1990)	M	
	3.3×10^{-1}		Dunnivant et al. (1988)	M	
	3.3×10^{-1}		Dunnivant and Elzerman (1988)	M	725
	1.7×10^{-1}	6100	Murphy et al. (1987)	M	12
	2.0×10^{-2}		Murphy et al. (1983a)	M	24
	6.9×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	8.4×10^{-2}		Mackay et al. (2006b)	V	
	8.4×10^{-2}		Mackay et al. (1992a)	V	
	8.3×10^{-2}		Shiu and Mackay (1986)	V	
	1.5×10^{-1}		Burkhard et al. (1985)	V	
	2.0×10^{-2}		Murphy et al. (1983b)	X	726, 24
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	3.8×10^{-1}		Duchowicz et al. (2020)	Q	300
	1.5×10^{-2}		Bhangare et al. (2019)	Q	
	1.8×10^{-1}		Hilal et al. (2008)	Q	
	2.1×10^{-1}		Modarresi et al. (2007)	Q	68
	1.5×10^{-1}		Lee (2007)	Q	723
	2.4×10^{-1}		Lee (2007)	Q	724
	1.2×10^{-1}		English and Carroll (2001)	Q	231, 232
9.5×10^{-2}	Dunnivant et al. (1992)	Q			
7.6×10^{-1}	Duchowicz et al. (2020)	?	186, 21		

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,5-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-129) [55215-18-4] VQQKIXKPMJTUMP-UHFFFAOYSA-N	3.4×10^{-1}	6400	Brunner et al. (1990)	M	
	6.4×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	2.5×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	2.7×10^{-1}		Duchowicz et al. (2020)	Q	
	1.6×10^{-1}		Hilal et al. (2008)	Q	
	2.2×10^{-1}		Modarresi et al. (2007)	Q	68
	2.9×10^{-1}		Lee (2007)	Q	723
	2.6×10^{-1}		Lee (2007)	Q	724
	7.1×10^{-2}		Dunnivant et al. (1992)	Q	
1.2×10^{-1}	Sabljić and Güsten (1989)	Q			
3.4×10^{-1}	Duchowicz et al. (2020)	?	186, 21		
2,2',3,3',4,5'-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-130) [52663-66-8] YFSLABAYQDPWPF-UHFFFAOYSA-N	2.7×10^{-1}	6500	Brunner et al. (1990)	M	
	9.2×10^{-2}		Murphy et al. (1987)	M	12
	5.9×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	8.7×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	2.1×10^{-1}		Duchowicz et al. (2020)	Q	
	1.9×10^{-1}		Hilal et al. (2008)	Q	
	2.0×10^{-1}		Modarresi et al. (2007)	Q	68
	3.1×10^{-1}		Lee (2007)	Q	723
	2.1×10^{-1}		Lee (2007)	Q	724
6.5×10^{-2}	Dunnivant et al. (1992)	Q			
5.1×10^{-2}	Sabljić and Güsten (1989)	Q			
2.7×10^{-1}	Duchowicz et al. (2020)	?	186, 21		
2,2',3,3',4,6-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-131) [61798-70-7] WDLTVNWWWEZJMPF-UHFFFAOYSA-N	1.5×10^{-1}	6500	Murphy et al. (1987)	M	12
	3.0×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	1.6×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.6×10^{-1}		Duchowicz et al. (2020)	Q	300
	1.6×10^{-1}		Hilal et al. (2008)	Q	
	2.1×10^{-1}		Modarresi et al. (2007)	Q	68
	1.7×10^{-1}		Lee (2007)	Q	723
	1.9×10^{-1}		Lee (2007)	Q	724
	4.1×10^{-2}		Dunnivant et al. (1992)	Q	
3.8×10^{-2}	Sabljić and Güsten (1989)	Q			
2.5×10^{-1}	Duchowicz et al. (2020)	?	186, 21		
2,2',3,3',4,6'-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-132) [38380-05-1] OKBJVIVEFXPEOU-UHFFFAOYSA-N	4.0×10^{-2}	2400	Bamford et al. (2002)	M	
	2.2×10^{-1}	6400	Brunner et al. (1990)	M	
	4.1×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	3.6×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	2.1×10^{-1}		Duchowicz et al. (2020)	Q	300
2.2×10^{-1}	Hilal et al. (2008)		Q		

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.6×10^{-1}		Modarresi et al. (2007)	Q	68
	1.7×10^{-1}		Lee (2007)	Q	723
	2.1×10^{-1}		Lee (2007)	Q	724
	2.3×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	4.9×10^{-2}		Dunnivant et al. (1992)	Q	
	6.1×10^{-2}		Sabljić and Güsten (1989)	Q	
	2.2×10^{-1}		Duchowicz et al. (2020)	?	186, 21
2,2',3,3',5,5'-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-133) [35694-04-3] AJKLIKINFZLWHQE-UHFFFAOYSA-N	4.1×10^{-3}	6500	Paasivirta and Sinkkonen (2009)	V	
	5.2×10^{-2}		Burkhard et al. (1985)	V	
	1.8×10^{-1}		Hilal et al. (2008)	Q	
	4.3×10^{-1}		Lee (2007)	Q	723
	2.0×10^{-1}		Lee (2007)	Q	724
	4.8×10^{-2}		Dunnivant et al. (1992)	Q	
	3.0×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,3',5,6-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-134) [52704-70-8] RVWLHPJFOKUPNM-UHFFFAOYSA-N	1.2×10^{-2}	7300	Bamford et al. (2002)	M	
	2.0×10^{-1}		Brunner et al. (1990)	M	
	1.0×10^{-1}		Murphy et al. (1987)	M	12
	1.7×10^{-2}		Murphy et al. (1983a)	M	24
	2.8×10^{-3}	6400	Paasivirta and Sinkkonen (2009)	V	
	1.8×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.5×10^{-1}		Duchowicz et al. (2020)	Q	300
	2.0×10^{-1}		Hilal et al. (2008)	Q	
	2.1×10^{-1}		Modarresi et al. (2007)	Q	68
	2.4×10^{-1}		Lee (2007)	Q	723
	3.2×10^{-1}		Lee (2007)	Q	724
	4.3×10^{-2}		Dunnivant et al. (1992)	Q	
	4.9×10^{-2}		Sabljić and Güsten (1989)	Q	
	2.0×10^{-1}		Duchowicz et al. (2020)	?	186, 21
2,2',3,3',5,6'-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-135) [52744-13-5] UUTNFLRSJBQQJM-UHFFFAOYSA-N	1.5×10^{-2}	5500	Bamford et al. (2002)	M	
	1.8×10^{-1}		Brunner et al. (1990)	M	
	7.0×10^{-2}		Murphy et al. (1987)	M	12
	4.8×10^{-3}	6600	Paasivirta and Sinkkonen (2009)	V	
	2.1×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.1×10^{-1}		Duchowicz et al. (2020)	Q	185
	2.3×10^{-1}		Hilal et al. (2008)	Q	
	1.9×10^{-1}		Modarresi et al. (2007)	Q	68
	2.4×10^{-1}		Lee (2007)	Q	723
	2.1×10^{-1}		Lee (2007)	Q	724
	3.7×10^{-2}		Dunnivant et al. (1992)	Q	
	3.2×10^{-2}		Sabljić and Güsten (1989)	Q	
	1.8×10^{-1}		Duchowicz et al. (2020)	?	186, 21

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',6,6'-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-136) [38411-22-2] FZFUUSROAHKTF-UHFFFAOYSA-N	9.0×10^{-3}	5400	Bamford et al. (2002)	M	
	1.1×10^{-1}		Brunner et al. (1990)	M	
	4.4×10^{-2}		Murphy et al. (1987)	M	12
	1.6×10^{-3}	6300	Paasivirta and Sinkkonen (2009)	V	
	1.1×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.1×10^{-1}		Duchowicz et al. (2020)	Q	300
	2.7×10^{-1}		Hilal et al. (2008)	Q	
	1.5×10^{-1}		Modarresi et al. (2007)	Q	68
	1.4×10^{-1}		Lee (2007)	Q	723
	1.6×10^{-1}		Lee (2007)	Q	724
2,2',3,4,4',5-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-137) [35694-06-5] CKLLRBPBZLTGDJ-UHFFFAOYSA-N	3.1×10^{-2}		Dunnivant et al. (1992)	Q	
	3.9×10^{-2}		Sabljić and Güsten (1989)	Q	
	1.1×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	4.5×10^{-2}	3200	Bamford et al. (2002)	M	
	1.5×10^{-1}		Murphy et al. (1987)	M	12
	2.1×10^{-2}		Murphy et al. (1983a)	M	24
	1.8×10^{-2}	6800	Paasivirta and Sinkkonen (2009)	V	
	1.8×10^{-2}		Burkhard et al. (1985)	V	
	1.4×10^{-1}		Lee (2007)	Q	723
	1.7×10^{-1}		Lee (2007)	Q	724
	5.3×10^{-2}		Dunnivant et al. (1992)	Q	
4.7×10^{-2}		Sabljić and Güsten (1989)	Q		
2,2',3,4,4',5'-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-138) [35065-28-2] RPUMZMSNLZHIGZ-UHFFFAOYSA-N	2.5×10^{-2}	7100	Li et al. (2003)	L	368
	3.3×10^{-2}	7700	Li et al. (2003)	L	369
	2.2×10^{-2}	10000	Bamford et al. (2000)	M	
	4.7×10^{-1}		Brunner et al. (1990)	M	
	1.3×10^{-1}		Murphy et al. (1987)	M	12
	1.4×10^{-1}		Brownawell (1986)	M	295
	2.1×10^{-2}		Murphy et al. (1983a)	M	24
	1.8×10^{-2}	6800	Paasivirta and Sinkkonen (2009)	V	
	1.2×10^{-2}		Shiu and Mackay (1986)	V	
	9.1×10^{-2}		Burkhard et al. (1985)	V	
	4.7×10^{-2}	8700	Paasivirta et al. (1999)	T	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	2.1×10^{-1}		Duchowicz et al. (2020)	Q	185
	1.5×10^{-2}		Bhangare et al. (2019)	Q	
	1.8×10^{-1}		Hilal et al. (2008)	Q	
	2.2×10^{-1}		Modarresi et al. (2007)	Q	68
	1.6×10^{-1}		Lee (2007)	Q	723
1.8×10^{-1}		Lee (2007)	Q	724	
5.2×10^{-1}		Yaffe et al. (2003)	Q	249, 250	
7.6×10^{-2}		Dunnivant et al. (1992)	Q		
9.2×10^{-2}		Sabljić and Güsten (1989)	Q		
4.7×10^{-1}		Duchowicz et al. (2020)	?	186, 21	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4,4',6-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-139) [56030-56-9] SPOPSCCFZQFGDL-UHFFFAOYSA-N	1.4×10^{-2}	6900	Paasivirta and Sinkkonen (2009)	V	
	1.1×10^{-2}		Burkhard et al. (1985)	V	
	8.6×10^{-2}		Lee (2007)	Q	723
	1.3×10^{-1}		Lee (2007)	Q	724
	3.0×10^{-2}		Dunnivant et al. (1992)	Q	
	2.6×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,4,4',6'-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-140) [59291-64-4] XBBRGUHRZBZMPP-UHFFFAOYSA-N	1.7×10^{-2}	7000	Paasivirta and Sinkkonen (2009)	V	
	2.7×10^{-2}		Burkhard et al. (1985)	V	
	8.5×10^{-2}		Lee (2007)	Q	723
	1.1×10^{-1}		Lee (2007)	Q	724
	3.2×10^{-2}		Dunnivant et al. (1992)	Q	
	2.3×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,4,5,5'-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-141) [52712-04-6] UCLKLGiyGBLTSm-UHFFFAOYSA-N	2.0×10^{-2}	8400	Bamford et al. (2002)	M	
	4.3×10^{-1}		Brunner et al. (1990)	M	
	1.0×10^{-1}		Murphy et al. (1987)	M	12
	2.5×10^{-2}	6700	Murphy et al. (1983a)	M	24
	1.0×10^{-2}		Paasivirta and Sinkkonen (2009)	V	
	2.5×10^{-2}		Shiu and Mackay (1986)	V	
	1.6×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.5×10^{-1}		Duchowicz et al. (2020)	Q	185
	1.3×10^{-1}		Hilal et al. (2008)	Q	
	2.0×10^{-1}		Modarresi et al. (2007)	Q	68
	2.9×10^{-1}		Lee (2007)	Q	723
	1.8×10^{-1}		Lee (2007)	Q	724
	5.7×10^{-2}		Dunnivant et al. (1992)	Q	
	6.9×10^{-2}		Sabljić and Güsten (1989)	Q	
4.3×10^{-1}	Duchowicz et al. (2020)	?	186, 21		
2,2',3,4,5,6-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-142) [41411-61-4] RUEIBQJFGMERJD-UHFFFAOYSA-N	4.0×10^{-3}	6900	Paasivirta and Sinkkonen (2009)	V	
	1.4×10^{-2}		Burkhard et al. (1985)	V	
	1.6×10^{-1}		Lee (2007)	Q	723
	2.4×10^{-1}		Lee (2007)	Q	724
	3.1×10^{-2}		Dunnivant et al. (1992)	Q	
	4.7×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,4,5,6'-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-143) [68194-15-0] UQPQKLGBEKEZBV-UHFFFAOYSA-N	6.5×10^{-3}	6600	Paasivirta and Sinkkonen (2009)	V	
	7.8×10^{-3}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.6×10^{-1}		Duchowicz et al. (2020)	Q	185
	1.6×10^{-1}		Hilal et al. (2008)	Q	
	1.7×10^{-1}		Modarresi et al. (2007)	Q	68
	1.6×10^{-1}		Lee (2007)	Q	723
	1.9×10^{-1}		Lee (2007)	Q	724
	3.4×10^{-2}		Dunnivant et al. (1992)	Q	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	3.9×10^{-2}		Sabljić and Güsten (1989)	Q	
	2.5×10^{-1}		Duchowicz et al. (2020)	?	186, 21
2,2',3,4,5',6-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-144) [68194-14-9] CXXRQFOKRZJAJA-UHFFFAOYSA-N	7.0×10^{-2} 1.6×10^{-2} 1.2×10^{-2} 1.7×10^{-2} 1.0×10^{-2} 1.8×10^{-1} 1.4×10^{-1} 3.3×10^{-2} 3.1×10^{-2}	7000	Murphy et al. (1987) Murphy et al. (1983a) Paasivirta and Sinkkonen (2009) Shiu and Mackay (1986) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljić and Güsten (1989)	M M V V V Q Q Q Q	12 24 723 724
2,2',3,4,6,6'-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-145) [74472-40-5] JZFLZCLFEPXCRGA-UHFFFAOYSA-N	1.5×10^{-3} 5.9×10^{-3} 9.6×10^{-2} 1.1×10^{-1} 2.1×10^{-2} 2.4×10^{-2}	6400	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljić and Güsten (1989)	V V Q Q Q Q	 723 724
2,2',3,4',5,5'-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-146) [51908-16-8] BQHCQAQLTCQFJZ-UHFFFAOYSA-N	1.7×10^{-2} 3.9×10^{-1} 1.1×10^{-1} 1.2×10^{-2} 5.4×10^{-2} 2.4×10^{-1} 1.1×10^{-1} 2.0×10^{-1} 2.2×10^{-1} 2.2×10^{-1} 1.6×10^{-1} 5.3×10^{-2} 4.0×10^{-2} 3.9×10^{-1}	7100 6800	Bamford et al. (2002) Brunner et al. (1990) Murphy et al. (1987) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljić and Güsten (1989) Duchowicz et al. (2020)	M M M V V Q Q Q Q Q Q Q Q ?	 12 185 186, 21
2,2',3,4',5,6-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-147) [68194-13-8] AQONCPKMJSBHQJ-UHFFFAOYSA-N	1.9×10^{-1} 3.1×10^{-3} 1.3×10^{-2} 2.4×10^{-1} 8.7×10^{-2} 1.8×10^{-1} 2.1×10^{-1} 1.2×10^{-1} 2.1×10^{-1} 3.1×10^{-2} 3.1×10^{-2} 1.9×10^{-1}	6500	Brunner et al. (1990) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Lee (2007) Lee (2007) Dunnivant et al. (1992) Sabljić and Güsten (1989) Duchowicz et al. (2020)	M V V Q Q Q Q Q Q Q Q ?	 300 186, 21

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4',5,6'-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-148) [74472-41-6] CTVRBEKNQHJPLX-UHFFFAOYSA-N	1.2×10^{-2}	7000	Paasivirta and Sinkkonen (2009)	V	
	1.6×10^{-2}		Burkhard et al. (1985)	V	
	1.2×10^{-1}		Lee (2007)	Q	723
	1.0×10^{-1}		Lee (2007)	Q	724
	2.3×10^{-2}		Dunnivant et al. (1992)	Q	
	1.7×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,4',5',6'-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-149) [38380-04-0] LKHLFUVHHXCNJH-UHFFFAOYSA-N	1.5×10^{-2}	5500	Bamford et al. (2002)	M	
	6.7×10^{-2}		Murphy et al. (1987)	M	12
	3.3×10^{-2}		Murphy et al. (1983a)	M	24
	7.2×10^{-3}		Duchowicz et al. (2020)	V	187
	1.0×10^{-2}	6800	Paasivirta and Sinkkonen (2009)	V	
	3.3×10^{-2}		Shiu and Mackay (1986)	V	
	2.2×10^{-2}		Burkhard et al. (1985)	V	
	1.1×10^{-1}		Duchowicz et al. (2020)	Q	
	1.3×10^{-1}		Lee (2007)	Q	723
	1.7×10^{-1}		Lee (2007)	Q	724
	2.1×10^{-1}		Yaffe et al. (2003)	Q	249, 250
4.2×10^{-2}	Dunnivant et al. (1992)	Q			
4.5×10^{-2}	Sabljić and Güsten (1989)	Q			
2,2',3,4',6,6'-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-150) [68194-08-1] RPPNJBZNXQNKNM-UHFFFAOYSA-N	6.5×10^{-3}	6900	Paasivirta and Sinkkonen (2009)	V	
	8.2×10^{-3}		Burkhard et al. (1985)	V	
	7.2×10^{-2}		Lee (2007)	Q	723
	8.0×10^{-2}		Lee (2007)	Q	724
	2.0×10^{-2}		Dunnivant et al. (1992)	Q	
	1.9×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,5,5',6'-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-151) [52663-63-5] UHCLFIWDCYOTOL-UHFFFAOYSA-N	1.4×10^{-2}	4500	Bamford et al. (2002)	M	
	1.7×10^{-1}		Brunner et al. (1990)	M	
	6.3×10^{-2}		Murphy et al. (1987)	M	12
	3.3×10^{-2}	6700	Murphy et al. (1983a)	M	24
	5.2×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	3.3×10^{-2}		Shiu and Mackay (1986)	V	
	1.2×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	7.9×10^{-2}		Duchowicz et al. (2020)	Q	
	1.6×10^{-1}		Hilal et al. (2008)	Q	
	2.1×10^{-1}		Modarresi et al. (2007)	Q	68
	2.4×10^{-1}		Lee (2007)	Q	723
	2.4×10^{-1}		Lee (2007)	Q	724
	3.5×10^{-2}		Dunnivant et al. (1992)	Q	
3.8×10^{-2}	Sabljić and Güsten (1989)	Q			
1.7×10^{-1}	Duchowicz et al. (2020)	?	186, 21		

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,5,6,6'-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-152) [68194-09-2] CLODVDBWNVQLGO-UHFFFAOYSA-N	1.3×10^{-3}	6300	Paasivirta and Sinkkonen (2009)	V	
	6.8×10^{-3}		Burkhard et al. (1985)	V	
	1.3×10^{-1}		Lee (2007)	Q	723
	1.9×10^{-1}		Lee (2007)	Q	724
	2.3×10^{-2}		Dunnivant et al. (1992)	Q	
	2.8×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',4,4',5,5'-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-153) [35065-27-1] MVWHGTYKUMDIHL-UHFFFAOYSA-N	4.0×10^{-2}	7100	Li et al. (2003)	L	368
	5.1×10^{-2}	7900	Li et al. (2003)	L	369
	1.9×10^{-2}	8000	Bamford et al. (2000)	M	
	4.3×10^{-1}		Brunner et al. (1990)	M	
	7.5×10^{-2}		Dunnivant et al. (1988)	M	
	7.5×10^{-2}		Dunnivant and Elzerman (1988)	M	725
	1.0×10^{-1}		Murphy et al. (1987)	M	12
	1.6×10^{-1}		Oliver (1985)	M	
	2.8×10^{-2}		Murphy et al. (1983a)	M	24
	1.1×10^{-2}	6700	Paasivirta and Sinkkonen (2009)	V	
	2.3×10^{-2}		Mackay et al. (2006b)	V	
	2.3×10^{-2}		Mackay et al. (1992a)	V	
	2.3×10^{-2}		Shiu and Mackay (1986)	V	
	5.6×10^{-2}		Burkhard et al. (1985)	V	
	1.7×10^{-2}	8400	Paasivirta et al. (1999)	T	
	2.8×10^{-2}		Murphy et al. (1983b)	X	726, 24
	8.0×10^{-2}		Dunnivant et al. (1988)	C	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.1×10^{-1}		Duchowicz et al. (2020)	Q	300
	1.7×10^{-2}		Bhangare et al. (2019)	Q	
1.8×10^{-1}	Hilal et al. (2008)		Q		
2.4×10^{-1}	Modarresi et al. (2007)		Q	68	
1.2×10^{-1}	Lee (2007)		Q	723	
1.4×10^{-1}	Lee (2007)		Q	724	
2.9×10^{-1}	Yaffe et al. (2003)	Q	249, 250		
6.0×10^{-2}	Dunnivant et al. (1992)	Q			
4.3×10^{-1}	Duchowicz et al. (2020)	?	186, 21		
2,2',4,4',5,6'-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-154) [60145-22-4] QXZHEJWDLVUFB-UHFFFAOYSA-N	1.3×10^{-2}	5600	Bamford et al. (2000)	M	
	1.7×10^{-2}	7100	Paasivirta and Sinkkonen (2009)	V	
	1.7×10^{-2}		Burkhard et al. (1985)	V	
	1.8×10^{-2}		Bhangare et al. (2019)	Q	
	6.8×10^{-2}		Lee (2007)	Q	723
	8.7×10^{-2}		Lee (2007)	Q	724
	2.6×10^{-2}		Dunnivant et al. (1992)	Q	
	2.0×10^{-2}		Sabljić and Güsten (1989)	Q	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',4,4',6,6'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-155) [33979-03-2] ICOAEPDGFWLUTI-UHFFFAOYSA-N	1.3×10^{-2}	7100	Li et al. (2003)	L	368
	1.1×10^{-2}	7600	Li et al. (2003)	L	369
	1.3×10^{-2}		Dunnivant et al. (1988)	M	
	1.3×10^{-2}		Dunnivant and Elzerman (1988)	M	725
	3.9×10^{-3}		Duchowicz et al. (2020)	V	187
	4.6×10^{-3}	6900	Paasivirta and Sinkkonen (2009)	V	
	1.2×10^{-2}		Mackay et al. (2006b)	V	
	1.2×10^{-2}		Mackay et al. (1992a)	V	
	1.2×10^{-3}		Shiu and Mackay (1986)	V	
	6.4×10^{-3}		Burkhard et al. (1985)	V	
	8.6×10^{-2}		Dunnivant et al. (1988)	C	
4.8×10^{-2}		Duchowicz et al. (2020)	Q		
4.2×10^{-2}		Lee (2007)	Q	723	
4.2×10^{-2}		Lee (2007)	Q	724	
1.2×10^{-2}		Dunnivant et al. (1992)	Q		
2,3,3',4,4',5-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-156) [38380-08-4] LCXMEXLGMKFLQO-UHFFFAOYSA-N	6.8×10^{-2}		Fang et al. (2006)	M	
	2.9×10^{-2}	13000	Bamford et al. (2002)	M	
	1.1×10^{-2}		Murphy et al. (1983a)	M	24
	6.9×10^{-2}		Duchowicz et al. (2020)	V	187
	5.9×10^{-3}	6200	Paasivirta and Sinkkonen (2009)	V	
	1.1×10^{-2}		Shiu and Mackay (1986)	V	
	5.7×10^{-2}		Burkhard et al. (1985)	V	
	2.7×10^{-1}		Duchowicz et al. (2020)	Q	
	1.8×10^{-1}		Lee (2007)	Q	723
	2.0×10^{-1}		Lee (2007)	Q	724
	1.1×10^{-1}		Dunnivant et al. (1992)	Q	
4.5×10^{-1}		Sabljić and Güsten (1989)	Q		
2,3,3',4,4',5'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-157) [69782-90-7] YTWXDQVNPCIEOX-UHFFFAOYSA-N	6.0×10^{-2}		Fang et al. (2006)	M	
	3.4×10^{-2}	16000	Bamford et al. (2002)	M	
	1.7×10^{-2}		Murphy et al. (1983a)	M	24
	2.3×10^{-3}	5900	Paasivirta and Sinkkonen (2009)	V	
	1.7×10^{-2}		Shiu and Mackay (1986)	V	
	3.0×10^{-1}		Burkhard et al. (1985)	V	
	1.9×10^{-1}		Lee (2007)	Q	723
	2.0×10^{-1}		Lee (2007)	Q	724
		6300	Kühne et al. (2005)	Q	
	1.2×10^{-1}		Dunnivant et al. (1992)	Q	
	1.5×10^{-1}		Sabljić and Güsten (1989)	Q	
	5100	Kühne et al. (2005)	?		

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3',4,4',6-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-158) [74472-42-7] ZQUPQXINXTWCQR-UHFFFAOYSA-N	2.1×10^{-2}	9600	Bamford et al. (2002)	M	
	2.3×10^{-1}		Murphy et al. (1987)	M	12
	1.5×10^{-2}		Murphy et al. (1983a)	M	24
	9.2×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	1.5×10^{-2}		Shiu and Mackay (1986)	V	
	4.8×10^{-2}		Burkhard et al. (1985)	V	
	1.1×10^{-1}		Lee (2007)	Q	723
	1.9×10^{-1}		Lee (2007)	Q	724
	6.0×10^{-2}		Dunnivant et al. (1992)	Q	
4.6×10^{-2}	Sabljić and Güsten (1989)	Q			
2,3,3',4,5,5'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-159) [39635-35-3] YZKLGRAIIGOHB-UHFFFAOYSA-N	4.9×10^{-1}	6100	Brunner et al. (1990)	M	
	2.9×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	3.4×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.6×10^{-1}		Duchowicz et al. (2020)	Q	185
	2.6×10^{-1}		Hilal et al. (2008)	Q	
	1.9×10^{-1}		Modarresi et al. (2007)	Q	68
	3.6×10^{-1}		Lee (2007)	Q	723
	1.8×10^{-1}		Lee (2007)	Q	724
	6.3×10^{-2}		Dunnivant et al. (1992)	Q	
3.2×10^{-2}	Sabljić and Güsten (1989)	Q			
4.9×10^{-1}	Duchowicz et al. (2020)	?	186, 21		
2,3,3',4,5,6-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-160) [41411-62-5] JHJMZCXLJXRCHK-UHFFFAOYSA-N	4.9×10^{-1}	7100	Brunner et al. (1990)	M	
	7.9×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	4.0×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.1×10^{-1}		Duchowicz et al. (2020)	Q	185
	1.2×10^{-1}		Hilal et al. (2008)	Q	
	3.8×10^{-1}		Modarresi et al. (2007)	Q	68
	2.0×10^{-1}		Lee (2007)	Q	723
	3.3×10^{-1}		Lee (2007)	Q	724
	4.6×10^{-2}		Dunnivant et al. (1992)	Q	
3.9×10^{-2}	Sabljić and Güsten (1989)	Q			
4.9×10^{-1}	Duchowicz et al. (2020)	?	186, 21		
2,3,3',4,5',6-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-161) [74472-43-8] UNPTZXSJGZTGJJ-UHFFFAOYSA-N	9.2×10^{-3}	6800	Paasivirta and Sinkkonen (2009)	V	
	2.9×10^{-2}		Burkhard et al. (1985)	V	
	2.2×10^{-1}		Lee (2007)	Q	723
	1.7×10^{-1}		Lee (2007)	Q	724
	3.5×10^{-2}		Dunnivant et al. (1992)	Q	
	2.0×10^{-2}		Sabljić and Güsten (1989)	Q	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3',4',5,5'-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-162) [39635-34-2] AHZUOPSGLWYCNF-UHFFFAOYSA-N	3.7×10^{-3}	6200	Paasivirta and Sinkkonen (2009)	V	
	1.8×10^{-1}		Burkhard et al. (1985)	V	
	2.7×10^{-1}		Lee (2007)	Q	723
	1.8×10^{-1}		Lee (2007)	Q	724
	7.5×10^{-2}		Dunnivant et al. (1992)	Q	
	4.8×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3,3',4',5,6-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-163) [74472-44-9] ZAGRQXMWMRUYRB-UHFFFAOYSA-N	2.1×10^{-2}	9700	Bamford et al. (2002)	M	
	6.6×10^{-1}		Brunner et al. (1990)	M	
	4.9×10^{-3}	6400	Paasivirta and Sinkkonen (2009)	V	
	5.4×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.5×10^{-1}		Duchowicz et al. (2020)	Q	300
	2.5×10^{-1}		Hilal et al. (2008)	Q	
	2.6×10^{-1}		Modarresi et al. (2007)	Q	68
	1.5×10^{-1}		Lee (2007)	Q	723
	3.1×10^{-1}		Lee (2007)	Q	724
6.0×10^{-2}	Dunnivant et al. (1992)	Q			
6.3×10^{-2}	Sabljić and Güsten (1989)	Q			
	6.6×10^{-1}		Duchowicz et al. (2020)	?	186, 21
2,3,3',4',5',6-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-164) [74472-45-0] HAZQOLYHFUJJN-UHFFFAOYSA-N	9.5×10^{-3}	6500	Paasivirta and Sinkkonen (2009)	V	
	1.0×10^{-1}		Burkhard et al. (1985)	V	
	1.6×10^{-1}		Lee (2007)	Q	723
	2.3×10^{-1}		Lee (2007)	Q	724
	5.6×10^{-2}		Dunnivant et al. (1992)	Q	
	5.0×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3,3',5,5',6-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-165) [74472-46-1] ZEATXTCWXXQPHO-UHFFFAOYSA-N	3.4×10^{-1}	6400	Brunner et al. (1990)	M	
	2.5×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	3.2×10^{-2}	6400	Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	8.7×10^{-2}		Duchowicz et al. (2020)	Q	
	1.6×10^{-1}		Hilal et al. (2008)	Q	
	2.1×10^{-1}		Modarresi et al. (2007)	Q	68
	3.0×10^{-1}		Lee (2007)	Q	723
	2.9×10^{-1}		Lee (2007)	Q	724
	3.6×10^{-2}		Dunnivant et al. (1992)	Q	
2.2×10^{-2}	Sabljić and Güsten (1989)	Q			
	3.4×10^{-1}		Duchowicz et al. (2020)	?	186, 21
2,3,4,4',5,6-hexachlorobiphenyl $\text{C}_{12}\text{H}_4\text{Cl}_6$ (PCB-166) [41411-63-6] BTOCFTAWZMMTNB-UHFFFAOYSA-N	3.5×10^{-3}	6500	Paasivirta and Sinkkonen (2009)	V	
	4.4×10^{-2}		Burkhard et al. (1985)	V	
	1.2×10^{-1}		Hilal et al. (2008)	Q	
	3.1×10^{-1}		Modarresi et al. (2007)	Q	68
	9.8×10^{-2}		Lee (2007)	Q	723
	2.9×10^{-1}		Lee (2007)	Q	724
		4100	Kühne et al. (2005)	Q	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	5.4×10^{-2}		Dunnivant et al. (1992)	Q	
	5.7×10^{-2}		Sabljić and Güsten (1989)	Q	
		5800	Kühne et al. (2005)	?	
2,3',4,4',5,5'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-167) [52663-72-6] AZXHAWRMEPZSSV-UHFFFAOYSA-N	7.8×10^{-2}		Fang et al. (2006)	M	
	2.7×10^{-2}	13000	Bamford et al. (2002)	M	
	7.3×10^{-3}	6400	Paasivirta and Sinkkonen (2009)	V	
	1.9×10^{-1}		Burkhard et al. (1985)	V	
	1.6×10^{-1}		Lee (2007)	Q	723
	1.4×10^{-1}		Lee (2007)	Q	724
	9.0×10^{-2}		Dunnivant et al. (1992)	Q	
	8.0×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3',4,4',5',6-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-168) [59291-65-5] PITHIPNORFGJPI-UHFFFAOYSA-N	1.1×10^{-2}	6700	Paasivirta and Sinkkonen (2009)	V	
	7.7×10^{-2}		Burkhard et al. (1985)	V	
	9.4×10^{-2}		Lee (2007)	Q	723
	1.2×10^{-1}		Lee (2007)	Q	724
	3.6×10^{-2}		Dunnivant et al. (1992)	Q	
	2.1×10^{-2}		Sabljić and Güsten (1989)	Q	
3,3',4,4',5,5'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-169) [32774-16-6] ZHLICBPIXDOFFG-UHFFFAOYSA-N	8.1×10^{-2}		Fang et al. (2006)	M	
	4.7×10^{-2}	19000	Bamford et al. (2002)	M	
	4.0×10^{-4}	5100	Paasivirta and Sinkkonen (2009)	V	
	6.4×10^{-1}		Burkhard et al. (1985)	V	
	2.3×10^{-2}	9000	Paasivirta et al. (1999)	T	
	3.4×10^{-1}		Lee (2007)	Q	723
	1.3×10^{-1}		Lee (2007)	Q	724
	1.5×10^{-1}		Dunnivant et al. (1992)	Q	
	1.7×10^{-1}		Sabljić and Güsten (1989)	Q	
2,2',3,3',4,4',5-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-170) [35065-30-6] RMPWIIKNWPVWNG-UHFFFAOYSA-N	4.8×10^{-2}	20000	Bamford et al. (2000)	M	
	1.1		Brunner et al. (1990)	M	
	6.6×10^{-1}		Murphy et al. (1987)	M	12
	7.8×10^{-3}	6600	Paasivirta and Sinkkonen (2009)	V	
	5.2×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	3.9×10^{-1}		Duchowicz et al. (2020)	Q	185
	1.5×10^{-2}		Bhangare et al. (2019)	Q	
	2.1×10^{-1}		Hilal et al. (2008)	Q	
	3.2×10^{-1}		Modarresi et al. (2007)	Q	68
	2.8×10^{-1}		Lee (2007)	Q	723
	4.0×10^{-1}		Lee (2007)	Q	724
	1.1×10^{-1}		Dunnivant et al. (1992)	Q	
	1.1		Duchowicz et al. (2020)	?	186, 21

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,4',6-heptachlorobiphenyl $\text{C}_{12}\text{H}_3\text{Cl}_7$ (PCB-171) [52663-71-5] TZMHVHLTPWKZCI-UHFFFAOYSA-N	2.9×10^{-2}		Duchowicz et al. (2020)	V	187
	1.3×10^{-2}	7100	Paasivirta and Sinkkonen (2009)	V	
	1.9×10^{-1}		Mackay et al. (2006b)	V	
	1.9×10^{-1}		Mackay et al. (1992a)	V	
	1.9×10^{-1}		Shiu and Mackay (1986)	V	
	3.4×10^{-2}		Burkhard et al. (1985)	V	
	2.3×10^{-1}		Duchowicz et al. (2020)	Q	
	2.1×10^{-1}		Hilal et al. (2008)	Q	
	2.8×10^{-1}		Modarresi et al. (2007)	Q	68
	1.7×10^{-1}		Lee (2007)	Q	723
	3.1×10^{-1}		Lee (2007)	Q	724
	5.7×10^{-2}		Dunnivant et al. (1992)	Q	
2,2',3,3',4,5,5'-heptachlorobiphenyl $\text{C}_{12}\text{H}_3\text{Cl}_7$ (PCB-172) [52663-74-8] HOPMUCXYRNOABF-UHFFFAOYSA-N	7.6×10^{-1}		Brunner et al. (1990)	M	
	8.3×10^{-3}	6800	Paasivirta and Sinkkonen (2009)	V	
	3.1×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	2.1×10^{-1}		Duchowicz et al. (2020)	Q	185
	3.2×10^{-1}		Modarresi et al. (2007)	Q	68
	5.6×10^{-1}		Lee (2007)	Q	723
	3.8×10^{-1}		Lee (2007)	Q	724
	8.3×10^{-2}		Dunnivant et al. (1992)	Q	
	7.6		Duchowicz et al. (2020)	?	186, 21
2,2',3,3',4,5,6-heptachlorobiphenyl $\text{C}_{12}\text{H}_3\text{Cl}_7$ (PCB-173) [68194-16-1] PAYFWJAKKLILIT-UHFFFAOYSA-N	7.0×10^{-1}		Brunner et al. (1990)	M	
	1.3×10^{-3}	6500	Paasivirta and Sinkkonen (2009)	V	
	3.3×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	2.1×10^{-1}		Duchowicz et al. (2020)	Q	
	1.8×10^{-1}		Hilal et al. (2008)	Q	
	3.5×10^{-1}		Modarresi et al. (2007)	Q	68
	3.1×10^{-1}		Lee (2007)	Q	723
	5.9×10^{-1}		Lee (2007)	Q	724
	5.4×10^{-2}		Dunnivant et al. (1992)	Q	
	7.0×10^{-1}		Duchowicz et al. (2020)	?	186, 21
2,2',3,3',4,5,6'-heptachlorobiphenyl $\text{C}_{12}\text{H}_3\text{Cl}_7$ (PCB-174) [38411-25-5] ZDLMBNHYTPHDLF-UHFFFAOYSA-N	2.2×10^{-2}	14000	Bamford et al. (2002)	M	
	7.0×10^{-1}		Brunner et al. (1990)	M	
	2.0×10^{-1}		Murphy et al. (1987)	M	12
	5.4×10^{-3}	6700	Paasivirta and Sinkkonen (2009)	V	
	1.3×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	2.1×10^{-1}		Duchowicz et al. (2020)	Q	300
	2.6×10^{-1}		Hilal et al. (2008)	Q	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	3.3×10^{-1}		Modarresi et al. (2007)	Q	68
	3.1×10^{-1}		Lee (2007)	Q	723
	4.3×10^{-1}		Lee (2007)	Q	724
	5.8×10^{-2}		Dunnivant et al. (1992)	Q	
	7.0×10^{-1}		Duchowicz et al. (2020)	?	186, 21
2,2',3,3',4,5',6- heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-175) [40186-70-7] KJBDZJFSYQUNJT-UHFFFAOYSA-N	1.0×10^{-2}	7200	Paasivirta and Sinkkonen (2009)	V	
	2.0×10^{-2}		Burkhard et al. (1985)	V	
	3.4×10^{-1}		Lee (2007)	Q	723
	3.0×10^{-1}		Lee (2007)	Q	724
	4.4×10^{-2}		Dunnivant et al. (1992)	Q	
2,2',3,3',4,6,6'- heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-176) [52663-65-7] HGMYRFJAJNYBRX-UHFFFAOYSA-N	1.1×10^{-1}		Murphy et al. (1987)	M	12
	8.5×10^{-3}	7200	Paasivirta and Sinkkonen (2009)	V	
	1.0×10^{-2}		Burkhard et al. (1985)	V	
	1.9×10^{-1}		Lee (2007)	Q	723
	2.6×10^{-1}		Lee (2007)	Q	724
	3.3×10^{-2}		Dunnivant et al. (1992)	Q	
2,2',3,3',4,5',6'- heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-177) [52663-70-4] CXOYNJAHPUASHN-UHFFFAOYSA-N	2.1×10^{-2}	13000	Bamford et al. (2002)	M	
	3.0×10^{-1}		Murphy et al. (1987)	M	12
	4.5×10^{-3}		Murphy et al. (1983a)	M	24
	3.4×10^{-3}	6600	Paasivirta and Sinkkonen (2009)	V	
	3.8×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Lee (2007)	Q	723
	5.3×10^{-1}		Lee (2007)	Q	724
	6.0×10^{-2}		Dunnivant et al. (1992)	Q	
2,2',3,3',5,5',6- heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-178) [52663-67-9] WCIBKXHMIXUQHK-UHFFFAOYSA-N	1.5×10^{-2}	11000	Bamford et al. (2002)	M	
	4.3×10^{-1}		Brunner et al. (1990)	M	
	1.5×10^{-1}		Murphy et al. (1987)	M	12
	1.0×10^{-2}	7200	Paasivirta and Sinkkonen (2009)	V	
	2.3×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.2×10^{-1}		Duchowicz et al. (2020)	Q	185
	2.7×10^{-1}		Hilal et al. (2008)	Q	
	3.0×10^{-1}		Modarresi et al. (2007)	Q	68
	4.8×10^{-1}		Lee (2007)	Q	723
	5.6×10^{-1}		Lee (2007)	Q	724
	4.6×10^{-2}		Dunnivant et al. (1992)	Q	
	4.3×10^{-1}		Duchowicz et al. (2020)	?	186, 21

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',5,6,6'- heptachlorobiphenyl $\text{C}_{12}\text{H}_3\text{Cl}_7$ (PCB-179) [52663-64-6] XYHVYEUZLSYHDP-UHFFFAOYSA-N	4.1×10^{-1}		Brunner et al. (1990)	M	
	4.2×10^{-3}	7000	Paasivirta and Sinkkonen (2009)	V	
	1.1×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.2×10^{-1}		Duchowicz et al. (2020)	Q	300
	3.1×10^{-1}		Hilal et al. (2008)	Q	
	3.1×10^{-1}		Modarresi et al. (2007)	Q	68
	2.6×10^{-1}		Lee (2007)	Q	723
	4.8×10^{-1}		Lee (2007)	Q	724
	3.6×10^{-2}		Dunnivant et al. (1992)	Q	
	4.1×10^{-1}		Duchowicz et al. (2020)	?	186, 21
2,2',3,4,4',5,5'- heptachlorobiphenyl $\text{C}_{12}\text{H}_3\text{Cl}_7$ (PCB-180) [35065-29-3] WBHQEUPUMONIKF-UHFFFAOYSA-N	1.7×10^{-1}	7300	Li et al. (2003)	L	368
	1.2×10^{-1}	7900	Li et al. (2003)	L	369
	2.7×10^{-2}	17000	Bamford et al. (2000)	M	
	9.9×10^{-1}		Brunner et al. (1990)	M	
	3.1×10^{-1}		Murphy et al. (1987)	M	12
	1.5×10^{-2}	6900	Paasivirta and Sinkkonen (2009)	V	
	3.3×10^{-2}		Burkhard et al. (1985)	V	
	2.5×10^{-2}	9000	Paasivirta et al. (1999)	T	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	2.1×10^{-1}		Duchowicz et al. (2020)	Q	300
	1.4×10^{-2}		Bhangare et al. (2019)	Q	
	2.1×10^{-1}		Hilal et al. (2008)	Q	
	3.5×10^{-1}		Modarresi et al. (2007)	Q	68
	2.8×10^{-1}		Lee (2007)	Q	723
	3.0×10^{-1}		Lee (2007)	Q	724
	9.2×10^{-2}		Dunnivant et al. (1992)	Q	
	9.9×10^{-1}		Duchowicz et al. (2020)	?	186, 21
2,2',3,4,4',5,6-heptachlorobiphenyl $\text{C}_{12}\text{H}_3\text{Cl}_7$ (PCB-181) [74472-47-2] DJEUXBQAKBLKPO-UHFFFAOYSA-N	1.2×10^{-2}	7200	Paasivirta and Sinkkonen (2009)	V	
	2.4×10^{-2}		Burkhard et al. (1985)	V	
	1.6×10^{-1}		Lee (2007)	Q	723
	3.8×10^{-1}		Lee (2007)	Q	724
	4.3×10^{-2}		Dunnivant et al. (1992)	Q	
2,2',3,4,4',5,6'- heptachlorobiphenyl $\text{C}_{12}\text{H}_3\text{Cl}_7$ (PCB-182) [60145-23-5] RXRLRYZUMSYVLS-UHFFFAOYSA-N	1.7×10^{-2}	12000	Bamford et al. (2002)	M	
	1.7×10^{-2}	7200	Paasivirta and Sinkkonen (2009)	V	
	1.0×10^{-2}		Burkhard et al. (1985)	V	
	1.5×10^{-1}		Lee (2007)	Q	723
	2.1×10^{-1}		Lee (2007)	Q	724
	3.8×10^{-2}		Dunnivant et al. (1992)	Q	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4,4',5',6'-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-183) [52663-69-1] KQBFUDNJKCZEDQ-UHFFFAOYSA-N	1.7×10^{-2} 1.5×10^{-1} 1.6×10^{-2} 2.4×10^{-2} 2.1×10^{-2} 1.7×10^{-1} 2.5×10^{-1} 4.9×10^{-2}	12000 7400	Bamford et al. (2002) Murphy et al. (1987) Murphy et al. (1983a) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992)	M M M V V Q Q Q	 12 24 723 724
2,2',3,4,4',6,6'-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-184) [74472-48-3] OBUIJJSQKPGKME-UHFFFAOYSA-N	8.1×10^{-3} 7.9×10^{-3} 9.4×10^{-2} 1.3×10^{-1} 2.2×10^{-2}	7200	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992)	V V Q Q Q	 723 724
2,2',3,4,5,5',6-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-185) [52712-05-7] PYZHTHZEHQHHEN-UHFFFAOYSA-N	6.2×10^{-1} 4.9×10^{-3} 2.2×10^{-2} 2.4×10^{-1} 1.1×10^{-1} 1.5×10^{-1} 3.4×10^{-1} 3.1×10^{-1} 4.3×10^{-1} 4.6×10^{-2} 6.2×10^{-1}	7000	Brunner et al. (1990) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Lee (2007) Lee (2007) Dunnivant et al. (1992) Duchowicz et al. (2020)	M V V Q Q Q Q Q Q Q ?	 300 68 723 724 186, 21
2,2',3,4,5,6,6'-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-186) [74472-49-4] FGDPOTMRBQHPJK-UHFFFAOYSA-N	9.6×10^{-4} 1.3×10^{-2} 1.7×10^{-1} 3.7×10^{-1} 2.7×10^{-2}	6500	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992)	V V Q Q Q	 723 724
2,2',3,4',5,5',6'-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-187) [52663-68-0] UDMZPLROONOSEF-UHFFFAOYSA-N	1.6×10^{-2} 1.2×10^{-1} 1.3×10^{-2} 2.4×10^{-2} 2.4×10^{-1} 4.3×10^{-1} 4.9×10^{-2}	12000 7200	Bamford et al. (2000) Murphy et al. (1987) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992)	M M V V Q Q Q	 12 723 724

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4',5,6,6'- heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-188) [74487-85-7] MMTJWDQKGUNSDK-UHFFFAOYSA-N	8.8×10^{-3} 4.8×10^{-3} 8.8×10^{-3} 1.6×10^{-2} 1.3×10^{-1} 2.3×10^{-1} 2.2×10^{-2}	7500 7100	Bamford et al. (2000) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Bhangare et al. (2019) Lee (2007) Lee (2007) Dunnivant et al. (1992)	M V V Q Q Q Q	 723 724
2,3,3',4,4',5,5'- heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-189) [39635-31-9] XUAWBXYHDRROL-UHFFFAOYSA-N	8.4×10^{-2} 4.1×10^{-3} 1.1×10^{-1} 3.4×10^{-1} 3.0×10^{-1} 1.5×10^{-1}	6300	Fang et al. (2006) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992)	M V V Q Q Q	 723 724
2,3,3',4,4',5,6-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-190) [41411-64-7] TYEDCFVCFDKSBK-UHFFFAOYSA-N	1.5×10^{-2} 9.9×10^{-2} 1.9×10^{-1} 5.3×10^{-1} 8.8×10^{-2}	7000	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992)	V V Q Q Q	 723 724
2,3,3',4,4',5',6- heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-191) [74472-50-7] TVFXBXWAXIMLAQ-UHFFFAOYSA-N	2.1×10^{-2} 5.8×10^{-2} 2.1×10^{-1} 3.2×10^{-1} 7.4×10^{-2}	7200	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992)	V V Q Q Q	 723 724
2,3,3',4,5,5',6-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-192) [74472-51-8] ZUTDUGMNRUOX-UHFFFAOYSA-N	4.9×10^{-3} 6.1×10^{-2} 3.8×10^{-1} 5.0×10^{-1} 5.2×10^{-2}	6900	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992)	V V Q Q Q	 723 724
2,3,3',4',5,5',6- heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-193) [69782-91-8] SSTJUBQGYXNFFP-UHFFFAOYSA-N	3.2×10^{-2} 7.5×10^{-3} 1.0×10^{-1} 2.9×10^{-1} 5.6×10^{-1} 7.3×10^{-2}	17000 6800	Bamford et al. (2002) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992)	M V V Q Q Q	 723 724

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,4',5,5'- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-194) [35694-08-7] DTMRKGRREZAYAP-UHFFFAOYSA-N	1.5×10^{-1}	7500	Li et al. (2003)	L	368
	2.3×10^{-1}	8200	Li et al. (2003)	L	369
	1.0×10^{-1}	20000	Bamford et al. (2002)	M	
	9.9×10^{-1}		Brunner et al. (1990)	M	
	8.0×10^{-3}	6900	Paasivirta and Sinkkonen (2009)	V	
	2.1×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	4.0×10^{-1}		Duchowicz et al. (2020)	Q	185
	2.3×10^{-1}		Hilal et al. (2008)	Q	
	4.8×10^{-1}		Modarresi et al. (2007)	Q	68
	5.6×10^{-1}		Lee (2007)	Q	723
	7.1×10^{-1}		Lee (2007)	Q	724
		6500	Kühne et al. (2005)	Q	
	1.5×10^{-1}		Dunnivant et al. (1992)	Q	
	9.9×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		6600	Kühne et al. (2005)	?	
2,2',3,3',4,4',5,6- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-195) [52663-78-2] JAHJITLFJSDRCG-UHFFFAOYSA-N	7.1×10^{-2}	20000	Bamford et al. (2000)	M	
	9.0×10^{-1}		Brunner et al. (1990)	M	
	7.1×10^{-3}	7100	Paasivirta and Sinkkonen (2009)	V	
	7.8×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	3.1×10^{-1}		Duchowicz et al. (2020)	Q	300
	2.4×10^{-1}		Hilal et al. (2008)	Q	
	4.5×10^{-1}		Modarresi et al. (2007)	Q	68
	3.1×10^{-1}		Lee (2007)	Q	723
	1.0		Lee (2007)	Q	724
	8.3×10^{-2}		Dunnivant et al. (1992)	Q	
	9.0×10^{-1}		Duchowicz et al. (2020)	?	186, 21
2,2',3,3',4,4',5,6'- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-196) [42740-50-1] BQFCCUSDZLKBG-UHFFFAOYSA-N	9.9×10^{-1}		Brunner et al. (1990)	M	
	1.8×10^{-2}	7400	Paasivirta and Sinkkonen (2009)	V	
	1.4×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	2.4×10^{-1}		Duchowicz et al. (2020)	Q	
	2.2×10^{-1}		Hilal et al. (2008)	Q	
	5.0×10^{-1}		Modarresi et al. (2007)	Q	68
	3.4×10^{-1}		Lee (2007)	Q	723
	6.2×10^{-1}		Lee (2007)	Q	724
	7.6×10^{-2}		Dunnivant et al. (1992)	Q	
	9.9×10^{-1}		Duchowicz et al. (2020)	?	186, 21

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,4',6,6'- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-197) [33091-17-7] YPDBBDKYNWRFMF-UHFFFAOYSA-N	1.3×10^{-2} 1.1×10^{-2} 1.9×10^{-1} 4.2×10^{-1} 3.9×10^{-2}	7600	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992)	V V Q Q Q	 723 724
2,2',3,3',4,5,5',6- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-198) [68194-17-2] PJHBSPRZHUOIAS-UHFFFAOYSA-N	7.0×10^{-1} 3.5×10^{-3} 4.8×10^{-2} 2.4×10^{-1} 1.7×10^{-1} 2.5×10^{-1} 4.5×10^{-1} 6.2×10^{-1} 1.0 6.4×10^{-2} 7.0×10^{-1}	7000	Brunner et al. (1990) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Lee (2007) Lee (2007) Dunnivant et al. (1992) Duchowicz et al. (2020)	M V V Q Q Q Q Q Q Q Q ?	 300 68 723 724 186, 21
2,2',3,3',4,5,5',6'- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-199) [52663-75-9] HJBYDWKNARZTMJ-UHFFFAOYSA-N	9.9×10^{-1} 3.4×10^{-3} 2.3×10^{-2} 2.4×10^{-1} 2.2×10^{-1} 2.7×10^{-1} 4.7×10^{-1} 6.2×10^{-1} 9.1×10^{-1} 4.3×10^{-2} 9.9×10^{-1}	7000	Brunner et al. (1990) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Lee (2007) Lee (2007) Dunnivant et al. (1992) Duchowicz et al. (2020)	M V V Q Q Q Q Q Q Q Q ?	 300 68 723 724 186, 21
2,2',3,3',4,5,6,6'- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-200) [52663-73-7] HHXNVASVVVNNDG-UHFFFAOYSA-N	7.6×10^{-3} 1.5×10^{-2} 3.4×10^{-1} 7.7×10^{-1} 4.1×10^{-2}	7200	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Lee (2007) Lee (2007) Dunnivant et al. (1992)	V V Q Q Q	 723 724
2,2',3,3',4,5',6,6'- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-201) [40186-71-8] LJQOBQLZTUSEJA-UHFFFAOYSA-N	1.0×10^{-2} 5.8×10^{-1} 1.2×10^{-2} 1.5×10^{-2} 2.4×10^{-1} 1.3×10^{-1} 1.3×10^{-2}	17000 7500	Bamford et al. (2000) Brunner et al. (1990) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Bhangare et al. (2019)	M M V V Q Q Q	 185

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	2.9×10^{-1}		Hilal et al. (2008)	Q	
	5.1×10^{-1}		Modarresi et al. (2007)	Q	68
	3.7×10^{-1}		Lee (2007)	Q	723
	1.1		Lee (2007)	Q	724
	7.6×10^{-2}		Dunnivant et al. (1992)	Q	
	5.8×10^{-1}		Duchowicz et al. (2020)	?	186, 21
2,2',3,3',5,5',6,6'- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-202) [2136-99-4] JPOPEORRMSDUIP-UHFFFAOYSA-N	5.5×10^{-1}		Brunner et al. (1990)	M	
	5.0×10^{-3}	7300	Paasivirta and Sinkkonen (2009)	V	
	2.6×10^{-2}		Mackay et al. (2006b)	V	
	2.6×10^{-2}		Mackay et al. (1992a)	V	
	2.7×10^{-2}		Shiu and Mackay (1986)	V	
	1.3×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.2×10^{-1}		Duchowicz et al. (2020)	Q	
	3.7×10^{-1}		Hilal et al. (2008)	Q	
	5.5×10^{-1}		Modarresi et al. (2007)	Q	68
	5.3×10^{-1}		Lee (2007)	Q	723
	1.4		Lee (2007)	Q	724
		4700	Kühne et al. (2005)	Q	
	4.4×10^{-2}		Dunnivant et al. (1992)	Q	
	5.5×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		5000	Kühne et al. (2005)	?	
2,2',3,4,4',5,5',6- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-203) [52663-76-0] DCPDZFRGNJDWPP-UHFFFAOYSA-N	3.2×10^{-2}	7800	Paasivirta and Sinkkonen (2009)	V	
	5.0×10^{-2}		Burkhard et al. (1985)	V	
	1.3×10^{-2}		Bhangare et al. (2019)	Q	
	3.1×10^{-1}		Lee (2007)	Q	723
	7.7×10^{-1}		Lee (2007)	Q	724
	7.0×10^{-2}		Dunnivant et al. (1992)	Q	
2,2',3,4,4',5,6,6'- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-204) [74472-52-9] JDZUWXRNKHXZFE-UHFFFAOYSA-N	1.1×10^{-2}	7800	Paasivirta and Sinkkonen (2009)	V	
	1.9×10^{-2}		Burkhard et al. (1985)	V	
	1.3×10^{-2}		Bhangare et al. (2019)	Q	
	1.7×10^{-1}		Lee (2007)	Q	723
	4.5×10^{-1}		Lee (2007)	Q	724
	2.9×10^{-2}		Dunnivant et al. (1992)	Q	

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3',4,4',5,5',6-octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-205) [74472-53-0] VXXBCDUYUQKWCK-UHFFFAOYSA-N	4.4×10^{-3} 2.1×10^{-1} 1.2×10^{-2} 3.8×10^{-1} 9.1×10^{-1} 1.1×10^{-1}	6800	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Bhangare et al. (2019) Lee (2007) Lee (2007) Dunnivant et al. (1992)	V V Q Q Q Q	723 724
2,2',3,3',4,4',5,5',6-nonachlorobiphenyl $C_{12}HCl_9$ (PCB-206) [40186-72-9] JFIMDKGRGPNRQ-UHFFFAOYSA-N	2.1×10^{-3} 1.2 1.2×10^{-2} 3.6×10^{-2} 1.1×10^{-2} 6.2×10^{-1} 2.0 1.1×10^{-1}	7300	Paasivirta and Sinkkonen (2009) Mackay et al. (2006b) Mackay et al. (1992a) Burkhard et al. (1985) Bhangare et al. (2019) Lee (2007) Lee (2007) Dunnivant et al. (1992)	V V V V Q Q Q Q	723 724
2,2',3,3',4,4',5,6,6'-nonachlorobiphenyl $C_{12}HCl_9$ (PCB-207) [52663-79-3] YGDPIDTZOQGPAX-UHFFFAOYSA-N	1.8×10^{-3} 2.8×10^{-2} 1.1×10^{-2} 3.3×10^{-1} 1.4 5.8×10^{-2}	7500	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Bhangare et al. (2019) Lee (2007) Lee (2007) Dunnivant et al. (1992)	V V Q Q Q Q	723 724
2,2',3,3',4,5,5',6,6'-nonachlorobiphenyl $C_{12}HCl_9$ (PCB-208) [52663-77-1] XIFFTDRFWYFAPO-UHFFFAOYSA-N	3.0×10^{-3} 3.1×10^{-2} 1.2×10^{-2} 6.7×10^{-1} 2.5 5.9×10^{-2}	7700	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Bhangare et al. (2019) Lee (2007) Lee (2007) Dunnivant et al. (1992)	V V Q Q Q Q	723 724
decachlorobiphenyl $C_{12}Cl_{10}$ (PCB-209) [2051-24-3] ONXPZLFXDMAPRO-UHFFFAOYSA-N	1.0×10^{-3} 6.7×10^{-4} 4.8×10^{-2} 4.8×10^{-2} 8.0×10^{-2} 2.6×10^{-1} 1.0×10^{-2} 3.1×10^{-1} 6.7×10^{-1} 5.0 8.8×10^{-2}	7200 6100 7300	Duchowicz et al. (2020) Paasivirta and Sinkkonen (2009) Mackay et al. (2006b) Mackay et al. (1992a) Shiu and Mackay (1986) Burkhard et al. (1985) Duchowicz et al. (2020) Bhangare et al. (2019) Hilal et al. (2008) Lee (2007) Lee (2007) Kühne et al. (2005) Dunnivant et al. (1992) Kühne et al. (2005)	V V V V V Q Q Q Q Q Q Q Q Q	187 685 723 724

Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
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A6.4 Oxygenated chlorocarbons (C, H, O, Cl)

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
phosgene	5.9×10^{-4}	3800	De Bruyn et al. (1995a)	M	
CCl ₂ O	6.8×10^{-4}	4200	Manogue and Pigford (1960)	M	
[75-44-5]	7.0×10^{-4}		Yaws (2003)	X	238
YGAWVDWMABLF-UHFFFAOYSA-N	5.3×10^{-4}		Hayer et al. (2022)	Q	20
	8.8×10^{-3}		Keshavarz et al. (2022)	Q	
	6.1×10^{-2}		Duchowicz et al. (2020)	Q	
	3.7×10^{-1}		Wang et al. (2017)	Q	81, 239
	1.4×10^{-2}		Wang et al. (2017)	Q	81, 240
	1.1×10^{-4}		Wang et al. (2017)	Q	81, 241
	6.8×10^{-4}		Gharagheizi et al. (2010)	Q	247
	5.9×10^{-4}		Duchowicz et al. (2020)	?	186, 21
	7.1×10^{-4}		Yaws (1999)	?	21
MCM:CCL3OOH	2.1×10^1		Wang et al. (2017)	Q	81, 239
CHO ₂ Cl ₃	4.9		Wang et al. (2017)	Q	81, 240
DUBMHDTUZCIGCY-UHFFFAOYSA-N	3.8		Wang et al. (2017)	Q	81, 241
MCM:CH2CLOOH	1.8×10^1		Wang et al. (2017)	Q	81, 239
CH ₃ O ₂ Cl	6.2×10^1		Wang et al. (2017)	Q	81, 240
DUNYOPWYTOSXOC-UHFFFAOYSA-N	1.8×10^1		Wang et al. (2017)	Q	81, 241
MCM:CHCL2OOH	4.7×10^1		Wang et al. (2017)	Q	81, 239
CH ₂ O ₂ Cl ₂	1.3×10^2		Wang et al. (2017)	Q	81, 240
TUIYYMKEIGYDJB-UHFFFAOYSA-N	5.6		Wang et al. (2017)	Q	81, 241
MCM:CCL3OH	4.7		Wang et al. (2017)	Q	81, 239
CHOC ₃	8.1×10^{-1}		Wang et al. (2017)	Q	81, 240
GYLIOGDFGLKMOL-UHFFFAOYSA-N	4.0×10^1		Wang et al. (2017)	Q	81, 241
MCM:CH2CLOH	1.9		Wang et al. (2017)	Q	81, 239
CH ₃ OCl	1.9×10^1		Wang et al. (2017)	Q	81, 240
BCUPGIHTCQJCSI-UHFFFAOYSA-N	1.1×10^2		Wang et al. (2017)	Q	81, 241
MCM:CHCL2OH	6.6		Wang et al. (2017)	Q	81, 239
CH ₂ OCl ₂	1.2×10^1		Wang et al. (2017)	Q	81, 240
GJYVZUKSNFSLCL-UHFFFAOYSA-N	2.8×10^1		Wang et al. (2017)	Q	81, 241
MCM:CHOCL	2.2×10^{-1}		Wang et al. (2017)	Q	81, 239
CHOCI	2.0×10^{-2}		Wang et al. (2017)	Q	81, 240
GFAUNYMRSKVDJL-UHFFFAOYSA-N	3.0×10^{-3}		Wang et al. (2017)	Q	81, 241
MCM:CLCO2H	3.2×10^1		Wang et al. (2017)	Q	81, 239
CHO ₂ Cl	8.5		Wang et al. (2017)	Q	81, 240
AOGYCOYQMAVAFD-UHFFFAOYSA-N	9.1×10^1		Wang et al. (2017)	Q	81, 241

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dichloroacetaldehyde $\text{C}_2\text{H}_2\text{Cl}_2\text{O}$ [79-02-7] NWQWQKUXRJYXFH-UHFFFAOYSA-N	4.7×10^{-1} 7.4×10^{-1} 1.1×10^{-2} 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	Q Q Q Q	81, 239 81, 240 81, 241 100
chloroacetyl chloride $\text{C}_2\text{H}_2\text{Cl}_2\text{O}$ [79-04-9] VGCXGMAHQTYDJK-UHFFFAOYSA-N	2.9×10^{-1} 1.3×10^{-1} 4.3×10^{-2} 4.3×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	Q Q Q Q	81, 239 81, 240 81, 241 100
chloral hydrate $\text{C}_2\text{H}_3\text{Cl}_3\text{O}_2$ [302-17-0] RNFNDJAIBTYOQL-UHFFFAOYSA-N	2.4×10^3		HSDB (2015)	V	
chloroacetaldehyde $\text{C}_2\text{H}_3\text{ClO}$ [107-20-0] QSKPIOLLBIHNAC-UHFFFAOYSA-N	1.9×10^{-1} 2.3 3.5 4.1×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	Q Q Q Q	81, 239 81, 240 81, 241 100
2-chloroethanol $\text{C}_2\text{H}_5\text{ClO}$ [107-07-3] SZIFAVKTNFCBPC-UHFFFAOYSA-N	1.3×10^1 3.3 1.1 1.3×10^1 4.7 9.5×10^1 2.8×10^1 1.4×10^1 1.7×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998)	V Q Q Q Q Q Q Q Q	187 81, 239 81, 240 81, 241 100 68 249, 250
2,2-dichloroethanol $\text{C}_2\text{H}_4\text{Cl}_2\text{O}$ [598-38-9] IDJOCJAIQSKSOP-UHFFFAOYSA-N	3.7×10^{-1} 3.7×10^{-1} 3.7×10^{-1} 3.2 2.6×10^1 6.9		Burkholder et al. (2019) Burkholder et al. (2015) O'Farrell and Waghorne (2010) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	L L M Q Q Q	 81, 239 81, 240 81, 241
2-chloroethanol-d4 $\text{ClC}_2\text{D}_4\text{OH}$ [117067-62-6] SZIFAVKTNFCBPC-LNLMKGTHSA-N	5.0	8700	Hiatt (2013)	M	
MCM:CCL2CL2OOH $\text{C}_2\text{H}_2\text{O}_2\text{Cl}_4$ SWNDCAXLXSSRFN-UHFFFAOYSA-N	3.9×10^2 7.1×10^1 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CCL3CH2OOH $\text{C}_2\text{H}_3\text{O}_2\text{Cl}_3$ RUIYMCLTECJZCN-UHFFFAOYSA-N	1.7×10^1 1.8×10^1 2.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CCL3CO3H C ₂ H ₃ O ₂ Cl ₃ DRTNVNKYVPOWCY-UHFFFAOYSA-N	2.6 × 10 ² 5.9 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CH2CL3OOH C ₂ H ₃ O ₂ Cl ₃ CHVIFDTZRLKJET-UHFFFAOYSA-N	1.2 × 10 ² 3.8 × 10 ¹ 1.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CH2CLCOOH C ₂ H ₅ O ₂ Cl PIXGNJBYAUTOCI-UHFFFAOYSA-N	1.6 × 10 ¹ 6.3 × 10 ¹ 5.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CH3CCL2OOH C ₂ H ₄ O ₂ Cl ₂ YUVMNUKOYKKNKNS-UHFFFAOYSA-N	1.2 × 10 ¹ 1.0 × 10 ¹ 8.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CH3CHCLOOH C ₂ H ₅ O ₂ Cl MCYQTMMYWIXRIL-UHFFFAOYSA-N	1.9 × 10 ¹ 2.0 × 10 ¹ 5.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHCL2CO3H C ₂ H ₂ O ₃ Cl ₂ VWNSYHZUZUFFDM-UHFFFAOYSA-N	5.1 × 10 ² 4.3 × 10 ¹ 8.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHCL2COOH C ₂ H ₄ O ₂ Cl ₂ GJBKLBBJOKITMY-UHFFFAOYSA-N	3.9 × 10 ¹ 1.1 × 10 ² 2.7 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHCL3OOH C ₂ H ₃ O ₂ Cl ₃ AMASFZACKVPSTN-UHFFFAOYSA-N	4.3 × 10 ² 1.2 × 10 ² 4.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CLETO3H C ₂ H ₃ O ₃ Cl JSQPGNJFQUOEPA-UHFFFAOYSA-N	2.1 × 10 ² 5.5 × 10 ¹ 1.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DICLETO2H C ₂ H ₄ O ₂ Cl ₂ UPXDMONURWDHKL-UHFFFAOYSA-N	1.3 × 10 ² 7.3 × 10 ¹ 4.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C2CL2OH2 C ₂ H ₄ O ₂ Cl ₂ HHQQTVMXFKGIIGR-UHFFFAOYSA-N	1.4 × 10 ⁵ 1.3 × 10 ⁴ 1.2 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C2CL2OHOOH C ₂ H ₄ O ₃ Cl ₂ NCBKAYIJWMIXBU-UHFFFAOYSA-N	2.8 × 10 ⁶ 1.7 × 10 ⁴ 1.4 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C2CL32OH C ₂ H ₃ O ₂ Cl ₃ MYDJEUINZIFHKK-UHFFFAOYSA-N	1.9 × 10 ⁵ 5.1 × 10 ³ 2.8 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C2CL3HOOOH C ₂ H ₃ O ₃ Cl ₃ KHLAQOPQQHOMKQ-UHFFFAOYSA-N	3.1 × 10 ⁶ 1.0 × 10 ⁴ 4.3 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:C2CL3OHOOH C ₂ H ₃ O ₃ Cl ₃ CEKNFZNLLTXCLL-UHFFFAOYSA-N	2.6 × 10 ⁶ 1.1 × 10 ⁴ 1.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
trichloroethanol C ₂ H ₃ OCl ₃ [115-20-8] KPWDGTGXUYRARH-UHFFFAOYSA-N	1.7 3.9 3.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CCLOHCOOH C ₂ H ₅ O ₃ Cl MIFGQALJBIDZDW-UHFFFAOYSA-N	1.9 × 10 ⁵ 9.6 × 10 ³ 1.0 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CH2CL3OH C ₂ H ₃ OCl ₃ HYCHPIPVDVAXCCJ-UHFFFAOYSA-N	2.9 × 10 ¹ 1.3 × 10 ¹ 1.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CH2OHCCLOH C ₂ H ₅ O ₂ Cl VVKFXODVPQSIHU-UHFFFAOYSA-N	4.2 × 10 ³ 4.2 × 10 ³ 9.3 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CH3CCL2OH C ₂ H ₄ OCl ₂ DNBABSPIEDTPHK-UHFFFAOYSA-N	1.6 2.4 8.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CH3CHCLOH C ₂ H ₅ OCl KJESGYZFCIMDE-UHFFFAOYSA-N	1.8 8.1 4.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHCL2CL2OH C ₂ H ₂ OCl ₄ LQINPQOSBLVJBS-UHFFFAOYSA-N	1.1 × 10 ² 2.2 × 10 ¹ 3.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHCL3OH C ₂ H ₃ OCl ₃ NIBKDWIGIKUFKL-UHFFFAOYSA-N	9.1 × 10 ¹ 5.6 × 10 ¹ 3.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CL2OHCH2OH C ₂ H ₄ O ₂ Cl ₂ ZOZPDNLNQWCVSW-UHFFFAOYSA-N	4.5 × 10 ³ 1.6 × 10 ³ 1.6 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CL2OHCO3H C ₂ H ₂ O ₄ Cl ₂ MACSTFWYVGNISK-UHFFFAOYSA-N	9.3 × 10 ⁴ 4.7 5.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CL2OHOOH C ₂ H ₄ O ₃ Cl ₂ WOJAYLCSWSBEJV-UHFFFAOYSA-N	1.7 × 10 ⁵ 4.0 × 10 ³ 4.1 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CLOHCO3H C ₂ H ₃ O ₄ Cl IODLIDNNOHQSDW-UHFFFAOYSA-N	1.0 × 10 ⁵ 2.5 × 10 ² 1.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:COHCCLOOH C ₂ H ₅ O ₃ Cl WXPZQCJQULOKCY-UHFFFAOYSA-N	1.2 × 10 ⁵ 5.0 × 10 ³ 4.4 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DICLETOH C ₂ H ₄ OCl ₂ QXBDFCZHAAOUBY-UHFFFAOYSA-N	2.6 × 10 ¹ 3.8 × 10 ¹ 3.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TCE2OH C ₂ H ₂ O ₂ Cl ₄ BVBMRJKFECUARX-UHFFFAOYSA-N	2.9 × 10 ⁵ 2.0 × 10 ³ 4.2 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:TCEOHOOH C ₂ H ₂ O ₃ Cl ₄ YKIXQGIQZGTABG-UHFFFAOYSA-N	3.4 × 10 ⁶ 4.3 × 10 ³ 1.4 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CCLOHCHO C ₂ H ₃ O ₂ Cl RYRGLFUQPWFSD-UHFFFAOYSA-N	8.3 × 10 ¹ 8.9 × 10 ¹ 4.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CL2OHCHO C ₂ H ₂ O ₂ Cl ₂ LCOUNIIIIWZOM-UHFFFAOYSA-N	7.6 × 10 ¹ 1.0 6.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CH3COCL C ₂ H ₃ OCl WETWJCDKMRHUPV-UHFFFAOYSA-N	1.5 × 10 ⁻¹ 2.6 × 10 ⁻² 8.7 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CHCL2COCL C ₂ HOCl ₃ FBCCMZVIWDFMO-UHFFFAOYSA-N	6.8 × 10 ⁻¹ 6.6 × 10 ⁻² 3.6 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CLCOCH2OOH C ₂ H ₃ O ₃ Cl ARKKUYXZQNWAAF-UHFFFAOYSA-N	1.1 × 10 ⁴ 2.1 × 10 ² 8.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CLCOCL2OOH C ₂ HO ₃ Cl ₃ FXUYMCPKRPYDCU-UHFFFAOYSA-N	1.6 × 10 ⁴ 3.1 × 10 ¹ 2.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CLCOCLOOH C ₂ H ₂ O ₃ Cl ₂ WROSSTYSMNZXC-UHFFFAOYSA-N	2.5 × 10 ⁴ 3.9 × 10 ² 2.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CLGLYOX C ₂ O ₂ Cl ₂ CTSLXHKWHWQRSH-UHFFFAOYSA-N	2.2 × 10 ² 1.3 × 10 ⁻¹ 3.6 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CCL2OHCOCL $\text{C}_2\text{HO}_2\text{Cl}_3$ WBBOIYQGQVKNEO-UHFFFAOYSA-N	1.3×10^2 1.2 1.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CCLOHCOCL $\text{C}_2\text{H}_2\text{O}_2\text{Cl}_2$ NABBVDLPPITPRF-UHFFFAOYSA-N	1.4×10^2 5.6×10^1 3.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CH2OHCOCL $\text{C}_2\text{H}_3\text{O}_2\text{Cl}$ LCIMJULVQOQTEZ-UHFFFAOYSA-N	2.1×10^1 1.1×10^2 4.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CL1GLYOX $\text{C}_2\text{HO}_2\text{Cl}$ ZNBGBHISQKMEPA-UHFFFAOYSA-N	1.4×10^2 1.5 4.2×10^{-3}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CLOHCO2H $\text{C}_2\text{H}_3\text{O}_3\text{Cl}$ SORBEIKZIPTJRS-UHFFFAOYSA-N	8.5×10^4 3.6×10^4 1.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
1,1,1-trichloro-2-propanone $\text{C}_3\text{H}_3\text{Cl}_3\text{O}$ [918-00-3] SMZHKGXSEAGRTI-UHFFFAOYSA-N	4.5		HSDB (2015)	Q	100
1,1-dichloro-2-propanone $\text{C}_3\text{H}_4\text{Cl}_2\text{O}$ (1,1-dichloroacetone) [513-88-2] CSVFWMPUJVDVKH-UHFFFAOYSA-N	3.3×10^{-1} 3.3×10^{-1} 3.3×10^{-1} 1.6		Burkholder et al. (2019) Burkholder et al. (2015) O'Farrell and Waghorne (2010) HSDB (2015)	L L M Q	 100
carbonochloridic acid, 2-chloroethyl ester $\text{C}_3\text{H}_4\text{Cl}_2\text{O}_2$ (chloroethyl chloroformate) [627-11-2] SVDDJQGVOFZBNX-UHFFFAOYSA-N	9.0×10^{-3}		HSDB (2015)	Q	100
carbonochloridic acid, ethyl ester $\text{C}_3\text{H}_5\text{ClO}_2$ (ethyl chloroformate) [541-41-3] RIFGWPKJUGCATF-UHFFFAOYSA-N	3.2×10^{-3}		HSDB (2015)	Q	100
2-chloropropanoic acid $\text{C}_3\text{H}_5\text{ClO}_2$ [598-78-7] GAWAYYRQGQZKCR-UHFFFAOYSA-N	3.8×10^1		HSDB (2015)	Q	100

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3-dichloro-1-propanol $\text{C}_3\text{H}_6\text{Cl}_2\text{O}$ [616-23-9] ZXCYIJGIGSDJQQ-UHFFFAOYSA-N	7.8 6.9×10^1 1.3×10^1 3.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	Q Q Q Q	81, 239 81, 240 81, 241 100
1,3-dichloro-2-propanol $\text{C}_3\text{H}_6\text{Cl}_2\text{O}$ [96-23-1] DEWLEGDTCGBNGU-UHFFFAOYSA-N	5.8 1.6×10^1 2.0×10^1 4.9×10^1 1.6×10^1 2.6×10^1 3.0×10^1 1.7×10^1		Meylan and Howard (1991) HSDB (2015) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Meylan and Howard (1991)	V Q Q Q Q Q Q Q	 100 272, 244 245 246 68 100
3-chloro-1,2-propanediol $\text{C}_3\text{H}_7\text{ClO}_2$ [96-24-2] SSZWWUDQMAHNAQ-UHFFFAOYSA-N	1.6×10^2		HSDB (2015)	Q	100
1-chloro-2-propanol $\text{C}_3\text{H}_7\text{ClO}$ [127-00-4] YYTSGNJTASLUOY-UHFFFAOYSA-N	5.8		HSDB (2015)	Q	100
2-chloro-1-propanol $\text{C}_3\text{H}_7\text{ClO}$ [78-89-7] VZIQXGLTRZLBEX-UHFFFAOYSA-N	5.8		HSDB (2015)	Q	100
3-chloro-1-propanol $\text{C}_3\text{H}_7\text{ClO}$ [627-30-5] LAMUXTNQCICZQX-UHFFFAOYSA-N	1.3×10^1		Ebert et al. (2023)	?	317
trichloroethanal CCl_3CHO (trichloroacetaldehyde; chloral) [75-87-6] HFFLGKNGCAIQMO-UHFFFAOYSA-N	3.4×10^3 3.4×10^3 3.4×10^3 2.2×10^3 1.3×10^{-1} 2.1×10^{-1} 1.6×10^{-2} 3.2×10^{-3} 1.2×10^3 3.1×10^2 3.1 1.7×10^3 3.4×10^3	3500 3500 3500	Burkholder et al. (2019) Burkholder et al. (2015) Betterton and Hoffmann (1988) Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Kühne et al. (2005) Meylan and Howard (1991) Duchowicz et al. (2020) Kühne et al. (2005)	L L M Q Q Q Q Q Q Q Q Q Q ? ?	462 462 462 81, 239 81, 240 81, 241 243, 244 245 246 186, 21 ?

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
chloro-2-propanone	5.8×10^{-1}	5400	Burkholder et al. (2019)	L	
CH ₂ ClCOCH ₃	5.8×10^{-1}	5400	Burkholder et al. (2015)	L	
(chloroacetone)	5.8×10^{-1}	5400	Sander et al. (2011)	L	
[78-95-5]	5.8×10^{-1}	5400	Betterton (1991)	M	
BULLHNUJGPPUOX-UHFFFAOYSA-N	1.2×10^{-1}		Keshavarz et al. (2022)	Q	
	8.8×10^{-2}		Duchowicz et al. (2020)	Q	300
	1.3×10^{-1}		Wang et al. (2017)	Q	81, 239
	2.0		Wang et al. (2017)	Q	81, 240
	1.2		Wang et al. (2017)	Q	81, 241
	1.6		Raventos-Duran et al. (2010)	Q	272, 244
	1.2		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	246
	8.8×10^{-1}		Hilal et al. (2008)	Q	
	6.8×10^{-1}		Modarresi et al. (2007)	Q	68
		4400	Kühne et al. (2005)	Q	
	6.0×10^{-1}		Duchowicz et al. (2020)	?	186, 21
		5500	Kühne et al. (2005)	?	
chloroethanoic acid	1.1×10^3	9700	Burkholder et al. (2019)	L	
CH ₂ ClCOOH	1.1×10^3	9700	Burkholder et al. (2015)	L	
(chloroacetic acid)	1.1×10^3	9700	Sander et al. (2011)	L	
[79-11-8]	1.1×10^3	9700	Bowden et al. (1998a)	M	
FOCAUTSVDIKZOP-UHFFFAOYSA-N	1.1×10^3		Keshavarz et al. (2022)	Q	
	1.3×10^2		Duchowicz et al. (2020)	Q	
	2.0×10^2		Wang et al. (2017)	Q	81, 239
	3.6×10^3		Wang et al. (2017)	Q	81, 240
	1.1×10^3		Wang et al. (2017)	Q	81, 241
	1.2×10^3		Raventos-Duran et al. (2010)	Q	272, 244
	1.6×10^3		Raventos-Duran et al. (2010)	Q	245
	4.9×10^1		Raventos-Duran et al. (2010)	Q	246
	8.8×10^2		Hilal et al. (2008)	Q	
	3.1×10^2		Modarresi et al. (2007)	Q	68
		8100	Kühne et al. (2005)	Q	
	1.1×10^3		Duchowicz et al. (2020)	?	186, 21
		9400	Kühne et al. (2005)	?	
dichloroethanoic acid	1.2×10^3	8000	Burkholder et al. (2019)	L	
CHCl ₂ COOH	1.2×10^3	8000	Burkholder et al. (2015)	L	
(dichloroacetic acid)	1.2×10^3	8000	Sander et al. (2011)	L	
[79-43-6]	1.2×10^3	8000	Bowden et al. (1998a)	M	
JXTHNDFMNIQAHM-UHFFFAOYSA-N	5.6×10^2		Keshavarz et al. (2022)	Q	
	3.9×10^2		Duchowicz et al. (2020)	Q	300
	6.6×10^2		Wang et al. (2017)	Q	81, 239
	1.4×10^3		Wang et al. (2017)	Q	81, 240
	3.8×10^2		Wang et al. (2017)	Q	81, 241
	2.5×10^3		Raventos-Duran et al. (2010)	Q	272, 244
	6.2×10^2		Raventos-Duran et al. (2010)	Q	245

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	1.6×10^2		Raventos-Duran et al. (2010)	Q	246
	3.9×10^2		Hilal et al. (2008)	Q	
	8.5×10^2	8400	Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	
	2.6×10^1		Katritzky et al. (1998)	Q	
	1.2×10^3	8000	Duchowicz et al. (2020)	?	186, 21
			Kühne et al. (2005)	?	
trichloroethanoic acid CCl_3COOH (trichloroacetic acid) [76-03-9] YXNBWRMUSHSURL-UHFFFAOYSA-N	7.3×10^2	8700	Burkholder et al. (2019)	L	
	7.3×10^2	8700	Burkholder et al. (2015)	L	
	7.3×10^2	8700	Sander et al. (2011)	L	
	7.3×10^2	8700	Bowden et al. (1998b)	M	
	5.6×10^2		Keshavarz et al. (2022)	Q	
	2.3×10^2		Duchowicz et al. (2020)	Q	
	9.9×10^2		Raventos-Duran et al. (2010)	Q	272, 244
	3.9		Raventos-Duran et al. (2010)	Q	245
	3.9×10^2		Raventos-Duran et al. (2010)	Q	246
	4.7		Hilal et al. (2008)	Q	
	7.6×10^2	8800	Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	
	7.3×10^2	8600	Duchowicz et al. (2020)	?	186, 21
			Kühne et al. (2005)	?	
2,2-dichloro-propanoic acid $\text{C}_3\text{H}_4\text{Cl}_2\text{O}_2$ [75-99-0] NDUPDOJHUQKPAG-UHFFFAOYSA-N	1.7×10^2		Duchowicz et al. (2020)	V	187
	3.5×10^8		Mackay et al. (2006d)	V	
	1.8×10^2		Duchowicz et al. (2020)	Q	
trichloroacetylchloride CCl_3COCl [76-02-8] PVFOMCVHYWHZJE-UHFFFAOYSA-N	2.0×10^{-2}		Mirabel et al. (1996)	M	
	2.0×10^{-2}		De Bruyn et al. (1995a)	M	451
	2.0×10^{-2}		George et al. (1994a)	M	
	1.2×10^{-2}		Keshavarz et al. (2022)	Q	
	7.3×10^{-2}		Duchowicz et al. (2020)	Q	185
	3.4×10^{-1}		HSDB (2015)	Q	100
	1.9×10^{-2}		Duchowicz et al. (2020)	?	186, 21
hexachloroacetone $\text{C}_3\text{Cl}_6\text{O}$ [116-16-5] DOJXGHGHTWFZHK-UHFFFAOYSA-N	1.0×10^2		Zhang et al. (2010)	Q	288, 289
	9.0×10^{-4}		Zhang et al. (2010)	Q	288, 290
	6.2×10^{-2}		Zhang et al. (2010)	Q	288, 291
	1.8×10^{-1}		Zhang et al. (2010)	Q	288, 292
(chloromethyl)-oxirane $\text{C}_3\text{H}_5\text{ClO}$ (epichlorohydrin) [106-89-8] BRLQWZUYTZBJKN-UHFFFAOYSA-N	2.9×10^{-1}		Welke et al. (1998)	M	
	3.2×10^{-1}		Duchowicz et al. (2020)	V	187
	3.3×10^{-1}		HSDB (2015)	V	
	3.0×10^{-1}		Mackay et al. (2006c)	V	
	3.0×10^{-1}		Mackay et al. (1993)	V	
	2.8×10^{-1}		Goldstein (1982)	X	448
	2.8×10^{-1}	3700	Goldstein (1982)	X	299

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.3×10^{-1}		Duchowicz et al. (2020)	Q	
	9.9×10^{-2}		Hilal et al. (2008)	Q	
	1.7×10^{-1}		Modarresi et al. (2007)	Q	68
methyl chloroethanoate $\text{C}_3\text{H}_5\text{ClO}_2$ [96-34-4] QABLOFMHHSOFRJ-UHFFFAOYSA-N	4.9×10^{-1} 4.2×10^{-1} 4.1×10^{-2} 3.3×10^{-1} 2.3×10^{-1} 1.2×10^{-1}	5600	Brockbank (2013) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	L V V Q Q Q	1 187
MCM:CL12CO3H $\text{C}_3\text{H}_4\text{O}_3\text{Cl}_2$ VMJCNPRZBGZGF-UHFFFAOYSA-N	1.6×10^3 1.1×10^2 2.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CL12PRAOOH $\text{C}_3\text{H}_6\text{O}_2\text{Cl}_2$ WGVINOMLJVZPKZ-UHFFFAOYSA-N	1.0×10^2 2.5×10^2 1.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CL12PRBOOH $\text{C}_3\text{H}_6\text{O}_2\text{Cl}_2$ OMIMXWULHYQJIC-UHFFFAOYSA-N	7.1×10^1 1.8×10^1 9.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CL12PRCOOH $\text{C}_3\text{H}_6\text{O}_2\text{Cl}_2$ ULSSZYIMOSSQB-UHFFFAOYSA-N	1.2×10^2 3.8×10^1 3.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CL12PRBOH $\text{C}_3\text{H}_6\text{OCl}_2$ QEZDCTNHTRSND-UHFFFAOYSA-N	1.4×10^1 1.5×10^1 2.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CL12PRCOH $\text{C}_3\text{H}_6\text{OCl}_2$ FLTSEOGWHPJWRV-UHFFFAOYSA-N	2.3×10^1 1.8×10^1 4.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CL12PRCHO $\text{C}_3\text{H}_4\text{OCl}_2$ IZRKUJREXIKQM-UHFFFAOYSA-N	1.3 3.5 5.5×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CH3CLCOCL $\text{C}_3\text{H}_4\text{OCl}_2$ JEQDSBVHLKBEIZ-UHFFFAOYSA-N	2.7×10^{-1} 3.8×10^{-2} 1.1×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CH3COCLOOH $\text{C}_3\text{H}_5\text{O}_3\text{Cl}$ HLLYIZVQRAGDFF-UHFFFAOYSA-N	1.0×10^4 3.5×10^2 1.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CLCOCLMOOH $\text{C}_3\text{H}_4\text{O}_3\text{Cl}_2$ RUPGTCZALLJKQM-UHFFFAOYSA-N	1.4×10^4 6.0×10^1 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CL12CO2H	1.3×10^3		Wang et al. (2017)	Q	81, 239
$\text{C}_3\text{H}_4\text{O}_2\text{Cl}_2$	3.5×10^3		Wang et al. (2017)	Q	81, 240
GKFWNPPZHDYVLI-UHFFFAOYSA-N	8.1×10^2		Wang et al. (2017)	Q	81, 241
3-chloro-2-butanone $\text{C}_4\text{H}_7\text{ClO}$ [4091-39-8] OIMRLHCSLQUXLL-UHFFFAOYSA-N	9.5×10^{-2}		Ebert et al. (2023)	?	317
ethyl chloroethanoate $\text{C}_4\text{H}_7\text{ClO}_2$ [105-39-5] VEUUMBGHMNHQGO-UHFFFAOYSA-N	2.6×10^{-1} 2.4×10^{-1} 1.5×10^{-1} 1.2×10^{-1} 1.1×10^{-1} 1.1×10^{-1} 2.4×10^{-1}	6100	Brockbank (2013) Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015) Hilal et al. (2008) Modarresi et al. (2007) Bartelt-Hunt et al. (2008)	L V Q Q Q Q ?	1 187 100 68 21
carbonochloridic acid, 1-methylethyl ester $\text{C}_4\text{H}_7\text{ClO}_2$ [108-23-6] IVRIRQXJSNCSPQ-UHFFFAOYSA-N	2.4×10^{-3}		HSDB (2015)	Q	100
chloroacetic acid anhydride $\text{C}_4\text{H}_4\text{Cl}_2\text{O}_3$ [541-88-8] PNVNPXKRAUBJGW-UHFFFAOYSA-N	2.2		HSDB (2015)	Q	100
chlorobutanol $\text{C}_4\text{H}_9\text{ClO}$ [1320-66-7] OSASVXMJTNOY-UHFFFAOYSA-N	4.5		HSDB (2015)	Q	100
methyl 2-chloroacetoacetate $\text{C}_5\text{H}_7\text{ClO}_3$ [4755-81-1] GYQRIAVRKLKQKP-UHFFFAOYSA-N	2.3		Ebert et al. (2023)	?	319
3-chloro-4-(dichloromethyl)-2-(5H)-furanone $\text{C}_5\text{H}_3\text{Cl}_3\text{O}_2$ [122551-89-7] WNQKLIFDPFSPIZ-UHFFFAOYSA-N	1.5		HSDB (2015)	Q	100
3-chloro-4-(dichloromethyl)-5-hydroxy-2-(5H)-furanone $\text{C}_5\text{H}_3\text{Cl}_3\text{O}_3$ [77439-76-0] WNTRMRXAGJOLCU-UHFFFAOYSA-N	3.9×10^4		HSDB (2015)	Q	100

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,4-trichloro-2-methyl-3-pentanone $\text{C}_6\text{H}_9\text{Cl}_3\text{O}$ [145556-04-3] KAUWEMQJFDRELR-UHFFFAOYSA-N	1.9 1.9 1.1×10^2 4.1×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
bis(2-chloroisopropyl) ether $\text{C}_6\text{H}_{12}\text{Cl}_2\text{O}$ [39638-32-9] BULHJTXRZFEUDQ-UHFFFAOYSA-N	3.0×10^{-2} 3.3×10^{-4} 9.5×10^{-1} 1.6×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
butyl 2,2,3,4,4-pentachloro-3-butenate $\text{C}_8\text{H}_9\text{Cl}_5\text{O}_2$ [75147-20-5] JZJILZTVTMMGAR-UHFFFAOYSA-N	3.9×10^{-1} 3.9×10^{-2} 7.9×10^{-2} 1.8×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane carbonyl chloride $\text{C}_8\text{H}_9\text{Cl}_3\text{O}$ [52314-67-7] CHLAOFANYRDCPD-UHFFFAOYSA-N	1.6×10^{-2} 9.7×10^{-3} 1.6×10^{-1} 8.8×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane carboxylic acid $\text{C}_8\text{H}_{10}\text{Cl}_2\text{O}_2$ [55701-05-8] LLMLSUSAKZVFOA-UHFFFAOYSA-N	1.9×10^1 9.0×10^1 6.1×10^4 6.1×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
hexanoic acid, 3,3-dimethyl-4,6,6,6-tetrachloro, methyl ester $\text{C}_9\text{H}_{14}\text{Cl}_4\text{O}_2$ [64667-33-0] POFHGKISWXYKLB-UHFFFAOYSA-N	6.7×10^{-1} 2.7×10^{-1} 6.1×10^2 1.8×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
methyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate $\text{C}_9\text{H}_{12}\text{Cl}_2\text{O}_2$ [61898-95-1] QJOOIMSFFIUFX-UHFFFAOYSA-N	6.1×10^{-2} 5.2×10^{-2} 1.3×10^{-1} 1.7×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
oxychlorane $\text{C}_{10}\text{H}_4\text{Cl}_8\text{O}$ [27304-13-8] WVGNQYSIWFHEQU-UHFFFAOYSA-N	6.0×10^{-2} 1.1×10^2	4300	Paasivirta et al. (1999) HSDB (2015)	T Q	 100

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) [$\frac{\text{mol}}{\text{m}^3 \text{Pa}}$]	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
kepone $\text{C}_{10}\text{Cl}_{10}\text{O}$ [143-50-0] LHHGDZSESBACKH-UHFFFAOYSA-N	1.8×10^2 1.8×10^2 2.0×10^2 1.5×10^2		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	187
bis-(chloromethyl) ether $\text{C}_2\text{H}_4\text{Cl}_2\text{O}$ [542-88-1] HRQGCQVOJVTVLU-UHFFFAOYSA-N	2.3×10^{-3} 4.8×10^{-2} 4.8×10^{-2} 4.7×10^{-3} 1.9×10^{-2} 4.3×10^{-2}		Duchowicz et al. (2020) Mackay et al. (2006c) Mackay et al. (1993) Ryan et al. (1988) Duchowicz et al. (2020) Modarresi et al. (2007)	V V V C Q Q	187 68
1,5-dichloro-3-oxapentane $\text{C}_4\text{H}_8\text{Cl}_2\text{O}$ (bis-(2-chloroethyl)-ether) [111-44-4] ZNSMNVMLTJELDZ-UHFFFAOYSA-N	4.8×10^{-1} 5.8×10^{-1} 3.4×10^{-1} 3.5×10^{-1} 3.4×10^{-2} 3.5×10^{-1} 4.6×10^{-1} 4.7×10^{-1} 3.7×10^{-1} 8.6 3.4×10^{-2} 5.2×10^{-2} 2.8×10^{-1} 4.4×10^{-2} 4.6×10^{-3} 2.9×10^{-1} 3.7×10^{-1}	6200 4100 6000 6000	Brockbank (2013) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Lide and Frederikse (1995) Mackay et al. (1993) Goldstein (1982) Goldstein (1982) Harrison et al. (1993) Ryan et al. (1988) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Kühne et al. (2005)	L V V V V V X X C C Q Q Q Q Q Q Q Q ?	1 187 448 299 288, 289 288, 290 288, 291 288, 292 68 319
2-chloro-1,1-dimethoxyethane $\text{C}_4\text{H}_9\text{ClO}_2$ [97-97-2] CRZJPEIBPQWDGJ-UHFFFAOYSA-N	3.2×10^{-1}		Ebert et al. (2023)	?	319
(2-chloroethoxy)-ethene $\text{C}_4\text{H}_7\text{ClO}$ (2-chloroethylvinylether) [110-75-8] DNJRKFKAWSXSE-UHFFFAOYSA-N	1.1×10^{-3} 1.1×10^{-3} 3.9×10^{-2} 3.9×10^{-2} 1.1×10^{-3} 3.1×10^{-2} 4.0×10^{-2} 4.9×10^{-2} 2.3×10^{-3} 2.1×10^{-2}	2500	Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Mackay et al. (1993) Goldstein (1982) Goldstein (1982) Ryan et al. (1988) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V V V V X X C Q Q Q	187 448 299 68

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
bis-(2-chloroethoxy)-methane $\text{C}_5\text{H}_{10}\text{Cl}_2\text{O}_2$ [111-91-1] NLXGURFLBLRZRO-UHFFFAOYSA-N	2.6		Duchowicz et al. (2020)	V	187
	2.5		HSDB (2015)	V	
	2.2×10^1		Mackay et al. (2006c)	V	
	2.2		Mackay et al. (1993)	V	
	8.8		Goldstein (1982)	X	448
	2.6×10^1	5500	Goldstein (1982)	X	299
	3.7×10^1		Ryan et al. (1988)	C	
	2.9×10^{-1}		Duchowicz et al. (2020)	Q	
	3.4		Hilal et al. (2008)	Q	
bis-(2-chloroisopropyl) ether $\text{C}_6\text{H}_{12}\text{Cl}_2\text{O}$ (DCIP) [108-60-1] QCFYJCYNJLBDRT-UHFFFAOYSA-N	4.2×10^{-1}		Kawamoto and Urano (1989)	M	
	1.3×10^{-1}		HSDB (2015)	V	
	9.6×10^{-2}		Mackay et al. (2006c)	V	
	9.6×10^{-2}		Mackay et al. (1993)	V	
	6.5×10^{-2}		Goldstein (1982)	X	448
	6.4×10^{-2}	2800	Goldstein (1982)	X	299
	8.6×10^{-3}		Ryan et al. (1988)	C	
	7.2×10^{-2}		Hilal et al. (2008)	Q	
	2.9×10^{-1}		Modarresi et al. (2007)	Q	68
1,2-bis(2-chloroethoxy)ethane $\text{C}_6\text{H}_{12}\text{Cl}_2\text{O}_2$ [112-26-5] AGYUOJIYYGGHKV-UHFFFAOYSA-N	1.3×10^1		HSDB (2015)	V	
	4.7		Modarresi et al. (2007)	Q	68
2-hydroxychlorobenzene $\text{C}_6\text{H}_5\text{ClO}$ (<i>o</i> -chlorophenol) [95-57-8] ISPYQTSUDJAMAB-UHFFFAOYSA-N	1.5		Sheikheldin et al. (2001)	M	12
	3.6	5700	Tabai et al. (1997)	M	11
	1.5		Mackay et al. (2006c)	V	
	1.2		Fogg and Sangster (2003)	V	731
	1.8×10^1		Lide and Frederikse (1995)	V	
	1.5		Mackay et al. (1995)	V	
	1.5		Shiu et al. (1994)	V	
	8.8×10^{-1}		Abraham et al. (1994a)	R	
	1.2		Goldstein (1982)	X	448
	1.2	4600	Goldstein (1982)	X	299
	1.8×10^1		Howard (1989)	X	420
	2.1		Ryan et al. (1988)	C	
	2.2		Keshavarz et al. (2022)	Q	
	8.2		Duchowicz et al. (2020)	Q	300
	4.2		Hilal et al. (2008)	Q	
	4.6		Modarresi et al. (2007)	Q	68
		6200		Kühne et al. (2005)	Q
9.2×10^{-1}			Yaffe et al. (2003)	Q	249, 250
1.8×10^2			Nirmalakhandan et al. (1997)	Q	
8.8×10^{-1}			Duchowicz et al. (2020)	?	186, 21
8.8×10^{-1}			HSDB (2015)	?	421
	5600		Kühne et al. (2005)	?	
2.6×10^{-1}			Yaws (1999)	?	21

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
		6400	Kühne et al. (2005)	?	
	7.8		Yaws (1999)	?	21, 12
	1.1×10^1		Chiou et al. (1980)	?	80
2,3-dichlorophenol $\text{C}_6\text{H}_4\text{Cl}_2\text{O}$ [576-24-9] UMPSXRYVXUPCOS-UHFFFAOYSA-N	2.9		HSDB (2015)	V	
2,4-dichlorophenol $\text{C}_6\text{H}_4\text{Cl}_2\text{O}$ [120-83-2] HFZWRUODUSTPEG-UHFFFAOYSA-N	3.4		Sheikheldin et al. (2001)	M	12
	6.6	6800	Tabai et al. (1997)	M	11
	2.3		Duchowicz et al. (2020)	V	187
	2.8		HSDB (2015)	V	
	2.3		Mackay et al. (2006c)	V	
	2.3		Mackay et al. (1995)	V	
	2.3		Shiu et al. (1994)	V	
	9.0		Leuenberger et al. (1985)	V	418
	1.5		Goldstein (1982)	X	448
	1.5	4900	Goldstein (1982)	X	299
	1.8		Ryan et al. (1988)	C	
	2.2×10^1		Duchowicz et al. (2020)	Q	
	3.2×10^1		Zhang et al. (2010)	Q	288, 289
	8.0		Zhang et al. (2010)	Q	288, 290
	1.1		Zhang et al. (2010)	Q	288, 291
	4.6		Zhang et al. (2010)	Q	288, 292
	8.2		Hilal et al. (2008)	Q	
	4.4		Modarresi et al. (2007)	Q	68
		6300	Kühne et al. (2005)	Q	
		7400	Kühne et al. (2005)	?	
2,5-dichlorophenol $\text{C}_6\text{H}_4\text{Cl}_2\text{O}$ [583-78-8] RANCECPPZIPNO-UHFFFAOYSA-N	1.6		HSDB (2015)	V	
2,6-dichlorophenol $\text{C}_6\text{H}_4\text{Cl}_2\text{O}$ [87-65-0] HOLHYSJJBXSLMV-UHFFFAOYSA-N	3.7		Duchowicz et al. (2020)	V	187
	3.7		HSDB (2015)	V	
	1.3		Mackay et al. (2006c)	V	
	3.3		Mackay et al. (1995)	V	
	1.2		Duchowicz et al. (2020)	Q	
	3.8		Yaffe et al. (2003)	Q	249, 250
	2.5×10^1		Katritzky et al. (1998)	Q	
3,4-dichlorophenol $\text{C}_6\text{H}_4\text{Cl}_2\text{O}$ [95-77-2] WDNBURPWRNALGP-UHFFFAOYSA-N	2.1×10^1		HSDB (2015)	Q	100

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,5-dichlorophenol $\text{C}_6\text{H}_4\text{Cl}_2\text{O}$ [591-35-5] VPOMSPZBQMDLTM-UHFFFAOYSA-N	4.0×10^1 4.1×10^1 1.8×10^2 4.6×10^1 1.4×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q	187 68
2,3,4-trichlorophenol $\text{C}_6\text{H}_3\text{Cl}_3\text{O}$ [15950-66-0] HSQFVBWFPBKHEB-UHFFFAOYSA-N	2.5 2.5		Mackay et al. (2006c) Mackay et al. (1995)	V V	
2,3,5-trichlorophenol $\text{C}_6\text{H}_3\text{Cl}_3\text{O}$ [933-78-8] WWGQHTJIFOQAOC-UHFFFAOYSA-N	2.5 2.5		Mackay et al. (2006c) Mackay et al. (1995)	V V	
2,4,5-trichlorophenol $\text{C}_6\text{H}_3\text{Cl}_3\text{O}$ [95-95-4] LHJGJYXLEPZJPM-UHFFFAOYSA-N	6.1 6.2 1.9 4.6×10^{-1} 1.9 7.6 4.6×10^1 2.0×10^1 5.7		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Fogg and Sangster (2003) Mackay et al. (1995) Leuenberger et al. (1985) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V V V V V V Q Q Q	187 418 68
2,3,6-trichlorophenol $\text{C}_6\text{H}_3\text{Cl}_3\text{O}$ [933-75-5] XGCHAIIDPMPFRLJ-UHFFFAOYSA-N	4.3×10^1		HSDB (2015)	Q	100
2,4,6-trichlorophenol $\text{C}_6\text{H}_3\text{Cl}_3\text{O}$ [88-06-2] LINPIYWFGCPVIE-UHFFFAOYSA-N	1.9×10^1 2.0 3.8 3.8 1.8 1.6×10^2 1.8 7.6 1.4 1.6×10^1 2.4 2.5 4.3×10^1 2.8×10^{-2} 8.8×10^{-1} 9.7×10^{-1} 2.2 3.3	5000	Chao et al. (2017) Yoshida et al. (1987) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Lide and Frederikse (1995) Mackay et al. (1995) Leuenberger et al. (1985) Goldstein (1982) Howard (1989) Ryan et al. (1988) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	M M V V V V V V X X C Q Q Q Q Q Q Q	732, 12 187 418 299 420 288, 289 288, 290 288, 291 288, 292 68

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
		6400	Kühne et al. (2005)	Q	
	3.8		Yaffe et al. (2003)	Q	249, 250
	1.8×10^1		Katritzky et al. (1998)	Q	
		6500	Kühne et al. (2005)	?	
3,4,5-trichlorophenol $\text{C}_6\text{H}_3\text{Cl}_3\text{O}$ [609-19-8] GBNHEBQXJVDXSW-UHFFFAOYSA-N	4.3×10^1		HSDB (2015)	Q	100
2,3,4,5-tetrachlorophenol $\text{C}_6\text{H}_2\text{Cl}_4\text{O}$ [4901-51-3] RULKYXXCCZKZDZ-UHFFFAOYSA-N	7.2		Mackay et al. (2006c)	V	
	7.2		Mackay et al. (1995)	V	
	2.8×10^1		HSDB (2015)	Q	100
2,3,4,6-tetrachlorophenol $\text{C}_6\text{H}_2\text{Cl}_4\text{O}$ [58-90-2] VGVRPFIEJYOFN-UHFFFAOYSA-N	1.1		Duchowicz et al. (2020)	V	187
	7.6		HSDB (2015)	V	
	2.8		Mackay et al. (2006c)	V	
	2.8		Mackay et al. (1995)	V	
	6.6		Duchowicz et al. (2020)	Q	
	5.8×10^1		Zhang et al. (2010)	Q	288, 289
	4.1×10^{-2}		Zhang et al. (2010)	Q	288, 290
	3.9		Zhang et al. (2010)	Q	288, 291
	3.1		Zhang et al. (2010)	Q	288, 292
2,3,5,6-tetrachlorophenol $\text{C}_6\text{H}_2\text{Cl}_4\text{O}$ [935-95-5] KEWNKZNRZIAIAK-UHFFFAOYSA-N	4.3		Mackay et al. (2006c)	V	
	4.3		Mackay et al. (1995)	V	
	2.8×10^1		HSDB (2015)	Q	100
hydroxypentachlorobenzene $\text{C}_6\text{HCl}_5\text{O}$ (pentachlorophenol) [87-86-5] IZUPBVBPLAPZRR-UHFFFAOYSA-N	4.1×10^2		Hellmann (1987)	M	88
	1.3×10^1		Mackay et al. (2006c)	V	
			Mackay et al. (2006d)	V	560
	1.1×10^{-2}		Fogg and Sangster (2003)	V	
	1.3×10^1		Mackay et al. (1995)	V	
	2.3×10^1		Riederer (1990)	V	
	2.3×10^1		Suntio et al. (1988)	V	12
	2.2×10^{-1}		Barcelo and Hennion (1997)	X	569
	1.1×10^{-1}	1300	Goldstein (1982)	X	299
	4.7		McCarty (1980)	X	370
	3.4		Ryan et al. (1988)	C	
	7.9×10^1		Zhang et al. (2010)	Q	288, 289
	6.0×10^{-2}		Zhang et al. (2010)	Q	288, 290
	6.5		Zhang et al. (2010)	Q	288, 291
	4.0		Zhang et al. (2010)	Q	288, 292
	2.5×10^{-1}		Goodarzi et al. (2010)	Q	570, 571
	1.3×10^1		Modarresi et al. (2007)	Q	68
		7800	Kühne et al. (2005)	Q	
	7.9×10^1		Meylan and Howard (1991)	Q	

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	1.8	7400	Fogg and Sangster (2003) Kühne et al. (2005)	E ?	
3,4,5-trichloro-1,2-benzenediol $\text{C}_6\text{H}_3\text{Cl}_3\text{O}_2$ (3,4,5-trichlorocatechol) [56961-20-7] FUTDYIMYZIMPBJ-UHFFFAOYSA-N	2.4×10^2		Lei et al. (1999)	V	
4,5-dichloro-1,2-benzenediol $\text{C}_6\text{H}_4\text{Cl}_2\text{O}_2$ (4,5-dichlorocatechol) [3428-24-8] ACCHWUWBKYGKNM-UHFFFAOYSA-N	1.3×10^3		Lei et al. (1999)	V	
3,4,5,6-tetrachloro-1,2-benzenediol $\text{C}_6\text{H}_2\text{Cl}_4\text{O}_2$ (tetrachlorocatechol) [1198-55-6] RRBMVWQICIXSEO-UHFFFAOYSA-N	2.9×10^1		Lei et al. (1999)	V	
2,3,5,6-tetrachloro- <i>p</i> - benzoquinone $\text{C}_6\text{Cl}_4\text{O}_2$ (chloranil) [118-75-2] UGNWTBMOAKPKBL-UHFFFAOYSA-N	1.5×10^3		HSDB (2015)	V	
2-chloro-5-methylphenol $\text{C}_7\text{H}_7\text{ClO}$ [615-74-7] SMFHPCZZAAMJJO-UHFFFAOYSA-N	2.1×10^1		HSDB (2015)	Q	100
4-chloro-2-methylphenol $\text{C}_7\text{H}_7\text{ClO}$ [1570-64-5] RHPUJHQBPORFGV-UHFFFAOYSA-N	8.7 9.0 8.5×10^1 1.6×10^1 1.5		Duchowicz et al. (2020) Woodrow et al. (1990) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q	187 68
4-chloro-3-methylphenol $\text{C}_7\text{H}_7\text{ClO}$ [59-50-7] CFKMVGJGLGFKI-UHFFFAOYSA-N	4.0 4.1 3.9×10^1 4.0 8.5×10^1 2.2×10^1 1.3×10^1 2.8×10^1 9.2×10^1 1.2×10^1 8.8		Duchowicz et al. (2020) HSDB (2015) Abraham et al. (1994a) Ryan et al. (1988) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V V R C Q Q Q Q Q Q	187 288, 289 288, 290 288, 291 288, 292 68

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.9×10^1		Yaffe et al. (2003)	Q	249, 250
	1.7×10^1		English and Carroll (2001)	Q	231, 232
	1.3×10^2		Nirmalakhandan et al. (1997)	Q	
1-chloro-2-methoxybenzene C_7H_7ClO (2-chloroanisole) [766-51-8] QGRPVMLBTFGQDQ-UHFFFAOYSA-N	1.0×10^{-1}		Pfeifer et al. (2001)	M	733
	1.1×10^{-1}		Duchowicz et al. (2020)	V	187
	1.8×10^{-1}		Duchowicz et al. (2020)	Q	
1-chloro-3-methoxybenzene C_7H_7ClO (3-chloroanisole) [2845-89-8] YUKILTJWFRTXGB-UHFFFAOYSA-N	4.5×10^{-2}		Pfeifer et al. (2001)	M	733
1-chloro-4-methoxybenzene C_7H_7ClO (4-chloroanisole) [623-12-1] YRGAYAGBVIXNAQ-UHFFFAOYSA-N	5.8×10^{-2}		Pfeifer et al. (2001)	M	733
1,2-dichloro-3-methoxybenzene $C_7H_6Cl_2O$ (2,3-dichloroanisole) [1984-59-4] HFEASCCDHUVYKU-UHFFFAOYSA-N	2.2×10^{-2}		Pfeifer et al. (2001)	M	733
1,5-dichloro-2-methoxybenzene $C_7H_6Cl_2O$ (2,4-dichloroanisole) [553-82-2] CICQUFBZCADHXX-UHFFFAOYSA-N	1.2×10^{-2}		Pfeifer et al. (2001)	M	733
1,4-dichloro-2-methoxybenzene $C_7H_6Cl_2O$ (2,5-dichloroanisole) [1984-58-3] QKMNFFSBZRGHDJ-UHFFFAOYSA-N	2.1×10^{-2}		Pfeifer et al. (2001)	M	733
	5.7×10^{-2}		Zhang et al. (2010)	Q	288, 289
	1.4×10^{-2}		Zhang et al. (2010)	Q	288, 290
	1.4×10^{-1}		Zhang et al. (2010)	Q	288, 291
	4.8×10^{-2}		Zhang et al. (2010)	Q	288, 292
1,3-dichloro-2-methoxybenzene $C_7H_6Cl_2O$ (2,6-dichloroanisole) [1984-65-2] KZLMCDNAVJJPX-UHFFFAOYSA-N	8.8×10^{-3}		Pfeifer et al. (2001)	M	733

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2-dichloro-4-methoxybenzene $\text{C}_7\text{H}_6\text{Cl}_2\text{O}$ (3,4-dichloroanisole) [36404-30-5] VISJRVXHPNMYRH-UHFFFAOYSA-N	9.2×10^{-3}		Pfeifer et al. (2001)	M	733
1,3-dichloro-5-methoxybenzene $\text{C}_7\text{H}_6\text{Cl}_2\text{O}$ (3,5-dichloroanisole) [33719-74-3] SSNXVMVLSOMJLU-UHFFFAOYSA-N	2.3×10^{-3}		Pfeifer et al. (2001)	M	733
1,2,3-trichloro-4-methoxybenzene $\text{C}_7\text{H}_5\text{Cl}_3\text{O}$ (2,3,4-trichloroanisole) [54135-80-7] FRQUNVLMWIYOLV-UHFFFAOYSA-N	1.3×10^{-2}		Pfeifer et al. (2001)	M	733
1,2,5-trichloro-3-methoxybenzene $\text{C}_7\text{H}_5\text{Cl}_3\text{O}$ (2,3,5-trichloroanisole) [54135-81-8] MKERQGLKSFEKAE-UHFFFAOYSA-N	7.6×10^{-3}		Pfeifer et al. (2001)	M	733
1,2,4-trichloro-3-methoxybenzene $\text{C}_7\text{H}_5\text{Cl}_3\text{O}$ (2,3,6-trichloroanisole) [50375-10-5] OTFNCXLUCRUNCH-UHFFFAOYSA-N	1.1×10^{-2} 9.8×10^{-3} 1.8×10^{-2} 2.0×10^{-2} 7.6×10^{-2}	4500	Diaz et al. (2005) Pfeifer et al. (2001) Hilal et al. (2008) Modarresi et al. (2007) Meylan and Howard (1991)	M M Q Q Q	733 68
1,2,4-trichloro-5-methoxybenzene $\text{C}_7\text{H}_5\text{Cl}_3\text{O}$ (2,4,5-trichloroanisole) [6130-75-2] SXKBHOQOGRFJF-UHFFFAOYSA-N	1.1×10^{-2}		Pfeifer et al. (2001)	M	733
1,3,5-trichloro-2-methoxybenzene $\text{C}_7\text{H}_5\text{Cl}_3\text{O}$ (2,4,6-trichloroanisole) [87-40-1] WCVOGSZTONGSQY-UHFFFAOYSA-N	2.3×10^{-2} 4.4×10^{-3} 4.6×10^{-3}	5500 640	Wu et al. (2022a) Diaz et al. (2005) Pfeifer et al. (2001)	M M M	733
1,2,3-trichloro-5-methoxybenzene $\text{C}_7\text{H}_5\text{Cl}_3\text{O}$ (3,4,5-trichloroanisole) [54135-82-9] GUCFBWGWRCILHN-UHFFFAOYSA-N	4.4×10^{-3}		Pfeifer et al. (2001)	M	733

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,4-tetrachloro-5-methoxybenzene $\text{C}_7\text{H}_4\text{Cl}_4\text{O}$ (2,3,4,5-tetrachloroanisole) [938-86-3] FUUHMSUPRUNWRQ-UHFFFAOYSA-N	6.5×10^{-3}		Pfeifer et al. (2001)	M	733
1,2,3,5-tetrachloro-4-methoxybenzene $\text{C}_7\text{H}_4\text{Cl}_4\text{O}$ (2,3,4,6-tetrachloroanisole) [938-22-7] ITXDBGLYYSJNPK-UHFFFAOYSA-N	3.1×10^{-3}		Pfeifer et al. (2001)	M	733
1,2,4,5-tetrachloro-3-methoxybenzene $\text{C}_7\text{H}_4\text{Cl}_4\text{O}$ (2,3,5,6-tetrachloroanisole) [6936-40-9] WMMFIDNWZNCBCT-UHFFFAOYSA-N	3.2×10^{-3}		Pfeifer et al. (2001)	M	733
pentachloromethoxybenzene $\text{C}_7\text{H}_3\text{Cl}_5\text{O}$ (pentachloroanisole) [1825-21-4] BBABSCYTNHOKOG-UHFFFAOYSA-N	2.1×10^{-3} 5.1×10^{-3}		Pfeifer et al. (2001) HSDB (2015)	M Q	733 100
4,5-dichloro-2-methoxyphenol $\text{C}_7\text{H}_6\text{Cl}_2\text{O}_2$ (4,5-dichloroguaiacol) [2460-49-3] HAAFFTHBNFBVKY-UHFFFAOYSA-N	5.2 2.3		Mackay et al. (2006c) Lei et al. (1999)	V V	
3,4,5-trichloro-2-methoxyphenol $\text{C}_7\text{H}_5\text{Cl}_3\text{O}_2$ (3,4,5-trichloroguaiacol) [57057-83-7] RKEHLKXRUVBJN-UHFFFAOYSA-N	1.1×10^1 8.3 9.7×10^1		Duchowicz et al. (2020) Mackay et al. (2006c) Lei et al. (1999) Duchowicz et al. (2020)	V V V Q	187 422
4,5,6-trichloro-2-methoxyphenol $\text{C}_7\text{H}_5\text{Cl}_3\text{O}_2$ (4,5,6-trichloroguaiacol) [2668-24-8] NIAJPNQTKGWEOI-UHFFFAOYSA-N	7.4 7.1		Mackay et al. (2006c) Lei et al. (1999)	V V	

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,4,5-tetrachloro-6-methoxyphenol $\text{C}_7\text{H}_4\text{Cl}_4\text{O}_2$ (tetrachloroguaiacol) [2539-17-5] YZZVKLJKDFFSFL-UHFFFAOYSA-N	1.4		Duchowicz et al. (2020)	V	187
	6.2		Mackay et al. (2006c)	V	
	6.7		Lei et al. (1999)	V	
	8.4		Duchowicz et al. (2020)	Q	
2-chlorobenzoic acid $\text{C}_7\text{H}_5\text{ClO}_2$ [118-91-2] IKCLCGXPQILATA-UHFFFAOYSA-N	1.5×10^2		Duchowicz et al. (2020)	V	187
	1.3×10^2		Yaws (2003)	X	238
	3.5×10^2		Duchowicz et al. (2020)	Q	
	1.4×10^2		Gharagheizi et al. (2010)	Q	247
3-chlorobenzoic acid $\text{C}_7\text{H}_5\text{ClO}_2$ [535-80-8] LULAYUGMBFYEX-UHFFFAOYSA-N	5.7×10^1		Abraham et al. (2019)	Q	
	2.5×10^2		HSDB (2015)	Q	547
4-chlorobenzoic acid $\text{C}_7\text{H}_5\text{ClO}_2$ [74-11-3] XRHGYUZYPHTUJZ-UHFFFAOYSA-N	2.5×10^1		Abraham et al. (2019)	Q	
3,4-dichlorobenzoic acid $\text{C}_7\text{H}_4\text{Cl}_2\text{O}_2$ [51-44-5] VPHHJAOJUJHJKD-UHFFFAOYSA-N	2.1×10^1		Abraham et al. (2019)	Q	
2,3,6-trichlorobenzoic acid $\text{C}_7\text{H}_3\text{Cl}_3\text{O}_2$ [50-31-7] XZIDTOHMBOSOX-UHFFFAOYSA-N	4.7×10^2		Duchowicz et al. (2020)	V	187
	6.5×10^2		Duchowicz et al. (2020)	Q	
1,2,3-trichloro-4,5-dimethoxybenzene $\text{C}_8\text{H}_7\text{Cl}_3\text{O}_2$ (3,4,5-trichloroveratrole) [16766-29-3] VKNITLPENCJQOP-UHFFFAOYSA-N	2.7×10^{-1}		Lei et al. (1999)	V	
1,2,3,4-tetrachloro-5,6-dimethoxybenzene $\text{C}_8\text{H}_6\text{Cl}_4\text{O}_2$ (tetrachloroveratrole) [944-61-6] NCYHCGGUQGDEQW-UHFFFAOYSA-N	9.1×10^{-2}		Lei et al. (1999)	V	
	1.7		Zhang et al. (2010)	Q	288, 289
	2.0		Zhang et al. (2010)	Q	288, 290
	2.6		Zhang et al. (2010)	Q	288, 291
	7.5×10^{-1}		Zhang et al. (2010)	Q	288, 292

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
3-chloro-2,6-dimethoxyphenol $\text{C}_8\text{H}_9\text{ClO}_3$ (3-chlorosyringol) [18113-22-9] WYEMCZZCZXKDNC-UHFFFAOYSA-N	4.2×10^1		Lei et al. (1999)	V	
3,5-dichloro-2,6-dimethoxyphenol $\text{C}_8\text{H}_8\text{Cl}_2\text{O}_3$ (3,5-dichlorosyringol) [78782-46-4] IDKMFABKPPHDBI-UHFFFAOYSA-N	1.4×10^1		Lei et al. (1999)	V	
3,5-dichloro-2-hydroxybenzoic acid $\text{C}_7\text{H}_4\text{Cl}_2\text{O}_3$ [320-72-9] CNJGWCQEGROXEE-UHFFFAOYSA-N	1.3×10^3		Zhang et al. (2010)	Q	288, 289
	4.3×10^2		Zhang et al. (2010)	Q	288, 290
	7.5×10^4		Zhang et al. (2010)	Q	288, 291
	2.2×10^2		Zhang et al. (2010)	Q	288, 292
3,6-dichloro-2-hydroxybenzoic acid $\text{C}_7\text{H}_4\text{Cl}_2\text{O}_3$ [3401-80-7] FKIKPQHMFZFEU-UHFFFAOYSA-N	1.3×10^3		Zhang et al. (2010)	Q	288, 289
	3.4×10^3		Zhang et al. (2010)	Q	288, 290
	1.1×10^1		Zhang et al. (2010)	Q	288, 291
	2.2×10^2		Zhang et al. (2010)	Q	288, 292
5-chloro-2-methoxybenzoic acid $\text{C}_8\text{H}_7\text{ClO}_3$ [3438-16-2] HULDRQRKXRXBI-UHFFFAOYSA-N	2.1×10^3		Zhang et al. (2010)	Q	288, 289
	3.8×10^1		Zhang et al. (2010)	Q	288, 290
	9.5×10^3		Zhang et al. (2010)	Q	288, 291
	6.0×10^3		Zhang et al. (2010)	Q	288, 292
2-chloroacetophenone $\text{C}_8\text{H}_7\text{ClO}$ [532-27-4] IMACFCSSMIZSPP-UHFFFAOYSA-N	2.8		HSDB (2015)	Q	100
2,2,2',4',5'-pentachloroacetophenone $\text{C}_8\text{H}_3\text{Cl}_5\text{O}$ [1203-86-7] WKJXVVFVFAALGBOH-UHFFFAOYSA-N	2.0×10^1		Zhang et al. (2010)	Q	288, 289
	5.7		Zhang et al. (2010)	Q	288, 290
	1.0		Zhang et al. (2010)	Q	288, 291
	6.0		Zhang et al. (2010)	Q	288, 292
tetrachloroterephthaloyl chloride $\text{C}_8\text{Cl}_6\text{O}_2$ [719-32-4] YJIRZJAZKDWEIJ-UHFFFAOYSA-N	1.0×10^1		Zhang et al. (2010)	Q	288, 289
	1.9×10^1		Zhang et al. (2010)	Q	288, 290
	3.4×10^{-2}		Zhang et al. (2010)	Q	288, 291
	1.3×10^3		Zhang et al. (2010)	Q	288, 292
chloroxyleneol $\text{C}_8\text{H}_9\text{ClO}$ [88-04-0] OSDLLIBGSJNGJE-UHFFFAOYSA-N	1.9×10^1		HSDB (2015)	Q	100
	1.9×10^1		Zhang et al. (2010)	Q	288, 289
	1.5×10^1		Zhang et al. (2010)	Q	288, 290
	2.0×10^1		Zhang et al. (2010)	Q	288, 291
	5.1×10^1		Zhang et al. (2010)	Q	288, 292

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
4,5,6,7-tetrachloro-1,3- isobenzofurandione $\text{C}_8\text{Cl}_4\text{O}_3$ [117-08-8] AUHHYELHRWCWEZ-UHFFFAOYSA-N	5.2 1.8×10^4 1.9×10^2 4.3×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
3,4,5-trichloro-2,6- dimethoxyphenol $\text{C}_8\text{H}_7\text{Cl}_3\text{O}_3$ (trichlorosyringol) [2539-26-6] ZZCSBXFJFLSDRR-UHFFFAOYSA-N	4.5×10^1		Lei et al. (1999)	V	
4,5,6,7-tetrachlorophthalide $\text{C}_8\text{H}_2\text{Cl}_4\text{O}_2$ [27355-22-2] NMWKWBPNKPGATC-UHFFFAOYSA-N	1.8×10^1 3.1×10^3 8.6		Kawamoto and Urano (1989) Duchowicz et al. (2020) Duchowicz et al. (2020)	M V Q	187
dicamba $\text{C}_8\text{H}_6\text{Cl}_2\text{O}_3$ (banvel) [1918-00-9] IWEDIXLBFLAXBO-UHFFFAOYSA-N	4.5×10^3 2.3×10^4 4.5×10^3 8.3×10^3 8.2×10^1 2.2×10^4 5.9×10^3 1.2 1.0×10^4		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Armbrust (2000) Duchowicz et al. (2020) Goodarzi et al. (2010) Maniere et al. (2011)	V V V V X C Q Q ?	187 12 569 570, 571 166
(2,4-dichlorophenoxy)-ethanoic acid $\text{C}_8\text{H}_6\text{Cl}_2\text{O}_3$ ((2,4-dichlorophenoxy)-acetic acid; 2,4-D) [94-75-7] OVSKIKFHRZPJSS-UHFFFAOYSA-N	1.4×10^{-1} 1.2 2.8×10^2 5.0×10^4 2.3×10^4 4.0×10^3 2.9×10^2 1.8 1.8 7.2×10^4 9.7×10^2 5.5×10^6 8.7×10^2 2.5×10^5		Rice et al. (1997b) Rice et al. (1997b) Duchowicz et al. (2020) Mackay et al. (2006c) Mackay et al. (2006d) Mackay et al. (2006d) Mackay et al. (1995) Riederer (1990) Suntio et al. (1988) Howard (1991) Howard (1991) Armbrust (2000) Duchowicz et al. (2020) Maniere et al. (2011)	M M V V V V V V V X X C Q ?	734, 12 734, 12 187 12 414 414 12, 166

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4,5-trichlorophenoxyethanoic acid $\text{C}_8\text{H}_5\text{Cl}_3\text{O}_3$ (2,4,5-T) [93-76-5] SMYMUJHWAQXWPDB-UHFFFAOYSA-N	1.7×10^2		Mackay et al. (2006d)	V	
	1.7×10^2		Riederer (1990)	V	
	1.7×10^2		Suntio et al. (1988)	V	12
	8.4×10^5		MacBean (2012a)	?	
1,4-dichloro-2,5-dimethoxybenzene $\text{C}_8\text{H}_8\text{Cl}_2\text{O}_2$ [2675-77-6] PFIADAMVCJPXSF-UHFFFAOYSA-N	9.7×10^{-2}		Duchowicz et al. (2020)	V	187
	9.9×10^{-2}		HSDB (2015)	V	
			Mackay et al. (2006d)	V	560
	9.4×10^{-1}		Duchowicz et al. (2020)	Q	
2,3,6-trichlorophenylacetic acid $\text{C}_8\text{H}_5\text{Cl}_3\text{O}_2$ [85-34-7] QZXCCPZJCKEPSA-UHFFFAOYSA-N	8.3×10^{-1}		Mackay et al. (2006d)	V	
	5.5×10^2		HSDB (2015)	Q	100
4-methoxy-benzoyl chloride $\text{C}_8\text{H}_7\text{ClO}_2$ (<i>p</i> -anisoyl chloride) [100-07-2] MXMOTZIXVICDSD-UHFFFAOYSA-N	1.3		HSDB (2015)	Q	100
(4-chlorophenoxy)acetic acid $\text{C}_8\text{H}_7\text{ClO}_3$ [122-88-3] SODPIMGUZLOIPE-UHFFFAOYSA-N	1.0×10^5		Ebert et al. (2023)	?	317
isobenzan $\text{C}_9\text{H}_4\text{Cl}_8\text{O}$ [297-78-9] LRWHHSXTGZSMSN-UHFFFAOYSA-N	1.7×10^2		HSDB (2015)	Q	100
2-chloro-4-hydroxy-3,5-dimethoxybenzaldehyde $\text{C}_9\text{H}_9\text{ClO}_4$ (2-chlorosyringaldehyde) [76341-69-0] GRIHRCLOUQZXPD-UHFFFAOYSA-N	9.1×10^1		Lei et al. (1999)	V	
2,6-dichloro-4-hydroxy-3,5-dimethoxybenzaldehyde $\text{C}_9\text{H}_8\text{Cl}_2\text{O}_4$ (2,6-dichlorosyringaldehyde) [76330-06-8] CTFRWEPMHUGVMM-UHFFFAOYSA-N	2.7×10^2		Lei et al. (1999)	V	

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
methyl 2,4-dichlorophenoxyethanoate $\text{C}_9\text{H}_8\text{Cl}_2\text{O}_3$ [1928-38-7] HWIGZMADSFQMOI-UHFFFAOYSA-N	3.6 1.0×10^1 1.8 1.3		Duchowicz et al. (2020) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q	187 68
(2-methyl-4-chlorophenoxy)acetic acid $\text{C}_9\text{H}_9\text{ClO}_3$ (MCPA) [94-74-6] WHKUVVPPKQRRBV-UHFFFAOYSA-N	$>9.9 \times 10^1$ 7.4×10^3 4.0×10^4 9.9×10^3 5.7×10^2 1.8×10^4		Mabury and Crosby (1996) Duchowicz et al. (2020) Mackay et al. (2006d) Woodrow et al. (1990) Duchowicz et al. (2020) Maniere et al. (2011)	M V V V Q ?	 187 166
α -(2,4-dichlorophenoxy)propionic acid $\text{C}_9\text{H}_8\text{Cl}_2\text{O}_3$ (dichloroprop) [120-36-5] MZHCEGPTKEIGP-UHFFFAOYSA-N	3.7×10^3		Mackay et al. (2006d)	V	
(<i>R</i>)-2-(2,4- dichlorophenoxy)propanoic acid $\text{C}_9\text{H}_8\text{Cl}_2\text{O}_3$ (dichloroprop-p) [15165-67-0] MZHCEGPTKEIGP-RXMQYKEDSA-N	4.0×10^4 1.8×10^4		Mackay et al. (2006d) Maniere et al. (2011)	V ?	 242, 166
2-(2,4,5- trichlorophenoxy)propanoic acid $\text{C}_9\text{H}_7\text{Cl}_3\text{O}_3$ [93-72-1] ZLSWBLPERHFHIS-UHFFFAOYSA-N	3.9×10^4		Mackay et al. (2006d)	V	
cloxyfonac $\text{C}_9\text{H}_9\text{O}_4\text{Cl}$ [6386-63-6] ZJRUTGDCLVIVRD-UHFFFAOYSA-N	1.0×10^5 1.9×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
tridiphane $\text{C}_{10}\text{H}_7\text{Cl}_5\text{O}$ [58138-08-2] IBZHOAONZVJLOB-UHFFFAOYSA-N	1.9×10^{-1}		MacBean (2012a)	?	
plifenat $\text{C}_{10}\text{H}_7\text{O}_2\text{Cl}_5$ [21757-82-4] FSGNOVKGEXRRHD-UHFFFAOYSA-N	1.1×10^4		MacBean (2012a)	?	

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
chlorfenprop-methyl $\text{C}_{10}\text{H}_{10}\text{Cl}_2\text{O}_2$ [14437-17-3] YJKIALIXRCSISK-UHFFFAOYSA-N	4.4		Ebert et al. (2023)	?	367
ethyl 2,4-dichlorophenoxyethanoate $\text{C}_{10}\text{H}_{10}\text{Cl}_2\text{O}_3$ [533-23-3] JSLBZIVMVVHMDJ-UHFFFAOYSA-N	3.0		Duchowicz et al. (2020)	V	187
	4.3		Duchowicz et al. (2020)	Q	
	1.2		Hilal et al. (2008)	Q	
	1.1		Modarresi et al. (2007)	Q	68
mecoprop $\text{C}_{10}\text{H}_{11}\text{ClO}_3$ [93-65-2] WNTGYJSOUMFZEP-UHFFFAOYSA-N	1.1×10^4		Duchowicz et al. (2020)	V	187
			Mackay et al. (2006d)	V	560
	9.0×10^1		Barcelo and Hennion (1997)	X	569
	9.0×10^3		Armbrust (2000)	C	
	2.6×10^2		Duchowicz et al. (2020)	Q	
	1.4×10^2		Goodarzi et al. (2010)	Q	570
(<i>R</i>)-2-(4-chloro-2-methylphenoxy)propanoic acid $\text{C}_{10}\text{H}_{11}\text{ClO}_3$ (mecoprop- <i>p</i>) [16484-77-8] WNTGYJSOUMFZEP-SSDOTTSWSA-N	1.0×10^4		Mackay et al. (2006d)	V	
	1.8×10^4		Maniere et al. (2011)	?	12, 166
dacthal $\text{C}_{10}\text{H}_6\text{Cl}_4\text{O}_4$ (DCPA) [1861-32-1] NPOJQCVMMSKXDN-UHFFFAOYSA-N	4.4		Muir et al. (2004)	L	369
	4.5		Duchowicz et al. (2020)	V	187
	4.5		HSDB (2015)	V	
	1.4×10^2		Duchowicz et al. (2020)	Q	
4-(2,4-dichlorophenoxy)-butanoic acid $\text{C}_{10}\text{H}_{10}\text{Cl}_2\text{O}_3$ (2,4-DB) [94-82-6] YIVXMZJTEQBPO-UHFFFAOYSA-N	4.3×10^3		HSDB (2015)	Q	100
	2.2×10^5		Maniere et al. (2011)	?	242, 166
dichlone $\text{C}_{10}\text{H}_4\text{Cl}_2\text{O}_2$ [117-80-6] SVPKNMBrVBMTLb-UHFFFAOYSA-N	9.7×10^3		HSDB (2015)	Q	100

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-[(2,3,6-trichlorophenyl)methoxy]propan-2-ol $\text{C}_{10}\text{H}_{11}\text{Cl}_3\text{O}_2$ (tritac) [1861-44-5] LJWIIRATRWPBHA-UHFFFAOYSA-N	2.0×10^1 1.7×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
(2,4-dichlorophenoxy)-acetic acid 1-methylethyl ester $\text{C}_{11}\text{H}_{12}\text{Cl}_2\text{O}_3$ [94-11-1] WHOKDONDRZNCBC-UHFFFAOYSA-N	4.6 4.5 2.0		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
4-(4-chloro-2-methylphenoxy)butanoic acid $\text{C}_{11}\text{H}_{13}\text{ClO}_3$ (MCPB) [94-81-5] LLWADFLAOKUBDR-UHFFFAOYSA-N	3.6×10^3 3.1×10^3 1.7×10^3 3.3×10^4		Duchowicz et al. (2020) Mackay et al. (2006d) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	187 242, 166
triclosan $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}_2$ [3380-34-5] XEQQLINVKFYRCS-UHFFFAOYSA-N	4.7×10^2 2.0×10^3 5.7×10^1 1.4×10^3 8.2×10^2		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
monobutyl tetrachlorophthalate $\text{C}_{12}\text{H}_{10}\text{Cl}_4\text{O}_4$ [24261-19-6] WKYMTJULVAGWJM-UHFFFAOYSA-N	2.0×10^4 7.5×10^2 5.1×10^4 5.1×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
(2,4-dichlorophenoxy)-acetic acid butyl ester $\text{C}_{12}\text{H}_{14}\text{Cl}_2\text{O}_3$ [94-80-4] UQMRAFJOBWOFNS-UHFFFAOYSA-N	2.0×10^1 2.0×10^1 5.7		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
sucralose $\text{C}_{12}\text{H}_{19}\text{Cl}_3\text{O}_8$ [56038-13-2] BAQAVOSOZGMPRM-QBMZZYIRSA-N	2.5×10^{13}		HSDB (2015)	Q	100
endrin aldehyde $\text{C}_{12}\text{H}_8\text{Cl}_6\text{O}$ [7421-93-4] HCTWZIFNBBCVGM-UHFFFAOYSA-N	2.4 2.3 4.8		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
clorophene $\text{C}_{13}\text{H}_{11}\text{ClO}$ (4-chloro-2-benzylphenol) [120-32-1] NCKMMSIFQUPKCK-UHFFFAOYSA-N	3.7×10^3 3.7×10^3 6.5×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
(4-chlorophenyl)phenylmethanone $\text{C}_{13}\text{H}_9\text{ClO}$ (4-chlorobenzophenone) [134-85-0] UGVRJVHOJNYEHR-UHFFFAOYSA-N	7.0		HSDB (2015)	Q	100
1-(4-chlorophenyl)-4,4-dimethyl- 3-pentanone $\text{C}_{13}\text{H}_{17}\text{ClO}$ [66346-01-8] ILQGIJDYSLHIOX-UHFFFAOYSA-N	1.1 7.2×10^{-1} 4.2 3.9×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
hexachlorophene $\text{C}_{13}\text{H}_6\text{Cl}_6\text{O}_2$ [70-30-4] ACGUYXCXAPNIKK-UHFFFAOYSA-N	1.8×10^7 1.1×10^7 2.5×10^5 1.2×10^4 6.5×10^5		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
2,4'-dichlorobenzophenone $\text{C}_{13}\text{H}_8\text{Cl}_2\text{O}$ [85-29-0] YXMYPHLWXBXNFF-UHFFFAOYSA-N	9.2 6.9 4.3×10^1 6.1×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1-(4-chlorophenyl)-4,4- dimethylpent-1-en-3-one $\text{C}_{13}\text{H}_{15}\text{ClO}$ [1577-03-3] LXJZYHPGRKBVGF-UHFFFAOYSA-N	4.8 2.2 8.2 1.5		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
dichlorophen $\text{C}_{13}\text{H}_{10}\text{Cl}_2\text{O}_2$ [97-23-4] MDNWOSOZYLHTCG-UHFFFAOYSA-N	8.2×10^6 8.5×10^6		HSDB (2015) Mackay et al. (2006d)	V V	
MCPB ethyl ester $\text{C}_{13}\text{H}_{17}\text{ClO}_3$ [10443-70-6] XNKARWLGLZGMGX-UHFFFAOYSA-N	2.0×10^2 2.9		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
2-chloro-9,10-anthracenedione $\text{C}_{14}\text{H}_7\text{ClO}_2$ [131-09-9] FPKCTSIVDAWGFA-UHFFFAOYSA-N	4.2×10^3 6.7×10^2 1.4×10^2 3.3×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dicofol $\text{C}_{14}\text{H}_9\text{Cl}_5\text{O}$ [115-32-2] UOAMTSKGCBMZTC-UHFFFAOYSA-N	4.1×10^1 4.1×10^1 9.6×10^2 1.8×10^4		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Zhang et al. (2010)	V V Q Q	187 288, 289
	3.1×10^2 9.2×10^1 3.2×10^3		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	288, 290 288, 291 288, 292
bis(2,4-dichlorobenzoyl)peroxide $\text{C}_{14}\text{H}_6\text{Cl}_4\text{O}_4$ [133-14-2] WRXCBRHBHGNQA-UHFFFAOYSA-N	9.2 1.4×10^2 1.6×10^3 3.5×10^3		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
dipropyl tetrachlorophthalate $\text{C}_{14}\text{H}_{14}\text{Cl}_4\text{O}_4$ [6928-67-2] QJRSPJSHRYBJL-UHFFFAOYSA-N	4.7×10^1 3.0×10^1 1.0×10^1 2.8×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2-(4-chlorobenzoyl)benzoic acid $\text{C}_{14}\text{H}_9\text{ClO}_3$ [85-56-3] YWECCEXWKFHQJ-UHFFFAOYSA-N	3.4×10^5 3.6×10^4 7.9×10^7 2.1×10^6		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
(2,4,5-trichlorophenoxy)acetic acid butoxyethanol ester $\text{C}_{14}\text{H}_{17}\text{Cl}_3\text{O}_4$ [2545-59-7] GLDWASBMWYLQGG-UHFFFAOYSA-N	1.2×10^2		HSDB (2015)	Q	100
(2,4-dichlorophenoxy)-acetic acid, 2-butoxyethyl ester $\text{C}_{14}\text{H}_{18}\text{Cl}_2\text{O}_4$ [1929-73-3] ZMWGIGHRZQTQRE-UHFFFAOYSA-N	6.2×10^1 6.2×10^1 6.0×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
1-chloro-9,10-anthracenedione $\text{C}_{14}\text{H}_7\text{ClO}_2$ (1-chloroanthraquinone) [82-44-0] BOCJQSFGAZAPQ-UHFFFAOYSA-N	4.3×10^2 4.2×10^3		Abraham et al. (2019) HSDB (2015)	Q Q	 100
chlorflurenol methyl $\text{C}_{15}\text{H}_{11}\text{ClO}_3$ [2536-31-4] LINPVWIEWJTJEEJ-UHFFFAOYSA-N	1.3×10^3		Ebert et al. (2023)	?	367

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,4'-(1-methylethylidene)bis(2,6-dichlorophenol) $\text{C}_{15}\text{H}_{12}\text{Cl}_4\text{O}_2$ (2,2',6,6'-tetrachlorobisphenol A) [79-95-8] KYPYTERUKNKOLP-UHFFFAOYSA-N	3.5×10^6		HSDB (2015)	Q	449
diclofop $\text{C}_{15}\text{H}_{12}\text{Cl}_2\text{O}_4$ [40843-25-2] OOLBCHYXZDXLDS-UHFFFAOYSA-N	9.2×10^5		Ebert et al. (2023)	?	317
methoxychlor $\text{C}_{16}\text{H}_{15}\text{Cl}_3\text{O}_2$ [72-43-5] IAKOZHOLGAGEJT-UHFFFAOYSA-N	4.9×10^1 1.0 4.0 5.5 2.8 6.4 4.9×10^1		Altschuh et al. (1999) Mackay et al. (2006d) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	M V Q Q Q Q ?	68 186, 21
diclofop-methyl $\text{C}_{16}\text{H}_{14}\text{Cl}_2\text{O}_4$ [51338-27-3] BACHBFVBHLGWSL-UHFFFAOYSA-N	5.0 5.0 1.3×10^2 2.6×10^2 9.5×10^1		Duchowicz et al. (2020) Mackay et al. (2006d) Duchowicz et al. (2020) HSDB (2015) Maniere et al. (2011)	V V Q Q ?	187 100 12, 166
chlorobenzilate $\text{C}_{16}\text{H}_{14}\text{Cl}_2\text{O}_3$ [510-15-6] RAPBNVSDCTNRC-UHFFFAOYSA-N	1.4×10^2 2.6×10^2		HSDB (2015) MacBean (2012a)	V ?	
(2,4-dichlorophenoxy)-acetic acid 2-ethylhexyl ester $\text{C}_{16}\text{H}_{22}\text{Cl}_2\text{O}_3$ [1928-43-4] QZSFJRIWRPJUOH-UHFFFAOYSA-N	5.5×10^{-1} 5.5×10^{-1}		MacBean (2012b) Maniere et al. (2011)	X ?	352 242, 166
(2,4-dichlorophenoxy)-acetic acid, isooctyl ester $\text{C}_{16}\text{H}_{22}\text{Cl}_2\text{O}_3$ [25168-26-7] BBPLSOGERZQYQC-UHFFFAOYSA-N	1.0×10^{-1} 3.3×10^{-1} 1.7×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015)	V Q Q	187 100
mecoprop-2-butoxyethyl ester $\text{C}_{16}\text{H}_{23}\text{ClO}_4$ [23359-62-8] GWFGUAFFJVHZKY-UHFFFAOYSA-N	5.0		Ebert et al. (2023)	?	319

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
chloropropylate $\text{C}_{17}\text{H}_{16}\text{Cl}_2\text{O}_3$ [5836-10-2] AXGUBXVWZBFQGA-UHFFFAOYSA-N	1.2×10^3 1.0×10^2		HSDB (2015) MacBean (2012a)	V ?	
MCPA-2-ethylhexyl ester $\text{C}_{17}\text{H}_{25}\text{ClO}_3$ [29450-45-1] IDGRPSMONFWWEK-UHFFFAOYSA-N	2.3×10^{-1}		Ebert et al. (2023)	?	319
1-(2-(2-chloroethoxy)ethoxy)-4-(1,1,3,3-tetramethylbutyl)benzene $\text{C}_{18}\text{H}_{29}\text{ClO}_2$ [65925-28-2] FITQCDWGUKECBJ-UHFFFAOYSA-N	5.3×10^{-1} 1.6 3.8×10^{-1} 8.4×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
fenofibrate $\text{C}_{20}\text{H}_{21}\text{ClO}_4$ [49562-28-9] YMTINGFKWXXKFG-UHFFFAOYSA-N	2.2×10^3		HSDB (2015)	Q	100
indanofan $\text{C}_{20}\text{H}_{17}\text{O}_3\text{Cl}$ [133220-30-1] PMAAYICDXGUAP-UHFFFAOYSA-N	1.5×10^4 5.4×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
spirodiclofen $\text{C}_{21}\text{H}_{24}\text{Cl}_2\text{O}_4$ [148477-71-8] DTDSAWVUFPGDMX-UHFFFAOYSA-N	1.7×10^2 $> 5.0 \times 10^2$		HSDB (2015) Maniere et al. (2011)	V ?	12, 166
permethrin $\text{C}_{21}\text{H}_{20}\text{Cl}_2\text{O}_3$ [52645-53-1] RLLPVAHGXCWKJ-UHFFFAOYSA-N	5.3 4.1 9.0 1.2×10^1		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	187
chlorophacinone $\text{C}_{23}\text{H}_{15}\text{ClO}_3$ [3691-35-8] UDHXJZHVNHGCEC-UHFFFAOYSA-N	2.7×10^6 4.1×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
chlormadinone acetate $\text{C}_{23}\text{H}_{29}\text{ClO}_4$ [302-22-7] QMBJSIBWORFWQT-UHFFFAOYSA-N	1.8×10^4		HSDB (2015)	Q	100
3,4,5,6-tetrachlorophthalic acid bis(2-ethylhexyl) ester $\text{C}_{24}\text{H}_{34}\text{Cl}_4\text{O}_4$ [34832-88-7] BELGUQVGMFEAQ-UHFFFAOYSA-N	2.8 2.3×10^1 1.0×10^4 3.5		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
endosulfan alcohol $\text{C}_9\text{H}_8\text{Cl}_6\text{O}_2$ [2157-19-9] GTSJHTSVFKEASK-UHFFFAOYSA-N	7.7×10^3 3.0×10^6 1.3×10^5 1.8×10^5		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
chlordenic anhydride $\text{C}_9\text{H}_2\text{Cl}_6\text{O}_3$ [115-27-5] FLBJFXNAEMSXGL-UHFFFAOYSA-N	1.1×10^2 3.1×10^4 1.5×10^4 3.9×10^7		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1,4,5,6,7,7-hexachloro- bicyclo[2.2.1]hept-5-ene-2,3- dicarboxylic acid $\text{C}_9\text{H}_4\text{Cl}_6\text{O}_4$ [115-28-6] DJKGDNKYTKCJKD-UHFFFAOYSA-N	3.3×10^8 3.3×10^8 3.1×10^9 3.9×10^9 7.3×10^7		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
heptachlorepoxyde $\text{C}_{10}\text{H}_5\text{Cl}_7\text{O}$ [1024-57-3] ZXFXBSWRVIQKOD-UHFFFAOYSA-N	4.8×10^{-1} 5.9×10^{-1} 9.6×10^{-1} 5.0×10^{-1} 4.7×10^{-1} 3.1×10^{-1} 5.4×10^{-1} 1.3×10^1 3.1×10^{-1} 6.6×10^{-1} 7.7×10^{-1} 7.3 5.4 4.7×10^{-1}	5200	Shen and Wania (2005) Shen and Wania (2005) Chao et al. (2017) Cetin et al. (2006) Altschuh et al. (1999) Warner et al. (1980) Hilal et al. (2008) Ryan et al. (1988) Shen (1982) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	L L M M M M C C C Q Q Q Q ?	368 369 68 186, 21
dieldrin $\text{C}_{12}\text{H}_8\text{OCl}_6$ [60-57-1] DFBKLUHFCTMDC-NLUYNBKHSA-N	1.0 9.1×10^{-1} 9.1×10^{-1} 6.5×10^{-1} 9.2×10^{-1} 9.8×10^{-1} 3.4×10^{-1} 1.7×10^{-1} 8.9×10^{-1} 8.9×10^{-1} 4.9×10^1 8.8×10^{-3} 1.7×10^{-1} 5.0×10^1	5800	Shen and Wania (2005) Shen and Wania (2005) Mackay and Shiu (1981) Chao et al. (2017) Cetin et al. (2006) Altschuh et al. (1999) Slater and Spedding (1981) Warner et al. (1980) Mackay et al. (2006d) Suntio et al. (1988) Mackay and Leinonen (1975) Barcelo and Hennion (1997) Hilal et al. (2008) Suntio et al. (1988)	L L L M M M M M V V V X C C	368 369 12 569 12 12

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	2.2×10^1		Suntio et al. (1988)	C	683
	9.8×10^{-1}		Suntio et al. (1988)	C	683
	1.7×10^{-1}		Suntio et al. (1988)	C	
	4.7×10^{-2}		Suntio et al. (1988)	C	
	1.3		Ryan et al. (1988)	C	
	1.7×10^{-1}		Shen (1982)	C	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	7.2×10^{-1}		Duchowicz et al. (2020)	Q	
	7.4×10^{-4}		Goodarzi et al. (2010)	Q	570, 573
	1.1		Hilal et al. (2008)	Q	
	2.7		Modarresi et al. (2007)	Q	68
	9.9×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	1.2		MacBean (2012a)	?	
	5.7×10^1		Brimblecombe (1986)	?	81
endrin	1.6		Shen and Wania (2005)	L	368
$\text{C}_{12}\text{H}_8\text{Cl}_6\text{O}$	9.1×10^{-1}		Shen and Wania (2005)	L	369
[72-20-8]	1.5		Chao et al. (2017)	M	
DFBKLUHFCTMDC-GKRDHZSOSA-N	1.8	4600	Cetin et al. (2006)	M	
	1.6		Altschuh et al. (1999)	M	
	3.0×10^1		Mackay et al. (2006d)	V	
	3.0×10^1		Suntio et al. (1988)	V	12
	5.6×10^3		Suntio et al. (1988)	C	
	2.4×10^1		Ryan et al. (1988)	C	
	1.2		Keshavarz et al. (2022)	Q	
	7.2×10^{-1}		Duchowicz et al. (2020)	Q	185
	1.1		Hilal et al. (2008)	Q	
	2.7		Modarresi et al. (2007)	Q	68
	1.6		Duchowicz et al. (2020)	?	186, 21
1,4,5,6,7,7-hexachlorobicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, dibutyl ester	5.8×10^2		Zhang et al. (2010)	Q	288, 289
$\text{C}_{17}\text{H}_{20}\text{Cl}_6\text{O}_4$	1.4×10^2		Zhang et al. (2010)	Q	288, 290
[1770-80-5]	4.6×10^3		Zhang et al. (2010)	Q	288, 291
UJAHPBDUQZFDLA-UHFFFAOYSA-N	8.0×10^2		Zhang et al. (2010)	Q	288, 292
di-2-ethylhexyl chlorendate	6.0×10^1		Zhang et al. (2010)	Q	288, 289
$\text{C}_{25}\text{H}_{36}\text{Cl}_6\text{O}_4$	2.1×10^2		Zhang et al. (2010)	Q	288, 290
[4827-55-8]	5.2×10^3		Zhang et al. (2010)	Q	288, 291
ONIHOFWLALAQH-UHFFFAOYSA-N	1.6×10^2		Zhang et al. (2010)	Q	288, 292

A6.5 Polychlorinated diphenyl ethers (PCDEs)

Table A6.5: Polychlorinated diphenyl ethers (PCDEs)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-chlorodiphenyl ether $\text{C}_{12}\text{H}_9\text{ClO}$ (PCDE-1) [2689-07-8] IPBRZLMGGXHHMS-UHFFFAOYSA-N	3.1×10^{-2}		Kurz and Ballschmiter (1999)	V	
3-chlorodiphenyl ether $\text{C}_{12}\text{H}_9\text{ClO}$ (PCDE-2) [6452-49-9] BMURONZFJJPAOK-UHFFFAOYSA-N	1.2×10^{-1} 2.7×10^{-2} 3.0×10^{-1}		Kurz and Ballschmiter (1999) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q	68
4-chlorodiphenyl ether $\text{C}_{12}\text{H}_9\text{ClO}$ (PCDE-3) [7005-72-3] PGPNJCAMHOJTEF-UHFFFAOYSA-N	1.1×10^{-1} 4.5×10^{-2} 9.0×10^{-2} 4.0×10^{-2} 3.1×10^{-2}		Kurz and Ballschmiter (1999) Mackay et al. (1993) Howard and Meylan (1997) Ryan et al. (1988) Hilal et al. (2008)	V V X C Q	448
2,3-dichlorodiphenyl ether $\text{C}_{12}\text{H}_8\text{Cl}_2\text{O}$ (PCDE-5) [68486-28-2] VSKSUBSGORDMQX-UHFFFAOYSA-N	2.4×10^{-1}		Kurz and Ballschmiter (1999)	V	
2,4-dichlorodiphenyl ether $\text{C}_{12}\text{H}_8\text{Cl}_2\text{O}$ (PCDE-7) [51892-26-3] KXIPYLZZJZMMPD-UHFFFAOYSA-N	1.9×10^{-1}		Kurz and Ballschmiter (1999)	V	
2,4'-dichlorodiphenyl ether $\text{C}_{12}\text{H}_8\text{Cl}_2\text{O}$ (PCDE-8) [6903-65-7] MWKULKMSBBSGTP-UHFFFAOYSA-N	3.2×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,5-dichlorodiphenyl ether $\text{C}_{12}\text{H}_8\text{Cl}_2\text{O}$ (PCDE-9) [24910-69-8] VITXVDNQHXYSK-UHFFFAOYSA-N	7.9×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,6-dichlorodiphenyl ether $\text{C}_{12}\text{H}_8\text{Cl}_2\text{O}$ (PCDE-10) [28419-69-4] IRLZOQDGEAIPX-UHFFFAOYSA-N	5.0×10^{-2}		Kurz and Ballschmiter (1999)	V	

Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,4-dichlorodiphenyl ether $\text{C}_{12}\text{H}_8\text{Cl}_2\text{O}$ (PCDE-12) [55538-69-7] QFQLZVAAQJUFU-UHFFFAOYSA-N	1.1×10^{-1}		Kurz and Ballschmiter (1999)	V	
3,4'-dichlorodiphenyl ether $\text{C}_{12}\text{H}_8\text{Cl}_2\text{O}$ (PCDE-13) [6842-62-2] HPRGYUWRGCTBAV-UHFFFAOYSA-N	1.3×10^{-1}		Kurz and Ballschmiter (1999)	V	
3,5-dichlorodiphenyl ether $\text{C}_{12}\text{H}_8\text{Cl}_2\text{O}$ (PCDE-14) [24910-68-7] LEKOWSSKXYFERR-UHFFFAOYSA-N	6.5×10^{-2}		Kurz and Ballschmiter (1999)	V	
4,4'-dichlorodiphenyl ether $\text{C}_{12}\text{H}_8\text{Cl}_2\text{O}$ (PCDE-15) [2444-89-5] URUJZHLCIILC-UHFFFAOYSA-N	2.1×10^{-1}		Kurz and Ballschmiter (1999)	V	
2,2',4-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-17) [68914-97-6] YXMNUPKWUMIZAV-UHFFFAOYSA-N	4.5×10^{-1}		Kurz and Ballschmiter (1999)	V	
2,3,4-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-21) [85918-32-7] ANKBTLMYMVMWBS-UHFFFAOYSA-N	2.8×10^{-1}		Kurz and Ballschmiter (1999)	V	
2,3,4'-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-22) [157683-71-1] KOTNFWJIMRGVBR-UHFFFAOYSA-N	3.2×10^{-1}		Kurz and Ballschmiter (1999)	V	
2,3,5-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-23) [162853-24-9] MDSPKCGOVVFJD-UHFFFAOYSA-N	2.2×10^{-1}		Kurz and Ballschmiter (1999)	V	

Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,6-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-24) [162853-25-0] RQSRPDGSUDRYLH-UHFFFAOYSA-N	3.0×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3',4-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-25) [155999-93-2] BJFOCMRBCBZFT-UHFFFAOYSA-N	1.5×10^{-1}		Kurz and Ballschmiter (1999)	V	
2,4,4'-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-28) [59039-21-3] PIORTDHJOLELKR-UHFFFAOYSA-N	3.0×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,4,5-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-29) [52322-80-2] UWKZWXCTDPYXHU-UHFFFAOYSA-N	8.9×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,4,6-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-30) [63646-52-6] WXLQUFLKMICSSY-UHFFFAOYSA-N	1.4×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,4',5-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-31) [65075-00-5] FZBSTAVCYOMFMD-UHFFFAOYSA-N	1.6×10^{-1}		Kurz and Ballschmiter (1999)	V	
2,4',6-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-32) [157683-72-2] ZMRFCSWFKICQE-UHFFFAOYSA-N	4.2×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3',4'-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-33) [61328-44-7] VBNJGYOQZAENPO-UHFFFAOYSA-N	3.4×10^{-1}		Kurz and Ballschmiter (1999)	V	

Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3',4-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-35) [66794-60-3] BUKLLCIUMZELOH-UHFFFAOYSA-N	2.2×10^{-1}		Kurz and Ballschmiter (1999)	V	
3,4,4'-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-37) [63646-51-5] FTZDEZOARSJHGU-UHFFFAOYSA-N	1.6×10^{-1}		Kurz and Ballschmiter (1999)	V	
3,4,5-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-38) [63646-53-7] ZQCCHNBMSHOJAT-UHFFFAOYSA-N	9.1×10^{-3}		Kurz and Ballschmiter (1999)	V	
3,4',5-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-39) [24910-73-4] CCEZFGXWVJQEF-UHFFFAOYSA-N	1.6×10^{-1}		Kurz and Ballschmiter (1999)	V	
2,2',3,4-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-41) [220002-37-9] VTTDVGUAWMLHPR-UHFFFAOYSA-N	5.5×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,4'-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-42) [147102-63-4] UYVBJPIPRAJEKW-UHFFFAOYSA-N	5.8×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',4,4'-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-47) [28076-73-5] ZRWRPGGXCSSBAO-UHFFFAOYSA-N	2.9×10^{-2} 2.8×10^{-1}		Kurz and Ballschmiter (1999) HSDB (2015)	V Q	100
2,2',4,5-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-48) [162853-26-1] DRVAMLZVBNYSQE-UHFFFAOYSA-N	1.6×10^{-2}		Kurz and Ballschmiter (1999)	V	

Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',4,5'-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-49) [155999-92-1] XIXPEFLLHQAIQY-UHFFFAOYSA-N	2.6×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,3',4-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-55) [220002-39-1] IZISEKJPNSBPRX-UHFFFAOYSA-N	2.3×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,3',4'-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-56) [162853-27-2] JVFGXWCLGNACOG-UHFFFAOYSA-N	4.4×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,4,4'-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-60) [65075-01-6] ZPOBHUZRVVTGKB-UHFFFAOYSA-N	3.6×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,4,5-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-61) [220002-40-4] QAPPZLVGIXQUJW-UHFFFAOYSA-N	6.6×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,3,4,6-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-62) [85918-33-8] WJZPRRFZVWZJL-UHFFFAOYSA-N	9.1×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,3,4',5-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-63) [220002-41-5] YHQRYZGDQCSHFO-UHFFFAOYSA-N	1.5×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,4',6-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-64) [220002-42-6] HJCNTJIMUWQMSA-UHFFFAOYSA-N	3.8×10^{-2}		Kurz and Ballschmiter (1999)	V	

Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,5,6-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-65) [63646-54-8] UFGXCDQXRUFDMA-UHFFFAOYSA-N	9.3×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,3',4,4'-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-66) [61328-46-9] CAWSVYYOUZEMHA-UHFFFAOYSA-N	2.5×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3',4,5-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-67) [152833-52-8] QDQGEFCVPRMEO-UHFFFAOYSA-N	8.9×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,3',4,5'-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-68) [147102-64-5] XORVNHCKWFPLN-UHFFFAOYSA-N	1.0×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3',4',5-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-70) [159553-67-0] MFTPXFIGIJCNJM-UHFFFAOYSA-N	1.8×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3',4',6-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-71) [130892-66-9] IZZULMOBRTYHMH-UHFFFAOYSA-N	4.6×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,4,4',5-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-74) [61328-45-8] KXQJXWNARBQHNX-UHFFFAOYSA-N	1.9×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,4,4',6-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-75) [63553-30-0] YCWRSOTXXJYCKF-UHFFFAOYSA-N	1.7×10^{-2}		Kurz and Ballschmiter (1999)	V	

Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3',4,4'-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-77) [56348-72-2] DHLVZXZRIZBPKG-UHFFFAOYSA-N	4.1×10^{-2}		Kurz and Ballschmiter (1999)	V	
3,3',4,5'-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-79) [552884-22-7] BUPRSRBWDJVKGG-UHFFFAOYSA-N	1.0×10^{-2}		Kurz and Ballschmiter (1999)	V	
3,4,4',5-tetrachlorodiphenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}$ (PCDE-81) [62615-07-0] CAUBBRCOHHHCNG-UHFFFAOYSA-N	1.5×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,3',4-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-82) [160282-10-0] ABRDPORILGADAP-UHFFFAOYSA-N	8.3×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,4,4'-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-85) [71585-37-0] RSBUDFTVQYJNHK-UHFFFAOYSA-N	5.2×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,4,5'-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-87) [160282-09-7] SCLCXTQIVCULDR-UHFFFAOYSA-N	2.2×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,4,6'-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-89) [85918-35-0] JGXAONSRHOSPTJ-UHFFFAOYSA-N	6.5×10^{-2}		Kurz and Ballschmiter (1999)	V	

Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4',5-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-90) [157683-73-3] QPEBRZQSEUOWPA-UHFFFAOYSA-N	1.5×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,4',6-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-91) [116995-20-1] BRNKJDZYZVNM-UHFFFAOYSA-N	3.9×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,4',5'-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-97) [160282-08-6] ABYZYVAIOYICJQ-UHFFFAOYSA-N	3.3×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',4,4',5-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-99) [60123-64-0] AVURWLKSFZBANQ-UHFFFAOYSA-N	1.8×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',4,4',6-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-100) [104294-16-8] FONWDRSQXQZNBNUHFFFAOYSA-N	3.8×10^{-2}	6100	Paasivirta et al. (1999)	T	
2,2',4,4',6-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-100) [104294-16-8] FONWDRSQXQZNBNUHFFFAOYSA-N	2.1×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',4,4',6-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-100) [104294-16-8] FONWDRSQXQZNBNUHFFFAOYSA-N	1.3×10^{-2}	5800	Paasivirta et al. (1999)	T	
2,2',4,5,5'-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-101) [131138-21-1] MKIAKZAWONVRFF-UHFFFAOYSA-N	1.6×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',4,5,6'-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-102) [130892-67-0] BOJBTUWEQMUWHT-UHFFFAOYSA-N	3.7×10^{-2}		Kurz and Ballschmiter (1999)	V	

Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3',4,4'-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-105) [85918-31-6] PKEGIXYNAGGYPN-UHFFFAOYSA-N	4.2×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,3',4,5'-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-108) [160282-07-5] HCTKORQPUCIAO-UHFFFAOYSA-N	1.5×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,3',4,6-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-109) [727738-64-9] SEIXDCGLHKOBEO-UHFFFAOYSA-N	1.4×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,3',4',6-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-110) [159553-69-2] KASGFDPQAMDPAZ-UHFFFAOYSA-N	3.6×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,4,4',5-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-114) [113464-17-8] WSTVMACYLXUQIM-UHFFFAOYSA-N	1.2×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,4,4',6-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-115) [160282-05-3] LUNNFBTEHRMWW-UHFFFAOYSA-N	1.1×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,4,5,6-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-116) [22274-42-6] JDWOFUWJURZFFF-UHFFFAOYSA-N	6.6×10^{-3}		Kurz and Ballschmiter (1999)	V	

Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,4',5,6-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-117) [63646-55-9] UETIKWAWMZLQQZ-UHFFFAOYSA-N	1.1×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3',4,4',5-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-118) [60123-65-1] NRAVUGAGYOBXIG-UHFFFAOYSA-N	1.5×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3',4,4',6-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-119) [157683-74-4] POOXVKSDWCXIBU-UHFFFAOYSA-N	1.3×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3',4,5,5'-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-120) [160282-04-2] XIFRTJZLSYOLIU-UHFFFAOYSA-N	4.8×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,3',4,4',5'-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-123) [160282-06-4] BUAXMSGDEZZOJD-UHFFFAOYSA-N	1.3×10^{-2}		Kurz and Ballschmiter (1999)	V	
3,3',4,4',5-pentachlorodiphenyl ether $\text{C}_{12}\text{H}_5\text{Cl}_5\text{O}$ (PCDE-126) [94339-59-0] WDBLKMRZRGLISL-UHFFFAOYSA-N	1.0×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,3',4,4'-hexachlorodiphenyl ether $\text{C}_{12}\text{H}_4\text{Cl}_6\text{O}$ (PCDE-128) [71585-39-2] GSWMXIIUDJOXNF-UHFFFAOYSA-N	8.3×10^{-2}		Kurz and Ballschmiter (1999)	V	

Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,5'-hexachlorodiphenyl ether $\text{C}_{12}\text{H}_4\text{Cl}_6\text{O}$ (PCDE-130) [76621-14-2] JTEWACHFMNTRBB-UHFFFAOYSA-N	1.5×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,3',4,6'-hexachlorodiphenyl ether $\text{C}_{12}\text{H}_4\text{Cl}_6\text{O}$ (PCDE-132) [124076-66-0] YDVYLSIVXYLBBX-UHFFFAOYSA-N	6.2×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,4,4',5-hexachlorodiphenyl ether $\text{C}_{12}\text{H}_4\text{Cl}_6\text{O}$ (PCDE-137) [71585-38-1] LDPJEMNPDFBCQ-UHFFFAOYSA-N	1.8×10^{-2}		Kurz and Ballschmiter (1999)	V	
	1.9×10^{-2}	6400	Paasivirta et al. (1999)	T	
2,2',3,4,4',5'-hexachlorodiphenyl ether $\text{C}_{12}\text{H}_4\text{Cl}_6\text{O}$ (PCDE-138) [71585-36-9] PHSJYZIFPWCLZ-UHFFFAOYSA-N	2.9×10^{-2}		Kurz and Ballschmiter (1999)	V	
	2.8×10^{-2}	6500	Paasivirta et al. (1999)	T	
2,2',3,4,4',6-hexachlorodiphenyl ether $\text{C}_{12}\text{H}_4\text{Cl}_6\text{O}$ (PCDE-139) [106220-83-1] BIWCEXHQZFHU-UHFFFAOYSA-N	9.8×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,2',3,4,4',6'-hexachlorodiphenyl ether $\text{C}_{12}\text{H}_4\text{Cl}_6\text{O}$ (PCDE-140) [106220-82-0] XDAOZRZWYVVKIAK-UHFFFAOYSA-N	3.0×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,4',5,5'-hexachlorodiphenyl ether $\text{C}_{12}\text{H}_4\text{Cl}_6\text{O}$ (PCDE-146) [162853-28-3] SFTBUGPDOJDENF-UHFFFAOYSA-N	1.0×10^{-2}		Kurz and Ballschmiter (1999)	V	

Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4',5,6-hexachlorodiphenyl ether $\text{C}_{12}\text{H}_4\text{Cl}_6\text{O}$ (PCDE-147) [116995-18-7] DIBYIHMYEPMGKC-UHFFFAOYSA-N	1.0×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,4',5',6-hexachlorodiphenyl ether $\text{C}_{12}\text{H}_4\text{Cl}_6\text{O}$ (PCDE-149) [85918-37-2] RDKSFIZNZGWNLA-UHFFFAOYSA-N	3.1×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',4,4',5,5'-hexachlorodiphenyl ether $\text{C}_{12}\text{H}_4\text{Cl}_6\text{O}$ (PCDE-153) [71859-30-8] PECXRRMHOQBOIE-UHFFFAOYSA-N	1.3×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',4,4',5,5'-hexachlorodiphenyl ether $\text{C}_{12}\text{H}_4\text{Cl}_6\text{O}$ (PCDE-153) [71859-30-8] PECXRRMHOQBOIE-UHFFFAOYSA-N	1.1×10^{-2}	6300	Paasivirta et al. (1999)	T	
2,2',4,4',5,6'-hexachlorodiphenyl ether $\text{C}_{12}\text{H}_4\text{Cl}_6\text{O}$ (PCDE-154) [106220-81-9] XKQUAQGLZDDBV-UHFFFAOYSA-N	1.4×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',4,4',5,6'-hexachlorodiphenyl ether $\text{C}_{12}\text{H}_4\text{Cl}_6\text{O}$ (PCDE-154) [106220-81-9] XKQUAQGLZDDBV-UHFFFAOYSA-N	4.4×10^{-3}	5900	Paasivirta et al. (1999)	T	
2,3,3',4,4',5-hexachlorodiphenyl ether $\text{C}_{12}\text{H}_4\text{Cl}_6\text{O}$ (PCDE-156) [109828-22-0] GHTWMHLFFDEYRE-UHFFFAOYSA-N	1.2×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,3',4,4',5'-hexachlorodiphenyl ether $\text{C}_{12}\text{H}_4\text{Cl}_6\text{O}$ (PCDE-157) [94339-60-3] FEIDIWDEJQVIPO-UHFFFAOYSA-N	2.8×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,3',4',5,6-hexachlorodiphenyl ether $\text{C}_{12}\text{H}_4\text{Cl}_6\text{O}$ (PCDE-163) [155999-97-6] YLAYOOJLJKJGCF-UHFFFAOYSA-N	1.6×10^{-2}		Kurz and Ballschmiter (1999)	V	

Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,4,4',5,6-hexachlorodiphenyl ether $\text{C}_{12}\text{H}_4\text{Cl}_6\text{O}$ (PCDE-166) [63646-56-0] MXDRLBNLTLOWGV-UHFFFAOYSA-N	5.0×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,3',4,4',5,5'-hexachlorodiphenyl ether $\text{C}_{12}\text{H}_4\text{Cl}_6\text{O}$ (PCDE-167) [131138-20-0] DYSUSQZPGJXVAL-UHFFFAOYSA-N	8.3×10^{-3}		Kurz and Ballschmiter (1999)	V	
	9.0×10^{-3}	6200	Paasivirta et al. (1999)	T	
2,2',3,3',4,4',5-heptachlorodiphenyl ether $\text{C}_{12}\text{H}_3\text{Cl}_7\text{O}$ (PCDE-170) [71585-40-5] BLBURLWSCHSPIS-UHFFFAOYSA-N	2.0×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,3',4,5,6'-heptachlorodiphenyl ether $\text{C}_{12}\text{H}_3\text{Cl}_7\text{O}$ (PCDE-174) [159553-73-8] DQYYZAABYZAOOC-UHFFFAOYSA-N	1.8×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,3',4,5',6'-heptachlorodiphenyl ether $\text{C}_{12}\text{H}_3\text{Cl}_7\text{O}$ (PCDE-177) [83992-71-6] RXPQVFMDOJTCKE-UHFFFAOYSA-N	1.4×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,4,4',5,5'-heptachlorodiphenyl ether $\text{C}_{12}\text{H}_3\text{Cl}_7\text{O}$ (PCDE-180) [83992-69-2] YBYYCWMPXZRBNI-UHFFFAOYSA-N	5.0×10^{-3}		Kurz and Ballschmiter (1999)	V	
	1.9×10^{-2}	6800	Paasivirta et al. (1999)	T	

Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4,4',5,6-heptachlorodiphenyl ether $\text{C}_{12}\text{H}_3\text{Cl}_7\text{O}$ (PCDE-181) [157683-75-5] RPNFRXWGMTYOPA-UHFFFAOYSA-N	3.4×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,2',3,4,4',5,6'-heptachlorodiphenyl ether $\text{C}_{12}\text{H}_3\text{Cl}_7\text{O}$ (PCDE-182) [88467-63-4] XWRZWPPSQDHTFU-UHFFFAOYSA-N	3.3×10^{-3}	6400	Paasivirta et al. (1999)	T	
2,2',3,4,4',6,6'-heptachlorodiphenyl ether $\text{C}_{12}\text{H}_3\text{Cl}_7\text{O}$ (PCDE-184) [106220-84-2] WTYSJAGEYAAIFW-UHFFFAOYSA-N	2.0×10^{-1}	7800	Paasivirta et al. (1999)	T	
2,2',3,4',5,5',6-heptachlorodiphenyl ether $\text{C}_{12}\text{H}_3\text{Cl}_7\text{O}$ (PCDE-187) [109828-23-1] BHJCMGUFRLKK-UHFFFAOYSA-N	7.4×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,3,3',4,4',5,5'-heptachlorodiphenyl ether $\text{C}_{12}\text{H}_3\text{Cl}_7\text{O}$ (PCDE-189) [83992-72-7] JUHPMUOWCYBMEY-UHFFFAOYSA-N	6.2×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,3,3',4,4',5,6-heptachlorodiphenyl ether $\text{C}_{12}\text{H}_3\text{Cl}_7\text{O}$ (PCDE-190) [83992-70-5] QLSBRXLSQINWHM-UHFFFAOYSA-N	5.8×10^{-3}		Kurz and Ballschmiter (1999)	V	

Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,4',5,5'- octachlorodiphenyl ether $\text{C}_{12}\text{H}_2\text{Cl}_8\text{O}$ (PCDE-194) [57379-40-5] IXZVOZCULZBCDY-UHFFFAOYSA-N	4.3×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,2',3,3',4,4',5,6- octachlorodiphenyl ether $\text{C}_{12}\text{H}_2\text{Cl}_8\text{O}$ (PCDE-195) [65075-02-7] YHUPMPHVHYBYJE-UHFFFAOYSA-N	1.8×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,2',3,3',4,4',5,6'- octachlorodiphenyl ether $\text{C}_{12}\text{H}_2\text{Cl}_8\text{O}$ (PCDE-196) [85918-38-3] HYNVIQBCBHJTOZ-UHFFFAOYSA-N	8.7×10^{-3}	7100	Paasivirta et al. (1999)	T	
2,2',3,3',4,4',6,6'- octachlorodiphenyl ether $\text{C}_{12}\text{H}_2\text{Cl}_8\text{O}$ (PCDE-197) [117948-62-6] GRWRDFGBFYSOKR-UHFFFAOYSA-N	7.7×10^{-3}	7000	Paasivirta et al. (1999)	T	
2,2',3,3',4,5,5',6'- octachlorodiphenyl ether $\text{C}_{12}\text{H}_2\text{Cl}_8\text{O}$ (PCDE-199) [83992-76-1] MRHQXCYYPFGEU-UHFFFAOYSA-N	2.6×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,2',3,4,4',5,5',6- octachlorodiphenyl ether $\text{C}_{12}\text{H}_2\text{Cl}_8\text{O}$ (PCDE-203) [83992-75-0] PKOSPZTRLMBK-UHFFFAOYSA-N	2.3×10^{-3}		Kurz and Ballschmiter (1999)	V	

Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,4',5,5',6- nonachlorodiphenyl ether $\text{C}_{12}\text{HCl}_9\text{O}$ (PCDE-206) [83992-73-8] FPEYJPVHPGDXXDD-UHFFFAOYSA-N	5.1×10^{-4}		Kurz and Ballschmiter (1999)	V	
decachlorodiphenyl ether $\text{C}_{12}\text{Cl}_{10}\text{O}$ (PCDE-209) [31710-30-2] CIPFDHFTBYJKQB-UHFFFAOYSA-N	7.1×10^{-5}		Kurz and Ballschmiter (1999)	V	

A6.6 Polychlorinated dibenzofuranes (PCDFs)

Table A6.6: Polychlorinated dibenzofuranes (PCDFs)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-chlorodibenzofuran $\text{C}_{12}\text{H}_7\text{ClO}$ (PCDF-1) [84761-86-4] WRSMJZYBNIAAEE-UHFFFAOYSA-N	8.3×10^{-2}		Govers and Krop (1998)	Q	
2-chlorodibenzofuran $\text{C}_{12}\text{H}_7\text{ClO}$ (PCDF-2) [51230-49-0] PRKTYWJFCODJOA-UHFFFAOYSA-N	1.1×10^{-1}		Govers and Krop (1998)	Q	
3-chlorodibenzofuran $\text{C}_{12}\text{H}_7\text{ClO}$ (PCDF-3) [25074-67-3] BBOZMMAURMEVAR-UHFFFAOYSA-N	1.3×10^{-1}		Govers and Krop (1998)	Q	
4-chlorodibenzofuran $\text{C}_{12}\text{H}_7\text{ClO}$ (PCDF-4) [74992-96-4] RHRYBWFAXXCUCR-UHFFFAOYSA-N	8.9×10^{-2}		Govers and Krop (1998)	Q	
1,2-dichlorodibenzofuran $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}$ (PCDF-12) [64126-85-8] QVAPRJWSOUITIF-UHFFFAOYSA-N	1.5×10^{-1}		Govers and Krop (1998)	Q	
1,3-dichlorodibenzofuran $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}$ (PCDF-13) [94538-00-8] VKIBKEFGJSPRJC-UHFFFAOYSA-N	2.0×10^{-1}		Govers and Krop (1998)	Q	
1,4-dichlorodibenzofuran $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}$ (PCDF-14) [94538-01-9] VHQMZLPHWGUDB-UHFFFAOYSA-N	1.5×10^{-1}		Govers and Krop (1998)	Q	
1,6-dichlorodibenzofuran $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}$ (PCDF-16) [74992-97-5] JRSRWACZUFLWKF-UHFFFAOYSA-N	1.4×10^{-1}		Govers and Krop (1998)	Q	

Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,7-dichlorodibenzofuran $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}$ (PCDF-17) [94538-02-0] XRQNHGZRFBKBJW-UHFFFAOYSA-N	1.9×10^{-1}		Govers and Krop (1998)	Q	
1,8-dichlorodibenzofuran $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}$ (PCDF-18) [81638-37-1] UAFNQBPWFPGC-UHFFFAOYSA-N	2.5×10^{-1}		Govers and Krop (1998)	Q	
1,9-dichlorodibenzofuran $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}$ (PCDF-19) [70648-14-5] AEKSGHBVWJHELW-UHFFFAOYSA-N	2.0×10^{-1}		Govers and Krop (1998)	Q	
2,3-dichlorodibenzofuran $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}$ (PCDF-23) [64126-86-9] GETJJZRPQFSFM-UHFFFAOYSA-N	2.3×10^{-1}		Govers and Krop (1998)	Q	
2,4-dichlorodibenzofuran $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}$ (PCDF-24) [24478-74-8] LHTCKMYRNOGUOA-UHFFFAOYSA-N	1.9×10^{-1}		Govers and Krop (1998)	Q	
2,6-dichlorodibenzofuran $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}$ (PCDF-26) [60390-27-4] XVLCNKFGFHUQNL-UHFFFAOYSA-N	1.8×10^{-1}		Govers and Krop (1998)	Q	
2,7-dichlorodibenzofuran $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}$ (PCDF-27) [74992-98-6] DOZUTNBCPVUMPY-UHFFFAOYSA-N	2.0×10^{-1}		Govers and Krop (1998)	Q	
2,8-dichlorodibenzofuran $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}$ (PCDF-28) [5409-83-6] IVVRJIDVYSPKFZ-UHFFFAOYSA-N	1.6×10^{-1} 1.6×10^{-1} 1.6×10^{-1} 4.2×10^{-1} 2.6×10^{-1} 2.2×10^{-1}		Duchowicz et al. (2020) Mackay et al. (2006b) Govers and Krop (1998) Duchowicz et al. (2020) Saçan et al. (2005) Govers and Krop (1998)	V V V Q Q Q	187

Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,4-dichlorodibenzofuran $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}$ (PCDF-34) [94570-83-9] HYQGGNWDQPZLGX-UHFFFAOYSA-N	1.9×10^{-1}		Govers and Krop (1998)	Q	
3,6-dichlorodibenzofuran $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}$ (PCDF-36) [74918-40-4] DMOBFKTSXOHG-UHFFFAOYSA-N	2.2×10^{-1}		Govers and Krop (1998)	Q	
3,7-dichlorodibenzofuran $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}$ (PCDF-37) [58802-21-4] OLTYAGNRSNFHLK-UHFFFAOYSA-N	3.0×10^{-1}		Govers and Krop (1998)	Q	
4,6-dichlorodibenzofuran $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}$ (PCDF-46) [64560-13-0] BZFIZJNKNCJEAD-UHFFFAOYSA-N	2.2×10^{-1}		Govers and Krop (1998)	Q	
1,2,3-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-123) [83636-47-9] LADSWAAWPMGHBE-UHFFFAOYSA-N	2.9×10^{-1}		Govers and Krop (1998)	Q	
1,2,4-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-124) [24478-73-7] RQIWKWHVZLDXEJ-UHFFFAOYSA-N	2.5×10^{-1}		Govers and Krop (1998)	Q	
1,2,6-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-126) [64560-15-2] CYRZCUBURUACKJ-UHFFFAOYSA-N	2.3×10^{-1}		Govers and Krop (1998)	Q	
1,2,7-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-127) [83704-37-4] AFOVQGPNOZDUEP-UHFFFAOYSA-N	2.3×10^{-1}		Govers and Krop (1998)	Q	

Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,8-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-128) [83704-34-1] UYIGPSPCOXGBCS-UHFFFAOYSA-N	3.9×10^{-1}		Govers and Krop (1998)	Q	
1,2,9-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-129) [83704-38-5] ICTXINQOXPMQPM-UHFFFAOYSA-N	4.8×10^{-1}		Govers and Krop (1998)	Q	
1,3,4-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-134) [82911-61-3] FIPOITUDJFQRRN-UHFFFAOYSA-N	2.8×10^{-1}		Govers and Krop (1998)	Q	
1,3,6-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-136) [83704-39-6] AGPTXRLVBIRYLV-UHFFFAOYSA-N	3.3×10^{-1}		Govers and Krop (1998)	Q	
1,3,7-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-137) [64560-16-3] INRBXOGZPDFCLQ-UHFFFAOYSA-N	4.1×10^{-1}		Govers and Krop (1998)	Q	
1,3,8-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-138) [76621-12-0] PHFSTDOPZHECA-UHFFFAOYSA-N	4.2×10^{-1}		Govers and Krop (1998)	Q	
1,3,9-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-139) [83704-40-9] SPPGDLROKBFNNO-UHFFFAOYSA-N	4.4×10^{-1}		Govers and Krop (1998)	Q	
1,4,6-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-146) [82911-60-2] XDQRWSUJOURTHK-UHFFFAOYSA-N	3.5×10^{-1}		Govers and Krop (1998)	Q	

Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,4,7-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-147) [83704-41-0] XTLMVJUSIANHND-UHFFFAOYSA-N	3.2×10^{-1}		Govers and Krop (1998)	Q	
1,4,8-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-148) [64560-14-1] PCQCYDNFBUADOK-UHFFFAOYSA-N	3.9×10^{-1}		Govers and Krop (1998)	Q	
1,4,9-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-149) [70648-13-4] NVYUPBVXKLTYPV-UHFFFAOYSA-N	3.5×10^{-1}		Govers and Krop (1998)	Q	
1,6,7-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-167) [83704-46-5] HEWLCNCSWBMZHG-UHFFFAOYSA-N	2.7×10^{-1}		Govers and Krop (1998)	Q	
1,6,8-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-168) [82911-59-9] ZOBVYDQWZXUJNO-UHFFFAOYSA-N	4.1×10^{-1}		Govers and Krop (1998)	Q	
1,7,8-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-178) [58802-18-9] YNMCXGLWHTVMQO-UHFFFAOYSA-N	4.6×10^{-1}		Govers and Krop (1998)	Q	
2,3,4-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-234) [57117-34-7] YDLADWPBKZODCJ-UHFFFAOYSA-N	3.1×10^{-1}		Govers and Krop (1998)	Q	
2,3,6-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-236) [57117-33-6] CPMGJTLNRBIKQM-UHFFFAOYSA-N	3.4×10^{-1}		Govers and Krop (1998)	Q	

Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,7-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-237) [58802-17-8] CKXMNTLGGAOERF-UHFFFAOYSA-N	3.5×10^{-1}		Govers and Krop (1998)	Q	
2,3,8-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-238) [57117-32-5] NUNSNNOYACKRIK-UHFFFAOYSA-N	3.1×10^{-1}		Govers and Krop (1998)	Q	
2,4,6-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-246) [58802-14-5] GTKURBTWZFHQHY-UHFFFAOYSA-N	4.2×10^{-1}		Govers and Krop (1998)	Q	
2,4,7-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-247) [83704-42-1] SZBZRVJHPZIGAY-UHFFFAOYSA-N	3.1×10^{-1}		Govers and Krop (1998)	Q	
2,4,8-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-248) [54589-71-8] WJURXKWTOMRCE-UHFFFAOYSA-N	3.2×10^{-1}		Govers and Krop (1998)	Q	
3,4,6-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-346) [83704-43-2] XEUHBCMRIBTD-UHFFFAOYSA-N	4.3×10^{-1}		Govers and Krop (1998)	Q	
3,4,7-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-347) [83704-44-3] RPJJBTSXPNFUTA-UHFFFAOYSA-N	3.9×10^{-1}		Govers and Krop (1998)	Q	
3,4,8-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-348) [83704-45-4] YTZWNIQGGIJHJX-UHFFFAOYSA-N	2.5×10^{-1}		Govers and Krop (1998)	Q	

Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,4-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1234) [24478-72-6] AETAPIFVELRIDN-UHFFFAOYSA-N	3.6×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,6-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1236) [83704-21-6] BBAXFLIBRPXRBP-UHFFFAOYSA-N	4.1×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,7-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1237) [83704-22-7] MDNZFYGATDCKRB-UHFFFAOYSA-N	3.9×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,8-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1238) [62615-08-1] KFQRHGKSHJMCO-UHFFFAOYSA-N	5.0×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,9-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1239) [83704-23-8] GNQHLJHTOATTOJ-UHFFFAOYSA-N	7.9×10^{-1}		Govers and Krop (1998)	Q	
1,2,4,6-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1246) [71998-73-7] NLVWEKPFJFUPVMZ-UHFFFAOYSA-N	5.1×10^{-1}		Govers and Krop (1998)	Q	
1,2,4,7-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1247) [83719-40-8] MFURKMJLDQBHRA-UHFFFAOYSA-N	3.5×10^{-1}		Govers and Krop (1998)	Q	
1,2,4,8-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1248) [64126-87-0] BFTASCFRRBHFFK-UHFFFAOYSA-N	5.5×10^{-1}		Govers and Krop (1998)	Q	

Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,4,9-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1249) [83704-24-9] ZUYTTCCHKQGGOV-UHFFFAOYSA-N	7.4×10^{-1}		Govers and Krop (1998)	Q	
1,2,6,7-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1267) [83704-25-0] AUJEWYHHKDYUYMI-UHFFFAOYSA-N	2.8×10^{-1}		Govers and Krop (1998)	Q	
1,2,6,8-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1268) [83710-07-0] KCVGVSIBBGJUNZ-UHFFFAOYSA-N	5.5×10^{-1}		Govers and Krop (1998)	Q	
1,2,6,9-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1269) [70648-18-9] IEPGLLVEBKXASE-UHFFFAOYSA-N	7.1×10^{-1}		Govers and Krop (1998)	Q	
1,2,7,8-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1278) [58802-20-3] JODWPAQNABOHG-UHFFFAOYSA-N	1.1 4.8×10^{-1}		Saçan et al. (2005) Govers and Krop (1998)	Q Q	
1,2,7,9-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1279) [83704-26-1] PDMFRPIFZAKMLH-UHFFFAOYSA-N	6.9×10^{-1}		Govers and Krop (1998)	Q	
1,2,8,9-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1289) [70648-22-5] OHYCQUKMNPHFPT-UHFFFAOYSA-N	9.5×10^{-1}		Govers and Krop (1998)	Q	
1,3,4,6-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1346) [83704-27-2] CBBDONKZEJKFJP-UHFFFAOYSA-N	6.3×10^{-1}		Govers and Krop (1998)	Q	

Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3,4,7-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1347) [70648-16-7] UMKCVDZTSZNRH-UHFFFAOYSA-N	5.1×10^{-1}		Govers and Krop (1998)	Q	
1,3,4,8-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1348) [92341-04-3] XWKRJSMNDOXIHS-UHFFFAOYSA-N	5.0×10^{-1}		Govers and Krop (1998)	Q	
1,3,4,9-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1349) [83704-28-3] PNCYJHOTZSKZPA-UHFFFAOYSA-N	5.8×10^{-1}		Govers and Krop (1998)	Q	
1,3,6,7-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1367) [57117-36-9] PITDPGCTIMCYEZ-UHFFFAOYSA-N	5.1×10^{-1}		Govers and Krop (1998)	Q	
1,3,6,8-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1368) [71998-72-6] BDXKVABZWRZKOS-UHFFFAOYSA-N	6.2×10^{-1}		Govers and Krop (1998)	Q	
1,3,6,9-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1369) [83690-98-6] NJQQZRLWVLWNGD-UHFFFAOYSA-N	6.8×10^{-1}		Govers and Krop (1998)	Q	
1,3,7,8-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1378) [57117-35-8] CSXDVUGDFSXYTD-UHFFFAOYSA-N	6.5×10^{-1}		Govers and Krop (1998)	Q	
1,3,7,9-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1379) [64560-17-4] IEMJMCVYAORWJV-UHFFFAOYSA-N	7.9×10^{-1}		Govers and Krop (1998)	Q	

Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,4,6,7-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1467) [66794-59-0] RBFNYMHNIOKXLA-UHFFFAOYSA-N	5.9×10^{-1}		Govers and Krop (1998)	Q	
1,4,6,8-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1468) [82911-58-8] VHOBVNETFRJED-UHFFFAOYSA-N	8.5×10^{-1}		Govers and Krop (1998)	Q	
1,4,6,9-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1469) [70648-19-0] JAYSBJFHJOMGZ-UHFFFAOYSA-N	7.9×10^{-1}		Govers and Krop (1998)	Q	
1,4,7,8-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1478) [83704-29-4] IVRRRWQABCXLY-UHFFFAOYSA-N	6.5×10^{-1}		Govers and Krop (1998)	Q	
1,6,7,8-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1678) [83704-33-0] KOJMOXYETDLOPN-UHFFFAOYSA-N	5.8×10^{-1}		Govers and Krop (1998)	Q	
2,3,4,6-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-2346) [83704-30-7] JNVHSHPAAMRSKK-UHFFFAOYSA-N	6.2×10^{-1}		Govers and Krop (1998)	Q	
2,3,4,7-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-2347) [83704-31-8] BROFYOSLFHTGCQ-UHFFFAOYSA-N	4.4×10^{-1}		Govers and Krop (1998)	Q	
2,3,4,8-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-2348) [83704-32-9] IIXXRERKNIJJQY-UHFFFAOYSA-N	3.5×10^{-1}		Govers and Krop (1998)	Q	

Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,6,7-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-2367) [57117-39-2] MJC�KMDTLRSHNK-UHFFFAOYSA-N	4.1×10^{-1}		Govers and Krop (1998)	Q	
2,3,6,8-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-2368) [57117-37-0] SPMZHWRMWWTSY-UHFFFAOYSA-N	4.2×10^{-1}		Govers and Krop (1998)	Q	
2,3,7,8-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-2378) [51207-31-9] KSMVNVHUTQZITP-UHFFFAOYSA-N	5.9×10^{-1} 6.8×10^{-1} 8.5×10^{-1} 2.2×10^{-3} 2.4×10^{-1} 1.2 6.4×10^{-1} 7.2×10^{-1} 3.7×10^{-1} 5.9×10^{-1}	3700	Friesen et al. (1993) Mackay et al. (2006b) Govers and Krop (1998) Paasivirta et al. (1999) Keshavarz et al. (2022) Duchowicz et al. (2020) HSDB (2015) Saçan et al. (2005) Govers and Krop (1998) Duchowicz et al. (2020)	M V V T Q Q Q Q Q Q ?	100 186, 21
2,4,6,7-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-2467) [57117-38-1] NSDXKMRVQOSASS-UHFFFAOYSA-N	5.4×10^{-1}		Govers and Krop (1998)	Q	
2,4,6,8-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-2468) [58802-19-0] ZSPJEACWUWSAGS-UHFFFAOYSA-N	6.6×10^{-1}		Govers and Krop (1998)	Q	
3,4,6,7-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-3467) [57117-40-5] LMJLCLBSUNZLNW-UHFFFAOYSA-N	7.1×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,4,6-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12346) [83704-47-6] LIQJBAPSLUZUTB-UHFFFAOYSA-N	7.1×10^{-1}		Govers and Krop (1998)	Q	

Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,4,7-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12347) [83704-48-7] DOJZTBGOWIYFAC-UHFFFAOYSA-N	4.5×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,4,8-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12348) [67517-48-0] ZCTNDJSCLPJGRA-UHFFFAOYSA-N	5.5×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,4,9-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12349) [83704-49-8] IQSZNVZXXOFRJS-UHFFFAOYSA-N	9.8×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,6,7-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12367) [57117-42-7] NZUPQBVDIWCBPX-UHFFFAOYSA-N	4.2×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,6,8-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12368) [83704-51-2] VHQJZOFUPXEZQZ-UHFFFAOYSA-N	6.5×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,6,9-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12369) [83704-52-3] IPSFQAKXDJVQOX-UHFFFAOYSA-N	1.1		Govers and Krop (1998)	Q	
1,2,3,7,8-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12378) [57117-41-6] SBMIVUVRFPGOEB-UHFFFAOYSA-N	8.7×10^{-4} 5.2×10^{-1}	3000	Paasivirta et al. (1999) Govers and Krop (1998)	T Q	
1,2,3,7,9-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12379) [83704-53-4] JVUSEQPOWCBYNG-UHFFFAOYSA-N	1.0		Govers and Krop (1998)	Q	

Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,8,9-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12389) [83704-54-5] NKGLWUJPCTUDEH-UHFFFAOYSA-N	2.0		Saçan et al. (2005)	Q	
1,2,3,8,9-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12389) [83704-54-5] NKGLWUJPCTUDEH-UHFFFAOYSA-N	1.1		Govers and Krop (1998)	Q	
1,2,4,6,7-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12467) [83704-50-1] BQTCODOVGXJHRB-UHFFFAOYSA-N	5.8×10^{-1}		Govers and Krop (1998)	Q	
1,2,4,6,8-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12468) [69698-57-3] JDTUAYPJSSXDNO-UHFFFAOYSA-N	1.0		Govers and Krop (1998)	Q	
1,2,4,6,9-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12469) [70648-24-7] QDQFGVXGPSYEJU-UHFFFAOYSA-N	1.5		Govers and Krop (1998)	Q	
1,2,4,7,8-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12478) [58802-15-6] GCFDWHIKRXCUPJ-UHFFFAOYSA-N	6.2×10^{-1}		Govers and Krop (1998)	Q	
1,2,4,7,9-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12479) [71998-74-8] YGVHNNHWORPMFU-UHFFFAOYSA-N	9.8×10^{-1}		Govers and Krop (1998)	Q	
1,2,4,8,9-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12489) [70648-23-6] ZSPAPWGNAGTCCA-UHFFFAOYSA-N	1.3		Govers and Krop (1998)	Q	
1,2,6,7,8-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12678) [69433-00-7] ZAAVDGLJEQXCMV-UHFFFAOYSA-N	5.2×10^{-1}		Govers and Krop (1998)	Q	

Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,6,7,9-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12679) [70872-82-1] QRRRQEVOSMEVQB-UHFFFAOYSA-N	7.9×10^{-1}		Govers and Krop (1998)	Q	
1,3,4,6,7-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-13467) [83704-36-3] JVYYDUWJJIJMOGW-UHFFFAOYSA-N	8.9×10^{-1}		Govers and Krop (1998)	Q	
1,3,4,6,8-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-13468) [83704-55-6] COKIAYPRHYHYCH-UHFFFAOYSA-N	1.0		Govers and Krop (1998)	Q	
1,3,4,6,9-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-13469) [70648-15-6] MYSAFUYQSBEDR-UHFFFAOYSA-N	1.2		Govers and Krop (1998)	Q	
1,3,4,7,8-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-13478) [58802-16-7] ORSUQGVCLXKLZ-UHFFFAOYSA-N	7.1×10^{-1}		Govers and Krop (1998)	Q	
1,3,4,7,9-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-13479) [70648-20-3] GFXPLABVZOBCCW-UHFFFAOYSA-N	9.5×10^{-1}		Govers and Krop (1998)	Q	
1,3,6,7,8-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-13678) [70648-21-4] FRLMQDUYUJIHCZ-UHFFFAOYSA-N	7.6×10^{-1}		Govers and Krop (1998)	Q	
1,4,6,7,8-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-14678) [83704-35-2] VANGHZRYKXDP RR-UHFFFAOYSA-N	1.1		Govers and Krop (1998)	Q	

Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,4,6,7-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-23467) [57117-43-8] SJFBZRQKGOGHEV-UHFFFAOYSA-N	6.9×10^{-1}		Govers and Krop (1998)	Q	
2,3,4,6,8-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-23468) [67481-22-5] MKRFORPSRBMAIP-UHFFFAOYSA-N	6.6×10^{-1}		Govers and Krop (1998)	Q	
2,3,4,7,8-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-23478) [57117-31-4] OGBQILNBLMPPDP-UHFFFAOYSA-N	2.0 2.0 2.0 1.7 2.3×10^{-3} 1.6 1.6 3.9×10^{-1}	2900	Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006b) Govers and Krop (1998) Paasivirta et al. (1999) Duchowicz et al. (2020) Saçan et al. (2005) Govers and Krop (1998)	V V V V T Q Q Q	187
1,2,3,4,6,7-hexachlorodibenzofuran $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}$ (PCDF-123467) [79060-60-9] SNWFMKXFMVHBKD-UHFFFAOYSA-N	6.8×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,4,6,8-hexachlorodibenzofuran $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}$ (PCDF-123468) [69698-60-8] UCFGNWHEREVQWMZ-UHFFFAOYSA-N	2.4×10^{-4} 9.8×10^{-1}	2300	Paasivirta et al. (1999) Govers and Krop (1998)	T Q	
1,2,3,4,6,9-hexachlorodibenzofuran $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}$ (PCDF-123469) [91538-83-9] KFFUZIROJGXTQH-UHFFFAOYSA-N	1.8		Govers and Krop (1998)	Q	
1,2,3,4,7,8-hexachlorodibenzofuran $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}$ (PCDF-123478) [70648-26-9] LVYBAQIVPKCOEE-UHFFFAOYSA-N	6.9×10^{-1} 3.8×10^{-1} 4.1×10^{-4} 2.0 5.2×10^{-1}	2400	Mackay et al. (2006b) Govers and Krop (1998) Paasivirta et al. (1999) Saçan et al. (2005) Govers and Krop (1998)	V V T Q Q	

Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,4,7,9- hexachlorodibenzofuran $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}$ (PCDF-123479) [91538-84-0] BKIXWRBZCQEZAQ-UHFFFAOYSA-N	1.1		Govers and Krop (1998)	Q	
1,2,3,4,8,9- hexachlorodibenzofuran $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}$ (PCDF-123489) [92341-07-6] VSDUQUBUJRNREH-UHFFFAOYSA-N	2.7 1.1		Saçan et al. (2005) Govers and Krop (1998)	Q Q	
1,2,3,6,7,8- hexachlorodibenzofuran $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}$ (PCDF-123678) [57117-44-9] JEYJJXOFWNEHN-UHFFFAOYSA-N	9.1×10^{-1} 1.1×10^{-3} 2.2 5.2×10^{-1}	3300	Govers and Krop (1998) Paasivirta et al. (1999) Saçan et al. (2005) Govers and Krop (1998)	V T Q Q	
1,2,3,6,7,9- hexachlorodibenzofuran $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}$ (PCDF-123679) [92341-06-5] JZVOLXQREJNTTL-UHFFFAOYSA-N	1.0		Govers and Krop (1998)	Q	
1,2,3,6,8,9- hexachlorodibenzofuran $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}$ (PCDF-123689) [75198-38-8] WLGQZUOHEXTWFH-UHFFFAOYSA-N	1.3		Govers and Krop (1998)	Q	
1,2,3,7,8,9- hexachlorodibenzofuran $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}$ (PCDF-123789) [72918-21-9] PYUSJFJVDVXSXIU-UHFFFAOYSA-N	6.3×10^{-4} 2.6 1.0	2600	Paasivirta et al. (1999) Saçan et al. (2005) Govers and Krop (1998)	T Q Q	
1,2,4,6,7,8- hexachlorodibenzofuran $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}$ (PCDF-124678) [67562-40-7] CKDDYGBBKXIHRY-UHFFFAOYSA-N	3.2×10^{-4} 9.3×10^{-1}	2300	Paasivirta et al. (1999) Govers and Krop (1998)	T Q	

Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,4,6,7,9- hexachlorodibenzofuran $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}$ (PCDF-124679) [75627-02-0] FAHIPPHRJJQOG-UHFFFAOYSA-N	1.5		Govers and Krop (1998)	Q	
1,2,4,6,8,9- hexachlorodibenzofuran $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}$ (PCDF-124689) [69698-59-5] FGZCXIPKUCJGHW-UHFFFAOYSA-N	2.2×10^{-4} 2.4	2600	Paasivirta et al. (1999) Govers and Krop (1998)	T Q	
1,3,4,6,7,8- hexachlorodibenzofuran $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}$ (PCDF-134678) [71998-75-9] OGTZINGGZYXZCR-UHFFFAOYSA-N	1.1		Govers and Krop (1998)	Q	
1,3,4,6,7,9- hexachlorodibenzofuran $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}$ (PCDF-134679) [92341-05-4] TURXXOIFVABBPW-UHFFFAOYSA-N	1.6		Govers and Krop (1998)	Q	
2,3,4,6,7,8- hexachlorodibenzofuran $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}$ (PCDF-234678) [60851-34-5] XTAHLACQOVXINQ-UHFFFAOYSA-N	3.6×10^{-4} 3.1 5.6×10^{-1}	2600	Paasivirta et al. (1999) Saçan et al. (2005) Govers and Krop (1998)	T Q Q	
1,2,3,4,6,7,8- heptachlorodibenzofuran $\text{C}_{12}\text{HCl}_7\text{O}$ (PCDF-1234678) [67562-39-4] WDMKCPVJOGHBF-UHFFFAOYSA-N	7.0×10^{-1} 7.0×10^{-1} 2.9×10^{-1} 5.4×10^{-5} 2.1 3.9 7.1×10^{-1}	1600	Duchowicz et al. (2020) Mackay et al. (2006b) Govers and Krop (1998) Paasivirta et al. (1999) Duchowicz et al. (2020) Saçan et al. (2005) Govers and Krop (1998)	V V V T Q Q Q	187

Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,4,6,7,9- heptachlorodibenzofuran $C_{12}HCl_7O$ (PCDF-1234679) [70648-25-8] JWXWOEUKHXOUSK-UHFFFAOYSA-N	1.5		Govers and Krop (1998)	Q	
1,2,3,4,6,8,9- heptachlorodibenzofuran $C_{12}HCl_7O$ (PCDF-1234689) [69698-58-4] BADFHCOLISGRRW-UHFFFAOYSA-N	3.4×10^{-4} 1.9	1800	Paasivirta et al. (1999) Govers and Krop (1998)	T Q	
1,2,3,4,7,8,9- heptachlorodibenzofuran $C_{12}HCl_7O$ (PCDF-1234789) [55673-89-7] VEZCTZWLJYWARH-UHFFFAOYSA-N	5.5×10^{-4} 3.2 1.0	2100	Paasivirta et al. (1999) Saçan et al. (2005) Govers and Krop (1998)	T Q Q	
octachlorodibenzofuran $C_{12}Cl_8O$ (PCDF-12346789) [39001-02-0] RHIROFAGUQOFLU-UHFFFAOYSA-N	5.2 7.6×10^{-1} 2.3×10^{-4} 1.7 4.9 1.3	2400	Duchowicz et al. (2020) Mackay et al. (2006b) Govers and Krop (1998) Paasivirta et al. (1999) Duchowicz et al. (2020) Saçan et al. (2005) Govers and Krop (1998)	V V V T Q Q Q	187 685

A6.7 Polychlorinated dibenzo-*p*-dioxins (PCDDs)Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-chlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_7\text{ClO}_2$ (PCDD-1) [39227-53-7] VGGGRWRBWXENKI-UHFFFAOYSA-N	1.6×10^{-1} 1.6×10^{-1} 2.5×10^{-2} 1.6×10^{-1} 1.2×10^{-1} 2.1		Duchowicz et al. (2020) Mackay et al. (2006b) Saçan et al. (2005) Govers and Krop (1998) Shiu et al. (1988) Duchowicz et al. (2020)	V V V V V Q	187
		7100	Kühne et al. (2005) Saçan et al. (2005)	Q Q	
	6.8×10^{-2} 1.3×10^{-1} 1.7×10^{-1}		Wang and Wong (2002) Govers and Krop (1998) Kühne et al. (2005)	Q Q ?	537
2-chlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_7\text{ClO}_2$ (PCDD-2) [39227-54-8] GIUGGRUEPVPNR-UHFFFAOYSA-N	8.6×10^{-1} 7.9×10^{-2} 7.9×10^{-2} 6.7×10^{-2} 1.1		Duchowicz et al. (2020) Mackay et al. (2006b) Govers and Krop (1998) Shiu et al. (1988) Duchowicz et al. (2020)	V V V V Q	187
	9.8×10^{-2} 1.3×10^{-1} 2.2×10^{-1}		Saçan et al. (2005) Wang and Wong (2002) Govers and Krop (1998)	Q Q Q	537
1,2-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}_2$ (PCDD-12) [54536-18-4] DFGDMWHUCCHXIF-UHFFFAOYSA-N	2.8×10^{-1} 3.2×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,3-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}_2$ (PCDD-13) [50585-39-2] AZYJYMAKTBXNSX-UHFFFAOYSA-N	2.2×10^{-1} 3.8×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,4-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}_2$ (PCDD-14) [54536-19-5] MBMUPQZSDWVPQU-UHFFFAOYSA-N	2.4×10^{-1} 3.2×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,6-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}_2$ (PCDD-16) [38178-38-0] MAWMBEVNJGEDAD-UHFFFAOYSA-N	2.5×10^{-1} 3.2×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537

Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,7-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}_2$ (PCDD-17) [82291-26-7] IJUWLAFFPVRYGY-UHFFFAOYSA-N	2.6×10^{-1} 3.6×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,8-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}_2$ (PCDD-18) [82291-27-8] PLZYIHQBHROTFD-UHFFFAOYSA-N	2.6×10^{-1} 3.8×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,9-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}_2$ (PCDD-19) [82291-28-9] JZDVJXBKJDADAY-UHFFFAOYSA-N	2.6×10^{-1} 5.4×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
2,3-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}_2$ (PCDD-23) [29446-15-9] YCIYTXRUZSDMRZ-UHFFFAOYSA-N	1.5×10^{-1} 1.5×10^{-1} 1.5×10^{-1} 1.5×10^{-1} 1.5×10^{-1} 8.5×10^{-1} 2.5×10^{-1} 2.6×10^{-1} 4.0×10^{-1}		Duchowicz et al. (2020) Mackay et al. (2006b) Saçan et al. (2005) Govers and Krop (1998) Shiu et al. (1988) Duchowicz et al. (2020) Saçan et al. (2005) Wang and Wong (2002) Govers and Krop (1998)	V V V V V Q Q Q Q	187 537
2,7-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}_2$ (PCDD-27) [33857-26-0] NBFMTHWVRBOVPE-UHFFFAOYSA-N	1.7×10^{-1} 1.2×10^{-1} 1.2×10^{-1} 2.4×10^{-1} 6.6×10^{-1} 7.3×10^{-1} 5.0 1.0×10^{-1} 2.6×10^{-1} 3.5×10^{-1} 1.7×10^{-1}		Santl et al. (1994) Mackay et al. (2006b) Govers and Krop (1998) Shiu et al. (1988) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Saçan et al. (2005) Wang and Wong (2002) Govers and Krop (1998) Duchowicz et al. (2020)	M V V V Q Q Q Q Q Q Q ?	735 685 300 68 537 186, 21
2,8-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}_2$ (PCDD-28) [38964-22-6] WWWJCKBJUQDYLM-UHFFFAOYSA-N	4.7×10^{-1} 4.7×10^{-1} 4.7×10^{-1} 4.7×10^{-1} 1.2 1.7×10^{-1} 2.6×10^{-1} 4.4×10^{-1}		Duchowicz et al. (2020) Mackay et al. (2006b) Govers and Krop (1998) Shiu et al. (1988) Duchowicz et al. (2020) Saçan et al. (2005) Wang and Wong (2002) Govers and Krop (1998)	V V V V Q Q Q Q	187 537

Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3-trichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}_2$ (PCDD-123) [54536-17-3] SKMFBGZVVNDVFR-UHFFFAOYSA-N	5.0×10^{-1} 5.6×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,2,4-trichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}_2$ (PCDD-124) [39227-58-2] HRVUKLBFRPWXPJ-UHFFFAOYSA-N	2.7×10^{-1} 2.9×10^{-1} 2.6×10^{-1} 2.6×10^{-1} 2.4×10^{-1} 9.1×10^{-1} 1.3 1.1×10^1 3.0×10^{-1} 4.4×10^{-1} 5.5×10^{-1} 2.7×10^{-1}		Santl et al. (1994) Mackay et al. (2006b) Govers and Krop (1998) Shiu et al. (1988) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Saçan et al. (2005) Wang and Wong (2002) Govers and Krop (1998) Duchowicz et al. (2020) Fogg and Sangster (2003)	M V V V Q Q Q Q Q Q Q ? W	735 68 537 186, 21 736
1,2,6-trichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}_2$ (PCDD-126) [69760-96-9] XQBPVWBIUBCJJO-UHFFFAOYSA-N	5.0×10^{-1} 5.1×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,2,7-trichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}_2$ (PCDD-127) [82291-30-3] TXJMXDWFQSYEQ-UHFFFAOYSA-N	5.1×10^{-1} 4.6×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,2,8-trichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}_2$ (PCDD-128) [82291-31-4] QBEOCKSANJLBAE-UHFFFAOYSA-N	5.1×10^{-1} 6.0×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,2,9-trichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}_2$ (PCDD-129) [82291-32-5] DQLRDBDQLSIOIX-UHFFFAOYSA-N	5.2×10^{-1} 9.1×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537

Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3,6-trichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}_2$ (PCDD-136) [82291-33-6] LNPMVMVAUXUGHH-UHFFFAOYSA-N	4.2×10^{-1} 6.3×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,3,7-trichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}_2$ (PCDD-137) [67028-17-5] RPKWIXFZKMDPMH-UHFFFAOYSA-N	4.3×10^{-1} 6.8×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,3,8-trichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}_2$ (PCDD-138) [82306-61-4] FJAKCOBYQSEWMT-UHFFFAOYSA-N	4.3×10^{-1} 5.6×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,3,9-trichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}_2$ (PCDD-139) [82306-62-5] DGDADRUTFAIIQQ-UHFFFAOYSA-N	4.4×10^{-1} 1.0		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,4,6-trichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}_2$ (PCDD-146) [82306-63-6] UTTYFTWIJLRXKB-UHFFFAOYSA-N	4.4×10^{-1} 9.3×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,4,7-trichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}_2$ (PCDD-147) [82306-64-7] NBWAQBGJBSYXHV-UHFFFAOYSA-N	4.5×10^{-1} 6.0×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,7,8-trichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}_2$ (PCDD-178) [82306-65-8] CAPCTZJHYADFNX-UHFFFAOYSA-N	4.9×10^{-1} 6.2×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
2,3,7-trichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}_2$ (PCDD-237) [33857-28-2] ZSIZNEVHVVRPFF-UHFFFAOYSA-N	4.9×10^{-1} 5.6×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537

Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,4-tetrachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}_2$ (PCDD-1234) [30746-58-8] DJHHDLMTUOLVHY-UHFFFAOYSA-N	5.0×10^{-1}		Santl et al. (1994)	M	735
	2.7×10^{-1}		Mackay et al. (2006b)	V	
	1.4		Mackay et al. (2006b)	V	
	3.3×10^{-1}		Govers and Krop (1998)	V	
	2.7×10^{-1}		Shiu et al. (1988)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	7.0×10^{-1}		Duchowicz et al. (2020)	Q	185
	1.4		Hilal et al. (2008)	Q	
	2.2×10^1		Modarresi et al. (2007)	Q	68
	6.3×10^{-1}		Saçan et al. (2005)	Q	
	8.7×10^{-1}		Wang and Wong (2002)	Q	537
	7.4×10^{-1}		Govers and Krop (1998)	Q	
	4.9×10^{-1}		Duchowicz et al. (2020)	?	186, 21
1,2,3,6-tetrachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}_2$ (PCDD-1236) [71669-25-5] XEZBZSVTUSXISZ-UHFFFAOYSA-N	8.7×10^{-1}		Wang and Wong (2002)	Q	537
	8.1×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,7-tetrachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}_2$ (PCDD-1237) [67028-18-6] SKGXVYFVQZVPEFP-UHFFFAOYSA-N	1.3		Mackay et al. (2006b)	V	
	1.7		Govers and Krop (1998)	V	
	1.3		Shiu et al. (1988)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	5.7×10^{-1}		Duchowicz et al. (2020)	Q	185
	1.7		Hilal et al. (2008)	Q	
	2.1×10^1		Modarresi et al. (2007)	Q	68
	4.3×10^{-1}		Saçan et al. (2005)	Q	
	8.7×10^{-1}		Wang and Wong (2002)	Q	537
	6.8×10^{-1}		Govers and Krop (1998)	Q	
	1.3		Duchowicz et al. (2020)	?	186, 21
1,2,3,8-tetrachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}_2$ (PCDD-1238) [53555-02-5] BXKLTNKYLCOZOHF-UHFFFAOYSA-N	8.7×10^{-1}		Wang and Wong (2002)	Q	537
	7.1×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,9-tetrachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}_2$ (PCDD-1239) [71669-26-6] CMVHZKSHSHQJHS-UHFFFAOYSA-N	9.1×10^{-1}		Wang and Wong (2002)	Q	537
	1.4		Govers and Krop (1998)	Q	

Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,4,6-tetrachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}_2$ (PCDD-1246) [71669-27-7] KQNBZUDHTCXCN-UHFFFAOYSA-N	8.1×10^{-1} 1.4		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,2,4,7-tetrachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}_2$ (PCDD-1247) [71669-28-8] SMPHQCMJQUBTFZ-UHFFFAOYSA-N	7.8×10^{-1} 7.1×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,2,4,8-tetrachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}_2$ (PCDD-1248) [71669-29-9] XGIKODBWQSAEFQ-UHFFFAOYSA-N	7.8×10^{-1} 8.9×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,2,4,9-tetrachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}_2$ (PCDD-1249) [71665-99-1] WDAHVJCSSYOALR-UHFFFAOYSA-N	8.1×10^{-1} 1.5		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,2,6,7-tetrachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}_2$ (PCDD-1267) [40581-90-6] SAMLAWFHxzIRMP-UHFFFAOYSA-N	9.5×10^{-1} 5.8×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,2,6,8-tetrachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}_2$ (PCDD-1268) [67323-56-2] YYUFYZDSYHKVDP-UHFFFAOYSA-N	8.1×10^{-1} 8.9×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,2,6,9-tetrachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}_2$ (PCDD-1269) [40581-91-7] ZKMXKYXNLFLUCD-UHFFFAOYSA-N	8.7×10^{-1} 1.4		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537

Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,7,8-tetrachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}_2$ (PCDD-1278) [34816-53-0] YDZCLBKUTXYYKS-UHFFFAOYSA-N	7.8×10^{-1} 6.8×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,2,7,9-tetrachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}_2$ (PCDD-1279) [71669-23-3] QIKHBBZEUNSCAF-UHFFFAOYSA-N	8.3×10^{-1} 1.2		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,2,8,9-tetrachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}_2$ (PCDD-1289) [62470-54-6] WELWFAGPAZKSBG-UHFFFAOYSA-N	9.8×10^{-1} 1.3		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,3,6,8-tetrachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}_2$ (PCDD-1368) [33423-92-6] OTQFXRBLGNEOGH-UHFFFAOYSA-N	1.4×10^{-1} 1.4 1.4 1.2 2.9×10^{-1} 6.8×10^{-1} 8.7×10^{-1}		Webster et al. (1985) Govers and Krop (1998) Shiu et al. (1988) Hilal et al. (2008) Saçan et al. (2005) Wang and Wong (2002) Govers and Krop (1998)	M V V Q Q Q Q	537
1,3,6,9-tetrachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}_2$ (PCDD-1369) [71669-24-4] QAUIRDJIUMMEP-UHFFFAOYSA-N	7.4×10^{-1} 1.7		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,3,7,8-tetrachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}_2$ (PCDD-1378) [50585-46-1] VPTDIAYLYJBYPQG-UHFFFAOYSA-N	7.8×10^{-1} 7.9×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537

Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3,7,9-tetrachlorodibenzo- <i>p</i> - dioxin C ₁₂ H ₄ Cl ₄ O ₂ (PCDD-1379) [62470-53-5] JMGYHLJVDHUACM-UHFFFAOYSA-N	7.1×10^{-1} 1.7		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,4,6,9-tetrachlorodibenzo- <i>p</i> - dioxin C ₁₂ H ₄ Cl ₄ O ₂ (PCDD-1469) [40581-93-9] QTIIAIRUSSOHT-UHFFFAOYSA-N	7.9×10^{-1} 2.6		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,4,7,8-tetrachlorodibenzo- <i>p</i> - dioxin C ₁₂ H ₄ Cl ₄ O ₂ (PCDD-1478) [40581-94-0] FCRXUTCUWCJZJI-UHFFFAOYSA-N	8.1×10^{-1} 9.1×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
2,3,7,8-tetrachlorodibenzo- <i>p</i> - dioxin C ₁₂ H ₄ Cl ₄ O ₂ (PCDD-2378; TCDD) [1746-01-6] HGUFODBRKLSHSI-UHFFFAOYSA-N	2.0×10^{-1} 2.0×10^{-1} 3.0×10^{-1} 3.0×10^{-1} 5.8×10^{-1} 6.1×10^{-1} 3.0×10^{-1} 9.7×10^{-2} 6.3×10^{-1} 4.7 2.6×10^{-4} 4.1×10^{-1} 3.3×10^{-1} 8.9×10^{-1} 6.2×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006b) Govers and Krop (1998) McLachlan et al. (1990) Shiu et al. (1988) Shiu et al. (1988) Shiu et al. (1988) Podoll et al. (1986) Schroy et al. (1985) Paasivirta et al. (1999) Duchowicz et al. (2020) Saçan et al. (2005) Wang and Wong (2002) Govers and Krop (1998)	V V V V V V V V V V T Q Q Q Q	187 375 537
1,2,3,4,6-pentachlorodibenzo- <i>p</i> - dioxin C ₁₂ H ₃ Cl ₅ O ₂ (PCDD-12346) [67028-19-7] LNWDBNKKBLRAMH-UHFFFAOYSA-N	1.5 1.8		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537

Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,4,7-pentachlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}_2$ (PCDD-12347) [39227-61-7] WRNGAZFESPEMCN-UHFFFAOYSA-N	3.8 3.8 4.5 3.8 4.5×10^{-1} 7.0×10^{-1} 1.4 8.1×10^{-1}		Duchowicz et al. (2020) Mackay et al. (2006b) Govers and Krop (1998) Shiu et al. (1988) Duchowicz et al. (2020) Saçan et al. (2005) Wang and Wong (2002) Govers and Krop (1998)	V V V V Q Q Q Q	187 537
1,2,3,6,7-pentachlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}_2$ (PCDD-12367) [71925-15-0] RLGWDUHOIWPGN-UHFFFAOYSA-N	1.5 7.8×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,2,3,6,8-pentachlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}_2$ (PCDD-12368) [71925-16-1] VKDGHBBUEIIEHL-UHFFFAOYSA-N	1.3 9.5×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,2,3,6,9-pentachlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}_2$ (PCDD-12369) [82291-34-7] NWKWRHSKKNELND-UHFFFAOYSA-N	1.4 1.9		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537
1,2,3,7,8-pentachlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}_2$ (PCDD-12378) [40321-76-4] FSPZPQQWDODWAW-UHFFFAOYSA-N	5.2×10^{-5} 6.4×10^{-1} 1.5 6.8×10^{-1}	2500	Paasivirta et al. (1999) Saçan et al. (2005) Wang and Wong (2002) Govers and Krop (1998)	T Q Q Q	 537
1,2,3,7,9-pentachlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}_2$ (PCDD-12379) [71925-17-2] UAOYHTXYVWEPIB-UHFFFAOYSA-N	1.3 1.5		Wang and Wong (2002) Govers and Krop (1998)	Q Q	537

Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,8,9-pentachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}_2$ (PCDD-12389) [71925-18-3] VUMZAVNIADYKFC-UHFFFAOYSA-N	1.5		Wang and Wong (2002)	Q	537
	1.4		Govers and Krop (1998)	Q	
1,2,4,6,7-pentachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}_2$ (PCDD-12467) [82291-35-8] SEKDDGLKEYEVQK-UHFFFAOYSA-N	1.4		Wang and Wong (2002)	Q	537
	1.4		Govers and Krop (1998)	Q	
1,2,4,6,8-pentachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}_2$ (PCDD-12468) [71998-76-0] SJJWALZHAWITMS-UHFFFAOYSA-N	1.2		Wang and Wong (2002)	Q	537
	2.1		Govers and Krop (1998)	Q	
1,2,4,6,9-pentachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}_2$ (PCDD-12469) [82291-36-9] GNQVSAMSAKZLKE-UHFFFAOYSA-N	1.3		Wang and Wong (2002)	Q	537
	3.6		Govers and Krop (1998)	Q	
1,2,4,7,8-pentachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}_2$ (PCDD-12478) [58802-08-7] QUPLGUUISJOUJ-UHFFFAOYSA-N	1.3		Wang and Wong (2002)	Q	537
	9.1×10^{-1}		Govers and Krop (1998)	Q	
1,2,4,7,9-pentachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}_2$ (PCDD-12479) [82291-37-0] QLBBXWPVEFJZEC-UHFFFAOYSA-N	1.2		Wang and Wong (2002)	Q	537
	1.8		Govers and Krop (1998)	Q	
1,2,4,8,9-pentachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}_2$ (PCDD-12489) [82291-38-1] KLLFLRKEOJCTGC-UHFFFAOYSA-N	1.4		Wang and Wong (2002)	Q	537
	1.9		Govers and Krop (1998)	Q	

Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,4,6,7-hexachlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}_2$ (PCDD-123467) [58200-66-1] NLBQVWJHLWAFGJ-UHFFFAOYSA-N	2.5		Wang and Wong (2002)	Q	537
	1.5		Govers and Krop (1998)	Q	
1,2,3,4,6,8-hexachlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}_2$ (PCDD-123468) [58200-67-2] IMALTUQZEIFHJW-UHFFFAOYSA-N	2.2		Wang and Wong (2002)	Q	537
	1.8		Govers and Krop (1998)	Q	
1,2,3,4,6,9-hexachlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}_2$ (PCDD-123469) [58200-68-3] UDYXCMRDCOVQLG-UHFFFAOYSA-N	2.3		Wang and Wong (2002)	Q	537
	4.0		Govers and Krop (1998)	Q	
1,2,3,4,7,8-hexachlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}_2$ (PCDD-123478) [39227-28-6] WCYYQNSQJHPVMG-UHFFFAOYSA-N	2.5		Duchowicz et al. (2020)	V	187
	3.0		Mackay et al. (2006b)	V	
	1.6		Govers and Krop (1998)	V	
	2.2×10^{-1}		Shiu et al. (1988)	V	
	1.2×10^{-4}	2900	Paasivirta et al. (1999)	T	
	3.7×10^{-1}		Duchowicz et al. (2020)	Q	
		8800	Kühne et al. (2005)	Q	
	7.7×10^{-1}		Saçan et al. (2005)	Q	
	2.3		Wang and Wong (2002)	Q	537
	6.9×10^{-1}		Govers and Krop (1998)	Q	
		9400	Kühne et al. (2005)	?	
1,2,3,6,7,8-hexachlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}_2$ (PCDD-123678) [57653-85-7] YCLUIPQDHPDJJ-UHFFFAOYSA-N	6.2×10^{-5}	2800	Paasivirta et al. (1999)	T	
	5.2		HSDB (2015)	Q	100
	7.4×10^{-1}		Saçan et al. (2005)	Q	
	2.4		Wang and Wong (2002)	Q	537
	6.9×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,6,7,9-hexachlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}_2$ (PCDD-123679) [64461-98-9] BQOHWGKNRKCEFT-UHFFFAOYSA-N	2.2		Wang and Wong (2002)	Q	537
	1.7		Govers and Krop (1998)	Q	

Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,6,8,9-hexachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}_2$ (PCDD-123689) [58200-69-4] GZRQZUFXVFRKBI-UHFFFAOYSA-N	2.2		Wang and Wong (2002)	Q	537
	1.8		Govers and Krop (1998)	Q	
1,2,3,7,8,9-hexachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}_2$ (PCDD-123789) [19408-74-3] LGIRBUBHIWTVCK-UHFFFAOYSA-N	2.5×10^{-4}	2700	Paasivirta et al. (1999)	T	
	5.2		HSDB (2015)	Q	100
	1.1		Saçan et al. (2005)	Q	
	2.4		Wang and Wong (2002)	Q	537
	1.2		Govers and Krop (1998)	Q	
1,2,4,6,7,9-hexachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}_2$ (PCDD-124679) [39227-62-8] BSJDQMWAFTDGD-UHFFFAOYSA-N	2.1		Wang and Wong (2002)	Q	537
	3.5		Govers and Krop (1998)	Q	
1,2,4,6,8,9-hexachlorodibenzo- <i>p</i> - dioxin $\text{C}_{12}\text{H}_2\text{Cl}_6\text{O}_2$ (PCDD-124689) [58802-09-8] URELDHWUZUWPIU-UHFFFAOYSA-N	2.0		Wang and Wong (2002)	Q	537
	4.4		Govers and Krop (1998)	Q	
1,2,3,4,6,7,8-heptachlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{HCl}_7\text{O}_2$ (PCDD-1234678) [35822-46-9] WCLNVRQZUKYVAI-UHFFFAOYSA-N	5.6×10^{-2}		Duchowicz et al. (2020)	V	187
	7.5		Mackay et al. (2006b)	V	
	2.3		Govers and Krop (1998)	V	
	7.5		Shiu et al. (1988)	V	
	7.5×10^{-5}	2400	Paasivirta et al. (1999)	T	
	4.5×10^{-1}		Duchowicz et al. (2020)	Q	
	4.5×10^{-1}		HSDB (2015)	Q	547
	1.4		Saçan et al. (2005)	Q	
	3.6		Wang and Wong (2002)	Q	537
	1.2		Govers and Krop (1998)	Q	
1,2,3,4,6,7,9-heptachlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{HCl}_7\text{O}_2$ (PCDD-1234679) [58200-70-7] KTJJIBIRZGQFQZ-UHFFFAOYSA-N	3.4		Wang and Wong (2002)	Q	537
	3.2		Govers and Krop (1998)	Q	

Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
octachlorodibenzo- <i>p</i> -dioxin	1.5		Duchowicz et al. (2020)	V	187
$\text{C}_{12}\text{Cl}_8\text{O}_2$	1.5		HSDB (2015)	V	
(PCDD-12346789)	1.5		Mackay et al. (2006b)	V	
[3268-87-9]	7.6×10^{-1}		Govers and Krop (1998)	V	
FOIBFBMSLDGNHL-UHFFFAOYSA-N	1.5		Shiu et al. (1988)	V	
	1.1×10^{-5}	2300	Paasivirta et al. (1999)	T	
	3.8×10^{-1}		Duchowicz et al. (2020)	Q	
		9600	Kühne et al. (2005)	Q	
	1.7		Saçan et al. (2005)	Q	
	5.2		Wang and Wong (2002)	Q	537
	1.9		Govers and Krop (1998)	Q	
		9500	Kühne et al. (2005)	?	

A6.8 Chlorocarbons with nitrogen (C, H, O, N, Cl)

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cyanogen chloride NCCl [506-77-4] QPJDMGCKMHUXFD-UHFFFAOYSA-N	1.2×10^{-2} 5.1×10^{-3}		Hilal et al. (2008) Yaws (1999)	Q ?	21
N,N-dichloromethylamine CH ₃ NCl ₂ [7651-91-4] DWEYPOWXNBAIDU-UHFFFAOYSA-N	3.3×10^{-3} 3.3×10^{-3} 3.3×10^{-3}	4300 4300 4300	Burkholder et al. (2019) Burkholder et al. (2015) Cimetiere and de Laat (2009)	L L M	
chloroacetonitrile C ₂ H ₂ ClN [107-14-2] RENMDAKOXSCIGH-UHFFFAOYSA-N	9.1×10^{-1}	4600 5400	HSDB (2015) Kühne et al. (2005) Kühne et al. (2005)	Q Q ?	449
dichloroacetonitrile C ₂ HCl ₂ N [3018-12-0] STZZWJGGRKXEFF-UHFFFAOYSA-N	2.6		HSDB (2015)	Q	100
trichloroacetonitrile C ₂ Cl ₃ N [545-06-2] DRUIESSIVFYOMK-UHFFFAOYSA-N	7.6 7.3 1.9×10^{-2} 3.9×10^{-3} 1.0×10^{-2}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
tetramethylammonium chloride C ₄ H ₁₂ ClN [75-57-0] OKIZCWYLBKLSU-UHFFFAOYSA-M	2.3×10^6		HSDB (2015)	Q	100
metformin hydrochloride C ₄ H ₁₂ ClN ₅ [1115-70-4] OETHQSJEHLVLGH-UHFFFAOYSA-N	1.3×10^{10}		HSDB (2015)	Q	100
bis(2-chloroethyl)methylamine C ₅ H ₁₁ Cl ₂ N [51-75-2] HAWPXGHAZFHAD-UHFFFAOYSA-N	3.4 8.5×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
chlormequat chloride C ₅ H ₁₃ Cl ₂ N [999-81-5] OLQFELZRGYJRAZ-UHFFFAOYSA-N	$> 3.2 \times 10^9$		Maniere et al. (2011)	?	242, 166

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
tris(2-chloroethyl)amine $\text{C}_6\text{H}_{12}\text{Cl}_3\text{N}$ [555-77-1] FDAYLTPAFBGXAB-UHFFFAOYSA-N	5.3×10^{-1} 5.3×10^{-1} 7.3×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
bis(2-chloroethyl)ethylamine $\text{C}_6\text{H}_{13}\text{Cl}_2\text{N}$ (ethylbis(2-chloroethyl)amine) [538-07-8] UQZPGHOJMQTOHB-UHFFFAOYSA-N	2.8×10^{-2} 2.9×10^{-2} 3.0×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
cetrimonium chloride $\text{C}_{19}\text{H}_{42}\text{ClN}$ (trimethylhexadecylammonium chloride) [112-02-7] WOWHHFRSBJGXCM-UHFFFAOYSA-M	3.4×10^4		HSDB (2015)	Q	100
dimethyldioctadecylammonium chloride $\text{C}_{38}\text{H}_{80}\text{ClN}$ [107-64-2] REZZEXDLIUJMMS-UHFFFAOYSA-M	1.5×10^2		HSDB (2015)	Q	100
1-amino-2-chlorobenzene $\text{C}_6\text{H}_6\text{ClN}$ (<i>o</i> -chloroaniline) [95-51-2] AKCRQHGQIJBRMN-UHFFFAOYSA-N	1.9 7.8×10^{-1} 1.8 7.6×10^{-1} 1.8 1.3 1.3 1.3 2.4 1.6 7.4 2.3 9.6×10^1 2.8 1.1×10^1 5.4 7.0 1.1	7900	Brockbank (2013) Chao et al. (2017) Duchowicz et al. (2020) Chao et al. (2017) HSDB (2015) Mackay et al. (2006d) Lide and Frederikse (1995) Mackay et al. (1995) Meylan and Howard (1991) Abraham et al. (1994a) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Meylan and Howard (1991) Yaws (1999)	L M V V V V V V V R Q Q Q Q Q Q Q ?	1, 737 187 68 231, 232 21, 12

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
1-amino-3-chlorobenzene $\text{C}_6\text{H}_6\text{ClN}$ (<i>m</i> -chloroaniline) [108-42-9] PNPCRKVUWYDDST-UHFFFAOYSA-N	4.7		Chao et al. (2017)	M	
	9.8		Altschuh et al. (1999)	M	
	2.7		Chao et al. (2017)	V	
	4.5		Mackay et al. (2006d)	V	
	4.5		Mackay et al. (1995)	V	
	7.5		Abraham et al. (1994a)	R	
	7.5		Yaws (2003)	X	238, 12
	9.1		Keshavarz et al. (2022)	Q	
	8.8		Duchowicz et al. (2020)	Q	
	4.9		Gharagheizi et al. (2010)	Q	247
	7.7		Hilal et al. (2008)	Q	
	3.1×10^1		Modarresi et al. (2007)	Q	68
	4.6		Yao et al. (2002)	Q	230
	4.1		English and Carroll (2001)	Q	231, 275
	1.5×10^1		Katritzky et al. (1998)	Q	
	5.3		Nirmalakhandan et al. (1997)	Q	
	9.9		Duchowicz et al. (2020)	?	186, 21
	4.9		Yaws (1999)	?	21, 12
1-amino-4-chlorobenzene $\text{C}_6\text{H}_6\text{ClN}$ (<i>p</i> -chloroaniline) [106-47-8] QNSCYSYFYORTR-UHFFFAOYSA-N	8.5		Duchowicz et al. (2020)	V	187
	3.2		HSDB (2015)	V	
	1.0×10^1		Mackay et al. (2006d)	V	
	9.1×10^{-1}		Lide and Frederikse (1995)	V	
	1.0×10^1		Mackay et al. (1995)	V	
	2.5×10^1		Meylan and Howard (1991)	V	
	8.6		Abraham et al. (1994a)	R	
	3.4		Yaws (2003)	X	238, 12
	9.2×10^{-1}		Howard (1989)	X	414
	8.3		Duchowicz et al. (2020)	Q	
	4.9		Gharagheizi et al. (2010)	Q	247
	8.6		Hilal et al. (2008)	Q	
	1.6×10^1		Modarresi et al. (2007)	Q	68
	8.8		Yaffe et al. (2003)	Q	249, 250
	5.4		English and Carroll (2001)	Q	231, 261
	1.5×10^1		Katritzky et al. (1998)	Q	
	5.3		Nirmalakhandan et al. (1997)	Q	
	7.0		Meylan and Howard (1991)	Q	
2,3-dichlorobenzeneamine $\text{C}_6\text{H}_5\text{Cl}_2\text{N}$ (2,3-dichloroaniline) [608-27-5] BRPSAOUIJSKOT-UHFFFAOYSA-N	6.2		HSDB (2015)	Q	100

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4-dichlorobenzeneamine $\text{C}_6\text{H}_5\text{Cl}_2\text{N}$ (2,4-dichloroaniline) [554-00-7] KQCMTOWTPBNWDB-UHFFFAOYSA-N	6.2		HSDB (2015)	Q	100
3,4-dichlorobenzeneamine $\text{C}_6\text{H}_5\text{Cl}_2\text{N}$ (3,4-dichloroaniline) [95-76-1] SDYWXFYBZPNOFX-UHFFFAOYSA-N	6.8×10^{-1} 6.8×10^{-1} 4.4×10^{-1} 4.4×10^{-1} 1.8×10^1 2.0×10^1		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Mackay et al. (1995) Duchowicz et al. (2020) Katritzky et al. (1998)	V V V V Q Q	187
3,5-dichlorobenzeneamine $\text{C}_6\text{H}_5\text{Cl}_2\text{N}$ (3,5-dichloroaniline) [626-43-7] UQRLKWGPEVNVHT-UHFFFAOYSA-N	6.2		HSDB (2015)	Q	100
2,5-dichlorobenzeneamine $\text{C}_6\text{H}_5\text{Cl}_2\text{N}$ (2,5-dichloroaniline) [95-82-9] AVYGCQXNNJPXSS-UHFFFAOYSA-N	6.2 9.5 2.6 2.7 1.9×10^1		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
2,4,5-trichlorobenzeneamine $\text{C}_6\text{H}_4\text{Cl}_3\text{N}$ [636-30-6] GUMCAKKKNKYFEB-UHFFFAOYSA-N	1.3×10^1 2.4 9.5 1.8×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2,4,6-trichlorobenzeneamine $\text{C}_6\text{H}_4\text{Cl}_3\text{N}$ [634-93-5] NATVSFWWWYJTAZ-UHFFFAOYSA-N	7.4 1.3×10^1 6.2×10^{-1} 4.1×10^{-1} 1.5×10^1		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2,3,4,5,6-pentachloroaniline $\text{C}_6\text{H}_2\text{Cl}_5\text{N}$ [527-20-8] KHCZSJXTDDHLGJ-UHFFFAOYSA-N	2.3×10^1		HSDB (2015)	Q	100
2,6-dichlorobenzene nitrile $\text{C}_6\text{H}_3\text{Cl}_2\text{CN}$ (dichlobenil) [1194-65-6] YOYAIZYFCNQIRF-UHFFFAOYSA-N	4.8×10^{-1} 9.8×10^{-1} 9.9×10^{-1} 1.5 1.4 1.5 1.4 1.5×10^{-2} 3.5×10^{-1}	5400	Schoene and Steinhanses (1985) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Schüürmann (2000) Suntio et al. (1988) Burkhard and Guth (1981) Barcelo and Hennion (1997) Duchowicz et al. (2020)	M V V V V V V X Q	187 12 569

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	1.5×10^{-2}		Goodarzi et al. (2010)	Q	570, 571
	3.6×10^{-1}		Modarresi et al. (2007)	Q	68
		6000	Kühne et al. (2005)	Q	
		5500	Kühne et al. (2005)	?	
(2,4,6-trichlorophenyl)hydrazine $\text{C}_6\text{H}_5\text{Cl}_3\text{N}_2$ [5329-12-4] MULHANRBCQBHII-UHFFFAOYSA-N	3.1×10^3		Zhang et al. (2010)	Q	288, 289
	3.7×10^1		Zhang et al. (2010)	Q	288, 290
	1.1×10^1		Zhang et al. (2010)	Q	288, 291
	5.4×10^3		Zhang et al. (2010)	Q	288, 292
4-chlorobenzonitrile $\text{C}_7\text{H}_4\text{ClN}$ [623-03-0] GJNGXPDXRVXSEH-UHFFFAOYSA-N	2.5×10^{-1}		Zhang et al. (2010)	Q	288, 289
	3.8×10^{-1}		Zhang et al. (2010)	Q	288, 290
	1.6		Zhang et al. (2010)	Q	288, 291
	4.5×10^{-1}		Zhang et al. (2010)	Q	288, 292
3-chloro-2-methylbenzenamine $\text{C}_7\text{H}_8\text{ClN}$ [87-60-5] ZUVPLKVDZNDZCM-UHFFFAOYSA-N	6.3		HSDB (2015)	Q	100
3-chloro-4-methylbenzenamine $\text{C}_7\text{H}_8\text{ClN}$ [95-74-9] RQKFYFNZSHWXAW-UHFFFAOYSA-N	4.9		HSDB (2015)	Q	100
4-chloro-2-methylbenzenamine $\text{C}_7\text{H}_8\text{ClN}$ [95-69-2] CXNVOWPRHWWCQR-UHFFFAOYSA-N	4.9		HSDB (2015)	Q	100
5-chloro-2-methylbenzenamine $\text{C}_7\text{H}_8\text{ClN}$ [95-79-4] WRZOMWDJOLIVQP-UHFFFAOYSA-N	6.3		HSDB (2015)	Q	547
2,4,5,6-tetrachloro-1,3-dicyanobenzene $\text{C}_8\text{Cl}_4\text{N}_2$ (chlorothalonil) [1897-45-6] CRQQGFUGUEAVUIL-UHFFFAOYSA-N	5.0×10^1		Kawamoto and Urano (1989)	M	
	1.7×10^{-2}		Mackay et al. (2006d)	V	
	3.9×10^1		MacBean (2012b)	X	352
	4.5×10^1		Armbrust (2000)	C	
	4.1×10^{-1}		Keshavarz et al. (2022)	Q	
	1.8×10^1		Duchowicz et al. (2020)	Q	
	6.5×10^1		Zhang et al. (2010)	Q	288, 289
	1.5		Zhang et al. (2010)	Q	288, 290
	6.9×10^1		Zhang et al. (2010)	Q	288, 291
	2.7×10^1		Zhang et al. (2010)	Q	288, 292
	5.8		Hilal et al. (2008)	Q	
	2.4×10^1		Modarresi et al. (2007)	Q	68
	6.5×10^1		Meylan and Howard (1991)	Q	
	4.9		Duchowicz et al. (2020)	?	186, 21

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-chlorobenzalmalononitrile $\text{C}_{10}\text{H}_5\text{ClN}_2$ [2698-41-1] JJNZXLAFIPKXIG-UHFFFAOYSA-N	9.9×10^2		HSDB (2015)	Q	100
benzyltrimethylammonium chloride $\text{C}_{10}\text{H}_{16}\text{ClN}$ [56-93-9] KXHPPCXNWTUNSB-UHFFFAOYSA-M	2.9×10^8		HSDB (2015)	Q	100
chlordimeform $\text{C}_{10}\text{H}_{13}\text{ClN}_2$ [6164-98-3] STUSTWKEFDQFFZ-UHFFFAOYSA-N	2.9×10^1 2.6×10^1		HSDB (2015) MacBean (2012a)	V ?	12
4,4'-dichloroazobenzene $\text{C}_{12}\text{H}_8\text{Cl}_2\text{N}_2$ [1602-00-2] XHQLXCFUPJSGOE-UHFFFAOYSA-N	1.2		HSDB (2015)	Q	100
bis(3,4-dichlorophenyl)diazene $\text{C}_{12}\text{H}_6\text{Cl}_4\text{N}_2$ (3,4,3',4'-tetrachloroazobenzene) [14047-09-7] SOBGIMQKWUEPY-UHFFFAOYSA-N	2.2		HSDB (2015)	Q	449
2-(<i>p</i> -chlorophenyl)-3- methylbutyronitrile $\text{C}_{11}\text{H}_{12}\text{ClN}$ [2012-81-9] RBGSZIRWNWQDOK-UHFFFAOYSA-N	2.3 4.4 3.9 2.9×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
3,3'-dichloro-(1,1'-biphenyl)-4,4'- diamine $\text{C}_{12}\text{H}_{10}\text{Cl}_2\text{N}_2$ (3,3'-dichlorobenzidine) [91-94-1] HUWXDEQWWKGRHV-UHFFFAOYSA-N	2.0×10^2 2.0×10^2 1.2×10^1 3.5×10^5		Mackay et al. (2006d) Mackay et al. (1995) Mackay et al. (1995) HSDB (2015)	V V C Q	100
4-chloroazobenzene $\text{C}_{12}\text{H}_9\text{ClN}_2$ [4340-77-6] NJFDMENHTAYHMA-UHFFFAOYSA-N	7.4 2.2		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,4'-methylenebis(2-chlorobenzenamine) $\text{C}_{13}\text{H}_{12}\text{Cl}_2\text{N}_2$ [101-14-4] IBOFVQJTBBUKMU-UHFFFAOYSA-N	9.0×10^5		HSDB (2015)	Q	100
	3.0×10^5		Zhang et al. (2010)	Q	288, 289
	3.4×10^4		Zhang et al. (2010)	Q	288, 290
	2.9×10^4		Zhang et al. (2010)	Q	288, 291
	9.7×10^5		Zhang et al. (2010)	Q	288, 292
clofentezine $\text{C}_{14}\text{H}_8\text{N}_4\text{Cl}_2$ [74115-24-5] UXADOQPNKNTIHB-UHFFFAOYSA-N	2.5×10^4		Duchowicz et al. (2020)	V	187
	1.7×10^4		Duchowicz et al. (2020)	Q	
aniline, 4,4'-(imidocarbonyl)bis-(N,N-dimethyl)-, hydrochloride $\text{C}_{17}\text{H}_{22}\text{ClN}_3$ (auramine hydrochloride) [2465-27-2] KSCQDDRPFHITRL-UHFFFAOYSA-N	3.5×10^{10}		HSDB (2015)	Q	100
amitriptyline hydrochloride $\text{C}_{20}\text{H}_{24}\text{ClN}$ [549-18-8] KFYRPLNVJVHZGT-UHFFFAOYSA-N	1.4×10^2		HSDB (2015)	Q	100
chlorhexidine $\text{C}_{22}\text{H}_{30}\text{Cl}_2\text{N}_{10}$ [55-56-1] GHXZTYHSJHQHIJ-UHFFFAOYSA-N	9.0×10^{24}		HSDB (2015)	Q	100
malachite green $\text{C}_{23}\text{H}_{25}\text{ClN}_2$ [569-64-2] FDZZZRQASAIRJF-UHFFFAOYSA-M	5.2×10^8		HSDB (2015)	Q	100
tetradecylbenzyl dimethyl ammonium chloride $\text{C}_{23}\text{H}_{42}\text{ClN}$ [139-08-2] OCBHHZMJRVXXQK-UHFFFAOYSA-M	7.6×10^5		HSDB (2015)	Q	100
stearyldimethylbenzyl ammonium chloride $\text{C}_{27}\text{H}_{50}\text{ClN}$ (benzyl dimethyl stearylammonium chloride) [122-19-0] SFVFIFLLYFPGHH-UHFFFAOYSA-M	2.3×10^5		HSDB (2015)	Q	100

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2,4,6-trichloro-1,3,5-triazine $\text{C}_3\text{Cl}_3\text{N}_3$ [108-77-0] MGNCLNQXLYJVJD-UHFFFAOYSA-N	2.0×10^1 2.0×10^1 2.4×10^1 3.1×10^{-1} 7.9		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
2-chloropyridine $\text{C}_5\text{H}_4\text{ClN}$ [109-09-1] OKDGRDCXVWSXDC-UHFFFAOYSA-N	7.4×10^{-1} 6.1×10^{-1} 1.9×10^{-1} 5.8×10^{-1} 1.1	5900 6100	Arnett and Chawla (1979) Duchowicz et al. (2020) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Yaffe et al. (2003) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Kühne et al. (2005)	M V Q Q Q Q Q Q Q ?	561 187 68 249, 250 231, 275
3-chloropyridine $\text{C}_5\text{H}_4\text{ClN}$ [626-60-8] PWRBCZZQRRPXAB-UHFFFAOYSA-N	3.5×10^{-1} 4.1×10^{-1} 8.3×10^{-1} 3.7×10^{-1} 2.9×10^{-1} 1.5×10^1	5600	Arnett and Chawla (1979) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Nirmalakhandan et al. (1997)	M Q Q Q Q Q	561 68 249, 250 231, 232
2,3,4,6-tetrachloropyridine $\text{C}_5\text{HCl}_4\text{N}$ [14121-36-9] FZFNDUTVMQOPCT-UHFFFAOYSA-N	1.2×10^{-3} 1.1×10^{-1} 7.9×10^{-2} 2.9×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2,3,5,6-tetrachloropyridine $\text{C}_5\text{HCl}_4\text{N}$ [2402-79-1] FATBKZJZAHWCSL-UHFFFAOYSA-N	1.2×10^{-3} 1.2×10^{-3} 3.4×10^{-2} 8.4×10^{-2} 1.9×10^{-1}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
pentachloropyridine $\text{C}_5\text{Cl}_5\text{N}$ [2176-62-7] DNDDPLEAVNVOOQZ-UHFFFAOYSA-N	1.6×10^{-3} 1.6×10^{-3} 1.3×10^{-2} 2.5×10^{-2} 1.8×10^{-1}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
desethylatrazine $\text{C}_6\text{H}_{10}\text{ClN}_5$ [6190-65-4] DFWFIQKMSFGDCQ-UHFFFAOYSA-N	6.6×10^3		HSDB (2015)	Q	100

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
2-chloro-6-(trichloromethyl)- pyridine $\text{C}_6\text{H}_3\text{Cl}_4\text{N}$ [1929-82-4] DCUJWWUNKJPH-UHFFFAOYSA-N	6.2×10^{-1} 1.8 2.7 4.2×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2,3,4,5-tetrachloro-6- methylpyridine $\text{C}_6\text{H}_3\text{Cl}_4\text{N}$ [10469-02-0] OZLPEWBQZDDFCQ-UHFFFAOYSA-N	6.7×10^{-2} 3.6×10^{-2} 3.6×10^{-2} 1.1×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2-chloro-5- (trichloromethyl)pyridine $\text{C}_6\text{H}_3\text{Cl}_4\text{N}$ [69045-78-9] VLJIVLGVKMTBOD-UHFFFAOYSA-N	6.2×10^{-1} 2.2 7.7×10^{-1} 4.2×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2,3-dichloro-5- (trichloromethyl)pyridine $\text{C}_6\text{H}_2\text{Cl}_5\text{N}$ [69045-83-6] XVBWGQSXLITICX-UHFFFAOYSA-N	8.4×10^{-1} 4.1×10^{-1} 1.8×10^{-1} 6.1×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2,5-dichloro-6- (trichloromethyl)pyridine $\text{C}_6\text{H}_2\text{Cl}_5\text{N}$ [1817-13-6] MWFCRQNUHFSUNY-UHFFFAOYSA-N	8.4×10^{-1} 1.2 9.9×10^{-1} 5.7×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
3,4,5-trichloro-2- (trichloromethyl)pyridine $\text{C}_6\text{HCl}_6\text{N}$ [1201-30-5] YWSFDYUMBEQNZ-UHFFFAOYSA-N	7.2×10^1 9.0×10^{-2} 1.0×10^{-1} 4.1×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2,3,4,5-tetrachloro-6- (trichloromethyl)pyridine $\text{C}_6\text{Cl}_7\text{N}$ [1134-04-9] YMBFWRZKTZICHS-UHFFFAOYSA-N	1.5 6.7×10^{-2} 7.0×10^{-2} 2.3×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
3,4,5,6-tetrachloropyridine-2- carbonitrile $\text{C}_6\text{Cl}_4\text{N}_2$ [17824-83-8] KFPBGJYBKSQIAI-UHFFFAOYSA-N	7.5 1.7 8.0×10^{-1} 1.5×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-amino-3,5,6-trichloropyridine-2-carbonitrile $\text{C}_6\text{H}_2\text{Cl}_3\text{N}_3$ [14143-60-3] AZYQVGBVUCIEO-UHFFFAOYSA-N	1.6×10^4		Zhang et al. (2010)	Q	288, 289
	1.1×10^3		Zhang et al. (2010)	Q	288, 290
	9.0×10^3		Zhang et al. (2010)	Q	288, 291
	1.0×10^5		Zhang et al. (2010)	Q	288, 292
crimidine $\text{C}_7\text{H}_{10}\text{ClN}_3$ [535-89-7] HJIUPFPIEBPYIE-UHFFFAOYSA-N	2.6×10^2		HSDB (2015)	Q	100
simazine $\text{C}_7\text{H}_{12}\text{ClN}_5$ [122-34-9] ODCWYMRDDJXKW-UHFFFAOYSA-N	1.0×10^4		HSDB (2015)	V	
	2.9×10^3		Mackay et al. (2006d)	V	
	2.9×10^3		Suntio et al. (1988)	V	12
	1.6×10^4		Glotfelty et al. (1987)	V	
	2.9×10^1		Barcelo and Hennion (1997)	X	569
	6.2×10^7		Delgado and Alderete (2003)	C	
	1.1×10^4		Delgado and Alderete (2003)	C	
	9.1×10^1		Goodarzi et al. (2010)	Q	570
	1.7×10^3		Hilal et al. (2008)	Q	
	7.2×10^3		Abraham et al. (2007)	Q	
	5.5×10^5		Delgado and Alderete (2003)	Q	
	4.0×10^6		Delgado and Alderete (2003)	Q	
desethylterbuthylazine $\text{C}_7\text{H}_{12}\text{ClN}_5$ [30125-63-4] LMKQNTMFZLAJDV-UHFFFAOYSA-N	2.2×10^3		Otto et al. (1997)	V	
mepiquat chloride $\text{C}_7\text{H}_{16}\text{NCl}$ [24307-26-4] VHOVSQVSAQANU-UHFFFAOYSA-M	3.3×10^{11}		Maniere et al. (2011)	?	242, 166
atrazine $\text{C}_8\text{H}_{14}\text{ClN}_5$ [1912-24-9] MXWJVTOOROXGIU-UHFFFAOYSA-N	1.9×10^3		Muir et al. (2004)	L	369
	3.5×10^3		Mackay et al. (2006d)	V	
	1.0×10^3		Siebers et al. (1994)	V	
	3.3×10^3		Riederer (1990)	V	
	3.4×10^3		Suntio et al. (1988)	V	12
	2.0×10^3		Glotfelty et al. (1987)	V	
	3.4×10^1		Barcelo and Hennion (1997)	X	569
	8.3×10^6		Delgado and Alderete (2003)	C	
	4.3×10^3		Delgado and Alderete (2003)	C	
	7.2×10^1		Goodarzi et al. (2010)	Q	570
	7.2×10^2		Hilal et al. (2008)	Q	
	5.1×10^3		Abraham et al. (2007)	Q	
	2.8×10^4		Delgado and Alderete (2003)	Q	
	4.0×10^5		Delgado and Alderete (2003)	Q	

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
clonidine $\text{C}_9\text{H}_9\text{Cl}_2\text{N}_3$ [4205-90-7] GJSURZIOUXUGAL-UHFFFAOYSA-N	6.6×10^5		HSDB (2015)	Q	100
cyprazine $\text{C}_9\text{H}_{12}\text{ClN}_5$ [22936-86-3] OOHIAOSLOGDBCE-UHFFFAOYSA-N	7.6×10^3 7.7×10^4 3.8×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015)	V Q Q	187 100
propazine $\text{C}_9\text{H}_{16}\text{ClN}_5$ [139-40-2] WJNRPIHGGKWCK-UHFFFAOYSA-N	2.1×10^3 1.0×10^4 9.9×10^1 1.7×10^2 3.6×10^2 4.0×10^3		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010) Hilal et al. (2008) Abraham et al. (2007)	V V V X Q Q Q	 560 12 569 570, 573
sebuthylazine $\text{C}_9\text{H}_{16}\text{ClN}_5$ [7286-69-3] BZRUVKZGXNSXMB-UHFFFAOYSA-N	8.4×10^2		Ebert et al. (2023)	?	319
terbuthylazine $\text{C}_9\text{H}_{16}\text{ClN}_5$ [5915-41-3] FZXISNSWEXTPMF-UHFFFAOYSA-N	4.3×10^2 2.5×10^2 2.5×10^2 2.4×10^2 2.9×10^2 9.0×10^2 4.3×10^2		HSDB (2015) Mackay et al. (2006d) Otto et al. (1997) Siebers et al. (1994) Hilal et al. (2008) Abraham et al. (2007) Maniere et al. (2011)	V V V V Q Q ?	 242, 166
cyanazine $\text{C}_9\text{H}_{13}\text{ClN}_6$ [21725-46-2] MZZBPDKVEFVLFU-UHFFFAOYSA-N	3.3×10^6 3.3×10^4 8.3×10^9 3.9×10^6 9.6×10^1 6.4×10^5 2.0×10^6 4.5×10^6 1.0×10^9		Mackay et al. (2006d) Barcelo and Hennion (1997) Delgado and Alderete (2003) Delgado and Alderete (2003) Goodarzi et al. (2010) Hilal et al. (2008) Abraham et al. (2007) Delgado and Alderete (2003) Delgado and Alderete (2003)	V X C C Q Q Q Q Q	 569 570
anilazine $\text{C}_9\text{H}_5\text{Cl}_3\text{N}_4$ [101-05-3] IMHBYKMAHXWHRP-UHFFFAOYSA-N	3.5×10^4 3.5×10^4 2.9×10^1 1.2×10^3 9.5 5.4×10^3 3.5×10^4		HSDB (2015) Mackay et al. (2006d) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) MacBean (2012a)	V V Q Q Q Q ?	 288, 289 288, 290 288, 291 288, 292

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,7-dichloroquinoline $\text{C}_9\text{H}_5\text{Cl}_2\text{N}$ [86-98-6] HXEWMTXDBOQQKO-UHFFFAOYSA-N	2.6×10^1 6.9 1.5 7.0		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
fenclorim $\text{C}_{10}\text{H}_6\text{Cl}_2\text{N}_2$ [3740-92-9] NRFQZTCQAYEXEE-UHFFFAOYSA-N	5.6×10^{-1}		Ebert et al. (2023)	?	319
acetamiprid $\text{C}_{10}\text{H}_{11}\text{ClN}_4$ [135410-20-7] WCXDHFDTOYPNIE-UHFFFAOYSA-N	1.4×10^2 $> 1.9 \times 10^7$		HSDB (2015) Maniere et al. (2011)	Q ?	100 166
pyrimethamine $\text{C}_{12}\text{H}_{13}\text{ClN}_4$ [58-14-0] WKS AUQYGYAYLPV-UHFFFAOYSA-N	9.1×10^4		HSDB (2015)	Q	449
penconazole $\text{C}_{13}\text{H}_{15}\text{Cl}_2\text{N}_3$ [66246-88-6] WKBPZYKAUNRMKP-UHFFFAOYSA-N	6.9×10^2 1.2×10^3 2.1 1.5×10^3		Duchowicz et al. (2020) Mackay et al. (2006d) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	187 12, 166
myclobutanil $\text{C}_{15}\text{H}_{17}\text{ClN}_4$ [88671-89-0] HZJKXKUJVSEEFU-UHFFFAOYSA-N	2.3×10^3 2.3×10^3 2.2×10^2 2.3×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	187 12, 166
2-chloro-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine $\text{C}_{19}\text{H}_{18}\text{N}_3\text{Cl}$ [1237-53-2] LVWOBZPDFCTAOU-UHFFFAOYSA-N	1.2×10^3 1.3×10^3 7.0 1.2×10^3		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
fenbuconazole $\text{C}_{19}\text{H}_{17}\text{ClN}_4$ [114369-43-6] RQDJADAKIFFEKQ-UHFFFAOYSA-N	3.3×10^4		Maniere et al. (2011)	?	242, 166
trichloronitromethane CCl_3NO_2 (chloropicrin) [76-06-2] LFHISGNCFUNFFM-UHFFFAOYSA-N	4.7×10^{-3} 4.7×10^{-3} 4.7×10^{-3} 4.7×10^{-3} 4.0×10^{-3} 4.8×10^{-3} 5.1×10^{-3} 5.0×10^{-2}		Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Worthington and Wade (2007) Welke et al. (1998) Kawamoto and Urano (1989) Mackay et al. (2006d) Suntio et al. (1988) Keshavarz et al. (2022)	L L L M M M V V Q	 560 12

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.6×10^{-2}		Duchowicz et al. (2020)	Q	185
	2.5×10^{-3}		Hilal et al. (2008)	Q	
	3.0×10^{-2}		Modarresi et al. (2007)	Q	68
	4.8×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	1.3×10^{-2}		Katritzky et al. (1998)	Q	
	4.8×10^{-3}		Duchowicz et al. (2020)	?	186, 21
phosgene oxime CHCl ₂ NO [1794-86-1] JIRJHEXNDQBKRZ-UHFFFAOYSA-N	1.8×10^1		HSDB (2015)	Q	100
1,1-dichloro-1-nitroethane C ₂ H ₃ Cl ₂ NO ₂ [594-72-9] OQOGEOLRYAOSKO-UHFFFAOYSA-N	7.7×10^{-3}		Duchowicz et al. (2020)	V	187
	1.3×10^{-1}		Duchowicz et al. (2020)	Q	
	7.7×10^{-3}		HSDB (2015)	Q	100
	2.0×10^{-2}		Hilal et al. (2008)	Q	
	1.1×10^{-1}		Modarresi et al. (2007)	Q	68
2-chloroacetamide C ₂ H ₄ ClNO [79-07-2] VXIVSQZSERGHQP-UHFFFAOYSA-N	2.5×10^3		HSDB (2015)	Q	100
MCM:CCL3PAN C ₂ NO ₅ Cl ₃ LLOMRHYBAIQGGH-UHFFFAOYSA-N	1.0×10^1		Wang et al. (2017)	Q	81, 239
	7.3×10^{-1}		Wang et al. (2017)	Q	81, 240
	3.6×10^{-5}		Wang et al. (2017)	Q	81, 241
MCM:CCLNO3COOH C ₂ H ₄ NO ₅ Cl GVGGZHVVOOFUNFY-UHFFFAOYSA-N	2.1×10^3		Wang et al. (2017)	Q	81, 239
	2.6×10^3		Wang et al. (2017)	Q	81, 240
	4.2		Wang et al. (2017)	Q	81, 241
MCM:CHCL2PAN C ₂ HNO ₅ Cl ₂ BORKLXDOXKHVRO-UHFFFAOYSA-N	2.2×10^1		Wang et al. (2017)	Q	81, 239
	1.6×10^1		Wang et al. (2017)	Q	81, 240
	4.9×10^{-4}		Wang et al. (2017)	Q	81, 241
MCM:CLETPAN C ₂ H ₂ NO ₅ Cl IEQWXJNETVFAEB-UHFFFAOYSA-N	9.8		Wang et al. (2017)	Q	81, 239
	3.3×10^1		Wang et al. (2017)	Q	81, 240
	4.2×10^{-3}		Wang et al. (2017)	Q	81, 241
MCM:CNO3CLOOH C ₂ H ₄ NO ₅ Cl FBIXZLOOAAICML-UHFFFAOYSA-N	2.1×10^3		Wang et al. (2017)	Q	81, 239
	3.0×10^3		Wang et al. (2017)	Q	81, 240
	8.3		Wang et al. (2017)	Q	81, 241
MCM:CCLNO3COH C ₂ H ₄ NO ₄ Cl PMLDKFZZOPGPNK-UHFFFAOYSA-N	1.8×10^2		Wang et al. (2017)	Q	81, 239
	7.1×10^2		Wang et al. (2017)	Q	81, 240
	7.8×10^{-1}		Wang et al. (2017)	Q	81, 241
MCM:CL2OHPAN C ₂ HNO ₆ Cl ₂ YJZUCQDIDXVPNP-UHFFFAOYSA-N	3.8×10^3		Wang et al. (2017)	Q	81, 239
	1.5×10^2		Wang et al. (2017)	Q	81, 240
	1.4×10^{-2}		Wang et al. (2017)	Q	81, 241

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CLOHPAN $\text{C}_2\text{H}_2\text{NO}_6\text{Cl}$ ZNYKQWDXHYNGTP-UHFFFAOYSA-N	4.2×10^3 1.0×10^4 8.9×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
1-chloro-1-nitroethane $\text{C}_2\text{H}_4\text{ClNO}_2$ [598-92-5] LPIWIOBGUAPNQW-UHFFFAOYSA-N	2.0×10^{-2}		Ebert et al. (2023)	?	317
MCM:CNO3CLOH $\text{C}_2\text{H}_4\text{NO}_4\text{Cl}$ OUFVLIWCNZOATK-UHFFFAOYSA-N	2.8×10^2 1.4×10^3 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CCLCONO3 $\text{C}_2\text{H}_2\text{NO}_4\text{Cl}$ XDEFPIDZLAIVCM-UHFFFAOYSA-N	2.6×10^1 1.6×10^2 2.5×10^{-3}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CNO3OCL $\text{C}_2\text{H}_2\text{NO}_4\text{Cl}$ ODQFUUDIEKKDDJ-UHFFFAOYSA-N	1.7×10^1 1.1×10^1 4.4×10^{-3}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
symclosene $\text{C}_3\text{Cl}_3\text{N}_3\text{O}_3$ (trichloroisocyanuric acid) [87-90-1] YRIZYWQGELRKNT-UHFFFAOYSA-N	1.6×10^5		HSDB (2015)	Q	100
MCM:CL12PAN $\text{C}_3\text{H}_3\text{NO}_5\text{Cl}_2$ MSMFQRZPTBDNBF-UHFFFAOYSA-N	6.2×10^1 4.9×10^1 2.5×10^{-3}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
1-chloro-1-nitropropane $\text{C}_3\text{H}_6\text{ClNO}_2$ [600-25-9] XEKUXTMJEFPWCG-UHFFFAOYSA-N	4.6×10^{-2}		Ebert et al. (2023)	?	317
1,3-dichloro-5,5-dimethylhydantoin $\text{C}_5\text{H}_6\text{Cl}_2\text{N}_2\text{O}_2$ [118-52-5] KEGGZUUPPQEDPF-UHFFFAOYSA-N	9.9		HSDB (2015)	Q	100
carmustine $\text{C}_5\text{H}_9\text{Cl}_2\text{N}_3\text{O}_2$ [154-93-8] DLGOEMSEDOSKAD-UHFFFAOYSA-N	2.1×10^5		HSDB (2015)	Q	100

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-chloro-N,N-di-2-propenylacetamide $\text{C}_8\text{H}_{12}\text{ClNO}$ [93-71-0] MDBGGTQNNUOQRC-UHFFFAOYSA-N	9.2×10^1 9.2×10^1 9.5 9.7×10^1 1.9×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q	187 68
2,2-dichloro-N,N-di-2-propenylacetamide $\text{C}_8\text{H}_{11}\text{Cl}_2\text{NO}$ (dichlormid) [37764-25-3] YRMLFORXOOIJDR-UHFFFAOYSA-N	3.1×10^1 2.7×10^1		Hilal et al. (2008) Modarresi et al. (2007)	Q Q	 68
lomustine $\text{C}_9\text{H}_{16}\text{ClN}_3\text{O}_2$ [13010-47-4] GQYIWUVLTXXAJ-UHFFFAOYSA-N	5.5×10^4		HSDB (2015)	Q	100
semustine $\text{C}_{10}\text{H}_{18}\text{ClN}_3\text{O}_2$ [13909-09-6] FVLVBPDQNARYJU-UHFFFAOYSA-N	3.9×10^4		HSDB (2015)	Q	100
furilazole $\text{C}_{11}\text{H}_{13}\text{Cl}_2\text{NO}_3$ [121776-33-8] MCNOFYBITGAAGM-UHFFFAOYSA-N	1.1×10^5 1.3×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
dimethazone $\text{C}_{12}\text{H}_{14}\text{ClNO}_2$ (clomazone) [81777-89-1] KIEDNEWSYUYDSN-UHFFFAOYSA-N	2.4×10^2 2.4×10^2 4.5 2.4×10^2		Duchowicz et al. (2020) MacBean (2012b) Duchowicz et al. (2020) Maniere et al. (2011)	V X Q ?	187 352 242, 166
2-chloronitrobenzene $\text{C}_6\text{H}_4\text{ClNO}_2$ (<i>o</i> -chloronitrobenzene) [88-73-3] BFCFYVKQTRLZHA-UHFFFAOYSA-N	1.1 2.2×10^{-1} 2.8×10^{-1} 1.1 3.1 6.2×10^{-1} 1.5×10^{-1} 1.2 4.6×10^{-1} 3.1×10^{-1} 1.8×10^{-1}		Altschuh et al. (1999) Hellmann (1987) Lide and Frederikse (1995) Keshavarz et al. (2022) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Yaffe et al. (2003) Yao et al. (2002)	M M V Q Q Q Q Q Q Q Q Q Q	 88 185 288, 289 288, 290 288, 291 288, 292 68 249, 250 230

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.5×10^{-1}		Katritzky et al. (1998)	Q	
	1.1	6000	Duchowicz et al. (2020)	?	186, 21
			Kühne et al. (2005)	?	
	9.7×10^{-1}		Yaws (1999)	?	21, 12
3-chloronitrobenzene $\text{C}_6\text{H}_4\text{ClNO}_2$ (<i>m</i> -chloronitrobenzene) [121-73-3] KMAQZIIIEGKYQZ-UHFFFAOYSA-N	1.4		Chao et al. (2017)	M	
	7.3×10^{-1}		Altschuh et al. (1999)	M	
	1.1×10^{-1}		Schüürmann (2000)	V	
	1.1		Keshavarz et al. (2022)	Q	
	1.8		Duchowicz et al. (2020)	Q	
	6.2×10^{-1}		Zhang et al. (2010)	Q	288, 289
	2.8×10^{-1}		Zhang et al. (2010)	Q	288, 290
	2.8×10^{-1}		Zhang et al. (2010)	Q	288, 291
	4.6×10^{-1}		Zhang et al. (2010)	Q	288, 292
	2.1×10^{-1}		Hilal et al. (2008)	Q	
	1.7×10^{-1}		Modarresi et al. (2007)	Q	68
	7.3×10^{-1}		Duchowicz et al. (2020)	?	186, 21
	3.4×10^{-1}		Yaws (1999)	?	21, 12
4-chloronitrobenzene $\text{C}_6\text{H}_4\text{ClNO}_2$ (<i>p</i> -chloronitrobenzene) [100-00-5] CZGCEKJOLUNIFY-UHFFFAOYSA-N	6.4×10^{-1}	5900	Brockbank (2013)	L	
	1.4		Chao et al. (2017)	M	
	2.0		Altschuh et al. (1999)	M	
	1.8×10^{-1}		Hellmann (1987)	M	88
	2.8×10^{-1}		Lide and Frederikse (1995)	V	
	1.1		Keshavarz et al. (2022)	Q	
	1.7		Duchowicz et al. (2020)	Q	185
	6.2×10^{-1}		Zhang et al. (2010)	Q	288, 289
	3.0×10^{-1}		Zhang et al. (2010)	Q	288, 290
	6.1×10^{-1}		Zhang et al. (2010)	Q	288, 291
	4.6×10^{-1}		Zhang et al. (2010)	Q	288, 292
	2.3×10^{-1}		Hilal et al. (2008)	Q	
	2.3×10^{-1}		Hilal et al. (2008)	Q	
	1.4×10^{-1}		Modarresi et al. (2007)	Q	68
		4700	Kühne et al. (2005)	Q	
	1.9×10^{-1}		Yaffe et al. (2003)	Q	249, 250
	1.6		Katritzky et al. (1998)	Q	
	2.0		Duchowicz et al. (2020)	?	186, 21
		4000	Kühne et al. (2005)	?	
1,2-dichloro-4-nitrobenzene $\text{C}_6\text{H}_3\text{Cl}_2\text{NO}_2$ [99-54-7] NTBYINQTYWZXLH-UHFFFAOYSA-N	1.2		Altschuh et al. (1999)	M	
	1.1		Keshavarz et al. (2022)	Q	
	1.8		Duchowicz et al. (2020)	Q	
	2.1×10^{-1}		Abraham et al. (2019)	Q	
	8.4×10^{-1}		Zhang et al. (2010)	Q	288, 289
	3.1×10^{-1}		Zhang et al. (2010)	Q	288, 290
	4.6×10^{-1}		Zhang et al. (2010)	Q	288, 291
	6.7×10^{-1}		Zhang et al. (2010)	Q	288, 292
	2.7×10^{-1}		Hilal et al. (2008)	Q	

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.3×10^{-1}		Modarresi et al. (2007)	Q	68
	1.2		Duchowicz et al. (2020)	?	186, 21
1,4-dichloro-2-nitrobenzene $\text{C}_6\text{H}_3\text{Cl}_2\text{NO}_2$ [89-61-2] RZKKOBGFCAHLCZ-UHFFFAOYSA-N	8.2×10^{-1} 1.1 1.8 3.2×10^{-1}		Altschuh et al. (1999) Keshavarz et al. (2022) Duchowicz et al. (2020) Abraham et al. (2019)	M Q Q Q	 185
	8.4×10^{-1} 1.5×10^{-1} 7.3×10^{-1} 6.1×10^{-1} 3.1×10^{-1} 2.2×10^{-1} 8.2×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	Q Q Q Q Q Q ?	288, 289 288, 290 288, 291 288, 292 68 186, 21
2,3-dichloronitrobenzene $\text{C}_6\text{H}_3\text{Cl}_2\text{NO}_2$ [3209-22-1] CMVQZRLQEOAYSW-UHFFFAOYSA-N	5.0×10^{-1} 8.2×10^{-1} 8.4×10^{-1} 1.4×10^{-1} 9.7×10^{-1} 6.7×10^{-1}		Abraham et al. (2019) HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q Q	 100 288, 289 288, 290 288, 291 288, 292
2,4-dichloronitrobenzene $\text{C}_6\text{H}_3\text{Cl}_2\text{NO}_2$ [611-06-3] QUIMTLZDMCNYGY-UHFFFAOYSA-N	3.1×10^{-1} 8.4×10^{-1} 1.6×10^{-1} 8.4×10^{-1} 2.9×10^{-1}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
3,5-dichloronitrobenzene $\text{C}_6\text{H}_3\text{Cl}_2\text{NO}_2$ [618-62-2] RNABGKOKSBUFHW-UHFFFAOYSA-N	8.4×10^{-1} 2.0×10^{-1} 1.1×10^{-1} 2.9×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
pentachloronitrobenzene $\text{C}_6\text{Cl}_5\text{NO}_2$ (quintozene) [82-68-8] LKPLKUMXSAEKID-UHFFFAOYSA-N	2.7 2.2×10^{-1} 2.2×10^{-1} 2.3×10^{-1} 2.1×10^{-1} 1.1 2.1 2.3×10^{-2} 2.2×10^{-2} 2.2×10^{-1} 6.9×10^{-2} 2.1		Kawamoto and Urano (1989) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Howard and Meylan (1997) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Hilal et al. (2008) Meylan and Howard (1991)	M V V V X Q Q Q Q Q Q Q	 187 448 288, 289 288, 290 288, 291 288, 292

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-chloro-2-nitrophenol $\text{C}_6\text{H}_4\text{ClNO}_3$ [89-64-5] NWSIFTLPLKCTSX-UHFFFAOYSA-N	7.8×10^{-1} 7.8×10^{-1} 1.6×10^1 7.9×10^{-1} 3.6×10^1		Duchowicz et al. (2020) Schwarzenbach et al. (1988) Duchowicz et al. (2020) Yaffe et al. (2003) Katritzky et al. (1998)	V V Q Q Q	187 12 249, 250
2-chloro-4-nitrobenzenamine $\text{C}_6\text{H}_5\text{ClN}_2\text{O}_2$ [121-87-9] LOCWBQIWHWIRGN-UHFFFAOYSA-N	1.0×10^3 4.2×10^3 1.3×10^3 1.8×10^3 1.3×10^3 6.7×10^4 2.1×10^3 4.6×10^2 6.4×10^2 1.0×10^3		Altschuh et al. (1999) Keshavarz et al. (2022) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	M Q Q Q Q Q Q Q Q Q ?	 185 288, 289 288, 290 288, 291 288, 292 68 186, 21
2-chloro-5-nitrobenzenamine $\text{C}_6\text{H}_5\text{ClN}_2\text{O}_2$ [6283-25-6] KWIXNFOTNVKIGM-UHFFFAOYSA-N	1.8×10^3		HSDB (2015)	Q	100
4-chloro-2,6-dinitrobenzenamine $\text{C}_6\text{H}_4\text{ClN}_3\text{O}_4$ [5388-62-5] CLMQEQFVUMDPC-UHFFFAOYSA-N	7.6×10^1		HSDB (2015)	Q	100
1-chloro-2,4-dinitrobenzene $\text{C}_6\text{H}_3\text{ClN}_2\text{O}_4$ [97-00-7] VYZAHLCBVHPDDF-UHFFFAOYSA-N	3.5 4.0 1.1×10^1 1.8×10^2 1.6×10^2 6.0 5.3 3.9×10^1 1.0×10^1		Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Gharagheizi et al. (2010)	V V X Q Q Q Q Q Q	187 238, 81 288, 289 288, 290 288, 291 288, 292 247
1-chloro-2,6-dinitrobenzene $\text{C}_6\text{H}_3\text{ClN}_2\text{O}_4$ [606-21-3] BPPMIQPXQVIZNJ-UHFFFAOYSA-N	1.6×10^2 4.3 7.2 3.9×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2-chloro-1,3,5-trinitrobenzene $\text{C}_6\text{H}_2\text{ClN}_3\text{O}_6$ [88-88-0] HJRJRUMKQCMYDL-UHFFFAOYSA-N	3.9×10^4		HSDB (2015)	Q	100

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,4-trichloronitrobenzene $\text{C}_6\text{H}_2\text{Cl}_3\text{NO}_2$ [17700-09-3] BGKIECJVXXHLDP-UHFFFAOYSA-N	1.1 1.3×10^{-1} 2.0×10^{-1} 4.0×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2,3,4,5-tetrachloronitrobenzene $\text{C}_6\text{HCl}_4\text{NO}_2$ [879-39-0] MTBYTWZDRVOMBR-UHFFFAOYSA-N	4.3×10^{-1}		HSDB (2015)	Q	100
1,2,4,5-tetrachloronitrobenzene $\text{C}_6\text{HCl}_4\text{NO}_2$ (tecnazene) [117-18-0] XQTLDFVHVHJORV-UHFFFAOYSA-N	4.3×10^{-1}		HSDB (2015)	Q	100
4-chloro-2-nitrobenzenamine $\text{C}_6\text{H}_5\text{ClN}_2\text{O}_2$ [89-63-4] PBGKNXWGYQPUJK-UHFFFAOYSA-N	8.2×10^1 8.0×10^1 1.7×10^2 2.2×10^3 2.9×10^2		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
4-chloro-3-nitrobenzenamine $\text{C}_6\text{H}_5\text{ClN}_2\text{O}_2$ [635-22-3] FOHHWGVAVOVDVLP-UHFFFAOYSA-N	1.8×10^3 1.8×10^3 1.1×10^3 2.4×10^3 3.5×10^3		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
botran $\text{C}_6\text{H}_4\text{Cl}_2\text{N}_2\text{O}_2$ [99-30-9] BIXZHMJUSMUDOQ-UHFFFAOYSA-N	1.2×10^2 2.4×10^3 6.9×10^1 1.7×10^3 1.4×10^3		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V Q Q Q Q	288, 289 288, 290 288, 291 288, 292
3,5-dichlorophenyl isocyanate $\text{C}_7\text{H}_3\text{Cl}_2\text{NO}$ [34893-92-0] XEFUJGURFLOFAN-UHFFFAOYSA-N	7.7×10^{-2} 2.8 8.2×10^{-3} 7.2×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2-chloro-5-nitrobenzoic acid $\text{C}_7\text{H}_4\text{ClNO}_4$ [2516-96-3] QUEKGYQTRJVEQC-UHFFFAOYSA-N	6.5×10^3		Abraham et al. (2019)	Q	
4-chloro-3-nitrobenzoic acid $\text{C}_7\text{H}_4\text{ClNO}_4$ [96-99-1] DFXQXFGFOLXAPO-UHFFFAOYSA-N	3.6×10^3 3.1×10^4 2.1×10^3 1.6×10^3 9.2×10^4		Abraham et al. (2019) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-chloro-4-isocyanatobenzene $\text{C}_7\text{H}_4\text{ClNO}$ [104-12-1] ADAKRBAJFHTIEW-UHFFFAOYSA-N	5.7×10^{-2} 4.1 9.7×10^{-3} 3.4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1,2-dichloro-4-isocyanatobenzene $\text{C}_7\text{H}_3\text{Cl}_2\text{NO}$ [102-36-3] MFUVCHZWGSJKEQ-UHFFFAOYSA-N	7.7×10^{-2} 4.5 1.6×10^{-2} 2.2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2-chloro-1-methyl-4-nitrobenzene $\text{C}_7\text{H}_6\text{ClNO}_2$ [121-86-8] LLYXJBROWQDVMU-UHFFFAOYSA-N	2.4×10^{-1} 5.7×10^{-1} 3.4×10^{-1} 3.7×10^{-1} 2.5×10^{-1}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	547 288, 289 288, 290 288, 291 288, 292
2,4-dichloro-3-methyl-6-nitrophenol $\text{C}_7\text{H}_5\text{Cl}_2\text{NO}_3$ [39549-27-4] VMBRJHMTAZXHES-UHFFFAOYSA-N	2.3 2.9 9.5×10^1 3.3×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
4-chloro-5-methyl-2-nitrophenol $\text{C}_7\text{H}_6\text{ClNO}_3$ (4-chloro-6-nitro- <i>m</i> -cresol) [7147-89-9] JBMGJOKJUYGIJH-UHFFFAOYSA-N	3.6×10^{-1}		Schwarzenbach et al. (1988)	V	12
3-amino-2,5-dichlorobenzoic acid $\text{C}_7\text{H}_5\text{Cl}_2\text{NO}_2$ [133-90-4] HSSBORCLYSCBJR-UHFFFAOYSA-N	2.6×10^5 3.6 4.5×10^5		Duchowicz et al. (2020) Mackay et al. (2006d) Duchowicz et al. (2020)	V V Q	187
2,3,5,6-tetrachloro-4-nitroanisole $\text{C}_7\text{H}_3\text{Cl}_4\text{NO}_3$ (TCNA) [2438-88-2] BGPPUXMKKQMWLV-UHFFFAOYSA-N	5.2×10^{-1}		HSDB (2015)	Q	100
2,6-dichlorobenzamide $\text{C}_7\text{H}_5\text{Cl}_2\text{NO}$ [2008-58-4] JHSPCUHPSIUQRB-UHFFFAOYSA-N	8.2×10^3		HSDB (2015)	Q	100
swep $\text{C}_8\text{H}_7\text{Cl}_2\text{NO}$ [1918-18-9] WOZQBERUBLYCEG-UHFFFAOYSA-N	8.2×10^2		HSDB (2015)	Q	100

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
N-(4-chlorophenyl)acetamide $\text{C}_8\text{H}_8\text{ClNO}$ (<i>p</i> -chloroacetanilide) [539-03-7] GGUOCFNAWIODMF-UHFFFAOYSA-N	2.1		HSDB (2015)	Q	100
methyl 5-chloro-2-nitrobenzoate $\text{C}_8\text{H}_6\text{ClNO}_4$ [51282-49-6] JGBJHRKCUKTQOE-UHFFFAOYSA-N	9.7×10^1 1.2×10^2 3.7×10^3 6.7×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
4-chloro-2,5-dimethoxynitrobenzene $\text{C}_8\text{H}_8\text{ClNO}_4$ [6940-53-0] ORLPGMKKCAEWOW-UHFFFAOYSA-N	1.8×10^2 1.6×10^1 2.0×10^2 3.9×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
chloraniformethan $\text{C}_9\text{H}_7\text{Cl}_5\text{N}_2\text{O}$ [20856-57-9] REEFSLKDEDEWAO-UHFFFAOYSA-N	$> 2.3 \times 10^{10}$		MacBean (2012a)	?	
monuron $\text{C}_9\text{H}_{11}\text{ClN}_2\text{O}$ [150-68-5] BMLIZLVNXIYGCK-UHFFFAOYSA-N	1.7×10^4 1.5×10^4 3.3×10^2 1.7×10^4 1.7×10^4 1.7×10^4		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Burkhard and Guth (1981) Abraham et al. (2019) MacBean (2012a)	V V V V Q ?	12
monolinuron $\text{C}_9\text{H}_{11}\text{ClN}_2\text{O}_2$ [1746-81-2] LKJPSUCKSLORMF-UHFFFAOYSA-N	2.1×10^2 1.7×10^2		HSDB (2015) Mackay et al. (2006d)	V V	
diuron $\text{C}_9\text{H}_{10}\text{Cl}_2\text{N}_2\text{O}$ [330-54-1] XMTQQYYKAHVGBJ-UHFFFAOYSA-N	3.5×10^1 2.0×10^4 8.3×10^2 8.2 4.0×10^4 5.2×10^1		Chao et al. (2017) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Abraham et al. (2019) Goodarzi et al. (2010)	M V V V X Q Q	560 12 569 570
linuron $\text{C}_9\text{H}_{10}\text{Cl}_2\text{N}_2\text{O}_2$ [330-55-2] XKJMBINC VNINCA-UHFFFAOYSA-N	1.6×10^3 1.9×10^2 5.0×10^3 1.8 6.5 2.2×10^1		Duchowicz et al. (2020) Mackay et al. (2006d) Suntio et al. (1988) MacBean (2012b) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010)	V V V X X Q Q	187 560 12 352 569 570, 573

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
propanil $\text{C}_9\text{H}_9\text{Cl}_2\text{NO}$ [709-98-8] LFULEKSKNZEWOE-UHFFFAOYSA-N	1.3×10^1 5.8×10^3 5.8×10^3 1.8×10^2 2.8×10^2 2.7 2.8 2.2×10^3 8.0×10^2 3.8×10^3 8.4×10^3 1.2×10^{-1}		Chao et al. (2017) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Goodarzi et al. (2010)	M V V V V X Q Q Q Q Q	187 12 569 288, 289 288, 290 288, 291 288, 292 570, 573
methazole $\text{C}_9\text{H}_6\text{Cl}_2\text{N}_2\text{O}_3$ [20354-26-1] LRUUNMYPBZBQH-UHFFFAOYSA-N	4.3×10^1 4.8×10^4 4.3×10^1		HSDB (2015) Hilal et al. (2008) MacBean (2012a)	V Q ?	
1,4-naphthalenedione, 2-amino-3-chloro- $\text{C}_{10}\text{H}_6\text{ClNO}_2$ (quinoclamine) [2797-51-5] OBLNWSCLAYSJJR-UHFFFAOYSA-N	3.3×10^4		Maniere et al. (2011)	?	242, 166
chlortoluron $\text{C}_{10}\text{H}_{13}\text{ClN}_2\text{O}$ (chlorotoluron) [15545-48-9] JXCGFZXSOMJFOA-UHFFFAOYSA-N	7.0×10^4 1.9×10^4 1.9×10^2 3.4×10^1		HSDB (2015) Mackay et al. (2006d) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V X Q	569 570, 573
metoxuron $\text{C}_{10}\text{H}_{13}\text{ClN}_2\text{O}_2$ [19937-59-8] DSRNRQBBJQVCW-UHFFFAOYSA-N	6.9×10^2 6.9×10^2 6.6 2.0×10^2 1.2×10^1		Duchowicz et al. (2020) Mackay et al. (2006d) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010)	V V X Q Q	187 569 570
chlorpropham $\text{C}_{10}\text{H}_{12}\text{ClNO}_2$ [101-21-3] CWJSHJJYOPWUGX-UHFFFAOYSA-N	2.3×10^1 1.7×10^1 1.7×10^1 4.8×10^2 4.7×10^1 5.4×10^{-2} 2.9		Watanabe (1993) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010)	M V V V V X Q Q	187 560 12 569 570, 573

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
pyrazon $\text{C}_{10}\text{H}_8\text{ClN}_3\text{O}$ [1698-60-8] WYKYKTKDBLFHCY-UHFFFAOYSA-N	3.0×10^4 3.0×10^4 2.3×10^{-1} 2.3×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988)	V V V V	187 12
	8.3×10^4 1.9×10^9		Duchowicz et al. (2020) Maniere et al. (2011)	Q ?	 12, 166
2,4-D dimethylamine $\text{C}_{10}\text{H}_{13}\text{Cl}_2\text{NO}_3$ ((2,4-dichlorophenoxy)acetic acid dimethylamine) [2008-39-1] IUQJDHJVPLKFL-UHFFFAOYSA-N	2.1×10^{10} 4.9×10^1 7.0×10^{10}		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015)	V Q Q	187 100
3',4'- dichlorocyclopropanecarboxanilide $\text{C}_{10}\text{H}_9\text{Cl}_2\text{NO}$ (cypromid) [2759-71-9] PLQDLOBGKJCDZS-UHFFFAOYSA-N	3.8×10^3		HSDB (2015)	Q	100
triazoxide $\text{C}_{10}\text{H}_6\text{N}_5\text{OCl}$ [72459-58-6] IQGKIPDJXCAMSM-UHFFFAOYSA-N	4.6×10^5 7.9×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
chlorbufam $\text{C}_{11}\text{H}_{10}\text{ClNO}_2$ [1967-16-4] ULBXWWGWDPVHAO-UHFFFAOYSA-N	1.1×10^3 1.1×10^3		HSDB (2015) MacBean (2012a)	V ?	
zarilamid $\text{C}_{11}\text{H}_{11}\text{N}_2\text{O}_2\text{Cl}$ [84527-51-5] VLBZAQJMGULJIU-UHFFFAOYSA-N	1.5×10^5		MacBean (2012a)	?	
chloramphenicol $\text{C}_{11}\text{H}_{12}\text{Cl}_2\text{N}_2\text{O}_5$ [56-75-7] WIIZWVCIJKGZOK-IUCAKERBSA-N	4.3×10^{12}		HSDB (2015)	Q	100
cloethocarb $\text{C}_{11}\text{H}_{14}\text{ClNO}_4$ [51487-69-5] PITWUHDDNUVBPT-UHFFFAOYSA-N	5.0×10^5		MacBean (2012a)	?	
formetanate hydrochloride $\text{C}_{11}\text{H}_{16}\text{ClN}_3\text{O}_2$ [23422-53-9] MYPKGPZHHQEODQ-UHFFFAOYSA-N	4.3×10^{13} 2.0×10^9		HSDB (2015) Maniere et al. (2011)	Q ?	100 242, 166

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cyclanilide $\text{C}_{11}\text{H}_9\text{Cl}_2\text{NO}_3$ [113136-77-9] GLWWLNJJCTFMZ-UHFFFAOYSA-N	1.4×10^4 1.2×10^4 1.2×10^5 1.4×10^4		MacBean (2012b) Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	X Q Q ?	352 186, 21
propachlor $\text{C}_{11}\text{H}_{14}\text{ClNO}$ [1918-16-7] MFOUDYKPLGXPGO-UHFFFAOYSA-N	2.7×10^1 9.1×10^1 9.1×10^1 9.0×10^{-1} 3.7×10^{-1}		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	 12 569 570
barban $\text{C}_{11}\text{H}_9\text{Cl}_2\text{NO}_2$ [101-27-9] MCOQHIWZJUDQIC-UHFFFAOYSA-N	8.4×10^2 8.2×10^2 8.5×10^2 3.3×10^{-1} 8.5×10^2		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020) MacBean (2012a)	V V V Q ?	187
aclonifen $\text{C}_{12}\text{H}_9\text{ClN}_2\text{O}_3$ [74070-46-5] DDBMQDADIHOWIC-UHFFFAOYSA-N	5.9×10^2 7.1×10^3 3.3×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	187 12, 166
propyzamide $\text{C}_{12}\text{H}_{11}\text{Cl}_2\text{NO}$ (pronamide) [23950-58-5] PHNUZKMIPFFYSO-UHFFFAOYSA-N	1.0×10^3 5.2 5.2×10^{-2} 1.5×10^2 6.6×10^{-2} 1.3×10^8		Duchowicz et al. (2020) HSDB (2015) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010) Maniere et al. (2011) Mackay et al. (2006d)	V V X Q Q ? W	187 569 570 570 12, 166 738
2,4,6-trichlorophenyl 4-nitrophenyl ether $\text{C}_{12}\text{H}_6\text{Cl}_3\text{NO}_3$ (chlornitrofen) [1836-77-7] XQNAUQUKWRBODG-UHFFFAOYSA-N	>8.1		Kawamoto and Urano (1989)	M	
nitrofen $\text{C}_{12}\text{H}_7\text{Cl}_2\text{NO}_3$ [1836-75-5] XITQUSLLOSKDTB-UHFFFAOYSA-N	3.3 3.9×10^1 2.8×10^1 1.2×10^2 1.1×10^2		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V Q Q Q Q	 288, 289 288, 290 288, 291 288, 292
buturon $\text{C}_{12}\text{H}_{13}\text{ClN}_2\text{O}$ [3766-60-7] BYMILHAKOURNM-UHFFFAOYSA-N	1.3×10^4		MacBean (2012a)	?	

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
triclocarban $\text{C}_{13}\text{H}_9\text{Cl}_3\text{N}_2\text{O}$ [101-20-2] ICUTUKXCWQYESQ-UHFFFAOYSA-N	2.2×10^5 2.2×10^5 5.0×10^3 7.2×10^7 1.8×10^7		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
dimethachlor $\text{C}_{13}\text{H}_{18}\text{ClNO}_2$ [50563-36-5] SCDDDNKJYDZXMM-UHFFFAOYSA-N	5.9×10^3		Maniere et al. (2011)	?	166
3,5-dichloro-N-(3,4-dichlorophenyl)-2-hydroxybenzamide $\text{C}_{13}\text{H}_7\text{Cl}_4\text{NO}_2$ [1154-59-2] SJOBHPJLLIJASD-UHFFFAOYSA-N	2.1×10^5 2.1×10^5 2.3×10^5 3.9×10^6 1.6×10^5		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
procymidone $\text{C}_{13}\text{H}_{11}\text{Cl}_2\text{NO}_2$ [32809-16-8] QXJKBPAVAHBARF-UHFFFAOYSA-N	8.5×10^{-1} 8.5×10^{-1} 9.0×10^{-3} 9.7×10^{-1} 1.4×10^{-2}		Duchowicz et al. (2020) Mackay et al. (2006d) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010)	V V X Q Q	187 569 570
melphalan $\text{C}_{13}\text{H}_{18}\text{Cl}_2\text{N}_2\text{O}_2$ [148-82-3] SGDBTWWWUNDEQ-LBPRGKRZSA-N	2.3×10^7		HSDB (2015)	Q	100
niclosamide $\text{C}_{13}\text{H}_8\text{Cl}_2\text{N}_2\text{O}_4$ [50-65-7] RJMUSRYZPJFPJ-UHFFFAOYSA-N	1.5×10^4		HSDB (2015)	V	
iprodone $\text{C}_{13}\text{H}_{13}\text{Cl}_2\text{N}_3\text{O}_3$ [36734-19-7] ONUFESLQCSAYKA-UHFFFAOYSA-N	7.1×10^2 4.0×10^4 9.5×10^3 2.0×10^1 3.2×10^3		Barcelo and Hennion (1997) Keshavarz et al. (2022) Duchowicz et al. (2020) Goodarzi et al. (2010) Duchowicz et al. (2020)	X Q Q Q ?	569 570, 571 186, 21
zoxamide $\text{C}_{14}\text{H}_{16}\text{Cl}_3\text{NO}_2$ [156052-68-5] SOUGWDPPRBKJEX-UHFFFAOYSA-N	4.9×10^3 $> 1.5 \times 10^2$		HSDB (2015) Maniere et al. (2011)	Q ?	100 242, 166

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
fenhexamid $\text{C}_{14}\text{H}_{17}\text{Cl}_2\text{NO}_2$ [126833-17-8] VDLGAVXLJYLFDH-UHFFFAOYSA-N	2.0×10^5		MacBean (2012b)	X	352
	2.0×10^5		Maniere et al. (2011)	?	12, 495, 166
	3.3×10^6		Maniere et al. (2011)	?	12, 575, 166
	1.1×10^5		Maniere et al. (2011)	?	12, 572, 166
chlorambucil $\text{C}_{14}\text{H}_{19}\text{Cl}_2\text{NO}_2$ [305-03-3] JCKYGMPEJWAADB-UHFFFAOYSA-N	3.7×10^4		HSDB (2015)	Q	100
2-chloro-N-(ethoxymethyl)-N-(2-ethyl-6-methylphenyl)acetamide $\text{C}_{14}\text{H}_{20}\text{ClNO}_2$ (acetochlor) [34256-82-1] VTNQPKFIQCLBDU-UHFFFAOYSA-N	3.7×10^4		HSDB (2015)	V	
alachlor $\text{C}_{14}\text{H}_{20}\text{ClNO}_2$ [15972-60-8] XCSPGPAVHZFQHGGE-UHFFFAOYSA-N	6.7×10^2		Muir et al. (2004)	L	369
	9.9×10^2		Muir et al. (2004)	L	368
	7.4		Chao et al. (2017)	M	
	1.4×10^2	9200	Gautier et al. (2003)	M	
	9.0×10^2		Fendinger et al. (1989)	M	73
	1.2×10^3		Fendinger and Glotfelty (1988)	M	73
	4.5×10^2		Mackay et al. (2006d)	V	
	1.6×10^2		Suntio et al. (1988)	V	12
	3.1×10^2		Glotfelty et al. (1987)	V	
	1.6		Barcelo and Hennion (1997)	X	569
	3.6×10^{-2}		Goodarzi et al. (2010)	Q	570, 571
	3.1×10^3		Hilal et al. (2008)	Q	
	4.5×10^1		Modarresi et al. (2007)	Q	68
		11000	Kühne et al. (2005)	Q	
8.2×10^4		Meylan and Howard (1991)	Q		
	9300	Kühne et al. (2005)	?		
	3.1×10^2	Chesters et al. (1989)	?		
bifenox $\text{C}_{14}\text{H}_9\text{Cl}_2\text{NO}_3$ [42576-02-3] SUSRORUBZHMPCO-UHFFFAOYSA-N	9.1×10^1		Duchowicz et al. (2020)	V	187
	3.7		HSDB (2015)	V	
	3.2		Mackay et al. (2006d)	V	
	3.3×10^{-2}		Barcelo and Hennion (1997)	X	569
	6.2×10^3		Duchowicz et al. (2020)	Q	
	3.5×10^{-2}		Goodarzi et al. (2010)	Q	570, 573
	$<6.2 \times 10^3$	Maniere et al. (2011)	?	12, 166	

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
pethoxamid $\text{C}_{16}\text{H}_{22}\text{ClNO}_2$ [106700-29-2] CSWIKHNSBZVWNQ-UHFFFAOYSA-N	8.5×10^2		Maniere et al. (2011)	?	12, 166
pigment red 4 $\text{C}_{16}\text{H}_{10}\text{ClN}_3\text{O}_3$ [2814-77-9] XLTMWFMJRJZDFD-VHEBQXMUSA-N	1.1×10^7		HSDB (2015)	Q	100
darendoside b $\text{C}_{17}\text{H}_{15}\text{Cl}_2\text{N}_5\text{O}_2$ [13301-61-6] KHZRTXVUEZJYNE-UHFFFAOYSA-N	2.7×10^7 5.0×10^6 2.5×10^7 7.3×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
butenachlor $\text{C}_{17}\text{H}_{24}\text{NO}_2\text{Cl}$ [87310-56-3] HZDIJTXDRLNTIS-DAXSKMNVSA-N	1.0×10^2		MacBean (2012a)	?	
butachlor $\text{C}_{17}\text{H}_{26}\text{ClNO}_2$ [23184-66-9] HKPHPIREJKHECO-UHFFFAOYSA-N	1.6×10^2 1.2×10^2 6.9×10^2 1.7×10^2		Watanabe (1993) Mackay et al. (2006d) Hilal et al. (2008) Modarresi et al. (2007)	M V Q Q	68
pretilachlor $\text{C}_{17}\text{H}_{26}\text{ClNO}_2$ [51218-49-6] YLPGTOIOYRQOHV-UHFFFAOYSA-N	4.5×10^3 1.8×10^2		Hilal et al. (2008) Modarresi et al. (2007)	Q Q	68
halofenozide $\text{C}_{18}\text{H}_{19}\text{ClN}_2\text{O}_2$ [112226-61-6] CNKHSLKYRMDDNQ-UHFFFAOYSA-N	2.7×10^5		HSDB (2015)	Q	100
benzoximate $\text{C}_{18}\text{H}_{18}\text{ClNO}_5$ [29104-30-1] BZMIHNKNQJVVRO-UHFFFAOYSA-N	1.8×10^2 1.5×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
pencycuron $\text{C}_{19}\text{H}_{21}\text{ClN}_2\text{O}$ [66063-05-6] OGYFATSSENRIKG-UHFFFAOYSA-N	2.0×10^6		Maniere et al. (2011)	?	12, 166
valifenalate $\text{C}_{19}\text{H}_{27}\text{ClN}_2\text{O}_5$ [283159-90-0] DBXFMOWZRXXBRN-LWKPJOBUSA-N	6.2×10^5		Maniere et al. (2011)	?	12, 740, 166

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pyrazoxyfen $\text{C}_{20}\text{H}_{16}\text{Cl}_2\text{N}_2\text{O}_3$ [71561-11-0] FKERUJTUOYLBKB-UHFFFAOYSA-N	4.7×10^4 1.9×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
α -cypermethrin $\text{C}_{22}\text{H}_{19}\text{Cl}_2\text{NO}_3$ [67375-30-8] KAATUXNTWXVJKI-DXCJPMOASA-N	1.0 1.0×10^2 1.9×10^1		HSDB (2015) Mackay et al. (2006d) Maniere et al. (2011)	V V ?	12, 166
cypermethrin- β $\text{C}_{22}\text{H}_{19}\text{Cl}_2\text{NO}_3$ [1224510-29-5] KAATUXNTWXVJKI-FLXSOZOKSA-N	5.6×10^1		Ebert et al. (2023)	?	319
β -cypermethrin $\text{C}_{22}\text{H}_{19}\text{Cl}_2\text{NO}_3$ [65731-84-2] KAATUXNTWXVJKI-NSHGMRRFSA-N			Mackay et al. (2006d)	V	560
δ -cypermethrin $\text{C}_{22}\text{H}_{19}\text{Cl}_2\text{NO}_3$ (cypermethrin; alphasmethrin) [52315-07-8] KAATUXNTWXVJKI-UHFFFAOYSA-N	4.1×10^1 4.3×10^2 1.2×10^1 2.5×10^1 1.0×10^1 4.2×10^1 5.0×10^7		HSDB (2015) Mackay et al. (2006d) Siebers and Mattusch (1996) Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011) Maniere et al. (2011)	V V V X Q ? ?	12 569 570, 571 12, 166 242, 166
θ -cypermethrin $\text{C}_{22}\text{H}_{19}\text{Cl}_2\text{NO}_3$ [71697-59-1] KAATUXNTWXVJKI-GGPKGHCWSA-N	6.1×10^2		Ebert et al. (2023)	?	319
ζ -cypermethrin $\text{C}_{22}\text{H}_{19}\text{Cl}_2\text{NO}_3$ [1315501-18-8] KAATUXNTWXVJKI-QPIRBTGLSA-N	4.3×10^2		Ebert et al. (2023)	?	367
ochratoxin C $\text{C}_{22}\text{H}_{22}\text{ClNO}_6$ [4865-85-4] BPZZWRPHVVDAPT-PXAZEXFGSA-N	7.6×10^8		HSDB (2015)	Q	100
quizalofop-p-tefuryl $\text{C}_{22}\text{H}_{21}\text{N}_2\text{O}_5\text{Cl}$ [119738-06-6] BBKDWPJZANJGB-UHFFFAOYSA-N	1.8×10^4 3.4×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
mandipropamid $\text{C}_{23}\text{H}_{22}\text{ClNO}_4$ [374726-62-2] KWLVWJPKJMCSH-UHFFFAOYSA-N	1.1×10^4 $> 1.1 \times 10^4$		HSDB (2015) Maniere et al. (2011)	V ?	166
fenvalerate $\text{C}_{25}\text{H}_{22}\text{ClNO}_3$ [51630-58-1] NYPJDWWKZLNGGM-UHFFFAOYSA-N	2.9×10^2 2.9×10^2 4.7×10^1 7.0×10^1 3.2×10^3		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Cotham and Bidleman (1989) Duchowicz et al. (2020)	V V V V Q	187
esfenvalerate $\text{C}_{25}\text{H}_{22}\text{ClNO}_3$ [66230-04-4] NYPJDWWKZLNGGM-ZEQLRLZLVA-N	2.4×10^1 2.4×10^1 3.2×10^3 2.0×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	187 242, 166
clopyralid $\text{C}_6\text{H}_3\text{Cl}_2\text{NO}_2$ [1702-17-6] HUBANNPOLNYSAD-UHFFFAOYSA-N	3.3×10^3 3.2×10^2 1.8×10^3 3.6×10^1 3.0×10^9 4.5×10^{10} 6.2×10^{10} 5.6×10^{10}		Duchowicz et al. (2020) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	V X Q Q ? ? ? ?	187 569 570 12, 166 12, 572, 166 12, 575, 166 12, 495, 166
pictoram $\text{C}_6\text{H}_3\text{Cl}_3\text{N}_2\text{O}_2$ [1918-02-1] NQQVFUXUMIDALNH-UHFFFAOYSA-N	3.0×10^4 2.9×10^4 2.9×10^2 7.7×10^6 2.5 9.0×10^4 1.6×10^8 1.1×10^3 2.1×10^4		Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Goodarzi et al. (2010) Maniere et al. (2011)	V V X Q Q Q Q Q ?	288, 289 288, 290 288, 291 288, 292 570, 573 242, 166
aminopyralid $\text{C}_6\text{H}_4\text{Cl}_2\text{N}_2\text{O}_2$ [150114-71-9] NIXXQNOQHKNPEJ-UHFFFAOYSA-N	5.8×10^6 1.0×10^{11}		HSDB (2015) Maniere et al. (2011)	Q ?	100 242, 495, 166

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
3,4,5,6-tetrachloropyridine-2-carboxylic acid $\text{C}_6\text{HCl}_4\text{NO}_2$ [10469-09-7] GXFRQLQUKBSYQL-UHFFFAOYSA-N	3.7×10^3		Zhang et al. (2010)	Q	288, 289
	2.4		Zhang et al. (2010)	Q	288, 290
	1.2×10^2		Zhang et al. (2010)	Q	288, 291
	4.1×10^4		Zhang et al. (2010)	Q	288, 292
[(3,5,6-trichloro-2-pyridinyl)oxy]-acetic acid $\text{C}_7\text{H}_4\text{Cl}_3\text{NO}_3$ (triclopyr) [55335-06-3] REEQLXCGVXDJSQ-UHFFFAOYSA-N	1.0×10^4		Duchowicz et al. (2020)	V	187
	1.0×10^4		HSDB (2015)	V	
	1.2×10^4		Armbrust (2000)	C	
	3.2×10^3		Duchowicz et al. (2020)	Q	
	1.1×10^4		Maniere et al. (2011)	?	12, 166
	2.1×10^5		Maniere et al. (2011)	?	12, 572, 166
	2.3×10^5		Maniere et al. (2011)	?	12, 495, 166
clopidol $\text{C}_7\text{H}_7\text{Cl}_2\text{NO}$ [2971-90-6] ZDPIZLCVJAAHHR-UHFFFAOYSA-N	9.9×10^3		HSDB (2015)	Q	100
[(3,5,6-trichloro-2-pyridinyl)oxy]-acetic acid, methyl ester $\text{C}_8\text{H}_6\text{Cl}_3\text{NO}_3$ [60825-26-5] MNYBZEHWPRTNJY-UHFFFAOYSA-N	6.0		Zhang et al. (2010)	Q	288, 289
	3.1×10^1		Zhang et al. (2010)	Q	288, 290
	4.6×10^3		Zhang et al. (2010)	Q	288, 291
	3.5×10^2		Zhang et al. (2010)	Q	288, 292
aminocyclopyrachlor $\text{C}_8\text{H}_8\text{ClN}_3\text{O}_2$ [858956-08-8] KWAHILXESXTJL-UHFFFAOYSA-N	1.3×10^7		Ebert et al. (2023)	?	319
uracil mustard $\text{C}_8\text{H}_{11}\text{Cl}_2\text{N}_3\text{O}_2$ [66-75-1] IDPUKCWIGUEADI-UHFFFAOYSA-N	2.5×10^7		HSDB (2015)	Q	100
imidacloprid $\text{C}_9\text{H}_{10}\text{ClN}_5\text{O}_2$ [138261-41-3] YWYTYJOPNNQFBPC-UHFFFAOYSA-N	4.9×10^9		Armbrust (2000)	C	
	5.9×10^9		Maniere et al. (2011)	?	12, 166

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethyl [(3,5,6-trichloro-2-pyridinyl)oxy]acetate $\text{C}_9\text{H}_8\text{Cl}_3\text{NO}_3$ [60825-27-6] KXAVVWXJUDQGDA-UHFFFAOYSA-N	4.5 1.7×10^1 2.3×10^1 3.1×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
N-methyl-3,4,5,6-tetrachlorophthalimide $\text{C}_9\text{H}_3\text{Cl}_4\text{NO}_2$ [14737-80-5] OHCSZUQRNNMRG-UHFFFAOYSA-N	1.5×10^3 1.2×10^3 4.1×10^1 3.1×10^3		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
terbacil $\text{C}_9\text{H}_{13}\text{ClN}_2\text{O}_2$ [5902-51-2] NBQCZYZJMBDKY-UHFFFAOYSA-N	5.2×10^4 6.5×10^4 7.9×10^4 5.6×10^4 5.5×10^2 4.4×10^2		HSDB (2015) Mackay et al. (2006d) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V V X Q	 12 569 570
eglinazine-ethyl $\text{C}_9\text{H}_{14}\text{ClN}_5\text{O}_2$ [6616-80-4] YESXTECNXIKUMM-UHFFFAOYSA-N	4.1×10^4		Ebert et al. (2023)	?	319
proglinazine ethyl ester $\text{C}_{10}\text{H}_{16}\text{ClN}_5\text{O}_2$ [68228-18-2] QQADVTSTCZBBOE-UHFFFAOYSA-N	1.0×10^4		Ebert et al. (2023)	?	319
triforine $\text{C}_{10}\text{H}_{14}\text{Cl}_6\text{N}_4\text{O}_2$ [26644-46-2] RROQIUMZODEXOR-UHFFFAOYSA-N	2.6×10^3 2.6×10^3		HSDB (2015) Mackay et al. (2006d)	V V	
drazoxolon $\text{C}_{10}\text{H}_8\text{ClN}_3\text{O}_2$ [5707-69-7] OOTHARUZHONSW-UHFFFAOYSA-N	1.4×10^2		Ebert et al. (2023)	?	319
anagrelide $\text{C}_{10}\text{H}_7\text{Cl}_2\text{N}_3\text{O}$ [68475-42-3] OTBXOEAORVKTNG-UHFFFAOYSA-N	3.7×10^7		HSDB (2015)	Q	100
fenpiclonil $\text{C}_{11}\text{H}_6\text{Cl}_2\text{N}_2$ [74738-17-3] FKLFBQCQYDUAM-UHFFFAOYSA-N	1.8×10^3 5.4×10^2 1.9×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020) MacBean (2012a)	V Q ?	187

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
benoxacor $\text{C}_{11}\text{H}_{11}\text{Cl}_2\text{NO}_2$ [98730-04-2] PFJMJDEVDLPNE-UHFFFAOYSA-N	1.3×10^2 2.9×10^2 1.3×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	187 12, 166
ethychlozate $\text{C}_{11}\text{H}_{11}\text{ClN}_2\text{O}_2$ [27512-72-7] GLPZEHFBLBYFHN-UHFFFAOYSA-N	1.6×10^4		Ebert et al. (2023)	?	319
quinmerac $\text{C}_{11}\text{H}_8\text{ClNO}_2$ [90717-03-6] ALZOLUNSQWINIR-UHFFFAOYSA-N	1.0×10^{10}		Maniere et al. (2011)	?	242, 166
quinonamid $\text{C}_{12}\text{H}_6\text{Cl}_3\text{NO}_3$ [27541-88-4] ZIEWAMOXCOLNSJ-UHFFFAOYSA-N	8.0×10^2		Ebert et al. (2023)	?	367
fenchlorazole-ethyl $\text{C}_{12}\text{H}_8\text{N}_3\text{O}_2\text{Cl}_5$ [103112-35-2] GMBRUAJEFRRHFQ-UHFFFAOYSA-N	2.7×10^3		MacBean (2012a)	?	12
vinclozoline $\text{C}_{12}\text{H}_9\text{Cl}_2\text{NO}_3$ (vinclozolin) [50471-44-8] FSCWZHGZWWDELK-UHFFFAOYSA-N	5.8×10^2 2.6×10^5 9.1×10^1 7.6 1.7		HSDB (2015) Mackay et al. (2006d) Siebers et al. (1994) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	 569 570
forchlorfenuron $\text{C}_{12}\text{H}_{10}\text{ClN}_3\text{O}$ [68157-60-8] GPXLRUVLMHHIK-UHFFFAOYSA-N	3.4×10^6 3.5×10^6 1.7×10^1 3.4×10^6		Duchowicz et al. (2020) MacBean (2012b) Duchowicz et al. (2020) Maniere et al. (2011)	V X Q ?	187 352 242, 166
azaconazole $\text{C}_{12}\text{H}_{11}\text{Cl}_2\text{N}_3\text{O}_2$ [60207-31-0] AKNQMEBLVAMSNZ-UHFFFAOYSA-N	5.1×10^4		Ebert et al. (2023)	?	319
myclozolin $\text{C}_{12}\text{H}_{11}\text{NO}_4\text{Cl}_2$ [54864-61-8] FTCOKXNKPOUEFH-UHFFFAOYSA-N	3.7×10^2		MacBean (2012a)	?	
triclopyr-butotyl $\text{C}_{13}\text{H}_{16}\text{Cl}_3\text{NO}_4$ [64700-56-7] IVDRCNHVGQBHZ-UHFFFAOYSA-N	3.4×10^2		Maniere et al. (2011)	?	12, 166

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
clofencet $\text{C}_{13}\text{H}_{11}\text{ClN}_2\text{O}_3$ [129025-54-3] PIZCXVUFSNPNON-UHFFFAOYSA-N	$>1.9 \times 10^8$ $>2.3 \times 10^{10}$		HSDB (2015) MacBean (2012a)	V ?	
chlozolate $\text{C}_{13}\text{H}_{11}\text{NO}_5\text{Cl}_2$ [84332-86-5] IGUYEXXAGBDLLX-UHFFFAOYSA-N	7.6×10^3 4.7×10^2 2.8×10^1 2.8×10^1 4.4×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020) Duchowicz et al. (2020) Duchowicz et al. (2020) MacBean (2012a)	V V Q Q ?	187 187
monalide $\text{C}_{13}\text{H}_{18}\text{ClNO}$ [7287-36-7] KXGYBSNVFXBPNO-UHFFFAOYSA-N	4.0×10^2		MacBean (2012a)	?	
chlomethoxyfen $\text{C}_{13}\text{H}_9\text{Cl}_2\text{NO}_4$ [32861-85-1] DXXVCXKMSWHGTF-UHFFFAOYSA-N	5.1×10^{-1}		Ebert et al. (2023)	?	319
metazachlor $\text{C}_{14}\text{H}_{16}\text{ClN}_3\text{O}$ [67129-08-2] STEPQTYSZVCJJPV-UHFFFAOYSA-N	1.3×10^1 3.5×10^2 7.1×10^3 1.7×10^4		Barcelo and Hennion (1997) Goodarzi et al. (2010) Modarresi et al. (2007) Maniere et al. (2011)	X Q Q ?	569 570 68 12, 166
etaconazole $\text{C}_{14}\text{H}_{15}\text{Cl}_2\text{N}_3\text{O}_2$ [60207-93-4] DWRKFAJEBUWTQM-UHFFFAOYSA-N	7.9×10^3		MacBean (2012a)	?	
triadimenol $\text{C}_{14}\text{H}_{18}\text{ClN}_3\text{O}_2$ [55219-65-3] BAZVSMNPJJMILC-UHFFFAOYSA-N	7.6×10^6 3.8×10^6 4.5×10^5		HSDB (2015) Mackay et al. (2006d) Maniere et al. (2011)	V V ?	242, 166
hexaconazole $\text{C}_{14}\text{H}_{17}\text{Cl}_2\text{N}_3\text{O}$ [79983-71-4] STMIIPIFODONDC-UHFFFAOYSA-N	2.8×10^1 6.0×10^1		Barcelo and Hennion (1997) Goodarzi et al. (2010)	X Q	569 570
triadimefon $\text{C}_{14}\text{H}_{16}\text{ClN}_3\text{O}_2$ [43121-43-3] WURBVZBTWMNKQT-UHFFFAOYSA-N	1.2×10^5 1.2×10^5 1.2×10^5 1.5×10^2		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	187
imazalil $\text{C}_{14}\text{H}_{14}\text{Cl}_2\text{N}_2\text{O}$ [35554-44-0] PZBPKYOVPCNPJY-UHFFFAOYSA-N	3.8×10^3 5.1×10^5 9.3×10^3		HSDB (2015) Mackay et al. (2006d) Maniere et al. (2011)	V V ?	242, 166

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pyrifenoX $\text{C}_{14}\text{H}_{12}\text{Cl}_2\text{N}_2\text{O}$ [88283-41-4] CKPCAYZTYMHQEX-UHFFFAOYSA-N	2.3×10^2		Ebert et al. (2023)	?	319
chlOrphthalim $\text{C}_{14}\text{H}_{12}\text{ClNO}_2$ [39985-63-2] MJQBFSWPMMHVSM-UHFFFAOYSA-N	5.1×10^2		Ebert et al. (2023)	?	319
cyprofuram $\text{C}_{14}\text{H}_{14}\text{ClNO}_3$ [69581-33-5] KRZUZYJEQBXUIN-UHFFFAOYSA-N	3.1×10^5		Ebert et al. (2023)	?	317
ofurace $\text{C}_{14}\text{H}_{16}\text{ClNO}_3$ [58810-48-3] OWDLFBLNMPXSD-UHFFFAOYSA-N	1.1×10^4		Ebert et al. (2023)	?	319
triadimenol B $\text{C}_{14}\text{H}_{18}\text{ClN}_3\text{O}_2$ [82200-72-4]	1.1×10^5		Ebert et al. (2023)	?	367
triadimenol A $\text{C}_{14}\text{H}_{18}\text{ClN}_3\text{O}_2$ [89482-17-7]	1.3×10^5		Ebert et al. (2023)	?	319
propiconazole $\text{C}_{15}\text{H}_{17}\text{Cl}_2\text{N}_3\text{O}_2$ [60207-90-1] STJLVHWMYQXCPB-UHFFFAOYSA-N	1.1×10^4 5.7×10^3 2.5×10^3 2.4×10^1 3.1×10^1		HSDB (2015) Mackay et al. (2006d) Siebers et al. (1994) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	 569 570, 573
clonazepam $\text{C}_{15}\text{H}_{10}\text{ClN}_3\text{O}_3$ [1622-61-3] DGBIGWXXNGSACT-UHFFFAOYSA-N	1.4×10^7		HSDB (2015)	Q	100
oxazepam $\text{C}_{15}\text{H}_{12}\text{ClN}_2\text{O}_2$ [604-75-1] ADIMAYPTOBDMTL-UHFFFAOYSA-N	1.8×10^4		HSDB (2015)	Q	100
oxadiazon $\text{C}_{15}\text{H}_{18}\text{Cl}_2\text{N}_2\text{O}_3$ [19666-30-9] CHNUNORXWHYHNE-UHFFFAOYSA-N	1.4×10^2 1.4×10^2		HSDB (2015) Armbrust (2000)	V C	

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
cyproconazole $\text{C}_{15}\text{H}_{18}\text{ClN}_3\text{O}$ [94361-06-5] UFNOUKDBUJZYDE-UHFFFAOYSA-N	1.4×10^4 1.3×10^2 3.4×10^2 2.0×10^4		HSDB (2015) Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011)	V X Q ?	569 570 242, 166
diclobutrazol $\text{C}_{15}\text{H}_{19}\text{Cl}_2\text{N}_3\text{O}$ [75736-33-3] URDNHJIVMYZFRU-UHFFFAOYSA-N	8.0×10^3		MacBean (2012a)	?	
paclobutrazol $\text{C}_{15}\text{H}_{20}\text{ClN}_3\text{O}$ [76738-62-0] RMOGWMIKYWRKWK-UHFFFAOYSA-N	4.2×10^4		Maniere et al. (2011)	?	242, 166
prochloraz $\text{C}_{15}\text{H}_{16}\text{Cl}_3\text{N}_3\text{O}_2$ [67747-09-5] TVLSRXXIMLFWEO-UHFFFAOYSA-N	6.0×10^2 5.8 6.4×10^3 5.9×10^{-1} 6.1×10^2		Duchowicz et al. (2020) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010) Maniere et al. (2011)	V X Q Q ?	187 569 570 242, 166
<i>cis</i> -propiconazole $\text{C}_{15}\text{H}_{17}\text{Cl}_2\text{N}_3\text{O}_2$ [112721-87-6]	1.2×10^4		Ebert et al. (2023)	?	319
<i>trans</i> -propiconazole $\text{C}_{15}\text{H}_{17}\text{Cl}_2\text{N}_3\text{O}_2$ [120523-07-1]	7.8×10^3		Ebert et al. (2023)	?	319
fenoxanil $\text{C}_{15}\text{H}_{18}\text{Cl}_2\text{N}_2\text{O}_2$ [115852-48-7] IUOKJNROJISWRO-UHFFFAOYSA-N	5.0×10^6		Ebert et al. (2023)	?	319
carpropamid $\text{C}_{15}\text{H}_{18}\text{Cl}_3\text{NO}$ [104030-54-8] RXDMAYSSBPYBFW-UHFFFAOYSA-N	8.4×10^2		Ebert et al. (2023)	?	319
propisochlor $\text{C}_{15}\text{H}_{22}\text{ClNO}_2$ [86763-47-5] KZNDFYDURHAESM-UHFFFAOYSA-N	5.6×10^1		Ebert et al. (2023)	?	319
mefenpyr-diethyl $\text{C}_{16}\text{H}_{18}\text{Cl}_2\text{N}_2\text{O}_4$ [135590-91-9] OPGCOAPTHCZZIW-UHFFFAOYSA-N	3.8×10^3 8.5×10^3		Maniere et al. (2011) Maniere et al. (2011)	? ?	166 12, 166

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
diazepam $\text{C}_{16}\text{H}_{13}\text{ClN}_2\text{O}$ [439-14-5] AAOVKJBEBIDNHE-UHFFFAOYSA-N	2.7×10^3		HSDB (2015)	Q	100
bendamustine $\text{C}_{16}\text{H}_{21}\text{Cl}_2\text{N}_3\text{O}_2$ [16506-27-7] YTKUWDBFDASYHO-UHFFFAOYSA-N	2.5×10^7		HSDB (2015)	Q	100
fentrazamide $\text{C}_{16}\text{H}_{20}\text{ClN}_5\text{O}_2$ [158237-07-1] LLQPHQFNMLZJMP-UHFFFAOYSA-N	5.1×10^4		Ebert et al. (2023)	?	319
piperalin $\text{C}_{16}\text{H}_{21}\text{Cl}_2\text{NO}_2$ [3478-94-2] BZGLBXYQOMFXAU-UHFFFAOYSA-N	4.3×10^2		HSDB (2015)	Q	100
tebuconazole $\text{C}_{16}\text{H}_{22}\text{ClN}_3\text{O}$ [107534-96-3] PXNMNQRDXWABCY-UHFFFAOYSA-N	7.0×10^4 1.1×10^3 2.2×10^2 1.0×10^5		HSDB (2015) Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011)	V X Q ?	569 570, 573 12, 166
diethyl-ethyl $\text{C}_{16}\text{H}_{22}\text{ClNO}_3$ [38727-55-8] WFKSADNZWSKCRZ-UHFFFAOYSA-N	7.9×10^2		Ebert et al. (2023)	?	319
fenarimol $\text{C}_{17}\text{H}_{12}\text{Cl}_2\text{N}_2\text{O}$ [60168-88-9] NHOWDZOIZKMWAI-UHFFFAOYSA-N	1.4×10^3 1.4×10^3 7.8×10^5		Duchowicz et al. (2020) Mackay et al. (2006d) Duchowicz et al. (2020)	V V Q	187
cumyluron $\text{C}_{17}\text{H}_{19}\text{ClN}_2\text{O}$ [99485-76-4] VYNOULHXXDFBLU-UHFFFAOYSA-N	2.5×10^6		Ebert et al. (2023)	?	319
triticonazole $\text{C}_{17}\text{H}_{20}\text{N}_3\text{OCl}$ [131983-72-7] PPDBOQMKNKNODG-ZROIWOOFSA-N	6.6×10^4 3.3×10^4		HSDB (2015) Maniere et al. (2011)	Q ?	100 242, 166
furametpyr $\text{C}_{17}\text{H}_{20}\text{ClN}_3\text{O}_2$ [123572-88-3] NRTLIIYOWLVMQBO-UHFFFAOYSA-N	6.0×10^6		Ebert et al. (2023)	?	319

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
metconazole $\text{C}_{17}\text{H}_{22}\text{ClN}_3\text{O}$ [125116-23-6] XWPZUHJBOLQNMN-UHFFFAOYSA-N	3.8×10^3 1.3×10^3 4.5×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	187 12, 166
tepraloxymid $\text{C}_{17}\text{H}_{24}\text{ClNO}_4$ [149979-41-9] IOYNQIMAUDJVEI-BMVIKAAMSA-N	5.2×10^4		Ebert et al. (2023)	?	319
cloquintocet-mexyl $\text{C}_{18}\text{H}_{22}\text{ClNO}_3$ [99607-70-2] COYBRKAVBMYYSF-UHFFFAOYSA-N	1.2×10^4 3.4×10^2 3.3×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	187 166
fenoxaprop-p-ethyl $\text{C}_{18}\text{H}_{16}\text{ClNO}_5$ [71283-80-2] PQKBPHSEKWERTG-LLVKDONJSA-N	6.2×10^2 2.3×10^3 3.7×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	187 12, 166
ipconazole $\text{C}_{18}\text{H}_{24}\text{ClN}_3\text{O}$ [125225-28-7] QTYCMBMOLSEAM-UHFFFAOYSA-N	3.9×10^3 1.3×10^3 3.3×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	187 242, 166
pyriofenone $\text{C}_{18}\text{H}_{20}\text{ClNO}_5$ [688046-61-9] NMVGBWZLCXANER-UHFFFAOYSA-N	5.3×10^3		Maniere et al. (2011)	?	242, 166
cintofen $\text{C}_{18}\text{H}_{15}\text{ClN}_2\text{O}_5$ (sintofen) [130561-48-7] QLMNCUHS DAGQGT-UHFFFAOYSA-N	1.4×10^7 5.4×10^9 6.1×10^9		Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	? ? ?	12, 579, 166 12, 575, 166 12, 495, 166
boscalid $\text{C}_{18}\text{H}_{12}\text{Cl}_2\text{N}_2\text{O}$ [188425-85-6] WYEMLYFITZORAB-UHFFFAOYSA-N	1.9×10^4 1.9×10^4		MacBean (2012b) Maniere et al. (2011)	X ?	352 242, 166
tebufenpyrad $\text{C}_{18}\text{H}_{24}\text{ClN}_3\text{O}$ [119168-77-3] ZZYSLNWXGKKDOML-UHFFFAOYSA-N	$> 8.2 \times 10^2$ $> 9.1 \times 10^2$		HSDB (2015) Maniere et al. (2011)	V ?	 242, 166

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
8,9,10,11-tetrachloro-12-phthaloperinone $\text{C}_{18}\text{H}_6\text{Cl}_4\text{N}_2\text{O}$ [20749-68-2] UBZVRROHBDDCQY-UHFFFAOYSA-N	4.8×10^5		Zhang et al. (2010)	Q	288, 289
pigment red 254 $\text{C}_{18}\text{H}_{10}\text{Cl}_2\text{N}_2\text{O}_2$ [84632-65-5] JNNHVXMCVRYTTN-UHFFFAOYSA-N	7.5×10^9		Zhang et al. (2010)	Q	288, 290
	5.7×10^3		Zhang et al. (2010)	Q	288, 291
	1.9×10^5		Zhang et al. (2010)	Q	288, 292
fenoxaprop-ethyl $\text{C}_{18}\text{H}_{16}\text{ClNO}_5$ [66441-23-4] PQKBPHSEKWERTG-UHFFFAOYSA-N	3.4×10^9		Zhang et al. (2010)	Q	288, 289
	3.9×10^6		Zhang et al. (2010)	Q	288, 290
	1.9×10^{13}		Zhang et al. (2010)	Q	288, 291
	2.2×10^{12}		Zhang et al. (2010)	Q	288, 292
benzoylprop-ethyl $\text{C}_{18}\text{H}_{17}\text{Cl}_2\text{NO}_3$ [22212-55-1] SLCGUGMPSUYJAY-UHFFFAOYSA-N	6.2×10^2		Ebert et al. (2023)	?	317
difenoconazole $\text{C}_{19}\text{H}_{17}\text{Cl}_2\text{N}_3\text{O}_3$ [119446-68-3] BQYJATMQXGBDHF-UHFFFAOYSA-N	1.2×10^4		Ebert et al. (2023)	?	741
	1.1×10^6		Duchowicz et al. (2020)	V	187
	6.6×10^3		Barcelo and Hennion (1997)	X	569
	3.1×10^4		Duchowicz et al. (2020)	Q	
	7.7×10^1		Goodarzi et al. (2010)	Q	570
quizalofop ethyl $\text{C}_{19}\text{H}_{17}\text{ClN}_2\text{O}_4$ [76578-14-8] OSUHJPCHFDQAIT-UHFFFAOYSA-N	1.1×10^6		Maniere et al. (2011)	?	166
	9.3×10^2		Duchowicz et al. (2020)	V	187
	9.0×10^2		HSDB (2015)	V	
	4.0×10^4		Duchowicz et al. (2020)	Q	
quizalofop-p-ethyl $\text{C}_{19}\text{H}_{17}\text{ClN}_2\text{O}_4$ [100646-51-3] OSUHJPCHFDQAIT-GFCCVEGCSA-N	1.5×10^4		Maniere et al. (2011)	?	12, 166
	4.8×10^3		Ebert et al. (2023)	?	319
pyraclostrobine $\text{C}_{19}\text{H}_{18}\text{ClN}_3\text{O}_4$ [175013-18-0] HZRSNVGNWUDEFX-UHFFFAOYSA-N	1.9×10^5		MacBean (2012b)	X	352
	1.9×10^5		Maniere et al. (2011)	?	12, 166
pyrimidifen $\text{C}_{20}\text{H}_{28}\text{ClN}_3\text{O}_2$ [105779-78-0] ITKAIUGKVKDENI-UHFFFAOYSA-N	3.6×10^4		Ebert et al. (2023)	?	319

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ponsol red violet 2rx $\text{C}_{21}\text{H}_8\text{Cl}_3\text{NO}_3$ [6373-31-5] SQAQTWYUQXFOMH-UHFFFAOYSA-N	2.4×10^{10} 4.1×10^7 9.9×10^8 4.6×10^9		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
dimethomorph $\text{C}_{21}\text{H}_{22}\text{NO}_4\text{Cl}$ [110488-70-5] QNBTYORWCCMPQP-JXAWBTAJSA-N	4.9×10^4 9.3×10^5 9.9×10^9 1.9×10^5 4.0×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015) Maniere et al. (2011) Maniere et al. (2011)	V Q Q ? ?	187 100 242, 166 242, 166
propaquizafop $\text{C}_{22}\text{H}_{22}\text{ClN}_3\text{O}_5$ [111479-05-1] FROBCXTULYFHEJ-UHFFFAOYSA-N	3.2×10^6 1.1×10^7 1.1×10^7		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	187 12, 166
aripiprazole $\text{C}_{23}\text{H}_{27}\text{Cl}_2\text{N}_3\text{O}_2$ [129722-12-9] CEUORZQYGDEFX-UHFFFAOYSA-N	9.9×10^{11}		HSDB (2015)	Q	100
ag-g-86814 $\text{C}_{26}\text{H}_6\text{Cl}_8\text{N}_2\text{O}_4$ [30125-47-4] ZEHOVWPIGREOPO-UHFFFAOYSA-N	1.8×10^{14} 9.7×10^{12} 1.1×10^{11} 4.1×10^{14}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
8,18-dichloro-5,15-diethyl-5,15-dihydrodiindolo(3,2-b:3',2'-m)triphenodioxazine $\text{C}_{34}\text{H}_{22}\text{Cl}_2\text{N}_4\text{O}_2$ [6358-30-1] CGLVZFOCZLHKOH-UHFFFAOYSA-N	8.0×10^6 1.8×10^{12} 6.2×10^6 1.0×10^{10}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

A6.9 Chlorofluorocarbons (C, H, O, N, F, Cl)

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
chlorofluoromethane	1.5×10^{-3}	2600	Wilhelm et al. (1977)	L	
CH ₂ FCI	1.5×10^{-3}	2300	Boggs and Buck (1958)	M	
(R31)	1.5×10^{-3}		Duchowicz et al. (2020)	V	187
[593-70-4]	1.5×10^{-3}		Hine and Mookerjee (1975)	V	
XWDCDCSDNJVCLO-UHFFFAOYSA-N	1.6×10^{-3}		Yaws (2003)	X	238
	1.5×10^{-3}		Duchowicz et al. (2020)	Q	
	3.9×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	1.6×10^{-3}		Gharagheizi et al. (2010)	Q	247
	3.4×10^{-3}		Hilal et al. (2008)	Q	
	5.9×10^{-4}		Modarresi et al. (2007)	Q	68
		2600	Kühne et al. (2005)	Q	
	6.6×10^{-4}		Yao et al. (2002)	Q	230
	1.8×10^{-3}		English and Carroll (2001)	Q	231, 232
	6.1×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	1.8×10^{-3}		Irmann (1965)	Q	
		2500	Kühne et al. (2005)	?	
	1.6×10^{-3}		Yaws (1999)	?	21
	1.5×10^{-3}		Yaws and Yang (1992)	?	21
chlorodifluoromethane	3.5×10^{-4}	2600	Burkholder et al. (2019)	L	
CHF ₂ Cl	3.2×10^{-4}	2700	Burkholder et al. (2019)	L	71
(R22)	3.5×10^{-4}	2600	Burkholder et al. (2015)	L	
[75-45-6]	3.2×10^{-4}	2700	Burkholder et al. (2015)	L	71
VOPWNXZWBVDODV-UHFFFAOYSA-N	3.4×10^{-4}	3400	Sander et al. (2011)	L	1
	3.4×10^{-4}	3400	Wilhelm et al. (1977)	L	
	2.9×10^{-4}	3100	Ooki and Yokouchi (2011)	M	71
	3.4×10^{-4}	3000	Zheng et al. (1997)	M	742
	3.5×10^{-4}	3100	Maaßen (1995)	M	743
	3.5×10^{-4}	3000	Reichl (1995)	M	744
	1.7×10^{-4}	3500	Chang and Criddle (1995)	M	745
	3.5×10^{-4}	2600	Boggs and Buck (1958)	M	
	3.3×10^{-4}		Mackay et al. (2006b)	V	
	3.3×10^{-4}		Mackay et al. (1993)	V	
	3.3×10^{-4}	3600	McLinden (1989)	V	746, 747
	3.4×10^{-4}		Hine and Mookerjee (1975)	V	
	3.2×10^{-4}		Irmann (1965)	V	
	3.3×10^{-4}		Yaws (2003)	X	238
			Kanakidou et al. (1995)	C	748
	3.1×10^{-4}		Hayer et al. (2022)	Q	20
	3.4×10^{-4}	3100	Li et al. (2019)	Q	1
	1.4×10^{-4}		Gharagheizi et al. (2012)	Q	

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	3.9×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-5}		Raventos-Duran et al. (2010)	Q	246
	3.7×10^{-4}		Gharagheizi et al. (2010)	Q	247
	6.0×10^{-4}		Hilal et al. (2008)	Q	
	1.9×10^{-4}		Modarresi et al. (2007)	Q	68
		2600	Kühne et al. (2005)	Q	
	3.4×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	8.4×10^{-4}		English and Carroll (2001)	Q	231, 232
	1.0×10^{-4}		Katritzky et al. (1998)	Q	
	4.0×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	3.5×10^{-4}		Irmann (1965)	Q	
		3000	Kühne et al. (2005)	?	
	3.3×10^{-4}		Yaws (1999)	?	21
	2.4×10^{-4}		Abraham and Weathersby (1994)	?	21
	3.3×10^{-4}		Yaws and Yang (1992)	?	21
dichlorofluoromethane CHFCl ₂ (R21) [75-43-4] UMNKXPULIDJLSU-UHFFFAOYSA-N	9.1×10^{-4}		HSDB (2015)	V	
	1.8×10^{-3}		Mackay et al. (1993)	V	
	6.8×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-3}		Hilal et al. (2008)	Q	
	5.9×10^{-4}		Modarresi et al. (2007)	Q	68
	9.2×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	1.5×10^{-3}		Yao et al. (2002)	Q	230
	7.2×10^{-4}		Katritzky et al. (1998)	Q	
	1.9×10^{-3}		Yaws (1999)	?	21
	3.8×10^{-5}		Mackay et al. (1993)	?	
	1.9×10^{-3}		Yaws and Yang (1992)	?	21
chlorotrifluoromethane CF ₃ Cl (R13) [75-72-9] AFYPFACVUDMOHA-UHFFFAOYSA-N	9.9×10^{-6}	1700	Burkholder et al. (2019)	L	749
	8.0×10^{-6}	1500	Burkholder et al. (2019)	L	71
	9.9×10^{-6}	1700	Burkholder et al. (2015)	L	750
	8.0×10^{-6}	1500	Burkholder et al. (2015)	L	71
	9.9×10^{-6}	1700	Sander et al. (2011)	L	751
	9.3×10^{-6}	1600	Wilhelm et al. (1977)	L	
	8.9×10^{-6}	1900	Reichl (1995)	M	752
	9.0×10^{-6}	2100	Scharlin and Battino (1995)	M	753
	9.0×10^{-6}	2100	Scharlin and Battino (1994)	M	754
	7.8×10^{-6}		Park et al. (1982)	M	
	1.5×10^{-4}		Mackay et al. (1993)	V	
	5.7×10^{-6}		Hine and Mookerjee (1975)	V	
	8.8×10^{-6}		Yaws (2003)	X	238
	7.2×10^{-6}		Hilal et al. (2008)	C	
	5.7×10^{-6}		Irmann (1965)	C	
	8.3×10^{-6}		Hayer et al. (2022)	Q	20
	6.4×10^{-6}		Keshavarz et al. (2022)	Q	
	4.0×10^{-5}		Duchowicz et al. (2020)	Q	

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.3×10^{-5}		Gharagheizi et al. (2012)	Q	
	6.9×10^{-6}		Gharagheizi et al. (2010)	Q	247
	2.6×10^{-5}		Hilal et al. (2008)	Q	
	2.1×10^{-5}		Modarresi et al. (2007)	Q	68
		2600	Kühne et al. (2005)	Q	
	7.7×10^{-6}		Yaffe et al. (2003)	Q	249, 250
	6.7×10^{-7}		Katritzky et al. (1998)	Q	
	1.4×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	5.1×10^{-6}		Irmann (1965)	Q	
	7.2×10^{-6}		Duchowicz et al. (2020)	?	186, 21
		2000	Kühne et al. (2005)	?	
	8.8×10^{-6}		Yaws (1999)	?	21
	8.7×10^{-6}		Yaws and Yang (1992)	?	21
dichlorodifluoromethane CF ₂ Cl ₂ (R12) [75-71-8] PXBRQCKWGAHEHS-UHFFFAOYSA-N	3.0×10^{-5}	3500	Burkholder et al. (2019)	L	
	2.6×10^{-5}	2100	Burkholder et al. (2019)	L	71
	3.0×10^{-5}	3500	Burkholder et al. (2015)	L	
	2.6×10^{-5}	2100	Burkholder et al. (2015)	L	71
	3.1×10^{-5}	3200	Brockbank (2013)	L	1
	3.0×10^{-5}	3400	Warneck and Williams (2012)	L	
	3.0×10^{-5}	3500	Sander et al. (2011)	L	
	3.0×10^{-5}	3500	Sander et al. (2006)	L	
	3.1×10^{-5}	3500	Staudinger and Roberts (2001)	L	
	2.1×10^{-5}	1800	Wilhelm et al. (1977)	L	
	1.3×10^{-4}	5500	Hiatt (2013)	M	
	3.0×10^{-5}	3000	Reichl (1995)	M	755
	2.9×10^{-5}	2900	Scharlin and Battino (1995)	M	756
	2.9×10^{-5}	2900	Scharlin and Battino (1994)	M	757
	3.1×10^{-5}	3500	Munz and Roberts (1987)	M	
	2.9×10^{-5}	3200	Warner and Weiss (1985)	M	
	2.3×10^{-5}	3400	Wisegarver and Cline (1985)	M	71
	2.9×10^{-5}		Park et al. (1982)	M	
	2.5×10^{-5}		Pearson and McConnell (1975)	M	651, 12
	2.4×10^{-5}		Mackay et al. (2006b)	V	
	2.4×10^{-5}		Mackay et al. (1993)	V	
	2.3×10^{-5}		Mackay and Shiu (1981)	V	
	2.3×10^{-5}		Hine and Mookerjee (1975)	V	
	2.5×10^{-5}		Yaws (2003)	X	238
	3.5×10^{-6}	-210	Goldstein (1982)	X	299
	3.6×10^{-5}		Hilal et al. (2008)	C	
	6.4×10^{-6}		Ryan et al. (1988)	C	
	2.3×10^{-5}		Irmann (1965)	C	
	2.4×10^{-5}		Hayer et al. (2022)	Q	20
	1.9×10^{-5}		Keshavarz et al. (2022)	Q	
	1.1×10^{-4}		Duchowicz et al. (2020)	Q	185
	2.8×10^{-5}	3300	Li et al. (2019)	Q	1

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^{-4}		Gharagheizi et al. (2012)	Q	
	2.4×10^{-5}		Gharagheizi et al. (2010)	Q	247
	5.4×10^{-5}		Hilal et al. (2008)	Q	
	7.7×10^{-5}		Modarresi et al. (2007)	Q	68
		3000	Kühne et al. (2005)	Q	
	2.5×10^{-5}		Yaffe et al. (2003)	Q	249, 250
	1.1×10^{-5}		Katritzky et al. (1998)	Q	
	4.7×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	2.0×10^{-5}		Irmann (1965)	Q	
	2.9×10^{-5}		Duchowicz et al. (2020)	?	186, 21
		3400	Kühne et al. (2005)	?	
	2.5×10^{-5}		Yaws (1999)	?	21
	2.3×10^{-5}		Abraham and Weathersby (1994)	?	21
	2.5×10^{-5}		Yaws and Yang (1992)	?	21
trichlorofluoromethane CFC1 ₃ (R11) [75-69-4] CYRMSUTZVYGINF-UHFFFAOYSA-N	1.1×10^{-4}	3300	Burkholder et al. (2019)	L	
	7.3×10^{-5}	3900	Burkholder et al. (2019)	L	71
	1.1×10^{-4}	3300	Burkholder et al. (2015)	L	
	7.3×10^{-5}	3900	Burkholder et al. (2015)	L	71
	1.0×10^{-4}	3400	Brockbank (2013)	L	
	1.1×10^{-4}	3400	Warneck and Williams (2012)	L	
	1.1×10^{-4}	3300	Sander et al. (2011)	L	
	1.1×10^{-4}	3300	Sander et al. (2006)	L	
	1.1×10^{-4}	3300	Staudinger and Roberts (2001)	L	
	1.0×10^{-4}	3100	Staudinger and Roberts (1996)	L	
	2.8×10^{-4}	5100	Hiatt (2013)	M	
	6.0×10^{-5}	4900	Ooki and Yokouchi (2011)	M	71
	1.0×10^{-4}	3700	Maaßen (1995)	M	758
	1.5×10^{-4}	3700	Reichl (1995)	M	759
	9.8×10^{-5}	3500	Ashworth et al. (1988)	M	279
	1.0×10^{-4}	3600	Warner and Weiss (1985)	M	
	7.8×10^{-5}	3900	Wisegarver and Cline (1985)	M	71
	1.1×10^{-4}	2700	Hunter-Smith et al. (1983)	M	660
	1.1×10^{-4}		Park et al. (1982)	M	
	1.7×10^{-4}		Warner et al. (1980)	M	
	1.1×10^{-4}	2100	Balls (1980)	M	
	1.2×10^{-5}		Pearson and McConnell (1975)	M	651, 12
	7.8×10^{-5}		Mackay et al. (2006b)	V	
	9.9×10^{-5}	6100	Fogg and Sangster (2003)	V	
	7.8×10^{-5}		Mackay et al. (1993)	V	
	9.0×10^{-5}		Yoshida et al. (1983)	V	
	9.0×10^{-5}		Mackay and Shiu (1981)	V	
	9.5×10^{-5}		Warner et al. (1980)	V	
	9.8×10^{-5}		Irmann (1965)	V	
	8.0×10^{-5}		Yaws (2003)	X	238, 38
	1.7×10^{-4}	730	Goldstein (1982)	X	299

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	1.0×10^{-4}		Hilal et al. (2008)	C	
	1.7×10^{-4}		Ryan et al. (1988)	C	
	1.7×10^{-4}		Shen (1982)	C	
	8.1×10^{-5}		Liss and Slater (1974)	C	
	9.4×10^{-5}		Hayer et al. (2022)	Q	20
	5.9×10^{-5}		Keshavarz et al. (2022)	Q	
	2.7×10^{-4}		Duchowicz et al. (2020)	Q	300
	6.5×10^{-4}		Gharagheizi et al. (2012)	Q	
	8.4×10^{-5}		Gharagheizi et al. (2010)	Q	247
	1.7×10^{-4}		Hilal et al. (2008)	Q	
	2.5×10^{-4}		Modarresi et al. (2007)	Q	68
		3300	Kühne et al. (2005)	Q	
	1.1×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	8.6×10^{-5}		Katritzky et al. (1998)	Q	
	8.6×10^{-5}		Irmann (1965)	Q	
	1.0×10^{-4}		Duchowicz et al. (2020)	?	186, 21
	9.8×10^{-5}		Mackay et al. (2006b)	?	
		3800	Kühne et al. (2005)	?	
	8.1×10^{-5}		Yaws (1999)	?	21, 38
	8.2×10^{-5}		Abraham and Weathersby (1994)	?	21
	9.8×10^{-5}		Mackay et al. (1993)	?	
	8.1×10^{-5}		Yaws and Yang (1992)	?	21
1,1,1,2-tetrachlorodifluoroethane $\text{C}_2\text{Cl}_4\text{F}_2$ [76-11-9] SLGOCMATMKJCE-UHFFFAOYSA-N	6.1×10^{-5}		Duchowicz et al. (2020)	V	187
	6.2×10^{-5}		HSDB (2015)	V	
	7.3×10^{-4}		Duchowicz et al. (2020)	Q	
	5.1×10^{-4}		Hilal et al. (2008)	Q	
	2.8×10^{-4}		Modarresi et al. (2007)	Q	68
	2.4×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	3.2×10^{-5}		Katritzky et al. (1998)	Q	
1,1,2,2-tetrachlorodifluoroethane $\text{C}_2\text{F}_2\text{Cl}_4$ (R112) [76-12-0] UGCSPKPEHQEOSR-UHFFFAOYSA-N	9.0×10^{-5}		HSDB (2015)	V	
	1.0×10^{-4}		Hine and Mookerjee (1975)	V	
	7.9×10^{-5}		Yaws (2003)	X	238
	2.4×10^{-3}		Gharagheizi et al. (2012)	Q	
	7.1×10^{-5}		Gharagheizi et al. (2010)	Q	247
	5.1×10^{-4}		Hilal et al. (2008)	Q	
	3.2×10^{-4}		Modarresi et al. (2007)	Q	68
	1.1×10^{-4}		Yao et al. (2002)	Q	230
	7.9×10^{-5}		Yaws (1999)	?	21
1,1,1-trichloro-2,2,2-trifluoroethane $\text{C}_2\text{F}_3\text{Cl}_3$ (R113a) [354-58-5] BOSAWIQFTJIYIS-UHFFFAOYSA-N	3.7×10^{-5}		HSDB (2015)	Q	100
	3.7×10^{-5}		Zhang et al. (2010)	Q	288, 289
	2.1×10^{-4}		Zhang et al. (2010)	Q	288, 290
	5.8×10^{-5}		Zhang et al. (2010)	Q	288, 291
	3.0×10^{-5}		Zhang et al. (2010)	Q	288, 292

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1,2-trichloro-1,2,2-trifluoroethane $\text{C}_2\text{F}_3\text{Cl}_3$ (R113) [76-13-1] AJDIZQLSFPQPEY-UHFFFAOYSA-N	3.4×10^{-5}	3200	Burkholder et al. (2019)	L	
	3.4×10^{-5}	3200	Burkholder et al. (2015)	L	
	2.9×10^{-5}	4100	Brockbank (2013)	L	
	2.0×10^{-4}	5700	Hiatt (2013)	M	
	2.9×10^{-5}	4300	Dewulf et al. (1999)	M	
	2.9×10^{-5}	4000	Bu and Warner (1995)	M	760
	2.8×10^{-5}	6500	Reichl (1995)	M	761
	3.4×10^{-5}	3200	Ashworth et al. (1988)	M	279
	1.9×10^{-5}		HSDB (2015)	V	
			Mackay et al. (2006b)	V	685
	8.8×10^{-6}		Mackay et al. (1993)	V	
	2.0×10^{-5}		Hine and Mookerjee (1975)	V	
	2.0×10^{-5}		Yaws (2003)	X	238
	7.0×10^{-4}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-5}		Gharagheizi et al. (2010)	Q	247
	1.8×10^{-4}		Hilal et al. (2008)	Q	
	1.1×10^{-4}		Modarresi et al. (2007)	Q	68
		3700	Kühne et al. (2005)	Q	
	3.1×10^{-5}		Mackay et al. (2006b)	?	
		3800	Kühne et al. (2005)	?	
	2.1×10^{-5}		Yaws (1999)	?	21
	3.1×10^{-5}		Mackay et al. (1993)	?	
	2.0×10^{-5}		Yaws and Yang (1992)	?	21
	2.0×10^{-5}		Abraham et al. (1990)	?	
1,1-dichlorotetrafluoroethane $\text{C}_2\text{F}_4\text{Cl}_2$ (R114a) [374-07-2] BAMUEXIPKSR TBS-UHFFFAOYSA-N	8.2×10^{-6}		HSDB (2015)	V	
	5.8×10^{-6}		Hine and Mookerjee (1975)	V	
	7.5×10^{-6}		Hilal et al. (2008)	C	
	5.8×10^{-6}		Irmann (1965)	C	295
	8.8×10^{-5}		Hilal et al. (2008)	Q	
	6.6×10^{-6}		Irmann (1965)	Q	
1,2-dichlorotetrafluoroethane $\text{C}_2\text{F}_4\text{Cl}_2$ (R114) [76-14-2] DDMOUSALMHHKOS-UHFFFAOYSA-N	9.0×10^{-6}	2800	Reichl (1995)	M	762
	7.9×10^{-6}		Mackay et al. (1993)	V	
	8.0×10^{-6}		Hine and Mookerjee (1975)	V	
	8.1×10^{-6}		Yaws (2003)	X	238
	8.1×10^{-6}		Irmann (1965)	C	12
	7.1×10^{-4}		Hayer et al. (2022)	Q	20
	1.8×10^{-4}		Gharagheizi et al. (2012)	Q	
	8.1×10^{-6}		Gharagheizi et al. (2010)	Q	247
	8.4×10^{-5}		Hilal et al. (2008)	Q	
	2.8×10^{-5}		Modarresi et al. (2007)	Q	68
		3300	Kühne et al. (2005)	Q	
	1.1×10^{-4}		Yao et al. (2002)	Q	230
	6.6×10^{-6}		Irmann (1965)	Q	
		2700	Kühne et al. (2005)	?	

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	8.2×10^{-6}		Yaws (1999)	?	21
	7.9×10^{-6}		Abraham and Weathersby (1994)	?	21
	8.1×10^{-6}		Yaws and Yang (1992)	?	21
chloropentafluoroethane $\text{C}_2\text{F}_5\text{Cl}$ (R115) [76-15-3] RFCUAADVODFSLZ-UHFFFAOYSA-N	3.4×10^{-6}	2800	Wilhelm et al. (1977)	L	
	3.1×10^{-6}	2100	Reichl (1995)	M	763
	1.8×10^{-6}		Duchowicz et al. (2020)	V	187
	1.8×10^{-6}		HSDB (2015)	V	
	3.8×10^{-6}		Mackay et al. (1993)	V	
	3.7×10^{-6}		Meylan and Howard (1991)	V	
	3.2×10^{-6}		Hine and Mookerjee (1975)	V	
	3.8×10^{-6}		Yaws (2003)	X	238
	3.2×10^{-6}		Irmann (1965)	C	
	3.1×10^{-6}		Hayer et al. (2022)	Q	20
	6.5×10^{-5}		Duchowicz et al. (2020)	Q	
	4.9×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-6}		Gharagheizi et al. (2010)	Q	247
	3.4×10^{-5}		Hilal et al. (2008)	Q	
	7.6×10^{-6}		Modarresi et al. (2007)	Q	68
		2900	Kühne et al. (2005)	Q	
	2.4×10^{-5}		Yao et al. (2002)	Q	230
	1.2×10^{-6}		Meylan and Howard (1991)	Q	
	2.1×10^{-6}		Irmann (1965)	Q	
		2000	Kühne et al. (2005)	?	
	3.8×10^{-6}		Yaws (1999)	?	21
	3.8×10^{-6}		Yaws and Yang (1992)	?	21
1,1,2,2-tetrachloro-1-fluoroethane $\text{C}_2\text{HCl}_4\text{F}$ [354-14-3] LUBCGHUOCJOIJA-UHFFFAOYSA-N	3.3×10^{-3}		HSDB (2015)	Q	100
1,1-dichloro-1,2,2-trifluoroethane $\text{C}_2\text{HCl}_2\text{F}_3$ [812-04-4] AFTSHZRGGNMLHC-UHFFFAOYSA-N	1.0×10^{-4}		HSDB (2015)	Q	100
1,2-dichloro-1,1,2-trifluoroethane $\text{C}_2\text{HCl}_2\text{F}_3$ [354-23-4] YMRMDGSNYHCUCL-UHFFFAOYSA-N	1.0×10^{-4}		HSDB (2015)	Q	100
2,2-dichloro-1,1,1-trifluoroethane $\text{C}_2\text{HF}_3\text{Cl}_2$ (R123) [306-83-2] OHMHGWPWCHTMQE-UHFFFAOYSA-N	2.3×10^{-4}	2400	Kutsuna (2013)	M	
	3.2×10^{-4}	3100	Chang and Criddle (1995)	M	764
	2.8×10^{-4}	2600	McLinden (1989)	V	
	5.0×10^{-4}		Hilal et al. (2008)	Q	
	1.8×10^{-4}		Modarresi et al. (2007)	Q	68

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
1-chloro-1,1,2,2-tetrafluoroethane C_2HClF_4 [354-25-6] JQZFYIGAYWLRCC-UHFFFAOYSA-N	1.8×10^{-5}		HSDB (2015)	Q	100
1-chloro-1,2,2,2-tetrafluoroethane $\text{C}_2\text{HF}_4\text{Cl}$ (R124) [2837-89-0] BOUGCJDAQLKBQH-UHFFFAOYSA-N	1.1×10^{-4} 1.0×10^{-4} 1.1×10^{-4} 1.1×10^{-4} 1.0×10^{-4} 1.2×10^{-4} 1.3×10^{-3}	2800 3500 3400	Kutsuna (2013) Maaßen (1995) Reichl (1995) Duchowicz et al. (2020) McLinden (1989) Hayer et al. (2022) Duchowicz et al. (2020) Kühne et al. (2005) Kühne et al. (2005)	M M M V V Q Q Q ?	765 766 187 20
1,2-dichloro-1,1-difluoroethane $\text{C}_2\text{H}_2\text{Cl}_2\text{F}_2$ [1649-08-7] SKDFWEPBABSFMG-UHFFFAOYSA-N	1.4×10^{-4} 1.4×10^{-4} 1.1×10^{-3}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
2-chloro-1,1,1-trifluoroethane $\text{C}_2\text{H}_2\text{F}_3\text{Cl}$ (R133a) [75-88-7] CYXIKYKBLDZZNW-UHFFFAOYSA-N	3.7×10^{-4} 4.1×10^{-4} 3.7×10^{-4} 3.7×10^{-4} 4.8×10^{-4} 3.7×10^{-5} 3.0×10^{-4} 4.6×10^{-4} 3.9×10^{-4} 2.9×10^{-4} 2.7×10^{-4}	3600 3500	Maaßen (1995) Reichl (1995) Hine and Mookerjee (1975) Irmann (1965) Hayer et al. (2022) HSDB (2015) Hilal et al. (2008) English and Carroll (2001) Nirmalakhandan and Speece (1988) Irmann (1965) Abraham and Weathersby (1994)	M M V C Q Q Q Q Q Q Q ?	767 768 20 100 231, 232 21
1,1-dichloro-1-fluoroethane CH_3CFCl_2 (R141b) [1717-00-6] FRCHKNSNAZZFGCA-UHFFFAOYSA-N	2.9×10^{-4} 2.8×10^{-4} 4.5×10^{-4} 4.5×10^{-4} 7.7×10^{-5} 2.9×10^{-4} 6.8×10^{-4} 2.9×10^{-4}	2800 3700	Kutsuna (2013) Maaßen (1995) Duchowicz et al. (2020) HSDB (2015) McLinden (1989) Hayer et al. (2022) Duchowicz et al. (2020) Li et al. (2019) Kühne et al. (2005) Kühne et al. (2005)	M M V V V Q Q Q Q Q ?	769 187 20 1

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
1-chloro-1,1-difluoroethane CH ₃ CF ₂ Cl (R142b) [75-68-3] BHNZEZWIUMJCGF-UHFFFAOYSA-N	1.5×10^{-4} 1.4×10^{-4} 1.4×10^{-4} 1.5×10^{-4} 1.4×10^{-4} 1.9×10^{-4} 1.6×10^{-4} 1.4×10^{-4} 1.5×10^{-4} 8.4×10^{-5} 1.5×10^{-3} 1.5×10^{-4}	2600 3200 3200 3000 2500 3200	Kutsuna (2013) Maaßen (1995) Reichl (1995) Chang and Criddle (1995) McLinden (1989) Irmann (1965) Hayer et al. (2022) Li et al. (2019) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998) Irmann (1965)	M M M M V C Q Q Q Q Q Q	770 771 772 295 20 1 68 249, 250
1-chloro-1,2-difluoroethane C ₂ H ₃ ClF ₂ [338-64-7] UOVSDUIHNGNMBZ-UHFFFAOYSA-N		2900 3200	Kühne et al. (2005) Kühne et al. (2005)	Q ?	
1-chloro-1,1,2-trifluoroethane C ₂ H ₂ F ₃ Cl (R133b) [421-04-5] HILNUELUBMBJQ-UHFFFAOYSA-N		2900 3500	Kühne et al. (2005) Kühne et al. (2005)	Q ?	
2-chloro-1,1-difluoroethene C ₂ HClF ₂ (R1122) [359-10-4] HTHTNTJCVPNKCPZ-UHFFFAOYSA-N	1.7×10^{-4} 1.7×10^{-4} 1.9×10^{-4}	3300 3300 2800 3300	Maaßen (1995) Reichl (1995) Hayer et al. (2022) Kühne et al. (2005) Kühne et al. (2005) Abraham and Weathersby (1994)	M M Q Q ? ?	773 774 20 21
chlorotrifluoroethene C ₂ ClF ₃ [79-38-9] UUAGAQQZIEFAH-UHFFFAOYSA-N	3.2×10^{-5}		HSDB (2015)	Q	100
3,3-dichloro-1,1,1,2,2-pentafluoropropane CF ₃ CF ₂ CHCl ₂ (R225ca) [422-56-0] COAUHYBSXMIJDK-UHFFFAOYSA-N	9.8×10^{-5} 1.5×10^{-5} 8.4×10^{-4} 9.0×10^{-5} 2.0×10^{-5} 3.0×10^{-4} 1.1×10^{-4} 3.9×10^{-5} 2.0×10^{-5}	3500	Kutsuna (2013) Keshavarz et al. (2022) Duchowicz et al. (2020) HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Duchowicz et al. (2020)	M Q Q Q Q Q Q Q ?	100 288, 289 288, 290 288, 291 288, 292 186, 21

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3-dichloro-1,1,2,2,3-pentafluoro- propane CCIF ₂ CF ₂ CHCIF (R225cb) [507-55-1] UJIGKESMIPTWJH-UHFFFAOYSA-N	1.1×10^{-4} 3.6×10^{-6}	3100	Kutsuna (2013) HSDB (2015)	M Q	100
1-chloro-2-fluorobenzene C ₆ H ₄ ClF [348-51-6] ZCJAYDKWZAWMPR-UHFFFAOYSA-N	3.1×10^{-3}		Ebert et al. (2023)	?	317
1-chloro-3-fluorobenzene C ₆ H ₄ ClF [625-98-9] VZHJIZEOCBKRA-UHFFFAOYSA-N	1.6×10^{-3}		Ebert et al. (2023)	?	317
1-chloro-3- (trifluoromethyl)benzene C ₇ H ₄ ClF ₃ [98-15-7] YTGOUNVIAWCMG-UHFFFAOYSA-N	2.9×10^{-4} 2.8×10^{-3} 1.4×10^{-3} 1.4×10^{-4}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1-chloro-4- (trifluoromethyl)benzene C ₇ H ₄ ClF ₃ [98-56-6] QULYNCCPRWKEMF-UHFFFAOYSA-N	2.8×10^{-4} 2.9×10^{-4} 3.1×10^{-3} 1.5×10^{-3} 1.4×10^{-4}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
3-chloro-4-fluorobenzotrifluoride C ₇ H ₃ ClF ₄ [78068-85-6] BKHVEYHSOXVAOP-UHFFFAOYSA-N	2.4×10^{-4} 2.5×10^{-3} 8.6×10^{-4} 1.1×10^{-4}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
3,4-dichlorobenzotrifluoride C ₇ H ₃ Cl ₂ F ₃ [328-84-7] XILPLWOGHPSJBK-UHFFFAOYSA-N	3.8×10^{-4} 3.9×10^{-4} 5.3×10^{-3} 2.0×10^{-3} 2.3×10^{-4}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
chlorodifluoroethanoic acid CF ₂ CICOOH (chlorodifluoroacetic acid) [76-04-0] OAWAZQITIZDJBK-UHFFFAOYSA-N	2.5×10^2 2.5×10^2 2.5×10^2 2.4×10^2 5.6×10^2 4.4×10^1 9.9×10^1 4.9×10^{-1} 1.2×10^1	10000 10000 10000 10000	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Bowden et al. (1998a) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	L L L M Q Q Q Q Q	243, 244 245 246

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.4×10^2		Duchowicz et al. (2020)	?	186, 21
carbonic chloride fluoride COFCl [353-49-1] OXVVNXMNLMMOL-UHFFFAOYSA-N	9.9×10^{-2}		George et al. (1993)	X	629
trifluoroacetylchloride CF ₃ COCl [354-32-5] PNQBEPDZQUOCNY-UHFFFAOYSA-N	2.0×10^{-2} 2.7×10^{-3} 2.0×10^{-2} 1.2×10^{-2} 9.3×10^{-3} 2.2×10^{-2}		Mirabel et al. (1996) De Bruyn et al. (1995a) George et al. (1994b) Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	M M M Q Q ?	451 632 300 186, 21
2,2-dichloro-1,1-difluoro-1- methoxyethane C ₃ H ₄ Cl ₂ F ₂ O (methoxyflurane) [76-38-0] RFKMCNOHBTXSMU-UHFFFAOYSA-N	2.9×10^{-3} 1.7×10^{-3} 3.0×10^{-3} 1.7×10^{-3} 2.9×10^{-3} 1.8×10^{-3} 2.9×10^{-2} 1.7×10^{-2} 4.1×10^{-3} 1.8×10^{-2} 2.7×10^{-3} 2.7×10^{-3} 1.7×10^{-3} 2.7×10^{-3}	4100 4300 3600 4800 4000	Fogg and Sangster (2003) Steward et al. (1973) Allott et al. (1973) Lerman et al. (1983) Smith et al. (1981b) Stoelting and Longshore (1972) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Duchowicz et al. (2020) HSDB (2015) Kühne et al. (2005) Abraham and Weathersby (1994) Abraham et al. (1990)	L L L M M M Q Q Q Q Q Q Q Q ?	14 14 775 14 14 68 186, 21 421 21
2-(chlorodifluoromethoxy)-1,1,1- trifluoroethane C ₃ H ₂ ClF ₅ O [33018-78-9] HPDPVPUPBZBOJ-UHFFFAOYSA-N	1.7×10^{-5}		Ebert et al. (2023)	?	367
2-(chlorofluoromethoxy)-1,1,1,2- tetrafluoroethane C ₃ H ₂ ClF ₅ O [56885-28-0] GGEBMRHBGQLKGJ-UHFFFAOYSA-N	2.2×10^{-4}		Ebert et al. (2023)	?	367

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
1-chloro-2,2,2-trifluoroethyl difluoromethyl ether $\text{C}_3\text{H}_2\text{ClF}_5\text{O}$ (forane; isoflurane) [26675-46-7] PIWKPBJCKXDKJR-UHFFFAOYSA-N	2.4×10^{-4}		Fogg and Sangster (2003)	L	
	2.4×10^{-4}		Steward et al. (1973)	L	14
	2.4×10^{-4}		Allott et al. (1973)	L	14
	2.4×10^{-4}		Lerman et al. (1983)	M	14
	4.8×10^{-4}	5300	Smith et al. (1981b)	M	
	5.7×10^{-4}		Keshavarz et al. (2022)	Q	
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	185
	4.2×10^{-4}		Hilal et al. (2008)	Q	
	1.2×10^{-3}		Modarresi et al. (2007)	Q	68
		4400	Kühne et al. (2005)	Q	
	3.8×10^{-4}		Goss (2005)	Q	
	3.4×10^{-4}		Duchowicz et al. (2020)	?	186, 21
	3.4×10^{-4}		HSDB (2015)	?	421
		4500	Kühne et al. (2005)	?	
	2.4×10^{-4}		Abraham and Weathersby (1994)	?	21
	3.4×10^{-4}		Abraham et al. (1990)	?	
2-chloro-1,1,2-trifluoroethyl difluoromethyl ether $\text{C}_3\text{H}_2\text{ClF}_5\text{O}$ (enflurane) [13838-16-9] JPGQOUSTVILISH-UHFFFAOYSA-N	3.0×10^{-4}		Fogg and Sangster (2003)	L	
	3.0×10^{-4}		Allott et al. (1973)	L	14
	2.7×10^{-4}		Guitart et al. (1989)	M	14
	2.9×10^{-4}		Lerman et al. (1983)	M	14
	1.3×10^{-3}		HSDB (2015)	V	
	3.0×10^{-4}		Steward et al. (1973)	C	14
	6.9×10^{-4}		Hilal et al. (2008)	Q	
	3.1×10^{-4}		Abraham and Weathersby (1994)	?	21
3-[2-chloro-4-(trifluoromethyl)phenoxy]benzoic acid $\text{C}_{14}\text{H}_8\text{ClF}_3\text{O}_3$ [63734-62-3] ONKRUAQFUNKYAX-UHFFFAOYSA-N	6.4×10^2		Zhang et al. (2010)	Q	288, 289
	3.3×10^2		Zhang et al. (2010)	Q	288, 290
	2.1×10^5		Zhang et al. (2010)	Q	288, 291
	2.9×10^3		Zhang et al. (2010)	Q	288, 292
3-(2-chloro-4-(trifluoromethyl)phenoxy)phenyl acetate $\text{C}_{15}\text{H}_{10}\text{ClF}_3\text{O}_3$ [50594-77-9] KNFRYRRZMRETJX-UHFFFAOYSA-N	1.1		Zhang et al. (2010)	Q	288, 289
	2.4×10^1		Zhang et al. (2010)	Q	288, 290
	2.9×10^1		Zhang et al. (2010)	Q	288, 291
	3.6		Zhang et al. (2010)	Q	288, 292
transfluthrin $\text{C}_{15}\text{H}_{12}\text{Cl}_2\text{F}_4\text{O}_2$ [118712-89-3] DDVNRFNDOPPPQJ-HQJQHLM TSA-N	2.2×10^{-1}		Ebert et al. (2023)	?	319

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tefluthrin $\text{C}_{17}\text{H}_{14}\text{O}_2\text{ClF}_7$ [79538-32-2] ZFHGXWPMULPQSE-GPCIZFCYSA-N	6.2×10^{-3} 5.0×10^{-3}		HSDB (2015) Maniere et al. (2011)	V ?	12, 166
clobetasol $\text{C}_{22}\text{H}_{28}\text{ClFO}_4$ [25122-41-2] FCSHDIVRCWTZOX-DVTGEIKXSA-N	6.2×10^4		HSDB (2015)	Q	100
flufenprox $\text{C}_{24}\text{H}_{22}\text{ClF}_3\text{O}_3$ [107713-58-6] RURQAJURNPMSSK-UHFFFAOYSA-N	2.1×10^1		Ebert et al. (2023)	?	319
EINECS 273-236-7 $\text{C}_{28}\text{H}_{33}\text{Cl}_3\text{F}_6\text{O}_{11}$ [68954-01-8] KVXVLCBFSKMBAR-UHFFFAOYSA-N	1.5×10^{14} 6.9×10^{18} 2.3×10^{12} 1.6×10^{15}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
3,5-dichloro-2,4,6-trifluoropyridine $\text{C}_5\text{Cl}_2\text{F}_3\text{N}$ [1737-93-5] PKSORSNCSXBOT-UHFFFAOYSA-N	1.6 7.7×10^{-4} 1.6×10^{-3} 2.7×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
chlorodifluoronitrooxymethane $\text{CClF}_2\text{OONO}_2$ [70490-95-8] HWHZTSGXJYKIPK-UHFFFAOYSA-N	2.9×10^{-2}	5900	Kanakidou et al. (1995)	E	776
1-chloro-2-nitro-4-(trifluoromethyl)-benzene $\text{C}_7\text{H}_3\text{ClF}_3\text{NO}_2$ [121-17-5] TZGFQIXRVUHDLE-UHFFFAOYSA-N	7.2×10^{-2} 1.2×10^{-1} 1.1×10^{-1} 1.0×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2-chloro-1,3-dinitro-5-(trifluoromethyl)-benzene $\text{C}_7\text{H}_2\text{ClF}_3\text{N}_2\text{O}_4$ [393-75-9] HFHAVERNVSLSL-UHFFFAOYSA-N	1.8×10^1 2.8 1.7×10^{-1} 9.0×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
fluroxypyr $\text{C}_7\text{H}_5\text{Cl}_2\text{FN}_2\text{O}_3$ [69377-81-7] MEFQWPUMEMWTJP-UHFFFAOYSA-N	5.7×10^5 5.9×10^9		HSDB (2015) Maniere et al. (2011)	V ?	12, 166

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
fluoroimide $\text{C}_{10}\text{H}_4\text{Cl}_2\text{FNO}_2$ [41205-21-4] IPENDKRRWFURRE-UHFFFAOYSA-N	7.7×10^{-1}		Ebert et al. (2023)	?	319
norflurazon $\text{C}_{12}\text{H}_9\text{ClF}_3\text{N}_3\text{O}$ [27314-13-2] NVGOPFQZYCNLDU-UHFFFAOYSA-N	2.9×10^4 2.9×10^4 5.5×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
fluchloralin $\text{C}_{12}\text{H}_{13}\text{ClF}_3\text{N}_3\text{O}_4$ [33245-39-5] MNFMIVVPXOGUMX-UHFFFAOYSA-N	6.6×10^{-1} 7.4×10^{-1}		HSDB (2015) Mackay et al. (2006d)	V V	
flurochloridone $\text{C}_{12}\text{H}_{10}\text{Cl}_2\text{F}_3\text{NO}$ [61213-25-0] OQZCSNDVOWYALR-UHFFFAOYSA-N	2.6×10^2 8.2×10^{-1} 4.2×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	187 166
flupyradifurone $\text{C}_{12}\text{H}_{11}\text{ClF}_2\text{N}_2\text{O}_2$ [951659-40-8] QOIYTRGFOFZKNF-UHFFFAOYSA-N	6.5×10^6		Ebert et al. (2023)	?	319
fluxofenim $\text{C}_{12}\text{H}_{11}\text{NO}_3\text{ClF}_3$ [88485-37-4] UKSLKNUCVPZQCQ-GZTJUZNOSA-N	2.6 5.8×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
fluazinam $\text{C}_{13}\text{H}_4\text{Cl}_2\text{F}_6\text{N}_4\text{O}_4$ [79622-59-6] UZCGKGPEKUCDTF-UHFFFAOYSA-N	3.9×10^{-2} 3.9×10^{-2}		HSDB (2015) Maniere et al. (2011)	V ?	12, 166
5-(2-chloro-4-(trifluoromethyl)phenoxy)-2-nitrophenol $\text{C}_{13}\text{H}_7\text{ClF}_3\text{NO}_4$ [42874-63-5] WYTRKEWETULQOA-UHFFFAOYSA-N	9.9 1.1×10^3 2.3×10^6 2.3×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
florpyrauxifen $\text{C}_{13}\text{H}_8\text{Cl}_2\text{F}_2\text{N}_2\text{O}_3$ [943832-81-3] XFZUQTKDBCXPP-UHFFFAOYSA-N	3.2×10^7		Ebert et al. (2023)	?	319

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tetraconazole $\text{C}_{13}\text{H}_{11}\text{Cl}_2\text{F}_4\text{N}_3\text{O}$ [112281-77-3] LQDARGUHUSPFNL-UHFFFAOYSA-N	2.3×10^3 2.8×10^3		HSDB (2015) Maniere et al. (2011)	V ?	242, 166
fluopicolide $\text{C}_{14}\text{H}_8\text{Cl}_3\text{F}_3\text{N}_2\text{O}$ [239110-15-7] GBOYJIHYACSLGN-UHFFFAOYSA-N	9.0×10^3 2.4×10^4		HSDB (2015) Maniere et al. (2011)	V ?	242, 166
diflubenzuron $\text{C}_{14}\text{H}_9\text{ClF}_2\text{N}_2\text{O}_2$ (difluron) [35367-38-5] QQQYTWIFVNMWR-UHFFFAOYSA-N	2.1×10^3 2.1×10^3 2.1×10^3 2.1×10^1 7.2×10^3 3.3×10^1 1.7×10^3		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010) Maniere et al. (2011)	V V V X Q Q ?	187 569 570 166
efavirenz $\text{C}_{14}\text{H}_9\text{ClF}_3\text{NO}_2$ [154598-52-4] XPOQHMRABVBWPR-ZDUSSCGKSA-N	1.4×10^3		HSDB (2015)	Q	100
halauxifen-methyl $\text{C}_{14}\text{H}_{11}\text{Cl}_2\text{FN}_2\text{O}_3$ [943831-98-9] KDHKOPYYWOHES-UHFFFAOYSA-N	8.1×10^5 8.2×10^5 8.3×10^5 9.0×10^5		Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	? ? ? ?	242, 572, 166 242, 495, 166 242, 575, 166 242, 166
fluroxypyr-butometyl $\text{C}_{14}\text{H}_{19}\text{Cl}_2\text{FN}_2\text{O}_4$ [154486-27-8] ZKFARSBUEBZZJT-UHFFFAOYSA-N	2.4×10^3		Ebert et al. (2023)	?	319
teflubenzuron $\text{C}_{14}\text{H}_6\text{N}_2\text{O}_2\text{Cl}_2\text{F}_4$ [83121-18-0] CJDWRQLODFKPEL-UHFFFAOYSA-N	6.2×10^4 2.5×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
fluroxypyr-meptyl $\text{C}_{15}\text{H}_{21}\text{Cl}_2\text{FN}_2\text{O}_3$ (attain A) [81406-37-3] OLZQTUCTGLHFTQ-UHFFFAOYSA-N	3.7×10^1		Maniere et al. (2011)	?	12, 166

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
quinoxifen $\text{C}_{15}\text{H}_8\text{Cl}_2\text{FNO}$ [124495-18-7] WRPIRSINYZBGPK-UHFFFAOYSA-N	1.0×10^3		HSDB (2015)	Q	100
5-(2-chloro-4-(trifluoromethyl)phenoxy)-2-nitrophenyl acetate $\text{C}_{15}\text{H}_9\text{ClF}_3\text{NO}_5$ [50594-44-0] PSWSPFSDVZVDC-UHFFFAOYSA-N	2.7×10^2		Zhang et al. (2010)	Q	288, 289
triflumuron $\text{C}_{15}\text{H}_{10}\text{ClF}_3\text{N}_2\text{O}_3$ [64628-44-0] XAIPTRIXGHTTNT-UHFFFAOYSA-N	1.1×10^3		Ebert et al. (2023)	?	319
oxyfluorfen $\text{C}_{15}\text{H}_{11}\text{ClF}_3\text{NO}_4$ [42874-03-3] OQMBBFQZGJFLBU-UHFFFAOYSA-N	1.2×10^1 1.2×10^1 8.3×10^1 4.2×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	187 166
pyraflufen-ethyl $\text{C}_{15}\text{H}_{13}\text{Cl}_2\text{F}_3\text{N}_2\text{O}_4$ [129630-19-9] APTZNLMHIGJTEW-UHFFFAOYSA-N	1.2×10^4 4.5×10^4		MacBean (2012b) Maniere et al. (2011)	X ?	352 12, 166
<i>cis</i> -furconazole $\text{C}_{15}\text{H}_{14}\text{Cl}_2\text{F}_3\text{N}_3\text{O}_2$ [112839-32-4] ULCWZQJLFZEXCS-KGLIPLIRSA-N	3.7×10^3		Ebert et al. (2023)	?	319
carfentrazone ethyl $\text{C}_{15}\text{H}_{14}\text{Cl}_2\text{F}_3\text{N}_3\text{O}_3$ [128639-02-1] MLKCGVHIFJBRCD-UHFFFAOYSA-N	3.3×10^3 3.3×10^3 1.7×10^4 6.4×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	187 12, 166
triflumizole $\text{C}_{15}\text{H}_{15}\text{ClF}_3\text{N}_3\text{O}$ [68694-11-1] HSMVPDGGQIQYSR-UHFFFAOYSA-N	1.9×10^5 2.5×10^7 3.7×10^1		Duchowicz et al. (2020) Mackay et al. (2006d) Duchowicz et al. (2020)	V V Q	187
diflumentorim $\text{C}_{15}\text{H}_{16}\text{N}_3\text{OCIF}_2$ [130339-07-0] NEKULYKCPJMMJ-UHFFFAOYSA-N	3.1×10^2 2.8×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-(2,4-dichlorophenyl)-6-fluoro-2-(1H-1,2,4-triazol-1-yl)-quinazolin-4(3H)-one $\text{C}_{16}\text{H}_8\text{Cl}_2\text{FN}_5\text{O}$ (fluquinconazole) [136426-54-5] IJJVMEJXYNJXOJ-UHFFFAOYSA-N	5.6×10^8		Hilal et al. (2008)	Q	
hexaflumuron $\text{C}_{16}\text{H}_8\text{Cl}_2\text{F}_6\text{N}_2\text{O}_3$ [86479-06-3] RGNPBRKPHBKXKX-UHFFFAOYSA-N	1.4×10^5 4.8×10^5		Modarresi et al. (2007) Maniere et al. (2011)	Q ?	68 242, 166
fluopyram $\text{C}_{16}\text{H}_{11}\text{ClF}_6\text{N}_2\text{O}$ [658066-35-4] KVDJTXBXMWJJEJ-UHFFFAOYSA-N	3.4×10^4		Maniere et al. (2011)	?	242, 166
haloxyfop-p-methyl $\text{C}_{16}\text{H}_{13}\text{ClF}_3\text{NO}_4$ [72619-32-0] MFSWTRQUCLNFOM-SECBINFHSA-N	8.3×10^2		Maniere et al. (2011)	?	242, 166
flumetralin $\text{C}_{16}\text{H}_{12}\text{ClF}_4\text{N}_3\text{O}_4$ [62924-70-3] PWNAWOCHVWERAR-UHFFFAOYSA-N	5.2 4.0×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
haloxyfop-methyl $\text{C}_{16}\text{H}_{13}\text{ClF}_3\text{NO}_4$ [69806-40-2] MFSWTRQUCLNFOM-UHFFFAOYSA-N	3.1×10^1 3.1×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
pydiflumetofen $\text{C}_{16}\text{H}_{16}\text{Cl}_3\text{F}_2\text{N}_3\text{O}_2$ [1228284-64-7] DGOAXBPOVUPPEB-UHFFFAOYSA-N	6.6×10^3		Ebert et al. (2023)	?	319
nuarimol $\text{C}_{17}\text{H}_{12}\text{ClFN}_2\text{O}$ [63284-71-9] SAPGTCDSEBGMXGD-UHFFFAOYSA-N	1.5×10^7		MacBean (2012a)	?	
clodinafop-propargyl $\text{C}_{17}\text{H}_{13}\text{ClFNO}_4$ [105512-06-9] JBDHZKJLJNAIJNC-LLVKDONJSA-N	3.6×10^3 3.5×10^3 2.4×10^3 3.6×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	187 242, 166

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
flamprop-methyl $\text{C}_{17}\text{H}_{15}\text{ClFNO}_3$ [52756-25-9] RBNIGDFIUWJJJEV-UHFFFAOYSA-N	2.2×10^3		MacBean (2012a)	?	
pyridalyl $\text{C}_{18}\text{H}_{14}\text{Cl}_4\text{F}_3\text{NO}_3$ [179101-81-6] UBSUCIGNYBBPFHD-UHFFFAOYSA-N	4.9×10^6		HSDB (2015)	V	
mefentrifluconazole $\text{C}_{18}\text{H}_{15}\text{ClF}_3\text{N}_3\text{O}_2$ [1417782-03-6] JERZEQUUMJNCPRJ-UHFFFAOYSA-N	6.2×10^2		Maniere et al. (2011)	?	12, 166
bixafen $\text{C}_{18}\text{H}_{12}\text{N}_3\text{OCl}_2\text{F}_3$ [581809-46-3] LDLMOOXUCMHBMZ-UHFFFAOYSA-N	2.6×10^4		Maniere et al. (2011)	?	242, 166
benzovindiflupyr $\text{C}_{18}\text{H}_{15}\text{Cl}_2\text{F}_2\text{N}_3\text{O}$ [1072957-71-1] CCCGEKHKHTPTUHH-UHFFFAOYSA-N	7.7×10^5		Maniere et al. (2011)	?	242, 166
lactofen $\text{C}_{19}\text{H}_{15}\text{ClF}_3\text{NO}_7$ [77501-63-4] CONWAEURSVPLRM-UHFFFAOYSA-N	2.1×10^1 2.3×10^1 4.0×10^4		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
flupoxam $\text{C}_{19}\text{H}_{14}\text{N}_4\text{O}_2\text{ClF}_5$ [119126-15-7] AOQMRUTZEYVDIL-UHFFFAOYSA-N	1.1×10^2 2.7×10^7		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
flamprop-m-isopropyl $\text{C}_{19}\text{H}_{19}\text{NO}_3\text{ClF}$ [63782-90-1] IKVXBIIHQGXQRQ-CYBMUJFWSA-N	3.9×10^2 2.3×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
haloxyfop-ethoxyethyl $\text{C}_{19}\text{H}_{19}\text{ClF}_3\text{NO}_5$ [87237-48-7] MIJLZGZLQLAQCM-UHFFFAOYSA-N	3.8×10^4		Ebert et al. (2023)	?	319
chlorfluazuron $\text{C}_{20}\text{H}_9\text{Cl}_3\text{F}_5\text{N}_3\text{O}_3$ [71422-67-8] UISUNVFOGSJSKD-UHFFFAOYSA-N	8.2×10^6 1.1×10^6 3.9×10^8 2.1×10^6 5.5×10^6		Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	Q Q Q Q ?	68 186, 21

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
fluazuron $\text{C}_{20}\text{H}_{10}\text{N}_3\text{O}_3\text{Cl}_2\text{F}_5$ [86811-58-7] YOWNVPAUWYHLQX-UHFFFAOYSA-N	$>2.3 \times 10^{10}$		MacBean (2012a)	?	
flufenoxuron $\text{C}_{21}\text{H}_{11}\text{ClF}_6\text{N}_2\text{O}_3$ [101463-69-8] RYLHNOVXKXPXDIP-UHFFFAOYSA-N	3.8×10^6		HSDB (2015)	Q	100
fluoxastrobin $\text{C}_{21}\text{H}_{16}\text{N}_4\text{O}_5\text{ClF}$ [361377-29-9] UFEODZBUAFNAEU-NLRVBDNBSA-N	9.0×10^6 1.0×10^7		HSDB (2015) Maniere et al. (2011)	V ?	12, 166
haloperidol $\text{C}_{21}\text{H}_{23}\text{ClFNO}_2$ [52-86-8] LNEPOXFFQSENCJ-UHFFFAOYSA-N	4.3×10^8		HSDB (2015)	Q	100
indoxacarb $\text{C}_{22}\text{H}_{17}\text{ClF}_3\text{N}_3\text{O}_7$ [173584-44-6] VBCVPMZEGZULK-NRFANRHFSAN	1.5×10^4 $>1.7 \times 10^4$		HSDB (2015) Maniere et al. (2011)	V ?	166
cyfluthrin $\text{C}_{22}\text{H}_{18}\text{Cl}_2\text{FNO}_3$ [68359-37-5] QQODLKZGRKWIFG-UHFFFAOYSA-N	3.4×10^2 1.1×10^1 1.7		HSDB (2015) Maniere et al. (2011) Maniere et al. (2011)	V ? ?	12, 166 12, 166
cyfluthrin I $\text{C}_{22}\text{H}_{18}\text{Cl}_2\text{FNO}_3$ [86560-92-1] QQODLKZGRKWIFG-QSFXBCCZSAN	2.2		Ebert et al. (2023)	?	319
β -cyfluthrin (cis) $\text{C}_{22}\text{H}_{18}\text{Cl}_2\text{FNO}_3$ [86560-93-2] QQODLKZGRKWIFG-XFQXTVEOSAN	1.4×10^2		Ebert et al. (2023)	?	367
cyfluthrin II $\text{C}_{22}\text{H}_{18}\text{Cl}_2\text{FNO}_3$ [86560-94-3] QQODLKZGRKWIFG-BPAFIMBUSAN	1.1×10^2		Ebert et al. (2023)	?	367
β -cyfluthrin (trans) $\text{C}_{22}\text{H}_{18}\text{Cl}_2\text{FNO}_3$ [86560-95-4] QQODLKZGRKWIFG-QKYXUNIQSAN	3.6×10^1		Ebert et al. (2023)	?	367

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
metamifop $\text{C}_{23}\text{H}_{18}\text{N}_2\text{O}_4\text{ClF}$ [256412-89-2] ADDQHLREJDZPMT-CQSZACIVSA-N	1.6×10^1		MacBean (2012a)	?	12
pyriminostrobin $\text{C}_{23}\text{H}_{18}\text{Cl}_2\text{F}_3\text{N}_3\text{O}_4$ [1257598-43-8] YYXSCUSVVALMNW-FOWTUZBSSA-N	8.3×10^3		Ebert et al. (2023)	?	319
cyhalothrin $\text{C}_{23}\text{H}_{19}\text{NO}_3\text{ClF}_3$ [68085-85-8] ZXQYGBMAQZUVM-I-BWHPXCRDSA-N	7.0×10^{-1}		HSDB (2015)	Q	100
bifenthrin $\text{C}_{23}\text{H}_{22}\text{ClF}_3\text{O}_2$ [82657-04-3] OMFRMAHOUIJSGP-UNOMPAQXSA-N	9.9 9.9 9.9 2.7×10^{-1} 4.7		Duchowicz et al. (2020) HSDB (2015) Hilal et al. (2008) Duchowicz et al. (2020) Hilal et al. (2008)	V V C Q Q	187
λ -cyhalothrin $\text{C}_{23}\text{H}_{19}\text{ClF}_3\text{NO}_3$ [91465-08-6] DFVKOWFGNASVPK-QQDHXZELSA-N	5.0×10^1		Maniere et al. (2011)	?	12, 166
γ -cyhalothrin $\text{C}_{23}\text{H}_{19}\text{ClF}_3\text{NO}_3$ [76703-62-3] ZXQYGBMAQZUVM-I-GCMPRSNUSA-N	4.5×10^1		Maniere et al. (2011)	?	242, 166
flucyclohexuron $\text{C}_{25}\text{H}_{20}\text{ClF}_2\text{N}_3\text{O}_3$ [94050-52-9] PCKNFPQPGUWFHO-UQRQXUALSA-N	3.8×10^1		MacBean (2012a)	?	
τ -fluvalinate $\text{C}_{26}\text{H}_{22}\text{ClF}_3\text{N}_2\text{O}_3$ [102851-06-9] INISTDXBRIBGOC-XMMISQBUSA-N	8.3×10^3		Maniere et al. (2011)	?	166
fluvalinate $\text{C}_{26}\text{H}_{22}\text{ClF}_3\text{N}_2\text{O}_3$ [69409-94-5] INISTDXBRIBGOC-UHFFFAOYSA-N	6.6×10^2		HSDB (2015)	Q	100

A7 Organic species with bromine (Br)

A7.1 Bromocarbons (C, H, O, N, Br)

Table A7.1: Bromocarbons (C, H, O, N, Br)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
bromomethane	1.5×10^{-3}	3300	Burkholder et al. (2019)	L	777
CH ₃ Br	1.5×10^{-3}	3000	Burkholder et al. (2019)	L	71
(methyl bromide)	1.7×10^{-3}	3100	Burkholder et al. (2015)	L	
[74-83-9]	1.5×10^{-3}	3000	Burkholder et al. (2015)	L	71
GZUXJHMPEANEGY-UHFFFAOYSA-N	1.5×10^{-3}	3800	Brockbank (2013)	L	
	1.7×10^{-3}	3100	Sander et al. (2011)	L	
	1.7×10^{-3}	3100	Sander et al. (2006)	L	
	1.7×10^{-3}	3100	Staudinger and Roberts (2001)	L	
	1.6×10^{-3}	3100	Wilhelm et al. (1977)	L	
	1.3×10^{-3}	2800	Hiatt (2013)	M	
	2.0×10^{-3}		Thomas et al. (2006)	M	155, 705
	1.8×10^{-3}	2500	De Bruyn and Saltzman (1997)	M	778
	1.4×10^{-3}		Gan and Yates (1996)	M	295
	1.7×10^{-3}	3400	Elliott and Rowland (1993)	M	
	1.5×10^{-3}	2600	Swain and Thornton (1962)	M	
	1.6×10^{-3}	3200	Glew and Moelwyn-Hughes (1953)	M	779
	1.6×10^{-3}		Mackay et al. (2006b)	V	
	1.6×10^{-3}		Lide and Frederikse (1995)	V	
	1.6×10^{-3}		Mackay et al. (1993)	V	
	1.9×10^{-3}		Mackay and Shiu (1981)	V	12
	1.5×10^{-3}		Hine and Mookerjee (1975)	V	
	1.5×10^{-3}		Yaws (2003)	X	238
	4.4×10^{-5}	350	Goldstein (1982)	X	299
	1.8×10^{-4}		Keshavarz et al. (2022)	Q	
	3.5×10^{-3}		Duchowicz et al. (2020)	Q	185
	5.5×10^{-4}		Wang et al. (2017)	Q	81, 239
	3.8×10^{-3}		Wang et al. (2017)	Q	81, 240
	2.3×10^{-3}		Wang et al. (2017)	Q	81, 241
	3.7×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	1.7×10^{-3}		Gharagheizi et al. (2010)	Q	247
	2.3×10^{-3}		Modarresi et al. (2007)	Q	68
		3400	Kühne et al. (2005)	Q	
	1.9×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	1.8×10^{-3}		Yao et al. (2002)	Q	230
	1.2×10^{-3}		English and Carroll (2001)	Q	231, 232
	9.9×10^{-5}		Katritzky et al. (1998)	Q	
	1.5×10^{-3}		Suzuki et al. (1992)	Q	233
	3.1×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	7.9×10^{-4}		Irmann (1965)	Q	

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.3×10^{-3}		Duchowicz et al. (2020)	?	186, 21
	1.8×10^{-3}		Thomas et al. (2006)	?	155, 706
		3200	Kühne et al. (2005)	?	
	1.5×10^{-3}		Yaws (1999)	?	21
	1.7×10^{-3}		Yates and Gan (1998)	?	
	1.4×10^{-3}		Yaws and Yang (1992)	?	21
	1.6×10^{-3}		Abraham et al. (1990)	?	
dibromomethane CH ₂ Br ₂ [74-95-3] FJBFPHVGVVTDIP-UHFFFAOYSA-N	1.2×10^{-2}	4300	Burkholder et al. (2019)	L	1
	9.0×10^{-3}	4600	Burkholder et al. (2019)	L	71
	9.0×10^{-3}	4600	Burkholder et al. (2015)	L	71
	1.2×10^{-2}	4300	Brockbank (2013)	L	1, 780
	3.1×10^{-2}		Mackay and Shiu (1981)	L	
	1.2×10^{-2}	5000	Hiatt (2013)	M	
	8.9×10^{-3}	4400	Ooki and Yokouchi (2011)	M	71
	1.4×10^{-2}		Dohnal and Hovorka (1999)	M	12
	1.5×10^{-2}		Hovorka and Dohnal (1997)	M	12
	1.2×10^{-2}	4900	Kondoh and Nakajima (1997)	M	
	9.7×10^{-3}	3800	Moore et al. (1995)	M	781, 71
	1.1×10^{-2}	4000	Wright et al. (1992)	M	782
	1.1×10^{-2}	4100	Tse et al. (1992)	M	
	1.1×10^{-2}	4400	Rex (1906)	M	
	1.1×10^{-2}		Mackay et al. (2006b)	V	
	1.3×10^{-2}	4200	Fogg and Sangster (2003)	V	
	7.1×10^{-3}		Mackay et al. (1993)	V	
	1.1×10^{-2}		Hine and Mookerjee (1975)	V	
	1.1×10^{-2}		Yaws (2003)	X	238
	3.2×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	1.2×10^{-1}		Gharagheizi et al. (2010)	Q	247
	3.8×10^{-2}		Hilal et al. (2008)	Q	
	1.7×10^{-3}		Modarresi et al. (2007)	Q	68
		4500	Kühne et al. (2005)	Q	
	1.2×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	8.2×10^{-3}		Yao et al. (2002)	Q	230, 268
	2.7×10^{-3}		Katritzky et al. (1998)	Q	
	9.5×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.2×10^{-2}		Mackay et al. (2006b)	?	
		4300	Kühne et al. (2005)	?	
	1.1×10^{-2}		Yaws (1999)	?	21
	1.2×10^{-2}		Mackay et al. (1993)	?	
	1.1×10^{-2}		Abraham et al. (1990)	?	

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tribromomethane	1.7×10^{-2}	5200	Burkholder et al. (2019)	L	
CHBr ₃	1.1×10^{-2}	6200	Burkholder et al. (2019)	L	71
(bromoform)	1.7×10^{-2}	5200	Burkholder et al. (2015)	L	
[75-25-2]	1.1×10^{-2}	6200	Burkholder et al. (2015)	L	71
DIKBFYAXUHHXCS-UHFFFAOYSA-N	1.8×10^{-2}	4800	Brockbank (2013)	L	
	1.7×10^{-2}	5200	Sander et al. (2011)	L	
	1.7×10^{-2}	5200	Sander et al. (2006)	L	
	1.7×10^{-2}	5200	Staudinger and Roberts (2001)	L	
	1.7×10^{-2}	5200	Staudinger and Roberts (1996)	L	
	1.6×10^{-2}		Mackay and Shiu (1981)	L	
	2.2×10^{-2}	6300	Hiatt (2013)	M	
	9.9×10^{-3}	6200	Ooki and Yokouchi (2011)	M	71
	2.0×10^{-2}		Ruiz-Bevia and Fernandez-Torres (2010)	M	
	9.6×10^{-3}		Zhang et al. (2002)	M	14
	2.3×10^{-2}		Hovorka and Dohnal (1997)	M	12
	1.4×10^{-2}	4500	Kondoh and Nakajima (1997)	M	
	1.5×10^{-2}	4300	Moore et al. (1995)	M	783, 71
	8.5×10^{-3}	1500	Khalfaoui and Newsham (1994a)	M	
	2.4×10^{-2}	4100	Wright et al. (1992)	M	784
	1.9×10^{-2}	5000	Tse et al. (1992)	M	
	1.8×10^{-2}	4700	Munz and Roberts (1987)	M	
	1.6×10^{-2}	5700	Nicholson et al. (1984)	M	
	1.9×10^{-2}		Warner et al. (1980)	M	
	1.7×10^{-2}		Mackay et al. (2006b)	V	
	1.8×10^{-2}	5300	Fogg and Sangster (2003)	V	
	1.7×10^{-2}		Mackay et al. (1993)	V	
	1.7×10^{-2}		Warner et al. (1980)	V	
	1.5×10^{-2}		Hine and Mookerjee (1975)	V	
	1.8×10^{-2}	2700	Goldstein (1982)	X	299
	1.7×10^{-2}		Ryan et al. (1988)	C	
	1.7×10^{-2}		Nicholson et al. (1984)	C	
	1.9×10^{-2}		Shen (1982)	C	
	8.8×10^{-3}		Keshavarz et al. (2022)	Q	
	1.0×10^{-2}		Duchowicz et al. (2020)	Q	
	7.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	7.3×10^{-3}		Hilal et al. (2008)	Q	
	9.8×10^{-4}		Modarresi et al. (2007)	Q	68
		5600	Kühne et al. (2005)	Q	
	1.8×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	2.3×10^{-2}		Yao et al. (2002)	Q	230
	1.4×10^{-2}		Katritzky et al. (1998)	Q	
	2.4×10^{-2}		Nirmalakhandan and Speece (1988)	Q	

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2-dibromoethane-d4 $\text{C}_2\text{D}_4\text{Br}_2$ (ethylene dibromide-d4) [22581-63-1] PAAZPARNPHGIKF-LNLMKGTSA-N	1.6×10^{-2}	4800	Hiatt (2013)	M	
1,1,2-tribromoethane $\text{C}_2\text{H}_3\text{Br}_3$ [78-74-0] QUMDOMSJJIFTCA-UHFFFAOYSA-N	2.4×10^{-2}		Ebert et al. (2023)	?	317
1,1,2,2-tetrabromoethane $\text{C}_2\text{H}_2\text{Br}_4$ [79-27-6] QXSZNDIIPUOQMB-UHFFFAOYSA-N	1.4×10^{-2} 1.4×10^{-2} 1.0×10^{-2} 7.4×10^{-1} 7.6×10^{-1} 7.3×10^{-1} 1.4×10^{-2} 5.7×10^{-1} 2.9×10^{-1} 4.3×10^{-1} 1.5×10^{-1} 7.2×10^{-1} 2.4×10^{-1} 7.0×10^{-1} 2.3×10^{-1} 7.3×10^{-1}	1300 1300 840	Burkholder et al. (2019) Brockbank (2013) Khalfauoui and Newsham (1994a) Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Yaffe et al. (2003) Katritzky et al. (1998) Yaws (1999)	L L M V V X Q Q Q Q Q Q Q Q Q Q ?	187 238 288, 289 288, 290 288, 291 288, 292 247 249, 250 21
1-bromopropane $\text{C}_3\text{H}_7\text{Br}$ [106-94-5] CYNIIHKIEHGYOZ-UHFFFAOYSA-N	1.1×10^{-3} 1.1×10^{-3} 1.1×10^{-3} 1.4×10^{-3} 2.6×10^{-4} 2.6×10^{-4} 1.0×10^{-3} 1.0×10^{-3} 1.3×10^{-3} 1.5×10^{-3} 6.2×10^{-4} 2.0×10^{-3} 6.2×10^{-4} 1.1×10^{-3} 2.8×10^{-3} 1.2×10^{-3} 1.4×10^{-3} 3.9×10^{-4} 8.4×10^{-4}	4600 4500	Brockbank (2013) Li et al. (1993) Rex (1906) HSDB (2015) Mackay et al. (2006b) Mackay et al. (1993) Abraham (1984) Hine and Mookerjee (1975) Yaws (2003) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Yao et al. (2002) English and Carroll (2001)	L M M V V V V X Q Q Q Q Q Q Q Q Q Q Q Q	238, 12 272, 244 245 246 247 247 68 249, 250 230 231, 275

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.4×10^{-4}		Katritzky et al. (1998)	Q	
	3.5×10^{-4}		Russell et al. (1992)	Q	280
	8.4×10^{-4}		Suzuki et al. (1992)	Q	233
	1.3×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.1×10^{-3}		Yaws (1999)	?	21, 12
	1.4×10^{-3}		Yaws and Yang (1992)	?	21, 12
	1.0×10^{-3}		Abraham et al. (1990)	?	
2-bromopropane $\text{C}_3\text{H}_7\text{Br}$ [75-26-3] NAMYKGV DVN BCFQ-UHFFFAOYSA-N	9.0×10^{-4}	3900	Brockbank (2013)	L	1
	8.4×10^{-4}		Li et al. (1993)	M	
	9.0×10^{-4}	4500	Rex (1906)	M	
	9.0×10^{-4}		Duchowicz et al. (2020)	V	187
	9.0×10^{-4}		HSDB (2015)	V	
	7.9×10^{-4}		Mackay et al. (2006b)	V	
	7.9×10^{-4}		Mackay et al. (1993)	V	
	9.0×10^{-4}		Hine and Mookerjee (1975)	V	
	1.0×10^{-3}		Yaws (2003)	X	238, 12
	5.4×10^{-4}		Duchowicz et al. (2020)	Q	
	3.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	9.4×10^{-4}		Gharagheizi et al. (2010)	Q	247
	1.5×10^{-3}		Hilal et al. (2008)	Q	
	7.5×10^{-4}		Modarresi et al. (2007)	Q	68
	9.2×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	3.4×10^{-4}		Yao et al. (2002)	Q	230, 268
	6.7×10^{-4}		English and Carroll (2001)	Q	231, 232
	3.3×10^{-4}		Katritzky et al. (1998)	Q	
	7.3×10^{-4}		Suzuki et al. (1992)	Q	233
	9.2×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	8.1×10^{-4}		Yaws (1999)	?	21, 12
	1.0×10^{-3}		Yaws and Yang (1992)	?	21, 12
	9.0×10^{-4}		Abraham et al. (1990)	?	
1,2-dibromopropane $\text{C}_3\text{H}_6\text{Br}_2$ [78-75-1] XFNJYAKDBJUJAJ-UHFFFAOYSA-N	5.3×10^{-3}		Albanese et al. (1987)	M	
	6.8×10^{-3}		Duchowicz et al. (2020)	V	187
	6.8×10^{-3}		HSDB (2015)	V	
	6.8×10^{-3}		Mackay et al. (2006b)	V	
	1.1×10^{-2}		Hine and Mookerjee (1975)	V	
	6.3×10^{-3}		Yaws (2003)	X	238
	1.5×10^{-3}		Duchowicz et al. (2020)	Q	
	3.5×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.6×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.9×10^{-2}		Hilal et al. (2008)	Q	
	2.8×10^{-3}		Modarresi et al. (2007)	Q	68
	6.9×10^{-3}		Yaffe et al. (2003)	Q	249, 250

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.2×10^{-3}		Katritzky et al. (1998)	Q	
	4.4×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	6.6×10^{-3}		Yaws and Yang (1992)	?	21
1,3-dibromopropane $\text{C}_3\text{H}_6\text{Br}_2$ [109-64-8] VEFLKXRACNJHOV-UHFFFAOYSA-N	1.1×10^{-3}		Mackay et al. (1993)	V	
	1.1×10^{-2}		Hine and Mookerjee (1975)	V	
	1.6×10^{-2}		Keshavarz et al. (2022)	Q	
	3.0×10^{-3}		Duchowicz et al. (2020)	Q	300
	7.2×10^{-2}		Hilal et al. (2008)	Q	
	5.0×10^{-3}		Modarresi et al. (2007)	Q	68
	1.2×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	5.6×10^{-3}		Katritzky et al. (1998)	Q	
	6.0×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.1×10^{-2}		Duchowicz et al. (2020)	?	186, 21
1-bromobutane $\text{C}_4\text{H}_9\text{Br}$ [109-65-9] MPPPKRYCTPRNTB-UHFFFAOYSA-N	7.4×10^{-4}		Brockbank (2013)	L	
	4.6×10^{-4}		Hoff et al. (1993)	M	
	8.2×10^{-4}		Li et al. (1993)	M	
	1.1×10^{-3}		Duchowicz et al. (2020)	V	187
	1.1×10^{-3}		HSDB (2015)	V	
	8.0×10^{-4}		Abraham (1984)	V	
	8.0×10^{-4}		Hine and Mookerjee (1975)	V	
	8.0×10^{-4}		Yaws (2003)	X	238
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	9.6×10^{-4}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	7.5×10^{-4}		Gharagheizi et al. (2010)	Q	247
	2.2×10^{-3}		Hilal et al. (2008)	Q	
	8.7×10^{-4}		Modarresi et al. (2007)	Q	68
	1.1×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	2.7×10^{-4}		Yao et al. (2002)	Q	230
	6.2×10^{-4}		English and Carroll (2001)	Q	231, 232
	4.1×10^{-4}		Katritzky et al. (1998)	Q	
	5.8×10^{-4}		Russell et al. (1992)	Q	280
	6.5×10^{-4}		Suzuki et al. (1992)	Q	233
	1.0×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	8.3×10^{-4}		Haynes (2014)	?	788
	8.1×10^{-4}		Yaws (1999)	?	21
	8.1×10^{-4}		Yaws and Yang (1992)	?	21
	7.9×10^{-4}		Abraham et al. (1990)	?	
2-bromobutane $\text{C}_4\text{H}_9\text{Br}$ [78-76-2] UPSXPQYNGXVBF-UHFFFAOYSA-N	8.8×10^{-4}		Brockbank (2013)	L	
	7.7×10^{-4}		Li et al. (1993)	M	
	6.2×10^{-4}		HSDB (2015)	Q	100
	1.4×10^{-3}		Hilal et al. (2008)	Q	

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-bromo-2-methylpropane $\text{C}_4\text{H}_9\text{Br}$ [78-77-3] HLVFKOKELQSQXIQUHFFFAOYSA-N	4.2×10^{-4}		Hine and Mookerjee (1975)	V	
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	2.0×10^{-3}		Hilal et al. (2008)	Q	
	7.7×10^{-4}		Modarresi et al. (2007)	Q	68
	4.2×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	4.0×10^{-4}		English and Carroll (2001)	Q	231, 232
	8.6×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	5.8×10^{-4}		Suzuki et al. (1992)	Q	233
4.2×10^{-4}		Abraham et al. (1990)	?		
2-bromo-2-methylpropane $\text{C}_4\text{H}_9\text{Br}$ [507-19-7] RKSOP LXZQNSWAS-UHFFFAOYSA-N	2.4×10^{-4}		Duchowicz et al. (2020)	V	187
	2.4×10^{-4}		HSDB (2015)	V	
	2.0×10^{-4}		Duchowicz et al. (2020)	Q	
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	5.2×10^{-4}		Hilal et al. (2008)	Q	
	5.1×10^{-4}		Modarresi et al. (2007)	Q	68
	4.5×10^{-4}		English and Carroll (2001)	Q	231, 232
	4.2×10^{-4}		Katritzky et al. (1998)	Q	
5.2×10^{-4}		Nirmalakhandan et al. (1997)	Q		
3.1×10^{-4}		Yaws and Yang (1992)	?	21, 28	
9.7×10^{-5}		Abraham et al. (1990)	?		
1-bromo-3-methylbutane $\text{C}_5\text{H}_{11}\text{Br}$ [107-82-4] YXZFFTJAHVMMLF-UHFFFAOYSA-N	4.9×10^{-4}		Mackay et al. (1993)	V	
	2.9×10^{-4}		Hine and Mookerjee (1975)	V	
	5.9×10^{-4}		Keshavarz et al. (2022)	Q	
	4.5×10^{-4}		Duchowicz et al. (2020)	Q	185
	1.8×10^{-3}		Hilal et al. (2008)	Q	
	7.8×10^{-4}		Modarresi et al. (2007)	Q	68
	4.7×10^{-4}		Katritzky et al. (1998)	Q	
	7.0×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	4.5×10^{-4}		Suzuki et al. (1992)	Q	233
2.9×10^{-4}		Duchowicz et al. (2020)	?	186, 21	
1,4-dibromobutane $\text{C}_4\text{H}_8\text{Br}_2$ [110-52-1] ULTHEAFYOOPTTB-UHFFFAOYSA-N	1.7×10^{-2}		Albanese et al. (1987)	M	
	7.3×10^{-2}		Hilal et al. (2008)	Q	
	4.3×10^{-3}		Modarresi et al. (2007)	Q	68

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-bromopentane $C_5H_{11}Br$ [110-53-2] YZWKMKMVJZFACSU-UHFFFAOYSA-N	5.0×10^{-4}		Duchowicz et al. (2020)	V	187
	4.7×10^{-4}		Abraham (1984)	V	
	5.6×10^{-4}		Yaws (2003)	X	238
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	6.1×10^{-4}		Gharagheizi et al. (2012)	Q	
	5.1×10^{-4}		Gharagheizi et al. (2010)	Q	247
	1.8×10^{-3}		Hilal et al. (2008)	Q	
	6.5×10^{-4}		Modarresi et al. (2007)	Q	68
	5.1×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	4.6×10^{-4}		English and Carroll (2001)	Q	231, 232
	5.1×10^{-4}		Katritzky et al. (1998)	Q	
	8.0×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	5.6×10^{-4}		Yaws (1999)	?	21
	5.0×10^{-4}		Yaws and Yang (1992)	?	21
	4.7×10^{-4}		Abraham et al. (1990)	?	
1-bromo-2-methylbutane $C_5H_{11}Br$ [10422-35-2] XKVLZBNEPALHIO-UHFFFAOYSA-N	8.8×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
1-bromohexane $C_6H_{13}Br$ [111-25-1] MNDIARAMWBIFKW-UHFFFAOYSA-N	3.0×10^{-4}		Duchowicz et al. (2020)	V	187
	3.0×10^{-4}		Abraham (1984)	V	
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	3.1×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	1.5×10^{-3}		Hilal et al. (2008)	Q	
	5.2×10^{-4}		Modarresi et al. (2007)	Q	68
	2.2×10^{-4}		Yaffe et al. (2003)	Q	249, 273
	3.4×10^{-4}		English and Carroll (2001)	Q	231, 232
	5.3×10^{-4}		Katritzky et al. (1998)	Q	
	6.2×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	3.0×10^{-4}		Abraham et al. (1990)	?	
1-bromo-3-methylpentane $C_6H_{13}Br$ [51116-73-5] MDCCBJLCTOTLKM-UHFFFAOYSA-N	2.3×10^{-4}		English and Carroll (2001)	Q	231, 232
	5.8×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
bromocyclohexane $C_6H_{11}Br$ [108-85-0] AQNQQHJNRPDOQV-UHFFFAOYSA-N	7.0×10^{-3}		Hilal et al. (2008)	Q	

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-bromononane $\text{C}_9\text{H}_{19}\text{Br}$ [693-58-3] AYMUQTNXKPEMLM-UHFFFAOYSA-N	7.9×10^{-4}		Hilal et al. (2008)	Q	
1-bromodecane $\text{C}_{10}\text{H}_{21}\text{Br}$ [112-29-8] MYMSJFSOOQERIO-UHFFFAOYSA-N	1.7×10^{-4}		Ebert et al. (2023)	?	317
hexabromocyclododecane $\text{C}_{12}\text{H}_{18}\text{Br}_6$ [3194-55-6] DEIGXXQKDWULML-UHFFFAOYSA-N	2.1×10^{-1} 2.1×10^{-1} 1.6×10^{-2} 1.3×10^{-2}		Duchowicz et al. (2020) HSDB (2015) HSDB (2015) Duchowicz et al. (2020)	V V V Q	187
	5.7 1.7×10^2 5.7×10^3 6.5		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
vinyl bromide $\text{C}_2\text{H}_3\text{Br}$ [593-60-2] INLLPKCGLOXCIV-UHFFFAOYSA-N	7.0×10^{-4} 8.0×10^{-4} 7.7×10^{-4} 4.8×10^{-4} 8.2×10^{-4}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
1,2-dibromoethene $\text{C}_2\text{H}_2\text{Br}_2$ [540-49-8] UWTUEMKLYAGTNQ-UHFFFAOYSA-N	1.2×10^{-2} 1.2×10^{-2} 4.8×10^{-3}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
(Z)-1,2-dibromoethene $\text{C}_2\text{H}_2\text{Br}_2$ (cis-1,2-dibromoethene) [590-11-4] UWTUEMKLYAGTNQ-UPHRSURJSA-N	2.4×10^{-3}		Yaffe et al. (2003)	Q	249, 250
3-bromo-1-propene $\text{C}_3\text{H}_5\text{Br}$ (allyl bromide) [106-95-6] BHELZAPQIKSEDF-UHFFFAOYSA-N	1.7×10^{-3} 9.0×10^{-4} 3.9×10^{-3} 1.6×10^{-3} 8.6×10^{-3} 2.6×10^{-3} 1.0×10^{-3} 1.7×10^{-3} 1.7×10^{-3} 1.7×10^{-3}		Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yao et al. (2002) Yaws (1999) Yaws and Yang (1992) Abraham et al. (1990)	X Q Q Q Q Q Q ? ? ?	238 100 247 68 230 21 21

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-bromo-1-propyne $\text{C}_3\text{H}_3\text{Br}$ (propargyl bromide) [106-96-7] YORCIIVHUBAYBQ-UHFFFAOYSA-N	8.8×10^{-3}	4000	Yates and Gan (1998)	M	1
	1.6×10^{-2}		Keshavarz et al. (2022)	Q	
	8.4×10^{-3}		Duchowicz et al. (2020)	Q	
		3200	Kühne et al. (2005)	Q	
		8.7×10^{-3}	4200	Duchowicz et al. (2020)	?
			Kühne et al. (2005)	?	
			Fogg and Sangster (2003)	W	790
1-bromocyclohexene $\text{C}_6\text{H}_9\text{Br}$ [2044-08-8] QBUMXSSCYUMVAW-UHFFFAOYSA-N	2.0×10^{-3}		Hilal et al. (2008)	Q	
1-bromo-4-methylcyclohexene $\text{C}_7\text{H}_{11}\text{Br}$ [31053-84-6] LIUFYLLBQSSKQS-UHFFFAOYSA-N	1.4×10^{-3}		Hilal et al. (2008)	Q	
bromobenzene $\text{C}_6\text{H}_5\text{Br}$ [108-86-1] QARVLSVVCXYDNA-UHFFFAOYSA-N	4.3×10^{-3}	4500	Brockbank (2013)	L	1
	5.0×10^{-3}	4200	Fogg and Sangster (2003)	L	
	4.8×10^{-3}		Mackay and Shiu (1981)	L	
	6.0×10^{-3}	4300	Hiatt (2013)	M	
	3.9×10^{-3}	2900	Lau et al. (2010)	M	11
	5.0×10^{-3}		de Wolf and Lieder (1998)	M	88
	4.0×10^{-3}		Shiu and Mackay (1997)	M	
	6.1×10^{-3}		Hovorka and Dohnal (1997)	M	12
	4.9×10^{-3}	4200	Kondoh and Nakajima (1997)	M	
	5.3×10^{-3}	5300	Hansen et al. (1993)	M	282
	4.4×10^{-3}		Li and Carr (1993)	M	
	4.0×10^{-3}		Mackay and Shiu (1981)	M	
	4.7×10^{-3}		Shiu and Mackay (1997)	V	
	4.7×10^{-3}		Mackay et al. (1993)	V	
	5.0×10^{-3}		Hwang et al. (1992)	V	
	4.7×10^{-3}		Hine and Mookerjee (1975)	V	
	4.6×10^{-3}		Yaws (2003)	X	238
	4.7×10^{-3}		HSDB (2015)	C	
	4.0×10^{-3}		Schüürmann (2000)	C	21
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
7.9×10^{-3}		Duchowicz et al. (2020)	Q	185	
3.1×10^{-2}		Gharagheizi et al. (2012)	Q		
6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244	
6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245	
4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	246	
4.2×10^{-3}		Gharagheizi et al. (2010)	Q	247	
5.2×10^{-3}		Hilal et al. (2008)	Q		
7.7×10^{-3}		Modarresi et al. (2007)	Q	68	
	4800	Kühne et al. (2005)	Q		
4.1×10^{-3}		Yaffe et al. (2003)	Q	249, 250	

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.2×10^{-3}		Yao et al. (2002)	Q	230
	5.4×10^{-3}		English and Carroll (2001)	Q	231, 232
	2.9×10^{-3}		Katritzky et al. (1998)	Q	
	5.1×10^{-3}		Suzuki et al. (1992)	Q	233
	7.3×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	4.0×10^{-3}	4300	Duchowicz et al. (2020)	?	186, 21
			Kühne et al. (2005)	?	
	4.6×10^{-3}		Yaws (1999)	?	21
	4.7×10^{-3}		Yaws and Yang (1992)	?	21
	4.7×10^{-3}		Abraham et al. (1990)	?	
bromobenzene-d5 C_6D_5Br [4165-57-5] QARVLSVVCXYDNA-RALIUCGRSA-N	6.5×10^{-3}	4200	Hiatt (2013)	M	
1,2-dibromobenzene $C_6H_4Br_2$ [583-53-9] WQONPSCCEXUXTQ-UHFFFAOYSA-N	9.5×10^{-3}		Schüürmann (2000)	V	
1,3-dibromobenzene $C_6H_4Br_2$ [108-36-1] JSRLURSZEMLAFO-UHFFFAOYSA-N	1.2×10^{-2}		Brockbank (2013)	L	
	8.0×10^{-3}		Duchowicz et al. (2020)	V	187
	5.0×10^{-3}		Mackay and Shiu (1981)	V	557
	1.2×10^{-2}		Yaws (2003)	X	238
	7.7×10^{-3}		Duchowicz et al. (2020)	Q	
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	1.2×10^{-2}		Gharagheizi et al. (2010)	Q	247
	9.0×10^{-3}		Hilal et al. (2008)	Q	
	6.4×10^{-3}		Modarresi et al. (2007)	Q	68
	7.0×10^{-3}		Yao et al. (2002)	Q	230
	4.2×10^{-2}		Katritzky et al. (1998)	Q	
	1.2×10^{-2}		Yaws (1999)	?	21
1,4-dibromobenzene $C_6H_4Br_2$ [106-37-6] SWJPEBQEEAHIGZ-UHFFFAOYSA-N	9.4×10^{-3}		Kuramochi et al. (2004)	M	
	1.1×10^{-2}		Duchowicz et al. (2020)	V	187
	1.1×10^{-2}		HSDB (2015)	V	
	4.3×10^{-3}		Schüürmann (2000)	V	
	4.8×10^{-3}		Mackay and Shiu (1981)	V	557
	2.0×10^{-2}		Hine and Mookerjee (1975)	V	
	1.1×10^{-2}		Kuramochi et al. (2004)	C	
	7.1×10^{-3}		Duchowicz et al. (2020)	Q	
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	243, 244
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	1.2×10^{-2}		Hilal et al. (2008)	Q	

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.0×10^{-2}	5600	Modarresi et al. (2007)	Q	68
	4.5×10^{-3}		Kühne et al. (2005)	Q	
	4.1×10^{-2}		English and Carroll (2001)	Q	231, 275
	2.4×10^{-2}		Katritzky et al. (1998)	Q	
			Nirmalakhandan and Speece (1988)	Q	
		6900	Kühne et al. (2005)	?	
1,2,4-tribromobenzene $\text{C}_6\text{H}_3\text{Br}_3$ [615-54-3] FWAJPSIPOULHHH-UHFFFAOYSA-N	3.1×10^{-2}		Kuramochi et al. (2004)	M	
	2.9×10^{-2}		Kuramochi et al. (2004)	C	
	1.8×10^{-2}		Hilal et al. (2008)	Q	
1,3,5-tribromobenzene $\text{C}_6\text{H}_3\text{Br}_3$ [626-39-1] YWDUZLFWHVQCHY-UHFFFAOYSA-N	1.3×10^{-2}		Duchowicz et al. (2020)	V	187
	5.8×10^{-3}		Duchowicz et al. (2020)	Q	
	2.9×10^{-2}		Zhang et al. (2010)	Q	288, 289
	4.0×10^{-2}		Zhang et al. (2010)	Q	288, 290
	2.5×10^{-2}		Zhang et al. (2010)	Q	288, 291
	2.6×10^{-2}		Zhang et al. (2010)	Q	288, 292
	5.1×10^{-1}		Katritzky et al. (1998)	Q	
1,2,4,5-tetrabromobenzene $\text{C}_6\text{H}_2\text{Br}_4$ [636-28-2] QCKHVNQHBQZGER-UHFFFAOYSA-N	2.7×10^{-3}		Kuramochi et al. (2004)	M	
	2.0×10^{-2}		Hilal et al. (2008)	Q	
hexabromobenzene C_6Br_6 [87-82-1] CAYGQBVSZLICD-UHFFFAOYSA-N	9.3×10^{-2}		Kuramochi et al. (2004)	M	
	4.1×10^{-1}		Kuramochi et al. (2014)	V	
	7.1		Tittlemier et al. (2002)	V	
	3.5×10^{-1}		HSDB (2015)	Q	100
	4.0×10^{-1}		Xiao et al. (2012)	Q	
	4.6×10^{-1}		Zhang et al. (2010)	Q	288, 289
	4.6×10^{-1}		Zhang et al. (2010)	Q	288, 290
	6.0×10^{-2}		Zhang et al. (2010)	Q	288, 291
	6.7×10^{-1}		Zhang et al. (2010)	Q	288, 292
	1.2×10^{-2}		Hilal et al. (2008)	Q	
(bromomethyl)-benzene $\text{C}_7\text{H}_7\text{Br}$ (benzyl bromide) [100-39-0] AGEZXYOZHKGVCN-UHFFFAOYSA-N	1.4×10^{-3}		HSDB (2015)	Q	100
	5.4×10^{-2}		Hilal et al. (2008)	Q	
	2.2×10^{-2}		Abraham et al. (1990)	?	
<i>p</i> -bromobenzyl bromide $\text{C}_7\text{H}_6\text{Br}_2$ [589-15-1] YLRBJYMANQKEAW-UHFFFAOYSA-N	3.6×10^{-2}		Zhang et al. (2010)	Q	288, 289
	2.7×10^{-1}		Zhang et al. (2010)	Q	288, 290
	2.0×10^{-1}		Zhang et al. (2010)	Q	288, 291
	2.4×10^{-2}		Zhang et al. (2010)	Q	288, 292

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-bromo-2-methylbenzene BrC ₆ H ₄ CH ₃ (<i>o</i> -bromotoluene) [95-46-5] QSSXJPIWXQTSIX-UHFFFAOYSA-N	4.1×10^{-3} 5.3×10^{-3}		HSDB (2015) Hilal et al. (2008)	Q Q	100
1-bromo-3-methylbenzene BrC ₆ H ₄ CH ₃ (<i>m</i> -bromotoluene) [591-17-3] WJIFKOVZ NJTSGO-UHFFFAOYSA-N	1.5×10^{-3} 1.5×10^{-3} 4.0×10^{-3} 5.2×10^{-3} 4.8×10^{-3}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q	187 68
1-bromo-4-methylbenzene BrC ₆ H ₄ CH ₃ (<i>p</i> -bromotoluene) [106-38-7] ZBTMRBYMKUEVEU-UHFFFAOYSA-N	3.6×10^{-3} 3.4×10^{-3} 4.2×10^{-3} 5.3×10^{-2} 4.0×10^{-3} 4.2×10^{-3} 5.6×10^{-3} 5.5×10^{-3} 4.5×10^{-3} 3.4×10^{-3} 8.0×10^{-3} 5.2×10^{-3} 3.6×10^{-3} 5.2×10^{-3} 4.2×10^{-3} 4.2×10^{-3}	4800 4600	Brockbank (2013) Brockbank et al. (2013) Hine and Mookerjee (1975) Keshavarz et al. (2022) Duchowicz et al. (2020) Li et al. (2014) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Suzuki et al. (1992) Nirmalakhandan and Speece (1988) Duchowicz et al. (2020) Abraham et al. (1990)	L M V Q Q Q Q Q Q Q Q Q Q Q Q Q Q	300 242 68 249, 250 231, 232 233 186, 21
3,5-dibromotoluene C ₇ H ₆ Br ₂ [1611-92-3] DPKKOVGCHDUSAI-UHFFFAOYSA-N	1.7×10^{-2}	4800	Hiatt (2013)	M	
pentabromotoluene C ₇ H ₃ Br ₅ [87-83-2] OZHJEQVYCBTHJT-UHFFFAOYSA-N	4.0×10^{-1}		Xiao et al. (2012)	Q	
1-bromo-2-ethylbenzene C ₈ H ₉ Br [1973-22-4] HVRUGFJYCAFAAN-UHFFFAOYSA-N	3.0×10^{-3} 4.3×10^{-3} 2.8×10^{-3} 2.9×10^{-3} 4.5×10^{-3}		Hine and Mookerjee (1975) Hilal et al. (2008) English and Carroll (2001) Suzuki et al. (1992) Nirmalakhandan and Speece (1988)	V Q Q Q Q	231, 232 233

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-bromo-4-ethylbenzene $\text{C}_8\text{H}_9\text{Br}$ [1585-07-5] URFPRAHGGBYNPW-UHFFFAOYSA-N	3.1×10^{-3} 6.1×10^{-3} 4.2×10^{-3} 5.2×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1-(bromomethyl)-2-methylbenzene $\text{C}_8\text{H}_9\text{Br}$ (<i>o</i> -xylyl bromide) [89-92-9] WGVYCXYPNNUQA-UHFFFAOYSA-N	1.3×10^{-2}		HSDB (2015)	Q	100
1-(bromomethyl)-3-methylbenzene $\text{C}_8\text{H}_9\text{Br}$ (<i>m</i> -xylyl bromide) [620-13-3] FWLWTILKTABGKQ-UHFFFAOYSA-N	1.3×10^{-2}		HSDB (2015)	Q	100
1-(bromomethyl)-4-methylbenzene $\text{C}_8\text{H}_9\text{Br}$ (<i>p</i> -xylyl bromide) [104-81-4] WZRKSPFYXUXINF-UHFFFAOYSA-N	1.3×10^{-2}		HSDB (2015)	Q	100
(2-bromoethyl)-benzene $\text{C}_8\text{H}_9\text{Br}$ [103-63-9] WMPDPTMATNBGJN-UHFFFAOYSA-N	6.5×10^{-3} 6.5×10^{-3} 7.9×10^{-3} 2.2×10^{-2} 6.9×10^{-3} 1.3×10^{-2}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998)	V V Q Q Q Q	187 68 249, 250
2-bromostyrene $\text{C}_8\text{H}_7\text{Br}$ [125904-11-2] SSZOCHFYYWVSAI-UHFFFAOYSA-N	9.0×10^{-3} 9.5×10^{-3} 7.3×10^{-3} 1.5×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
(2-bromoethenyl)benzene $\text{C}_8\text{H}_7\text{Br}$ [103-64-0] YMOONIIMQBGTDU-VOTSOKGWSA-N	1.8×10^{-2}		HSDB (2015)	Q	100
2,3,4,5,6-pentabromoethylbenzene $\text{C}_8\text{H}_5\text{Br}_5$ [85-22-3] FIAXCDIQXHJNIX-UHFFFAOYSA-N	1.2×10^{-1} 3.6×10^{-1} 3.3×10^{-2} 9.7×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1-bromo-2-(2-propyl)-benzene $\text{BrC}_6\text{H}_4\text{C}_3\text{H}_7$ (<i>o</i> -bromocumene) [7073-94-1] LECYCYNAEJDSIL-UHFFFAOYSA-N	1.7×10^{-3} 2.5×10^{-3} 2.0×10^{-3} 3.1×10^{-3}		Hine and Mookerjee (1975) Hilal et al. (2008) Suzuki et al. (1992) Nirmalakhandan and Speece (1988)	V Q Q Q	 233

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-bromonaphthalene $\text{C}_{10}\text{H}_7\text{Br}$ [90-11-9] DLKQHBOKULLWDQ-UHFFFAOYSA-N	3.5×10^{-2} 5.0×10^{-2} 3.0×10^{-2} 5.0×10^{-2} 8.2×10^{-2} 3.7×10^{-2} 1.8×10^{-2} 3.5×10^{-2}		Duchowicz et al. (2020) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2010) Hilal et al. (2008) Yaffe et al. (2003) Katritzky et al. (1998) Yaws (1999)	V X Q Q Q Q Q ?	187 238, 295 247 249, 250 21, 295
2-bromonaphthalene $\text{C}_{10}\text{H}_7\text{Br}$ [580-13-2] APSMUYLXLZULMS-UHFFFAOYSA-N	4.3×10^{-2}		Ebert et al. (2023)	?	319
1,4-dibromonaphthalene $\text{C}_{10}\text{H}_6\text{Br}_2$ [83-53-4] IBGUDZMIAZLJNY-UHFFFAOYSA-N	5.8×10^{-2}		Ebert et al. (2023)	?	317
decabromobiphenyl $\text{C}_{12}\text{Br}_{10}$ [13654-09-6] AQPBYQUCKHJLT-UHFFFAOYSA-N	2.3×10^2 2.4×10^2 3.0×10^2 2.3×10^2 5.0×10^2		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
4-bromo-1,1'-biphenyl $\text{C}_{12}\text{H}_9\text{Br}$ [92-66-0] PKJBWOWQJHHAHG-UHFFFAOYSA-N	6.0×10^{-2} 6.9×10^{-2} 1.7×10^{-1} 3.5×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
octabromobiphenyl $\text{C}_{12}\text{H}_2\text{Br}_8$ [27858-07-7] NDRKXFLZSRHAJE-UHFFFAOYSA-N	4.1×10^3		HSDB (2015)	V	
2,2',4,4',5,5'-hexabromobiphenyl $\text{C}_{12}\text{H}_4\text{Br}_6$ [59080-40-9] HMBBJSKXDBUNNT-UHFFFAOYSA-N	2.3		HSDB (2015)	V	
1,2-bis(pentabromophenyl) ethane $\text{C}_{14}\text{H}_4\text{Br}_{10}$ [84852-53-9] BZQKBFHEWDPQHD-UHFFFAOYSA-N	1.5×10^2 8.8×10^2 8.6×10^1 1.7×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1,3,6,8-tetrabromopyrene $\text{C}_{16}\text{H}_6\text{Br}_4$ [128-63-2] ZKBKRTZIYOKNRG-UHFFFAOYSA-N	4.7×10^1 4.4×10^1 6.2×10^{-1} 6.5×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
6-bromobenzo[<i>a</i>]pyrene $\text{C}_{20}\text{H}_{11}\text{Br}$ [21248-00-0] MJSYSGSEEADMTK-UHFFFAOYSA-N	1.2×10^2		HSDB (2015)	Q	100
bromomethanol CH_2BrOH [50398-29-3] OEDMOCYNWLHUDP-UHFFFAOYSA-N	4.1 3.2×10^1 2.5×10^2 2.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Krysztofiak et al. (2012)	Q Q Q Q	81, 239 81, 240 81, 241
dibromomethanol CHBr_2OH [166600-78-8] WICMSCLXMMZMFF-UHFFFAOYSA-N	1.7×10^2		Krysztofiak et al. (2012)	Q	
tribromomethanol CBr_3OH [5405-30-1] ACRXLLXANWELLX-UHFFFAOYSA-N	1.5×10^3		Krysztofiak et al. (2012)	Q	
formyl bromide CHBrO [7726-11-6] AIFARXRIYKCEEV-UHFFFAOYSA-N	4.5×10^{-1} 3.2×10^{-2} 3.7×10^{-3} 7.3×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Krysztofiak et al. (2012)	Q Q Q Q	81, 239 81, 240 81, 241
carbonyl bromide CBr_2O [593-95-3] MOIPGXQKZSZOQX-UHFFFAOYSA-N	2.1×10^{-1}		Krysztofiak et al. (2012)	Q	
bromomethyl peroxide $\text{CH}_2\text{BrO}_2\text{H}$ WXVCUAGYVVWQBP-UHFFFAOYSA-N	3.7×10^1 1.3×10^2 3.0×10^1 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Krysztofiak et al. (2012)	Q Q Q Q	81, 239 81, 240 81, 241
dibromomethyl peroxide $\text{CHBr}_2\text{O}_2\text{H}$ JBKQCSQVMCXPZ-UHFFFAOYSA-N	2.2×10^2		Krysztofiak et al. (2012)	Q	
tribromomethyl peroxide $\text{CBr}_3\text{O}_2\text{H}$ WJYKADCZNTKBI-UHFFFAOYSA-N	1.9×10^3		Krysztofiak et al. (2012)	Q	
bromoethanoic acid CH_2BrCOOH (bromoacetic acid) [79-08-3] KDPAWGWELVVRCH-UHFFFAOYSA-N	1.5×10^3 1.5×10^3 1.5×10^3 1.5×10^3 5.6×10^2 1.5×10^2 4.2×10^2 5.6×10^3	9300 9300 9300 9300	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Bowden et al. (1998a) Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017)	L L L M Q Q Q Q	185 81, 239 81, 240

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.5×10^2		Wang et al. (2017)	Q	81, 241
	2.0×10^3		Raventos-Duran et al. (2010)	Q	243, 244
	2.5×10^3		Raventos-Duran et al. (2010)	Q	245
	1.6×10^2		Raventos-Duran et al. (2010)	Q	246
		8800	Kühne et al. (2005)	Q	
	1.5×10^3		Duchowicz et al. (2020)	?	186, 21
		9300	Kühne et al. (2005)	?	
dibromoethanoic acid CHBr ₂ COOH (dibromoacetic acid) [631-64-1] SIEILNCFEENQ-UHFFFAOYSA-N	2.3×10^3	8900	Burkholder et al. (2019)	L	
	2.3×10^3	8900	Burkholder et al. (2015)	L	
	2.3×10^3	8900	Sander et al. (2011)	L	
	2.2×10^3	8900	Bowden et al. (1998a)	M	
	5.6×10^2		Keshavarz et al. (2022)	Q	
	4.9×10^2		Duchowicz et al. (2020)	Q	185
	3.9×10^3		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^2		Raventos-Duran et al. (2010)	Q	245
	1.2×10^3		Raventos-Duran et al. (2010)	Q	246
		9900	Kühne et al. (2005)	Q	
	2.2×10^3		Duchowicz et al. (2020)	?	186, 21
		9000	Kühne et al. (2005)	?	
tribromoethanoic acid CBr ₃ COOH (tribromoacetic acid) [75-96-7] QIONYIKHPASLHO-UHFFFAOYSA-N	3.0×10^3	9000	Burkholder et al. (2019)	L	
	3.0×10^3	9000	Burkholder et al. (2015)	L	
	3.0×10^3	9000	Sander et al. (2011)	L	
	2.9×10^3	9000	Bowden et al. (1998a)	M	
	5.6×10^2		Keshavarz et al. (2022)	Q	
	3.5×10^2		Duchowicz et al. (2020)	Q	
	2.0×10^3		Raventos-Duran et al. (2010)	Q	272, 244
	9.9		Raventos-Duran et al. (2010)	Q	245
	1.2×10^4		Raventos-Duran et al. (2010)	Q	246
	3.0×10^3		Duchowicz et al. (2020)	?	186, 21
MCM:BRETO3H C ₂ H ₃ O ₃ Br RGXORGOPJDPEIK-UHFFFAOYSA-N	4.5×10^2		Wang et al. (2017)	Q	81, 239
	1.4×10^2		Wang et al. (2017)	Q	81, 240
	9.8×10^{-1}		Wang et al. (2017)	Q	81, 241
MCM:DIBRETO2H C ₂ H ₄ O ₂ Br ₂ ZXSZEFURCAPOPD-UHFFFAOYSA-N	5.4×10^2		Wang et al. (2017)	Q	81, 239
	2.2×10^2		Wang et al. (2017)	Q	81, 240
	9.6×10^1		Wang et al. (2017)	Q	81, 241
MCM:DIBRETOH C ₂ H ₄ OBr ₂ IYJYRKYSUOTLAE-UHFFFAOYSA-N	1.1×10^2		Wang et al. (2017)	Q	81, 239
	1.1×10^2		Wang et al. (2017)	Q	81, 240
	1.7×10^3		Wang et al. (2017)	Q	81, 241
MCM:BRETAL C ₂ H ₃ OBr NMPVEAUIHMEAQP-UHFFFAOYSA-N	4.1×10^{-1}		Wang et al. (2017)	Q	81, 239
	6.0		Wang et al. (2017)	Q	81, 240
	2.5×10^{-1}		Wang et al. (2017)	Q	81, 241

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-bromopropanol $\text{C}_3\text{H}_7\text{BrO}$ [627-18-9] RQFUZUMFPRMVDX-UHFFFAOYSA-N	8.2		Modarresi et al. (2007)	Q	68
2,3-dibromopropanol $\text{C}_3\text{H}_6\text{Br}_2\text{O}$ [96-13-9] QWVCIORZLNBIIC-UHFFFAOYSA-N	1.6×10^2 1.6×10^2 1.1×10^2 1.2×10^1 1.4×10^1		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
bromoacetone $\text{C}_3\text{H}_5\text{BrO}$ [598-31-2] VQFAIAKILWQPZ-UHFFFAOYSA-N	1.7		HSDB (2015)	Q	100
(bromomethyl)oxirane $\text{C}_3\text{H}_5\text{BrO}$ (epibromohydrin) [3132-64-7] GKIPXFAANLTWBM-UHFFFAOYSA-N	4.1		HSDB (2015)	Q	100
2,3-dibromobutane-1,4-diol $\text{C}_4\text{H}_8\text{Br}_2\text{O}_2$ [90801-18-6] OXYNQEOLHRWEPE-QWWZWVQMSA-N	3.2×10^3 1.0×10^5 1.5×10^6 4.7×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
bromoacetic acid, ethyl ester $\text{C}_4\text{H}_7\text{BrO}_2$ [105-36-2] PQJJMRNHATNKG-UHFFFAOYSA-N	3.7×10^{-1}		HSDB (2015)	Q	100
brometone $\text{C}_4\text{H}_7\text{Br}_3\text{O}$ (1,1,1-tribromo-2-methyl-2-propanol) [76-08-4] JUGRTVJQTFZHOM-UHFFFAOYSA-N	1.0×10^3		HSDB (2015)	Q	100
2,2-bis(bromomethyl)-1,3-propanediol $\text{C}_5\text{H}_{10}\text{Br}_2\text{O}_2$ [3296-90-0] CHUGKEQJSLLOHL-UHFFFAOYSA-N	2.4×10^3		HSDB (2015)	Q	100
tribromoneopentyl alcohol $\text{C}_5\text{H}_9\text{Br}_3\text{O}$ [36483-57-5] HQWKMYFWGMCJSW-UHFFFAOYSA-N	7.7×10^2 7.5 1.1×10^1 1.0		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-bromophenol HOC ₆ H ₄ Br [95-56-7] VADKRMSMGWJZCF-UHFFFAOYSA-N	4.5×10^1 4.2		HSDB (2015) Hilal et al. (2008)	Q Q	100
3-bromophenol HOC ₆ H ₄ Br [591-20-8] MNOJRWOWILAHAV-UHFFFAOYSA-N	4.5×10^1 2.3×10^1		HSDB (2015) Hilal et al. (2008)	Q Q	100
4-bromophenol HOC ₆ H ₄ Br [106-41-2] GZFGOTFRPZRKDS-UHFFFAOYSA-N	6.7×10^1 6.8×10^1 4.3 1.5×10^2 6.5×10^1 2.0×10^1 2.5×10^1 4.9×10^1 1.6×10^1 2.3×10^1 6.5×10^1 3.5×10^1 1.3×10^2 3.0×10^2 3.3×10^1 6.5×10^1 6.9×10^1	8200	Abraham et al. (1994a) Parsons et al. (1971) Keshavarz et al. (2022) Duchowicz et al. (2020) Li et al. (2014) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Nirmalakhandan and Speece (1988) Duchowicz et al. (2020) Abraham et al. (1990)	R T Q Q Q Q Q Q Q Q Q Q Q Q Q Q ?	419 242 243, 244 245 246 68 249, 250 231, 232 186, 21
2,4-dibromophenol C ₆ H ₄ Br ₂ O [615-58-7] FAXWFCTVSHEODL-UHFFFAOYSA-N	1.1×10^2		HSDB (2015)	Q	100
2,6-dibromophenol C ₆ H ₄ Br ₂ O [608-33-3] SSIZLKDLDKIHEV-UHFFFAOYSA-N	1.1×10^2		HSDB (2015)	Q	100
2,4,6-tribromophenol C ₆ H ₃ Br ₃ O [118-79-6] BSWWWXRFVMJHFBN-UHFFFAOYSA-N	2.1×10^2 2.8×10^2 1.5×10^{-1} 6.2 7.7		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
2,3,4,6-tetrabromophenol C ₆ H ₂ Br ₄ O [14400-94-3] CXPJZISGVIVNEL-UHFFFAOYSA-N	7.0×10^2		HSDB (2015)	Q	100

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pentabromophenol $\text{C}_6\text{HBr}_5\text{O}$ [608-71-9] SVHOVVJFOWGYJO-UHFFFAOYSA-N	1.8×10^3 1.8×10^3 1.2 2.2×10^1 1.3×10^2		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
1-bromo-2-methoxybenzene $\text{C}_7\text{H}_7\text{BrO}$ (2-bromoanisole) [578-57-4] HTDQSWDEWGSAMN-UHFFFAOYSA-N	2.9×10^{-2}		Pfeifer et al. (2001)	M	733
1-bromo-3-methoxybenzene $\text{C}_7\text{H}_7\text{BrO}$ (3-bromoanisole) [2398-37-0] PLDWAJLZAAHOGG-UHFFFAOYSA-N	7.2×10^{-3}		Pfeifer et al. (2001)	M	733
1-bromo-4-methoxybenzene $\text{C}_7\text{H}_7\text{BrO}$ (4-bromoanisole) [104-92-7] QJPJQTDYNZKKQF-UHFFFAOYSA-N	1.1×10^{-2}		Pfeifer et al. (2001)	M	733
1,5-dibromo-2-methoxybenzene $\text{C}_7\text{H}_6\text{Br}_2\text{O}$ (2,4-dibromoanisole) [21702-84-1] XGXUGXPKRBQINS-UHFFFAOYSA-N	8.1×10^{-2}		Pfeifer et al. (2001)	M	733
1,3-dibromo-2-methoxybenzene $\text{C}_7\text{H}_6\text{Br}_2\text{O}$ (2,6-dibromoanisole) [38603-09-7] BMZVDHQOAJUZJL-UHFFFAOYSA-N	3.7×10^{-2}		Pfeifer et al. (2001)	M	733
1,2,3-tribromo-4-methoxybenzene $\text{C}_7\text{H}_5\text{Br}_3\text{O}$ (2,3,4-tribromoanisole) [95970-13-1] NKWYZAWFQZLPSU-UHFFFAOYSA-N	9.9×10^{-3}		Ebert et al. (2023)	?	791
1,3,4-tribromo-2-methoxybenzene $\text{C}_7\text{H}_5\text{Br}_3\text{O}$ (2,3,6-tribromoanisole) [95970-19-7] XZYCSFIRWAPGJV-UHFFFAOYSA-N	5.2×10^{-3}	2800	Diaz et al. (2005)	M	792

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3,5-tribromo-2-methoxybenzene $\text{C}_7\text{H}_5\text{Br}_3\text{O}$ (2,4,6-tribromoanisole) [607-99-8] YXTRCOAFNXQTKL-UHFFFAOYSA-N	1.9×10^{-2} 1.3×10^{-2} 3.1×10^{-2}	6400	Diaz et al. (2005) Pfeifer et al. (2001) HSDB (2015)	M M Q	733 100
pentabromomethoxybenzene $\text{C}_7\text{H}_3\text{Br}_5\text{O}$ (pentabromoanisole) [1825-26-9] VEFNQGLLEDJPUJF-UHFFFAOYSA-N	1.0		Pfeifer et al. (2001)	M	733
1,3,5-tribromo-2-methoxy-4-methylbenzene $\text{C}_8\text{H}_7\text{Br}_3\text{O}$ [41424-36-6] NMPAMFEYWGNCI-UHFFFAOYSA-N	4.4×10^{-1} 2.0×10^{-1} 3.2×10^{-1} 1.9×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
4,5,6,7-tetrabromo-1,3-isobenzofurandione $\text{C}_8\text{Br}_4\text{O}_3$ [632-79-1] QHWKHLUYUUGSCW-UHFFFAOYSA-N	6.1×10^1 4.4×10^5 2.4×10^2 8.0×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
allyl 2,4,6-tribromophenyl ether $\text{C}_9\text{H}_7\text{Br}_3\text{O}$ [3278-89-5] RZLLIOPGUFOWOD-UHFFFAOYSA-N	3.8×10^{-1} 1.3×10^{-1} 2.0×10^{-1} 6.2×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2,4-dibromo-6-methylphenyl glycidyl ether $\text{C}_{10}\text{H}_{10}\text{Br}_2\text{O}_2$ [75150-13-9] XQTJZNGNEJLXTR-UHFFFAOYSA-N	8.2×10^1 7.0 5.2×10^1 5.4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2-(2,4,6-tribromophenoxy)ethyl acrylate $\text{C}_{11}\text{H}_9\text{Br}_3\text{O}_3$ [7347-19-5] AMBJXYFIMKHOQE-UHFFFAOYSA-N	2.9×10^2 1.6×10^1 4.3×10^3 1.3×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2,3,7,8-tetrabromodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_4\text{Br}_4\text{O}_2$ [50585-41-6] JZLQUWSWOJPCAK-UHFFFAOYSA-N	3.0		Ebert et al. (2023)	?	319

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
octabromodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{Br}_8\text{O}_2$ [2170-45-8] XAHTWKGGNHXJRP-UHFFFAOYSA-N	5.1×10^1		Ebert et al. (2023)	?	319
4,4'-methylenebis(2,6-dibromophenol) $\text{C}_{13}\text{H}_8\text{Br}_4\text{O}_2$ [21825-03-6] WPZJSWWEEJJSIZ-UHFFFAOYSA-N	7.5×10^7		Zhang et al. (2010)	Q	288, 289
	9.0×10^1		Zhang et al. (2010)	Q	288, 290
	1.3×10^4		Zhang et al. (2010)	Q	288, 291
	3.4×10^3		Zhang et al. (2010)	Q	288, 292
1,1'-[1,2-ethanediylbis(oxy)]bis pentabromobenzene $\text{C}_{14}\text{H}_4\text{Br}_{10}\text{O}_2$ [61262-53-1] JJEQBZQAGCZTH-UHFFFAOYSA-N	5.3×10^4		Zhang et al. (2010)	Q	288, 289
	8.6×10^2		Zhang et al. (2010)	Q	288, 290
	2.2×10^2		Zhang et al. (2010)	Q	288, 291
	1.1×10^3		Zhang et al. (2010)	Q	288, 292
4,4'-dibromobenzil $\text{C}_{14}\text{H}_8\text{Br}_2\text{O}_2$ [35578-47-3] NYCUBYBDECLFPE-UHFFFAOYSA-N	8.0×10^3		Zhang et al. (2010)	Q	288, 289
	2.6×10^3		Zhang et al. (2010)	Q	288, 290
	1.9×10^2		Zhang et al. (2010)	Q	288, 291
	1.3×10^5		Zhang et al. (2010)	Q	288, 292
1,2-bis(2,4,6-tribromophenoxy)ethane $\text{C}_{14}\text{H}_8\text{Br}_6\text{O}_2$ (BTBPE) [37853-59-1] YATIGPZCMOYEGE-UHFFFAOYSA-N	1.8×10^1		Kuramochi et al. (2014)	V	
	2.3×10^1		HSDB (2015)	Q	100
	6.4×10^1		Xiao et al. (2012)	Q	
	1.3×10^3		Zhang et al. (2010)	Q	288, 289
	7.3×10^1		Zhang et al. (2010)	Q	288, 290
	1.1×10^3		Zhang et al. (2010)	Q	288, 291
	1.0×10^3		Zhang et al. (2010)	Q	288, 292
2-ethylhexyl-2,3,4,5-tetrabromobenzoate $\text{C}_{15}\text{H}_{18}\text{Br}_4\text{O}_2$ (EHTeBB) [183658-27-7] HVDXCGSGEQKWGB-UHFFFAOYSA-N	1.6		Xiao et al. (2012)	Q	
tribromobisphenol A $\text{C}_{15}\text{H}_{13}\text{Br}_3\text{O}_2$ [6386-73-8] WYBOEVJIVYIEJL-UHFFFAOYSA-N	1.1×10^2		HSDB (2015)	Q	449
4,4'-(1-methylethylidene)bis(2,6-dibromophenol) $\text{C}_{15}\text{H}_{12}\text{Br}_4\text{O}_2$ [79-94-7] VEORPZCZECFIRK-UHFFFAOYSA-N	2.4×10^2		HSDB (2015)	V	
	4.2×10^7		Zhang et al. (2010)	Q	288, 289
	3.9×10^1		Zhang et al. (2010)	Q	288, 290
	8.0×10^4		Zhang et al. (2010)	Q	288, 291
	1.6×10^3		Zhang et al. (2010)	Q	288, 292

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-[2-[2,6-bis(bromanyl)-4-oxidanyl-phenyl]propan-2-yl]-3,5-bis(bromanyl)phenol $\text{C}_{15}\text{H}_{12}\text{Br}_4\text{O}_2$ [94334-64-2] KIZJVNGSIWXYTL-UHFFFAOYSA-N	4.2×10^7		Zhang et al. (2010)	Q	288, 289
	2.0×10^7		Zhang et al. (2010)	Q	288, 290
	2.2×10^7		Zhang et al. (2010)	Q	288, 291
	1.7×10^8		Zhang et al. (2010)	Q	288, 292
2-(2-hydroxyethoxy)ethyl 2-hydroxypropyl 3,4,5,6-tetrabromophthalate $\text{C}_{15}\text{H}_{16}\text{Br}_4\text{O}_7$ [20566-35-2] OQHHSWUHOGRRCR-UHFFFAOYSA-N	3.6×10^{10}		Zhang et al. (2010)	Q	288, 289
	1.5×10^{11}		Zhang et al. (2010)	Q	288, 290
	3.1×10^{13}		Zhang et al. (2010)	Q	288, 291
	5.7×10^{10}		Zhang et al. (2010)	Q	288, 292
bromopropylate $\text{C}_{17}\text{H}_{16}\text{Br}_2\text{O}_3$ [18181-80-1] FOANIXZHAMJWOI-UHFFFAOYSA-N	2.1×10^1		Duchowicz et al. (2020)	V	187
	2.1×10^1		HSDB (2015)	V	
	4.2×10^2		Duchowicz et al. (2020)	Q	
1,2,4,5-tetrabromo-3,6-bis(pentabromophenoxy)benzene $\text{C}_{18}\text{O}_2\text{Br}_{14}$ [58965-66-5] YMIUHIWWWDYGGU-UHFFFAOYSA-N	1.5×10^6		Zhang et al. (2010)	Q	288, 289
	4.1×10^5		Zhang et al. (2010)	Q	288, 290
	2.1×10^6		Zhang et al. (2010)	Q	288, 291
	6.7×10^5		Zhang et al. (2010)	Q	288, 292
2,2-bis(3,5-dibromo-4-(2-hydroxyethoxy)phenyl)propane $\text{C}_{19}\text{H}_{20}\text{Br}_4\text{O}_4$ [4162-45-2] RVHUMFJSCJBNGS-UHFFFAOYSA-N	5.6×10^7		Zhang et al. (2010)	Q	288, 289
	1.5×10^8		Zhang et al. (2010)	Q	288, 290
	6.1×10^9		Zhang et al. (2010)	Q	288, 291
	2.5×10^8		Zhang et al. (2010)	Q	288, 292
metrafenone $\text{C}_{19}\text{H}_{21}\text{BrO}_5$ [220899-03-6] AMSPWOYQQAWRRM-UHFFFAOYSA-N	7.6		Maniere et al. (2011)	?	12, 166
solvent red 43 $\text{C}_{20}\text{H}_8\text{Br}_4\text{O}_5$ [15086-94-9] DBZJJPROPLPMSN-UHFFFAOYSA-N	4.4×10^{12}		Zhang et al. (2010)	Q	288, 289
	1.5×10^8		Zhang et al. (2010)	Q	288, 290
	2.7×10^{10}		Zhang et al. (2010)	Q	288, 291
	2.9×10^8		Zhang et al. (2010)	Q	288, 292
2,2-bis[4-(2,3-dibromopropoxy)-3,5-dibromophenyl]-propane $\text{C}_{21}\text{H}_{20}\text{Br}_8\text{O}_2$ [21850-44-2] LXIZRZRTWSDLKK-UHFFFAOYSA-N	2.4×10^5		Zhang et al. (2010)	Q	288, 289
	4.0×10^4		Zhang et al. (2010)	Q	288, 290
	1.7×10^5		Zhang et al. (2010)	Q	288, 291
	8.6×10^4		Zhang et al. (2010)	Q	288, 292

Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2-bis(4-allyloxy-3,5-dibromophenyl)propane $\text{C}_{21}\text{H}_{20}\text{Br}_4\text{O}_2$ [25327-89-3] PWXTUWQHMIKFLKLUHFFFAOYSA-N	7.7×10^1		Zhang et al. (2010)	Q	288, 289
	1.3×10^1		Zhang et al. (2010)	Q	288, 290
	1.7×10^2		Zhang et al. (2010)	Q	288, 291
	1.9×10^2		Zhang et al. (2010)	Q	288, 292
AC1MJ2TG $\text{C}_{21}\text{H}_{24}\text{Br}_4\text{O}_4$ [33294-14-3] UTMWWHZWNKBNKFUHFFAOYSA-N	1.3×10^8		Zhang et al. (2010)	Q	288, 289
	4.7×10^6		Zhang et al. (2010)	Q	288, 290
	9.2×10^6		Zhang et al. (2010)	Q	288, 291
	1.2×10^6		Zhang et al. (2010)	Q	288, 292
tetrabromophenolphthalein, ethyl ester $\text{C}_{22}\text{H}_{14}\text{Br}_4\text{O}_4$ [1176-74-5] SQFXATUXPUCFFO-UHFFAOYSA-N	1.0×10^{11}		Zhang et al. (2010)	Q	288, 289
	1.2×10^7		Zhang et al. (2010)	Q	288, 290
	3.1×10^{10}		Zhang et al. (2010)	Q	288, 291
	3.5×10^8		Zhang et al. (2010)	Q	288, 292
4,10-dibromodibenzo[def,mno]chrysene-6,12-dione $\text{C}_{22}\text{H}_8\text{Br}_2\text{O}_2$ [4378-61-4] HTENFZMEHKCNMDUHFFAOYSA-N	5.8×10^6		Zhang et al. (2010)	Q	288, 289
	2.7×10^5		Zhang et al. (2010)	Q	288, 290
	4.1×10^6		Zhang et al. (2010)	Q	288, 291
	1.1×10^8		Zhang et al. (2010)	Q	288, 292
bis(2-ethylhexyl)-3,4,5,6-tetrabromophthalate $\text{C}_{24}\text{H}_{34}\text{Br}_4\text{O}_4$ (TBPH) [26040-51-7] UUEDINPOVKWVAZUHFFAOYSA-N	4.0×10^2		Xiao et al. (2012)	Q	
bromadiolone $\text{C}_{30}\text{H}_{23}\text{BrO}_4$ [28772-56-7] OWNRRUFOJXFKCUUHFFAOYSA-N	1.1×10^6		HSDB (2015)	V	
	1.1×10^6		Maniere et al. (2011)	?	242, 166
brodifacoum $\text{C}_{31}\text{H}_{23}\text{BrO}_3$ [56073-10-0] VEUZZDOCACZPRYUHFFAOYSA-N	4.6×10^2		Rubbiani (2013)	?	

A7.2 Polybrominated diphenyl ethers (PBDEs)

Table A7.2: Polybrominated diphenyl ethers (PBDEs)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-bromodiphenyl ether $\text{C}_{12}\text{H}_9\text{BrO}$ (PBDE-1) [36563-47-0] RRWFUWRLNIZICP-UHFFFAOYSA-N	2.3×10^{-2}	7400	Long et al. (2017)	Q	288
3-bromodiphenyl ether $\text{C}_{12}\text{H}_9\text{BrO}$ (PBDE-2) [6876-00-2] AHDAKFFMKLQPTD-UHFFFAOYSA-N	2.3×10^{-2}	7400	Long et al. (2017)	Q	288
4-bromodiphenyl ether $\text{C}_{12}\text{H}_9\text{BrO}$ (PBDE-3) [101-55-3] JDUIYUPUMQALQRCN-UHFFFAOYSA-N	5.0×10^{-2} 4.3×10^{-2} 5.8×10^{-2} 9.6×10^{-2} 1.4×10^{-2} 8.2×10^{-2}	5500 7400	Lau et al. (2006) Lau et al. (2006) Charles and Destailats (2005) Mackay et al. (1993) Long et al. (2017) HSDB (2015)	M M M V Q Q	721 722 288 100
2,2'-dibromodiphenyl ether $\text{C}_{12}\text{H}_8\text{Br}_2\text{O}$ (PBDE-4) [51452-87-0] JMSKYMHFNWGUJG-UHFFFAOYSA-N	9.5×10^{-2}	7400	Long et al. (2017)	Q	288
2,3-dibromodiphenyl ether $\text{C}_{12}\text{H}_8\text{Br}_2\text{O}$ (PBDE-5) [446254-14-4] JTYRXXKXOULVAP-UHFFFAOYSA-N	5.1×10^{-2}	7400	Long et al. (2017)	Q	288
2,3'-dibromodiphenyl ether $\text{C}_{12}\text{H}_8\text{Br}_2\text{O}$ (PBDE-6) [147217-72-9] GODQTPrKFHOLPH-UHFFFAOYSA-N	9.4×10^{-2}	7400	Long et al. (2017)	Q	288
2,4-dibromodiphenyl ether $\text{C}_{12}\text{H}_8\text{Br}_2\text{O}$ (PBDE-7) [171977-44-9] JMCIHKKTRDLVCO-UHFFFAOYSA-N	6.9×10^{-2}	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4'-dibromodiphenyl ether $\text{C}_{12}\text{H}_8\text{Br}_2\text{O}$ (PBDE-8) [147217-71-8] RJQLQJZMLISKRJ-UHFFFAOYSA-N	5.8×10^{-2}	7400	Long et al. (2017)	Q	288
2,5-dibromodiphenyl ether $\text{C}_{12}\text{H}_8\text{Br}_2\text{O}$ (PBDE-9) [337513-66-3] URDWJMUOJJSXAE-UHFFFAOYSA-N	8.0×10^{-2}	7400	Long et al. (2017)	Q	288
2,6-dibromodiphenyl ether $\text{C}_{12}\text{H}_8\text{Br}_2\text{O}$ (PBDE-10) [51930-04-2] MUVDKHMQIZJFTC-UHFFFAOYSA-N	8.3×10^{-2}	7400	Long et al. (2017)	Q	288
3,3'-dibromodiphenyl ether $\text{C}_{12}\text{H}_8\text{Br}_2\text{O}$ (PBDE-11) [6903-63-5] ALSVFJIXSNRBLE-UHFFFAOYSA-N	7.8×10^{-2}	7400	Long et al. (2017)	Q	288
3,4-dibromodiphenyl ether $\text{C}_{12}\text{H}_8\text{Br}_2\text{O}$ (PBDE-12) [189084-59-1] SUUJFDKVPDCZQZ-UHFFFAOYSA-N	3.3×10^{-2}	7400	Long et al. (2017)	Q	288
3,4'-dibromodiphenyl ether $\text{C}_{12}\text{H}_8\text{Br}_2\text{O}$ (PBDE-13) [83694-71-7] BGPOVBPKODCMMN-UHFFFAOYSA-N	5.5×10^{-2}	7400	Long et al. (2017)	Q	288
3,5-dibromodiphenyl ether $\text{C}_{12}\text{H}_8\text{Br}_2\text{O}$ (PBDE-14) [46438-88-4] FOXBJLXVUHYQZ-UHFFFAOYSA-N	9.9×10^{-2}	7400	Long et al. (2017)	Q	288
4,4'-dibromodiphenyl ether $\text{C}_{12}\text{H}_8\text{Br}_2\text{O}$ (PBDE-15) [2050-47-7] YAWIAFUBXXPJM-Q-UHFFFAOYSA-N	8.3×10^{-2}		Lau et al. (2006)	M	721
	7.1×10^{-2}		Lau et al. (2006)	M	722
	7.3×10^{-2}	4500	Charles and Destailats (2005)	M	
	4.8×10^{-2}		Tittlemier et al. (2002)	V	
	2.4×10^{-1}		Wania and Dugani (2003)	R	
	3.9×10^{-2}	7400	Long et al. (2017)	Q	288
	9.0×10^{-2}		Hilal et al. (2008)	Q	

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-16) [147217-74-1] VRNGWCVC SHJUEJ-UHFFFAOYSA-N	2.2×10^{-1}	7400	Long et al. (2017)	Q	288
2,2',4-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-17) [147217-75-2] VYBFILXLB MWOLI-UHFFFAOYSA-N	2.3×10^{-1}	7400	Long et al. (2017)	Q	288
2,2',5-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-18) [407606-55-7] FAZLXBWRNJAGSV-UHFFFAOYSA-N	2.4×10^{-1}	7400	Long et al. (2017)	Q	288
2,2',6-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-19) [147217-73-0] YDFQHBRKURQGAH-UHFFFAOYSA-N	3.6×10^{-1}	7400	Long et al. (2017)	Q	288
2,3,3'-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-20) [147217-76-3] RQJUBSPXD SGLRB-UHFFFAOYSA-N	1.8×10^{-1}	7400	Long et al. (2017)	Q	288
2,3,4-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-21) [337513-67-4] RXWRVYYPLRPDOS-UHFFFAOYSA-N	1.0×10^{-1}	7400	Long et al. (2017)	Q	288
2,3,4'-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-22) [446254-15-5] WZHNIFQVNBINLF-UHFFFAOYSA-N	1.2×10^{-1}	7400	Long et al. (2017)	Q	288
2,3,5-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-23) [446254-16-6] XQHLKDAUZRXBGC-UHFFFAOYSA-N	2.3×10^{-1}	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,6-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-24) [218304-36-0] GFLRHBRMAZDOIG-UHFFFAOYSA-N	1.8×10^{-1}	7400	Long et al. (2017)	Q	288
2,3',4-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-25) [147217-77-4] AURKEOPYVUYTLO-UHFFFAOYSA-N	2.3×10^{-1}	7400	Long et al. (2017)	Q	288
2,3',5-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-26) [337513-75-4] VUOBKVBAFJQQDB-UHFFFAOYSA-N	2.5×10^{-1}	7400	Long et al. (2017)	Q	288
2,3',6-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-27) [337513-53-8] JUPZALSVNWHII-UHFFFAOYSA-N	3.4×10^{-1}	7400	Long et al. (2017)	Q	288
2,4,4'-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-28) [41318-75-6] UPNBETHXPIWQX-UHFFFAOYSA-N	1.6×10^{-1}	8100	Long et al. (2017)	M	288
	1.1×10^{-1}		Lau et al. (2006)	M	721
	7.7×10^{-2}		Lau et al. (2006)	M	722
	1.8×10^{-1}	7400	Cetin and Odabasi (2005)	M	
	1.2×10^{-1}	12000	Charles and Destailats (2005)	M	33
	2.0×10^{-1}		Tittlemier et al. (2002)	V	
	5.2×10^{-1}		Wania and Dugani (2003)	R	
	1.8×10^{-1}	7400	Long et al. (2017)	Q	288
1.4×10^{-1}		Hilal et al. (2008)	Q		
2,4,5-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-29) [337513-56-1] LTMKAFUXYKEDLR-UHFFFAOYSA-N	1.6×10^{-1}	7400	Long et al. (2017)	Q	288
2,4,6-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-30) [155999-95-4] TVZAPPGLBLTACB-UHFFFAOYSA-N	3.4×10^{-1}	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4',5'-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-31) [65075-08-3] PURZBWMLFRWRMG-UHFFFAOYSA-N	1.9×10^{-1}	7400	Long et al. (2017)	Q	288
2,4',6'-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-32) [189084-60-4] TYDVYKIQSZGUMV-UHFFFAOYSA-N	1.6×10^{-1}	7400	Long et al. (2017)	Q	288
2,3',4'-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-33) [49690-94-0] BUQBQEYUVAKJQK-UHFFFAOYSA-N	1.3×10^{-1}	7400	Long et al. (2017)	Q	288
2,3',5'-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-34) [446254-17-7] XMNXHCHZIPYCNA-UHFFFAOYSA-N	4.2×10^{-1}	7400	Long et al. (2017)	Q	288
3,3',4'-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-35) [147217-80-9] CDVYKQPKJYPWRO-UHFFFAOYSA-N	1.2×10^{-1}	7400	Long et al. (2017)	Q	288
3,3',5'-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-36) [147217-79-6] XUKPJLVONRTECE-UHFFFAOYSA-N	2.8×10^{-1}	7400	Long et al. (2017)	Q	288
3,4,4'-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-37) [147217-81-0] YALAYFVVZFORPV-UHFFFAOYSA-N	9.0×10^{-2}	7400	Long et al. (2017)	Q	288
3,4,5'-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-38) [337513-54-9] DPGVQKLGQZZLMI-UHFFFAOYSA-N	9.9×10^{-2}	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,4',5-tribromodiphenyl ether $\text{C}_{12}\text{H}_7\text{Br}_3\text{O}$ (PBDE-39) [407606-57-9] UFFNOPDHJNQYKD-UHFFFAOYSA-N	2.0×10^{-1}	7400	Long et al. (2017)	Q	288
2,2',3,3'-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-40) [337513-77-6] SXSUUFZWSVMTRL-UHFFFAOYSA-N	4.8×10^{-1}	7400	Long et al. (2017)	Q	288
2,2',3,4-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-41) [337513-68-5] UAEBSKBXZAIRMX-UHFFFAOYSA-N	3.2×10^{-1}	7400	Long et al. (2017)	Q	288
2,2',3,4'-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-42) [446254-18-8] HQDQKPAHIDGGMH-UHFFFAOYSA-N	5.2×10^{-1}	7400	Long et al. (2017)	Q	288
2,2',3,5-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-43) [446254-19-9] LKMQHSYDVIDIECC-UHFFFAOYSA-N	6.6×10^{-1}	7400	Long et al. (2017)	Q	288
2,2',3,5'-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-44) [446254-20-2] VBGBGTYMDIVKKNK-UHFFFAOYSA-N	5.7×10^{-1}	7400	Long et al. (2017)	Q	288
2,2',3,6-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-45) [446254-21-3] VTFWUBIOZQCMQS-UHFFFAOYSA-N	7.3×10^{-1}	7400	Long et al. (2017)	Q	288
2,2',3,6'-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-46) [446254-22-4] GBUUKJRFSCMTB-UHFFFAOYSA-N	1.1	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',4,4'-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-47) [5436-43-1] XYBSIYMGXVUVGY-UHFFFAOYSA-N	9.1×10^{-1} 1.6×10^{-1} 1.7×10^{-1} 8.7×10^{-1} 1.7×10^{-1}	7400 7300 620	Long et al. (2017) Lau et al. (2006) Lau et al. (2006) Cetin and Odabasi (2005) Charles and Destailats (2005)	M M M M M	288 721 722 42
	9.3×10^{-1} 6.7×10^{-1} 9.0×10^{-1} 8.5×10^{-1} 2.2×10^{-1}		Kuramochi et al. (2014) Tittlemier et al. (2002) Wania and Dugani (2003) Long et al. (2017) Hilal et al. (2008)	V V R Q Q	
2,2',4,5-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-48) [337513-55-0] FJGDNHOVDFREMP-UHFFFAOYSA-N	4.8×10^{-1}	7400	Long et al. (2017)	Q	288
2,2',4,5'-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-49) [243982-82-3] QWVDUBDYUPHNHY-UHFFFAOYSA-N	8.6×10^{-1}	7400	Long et al. (2017)	Q	288
2,2',4,6-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-50) [446254-23-5] FXUAKFRJBKFDY-UHFFFAOYSA-N	1.1	7400	Long et al. (2017)	Q	288
2,2',4,6'-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-51) [189084-57-9] WKBBBTLDLKYGBI-UHFFFAOYSA-N	1.3	7400	Long et al. (2017)	Q	288
2,2',5,5'-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-52) [446254-24-6] CDTHXJORUCZHMD-UHFFFAOYSA-N	8.9×10^{-1}	7400	Long et al. (2017)	Q	288
2,2',5,6'-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-53) [446254-25-7] SDVQGIMOFXMKHR-UHFFFAOYSA-N	1.4	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',6,6'-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-54) [446254-26-8] WCDCHQGVTZHVSO-UHFFFAOYSA-N	1.7	7400	Long et al. (2017)	Q	288
2,3,3',4-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-55) [446254-27-9] VIHUMJGEWQPWOT-UHFFFAOYSA-N	3.0×10^{-1}	7400	Long et al. (2017)	Q	288
2,3,3',4'-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-56) [446254-28-0] NFOIVCGFYJIYIB-UHFFFAOYSA-N	2.8×10^{-1}	7400	Long et al. (2017)	Q	288
2,3,3',5-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-57) [337513-82-3] CSIFWDKYUJLQEB-UHFFFAOYSA-N	6.2×10^{-1}	7400	Long et al. (2017)	Q	288
2,3,3',5'-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-58) [446254-29-1] SWOYBZHGPZIRHS-UHFFFAOYSA-N	1.3	7400	Long et al. (2017)	Q	288
2,3,3',6-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-59) [446254-30-4] DMAMJZQQOWYEHT-UHFFFAOYSA-N	6.5×10^{-1}	7400	Long et al. (2017)	Q	288
2,3,4,4'-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-60) [446254-31-5] ARERIMFZYPFJAV-UHFFFAOYSA-N	2.3×10^{-1}	7400	Long et al. (2017)	Q	288
2,3,4,5-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-61) [446254-32-6] NDRSXNBQWAOQPP-UHFFFAOYSA-N	3.2×10^{-1}	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,4,6-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-62) [446254-33-7] YIQYWYZZLOZVRM-UHFFFAOYSA-N	5.5×10^{-1}	7400	Long et al. (2017)	Q	288
2,3,4',5-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-63) [446254-34-8] HNICYXFGCWPYGC-UHFFFAOYSA-N	5.0×10^{-1}	7400	Long et al. (2017)	Q	288
2,3,4',6-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-64) [446254-35-9] LDCXVFJUWKKBNY-UHFFFAOYSA-N	3.3×10^{-1}	7400	Long et al. (2017)	Q	288
2,3,5,6-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-65) [446254-36-0] HPEUYVBOPJQVFN-UHFFFAOYSA-N	4.8×10^{-1}	7400	Long et al. (2017)	Q	288
2,3',4,4'-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-66) [189084-61-5] DHUMTYRHKMCVAG-UHFFFAOYSA-N	2.0 4.7×10^{-1}	7400	Tittlemier et al. (2002) Long et al. (2017)	V Q	288
2,3',4,5-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-67) [446254-37-1] OARGWSONVLGXQA-UHFFFAOYSA-N	4.7×10^{-1}	7400	Long et al. (2017)	Q	288
2,3',4,5'-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-68) [446254-38-2] UFWGRLCUOLLWAO-UHFFFAOYSA-N	1.6	7400	Long et al. (2017)	Q	288
2,3',4,6-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-69) [327185-09-1] NHZNRCYNZJADTG-UHFFFAOYSA-N	9.8×10^{-1}	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3',4',5-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-70) [446254-39-3] GHQMTYWQVJZWAR-UHFFFAOYSA-N	5.2×10^{-1}	7400	Long et al. (2017)	Q	288
2,3',4',6-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-71) [189084-62-6] COPAGYRSCJVION-UHFFFAOYSA-N	5.2×10^{-1}	7400	Long et al. (2017)	Q	288
2,3',5,5'-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-72) [446254-40-6] GBBNZKQTOOZGIS-UHFFFAOYSA-N	9.6×10^{-1}	7400	Long et al. (2017)	Q	288
2,3',5',6-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-73) [446254-41-7] WQFLVWXBCRJ AQN-UHFFFAOYSA-N	1.7	7400	Long et al. (2017)	Q	288
2,4,4',5-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-74) [446254-42-8] LXCFDVVDUVPAGR-UHFFFAOYSA-N	3.9×10^{-1}	7400	Long et al. (2017)	Q	288
2,4,4',6-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-75) [189084-63-7] BWCNKMFUGBFBGB-UHFFFAOYSA-N	6.3×10^{-1}	7400	Long et al. (2017)	Q	288
2,3',4',5'-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-76) [446254-43-9] NCSWBJSFVPJPPK-UHFFFAOYSA-N	4.7×10^{-1}	7400	Long et al. (2017)	Q	288
3,3',4,4'-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-77) [93703-48-1] RYGLOWMCGZHYRQ-UHFFFAOYSA-N	8.3×10^{-1} 2.3×10^{-1}	7400	Tittlemier et al. (2002) Long et al. (2017)	V Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3',4,5-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-78) [446254-45-1] HWOBLTZZSVXBOJ-UHFFFAOYSA-N	2.9×10^{-1}	7400	Long et al. (2017)	Q	288
3,3',4,5'-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-79) [446254-48-4] LELQGHJEUVRPEV-UHFFFAOYSA-N	4.7×10^{-1}	7400	Long et al. (2017)	Q	288
3,3',5,5'-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-80) [103173-66-6] HFIOZJQRZKNPKJ-UHFFFAOYSA-N	1.1	7400	Long et al. (2017)	Q	288
3,4,4',5-tetrabromodiphenyl ether $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}$ (PBDE-81) [446254-50-8] ULFOIXCXIWHJDS-UHFFFAOYSA-N	2.4×10^{-1}	7400	Long et al. (2017)	Q	288
2,2',3,3',4-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-82) [327185-11-5] RQMSPGJESCCPQX-UHFFFAOYSA-N	7.1×10^{-1}	7400	Long et al. (2017)	Q	288
2,2',3,3',5-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-83) [446254-51-9] XAHYSNUYJLNDBX-UHFFFAOYSA-N	1.4	7400	Long et al. (2017)	Q	288
2,2',3,3',6-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-84) [446254-52-0] PPIZNRAVQHNLJM-UHFFFAOYSA-N	1.8	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4,4'-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-85) [182346-21-0] DMLQSUZPTTUUDP-UHFFFAOYSA-N	9.1		Tittlemier et al. (2002)	V	
	1.3	7400	Long et al. (2017)	Q	288
2,2',3,4,5-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-86) [446254-53-1] YMWYUWOUOQCQP-UHFFFAOYSA-N	9.2×10^{-1}	7400	Long et al. (2017)	Q	288
2,2',3,4,5'-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-87) [446254-54-2] WKYQUGCIKNOXFW-UHFFFAOYSA-N	1.1×10^2	7400	Long et al. (2017)	Q	288
2,2',3,4,6-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-88) [446254-55-3] OPZUHBCVIZNZFB-UHFFFAOYSA-N	1.2	7400	Long et al. (2017)	Q	288
2,2',3,4,6'-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-89) [446254-56-4] XGFLJLJXVIMCNR-UHFFFAOYSA-N	1.8	7400	Long et al. (2017)	Q	288
2,2',3,4',5-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-90) [446254-57-5] BATFXMGTVIESIQ-UHFFFAOYSA-N	2.3	7400	Long et al. (2017)	Q	288
2,2',3,4',6-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-91) [446254-58-6] HWNJTKDPNZUSO-UHFFFAOYSA-N	1.7	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,5,5'-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-92) [446254-59-7] QWSQOVAGRDRZLM-UHFFFAOYSA-N	1.9	7400	Long et al. (2017)	Q	288
2,2',3,5,6-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-93) [446254-60-0] BRTVPVJQMWLDNO-UHFFFAOYSA-N	1.5	7400	Long et al. (2017)	Q	288
2,2',3,5,6'-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-94) [446254-61-1] JOPASNJHCFYVHD-UHFFFAOYSA-N	3.8	7400	Long et al. (2017)	Q	288
2,2',3,5',6-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-95) [446254-62-2] BZDYRALIEYVMEP-UHFFFAOYSA-N	1.8	7400	Long et al. (2017)	Q	288
2,2',3,6,6'-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-96) [446254-63-3] ZFCJNRDWGBZUED-UHFFFAOYSA-N	3.9	7400	Long et al. (2017)	Q	288
2,2',3,4',5'-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-97) [446254-64-4] MAGYDGRJRSCLJL-UHFFFAOYSA-N	1.0	7400	Long et al. (2017)	Q	288
2,2',3,4',6'-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-98) [38463-82-0] OCLWEJVGAUFXQU-UHFFFAOYSA-N	3.5	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',4,4',5-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-99) [60348-60-9] WHPVYXDFIXRKLN-UHFFFAOYSA-N	1.5	8900	Long et al. (2017)	M	288
	6.2×10^{-1}		Lau et al. (2006)	M	721
	3.3×10^{-1}		Lau et al. (2006)	M	722
	1.5	8800	Cetin and Odabasi (2005)	M	
	2.7×10^{-1}	-6700	Charles and Destailats (2005)	M	42
	2.1		Kuramochi et al. (2014)	V	
	4.3		Tittlemier et al. (2002)	V	
	1.9		Wania and Dugani (2003)	R	
	1.6	7400	Long et al. (2017)	Q	288
	8.4		Zhang et al. (2010)	Q	288, 289
	3.7		Zhang et al. (2010)	Q	288, 290
	1.2×10^2		Zhang et al. (2010)	Q	288, 291
	2.4×10^1		Zhang et al. (2010)	Q	288, 292
	4.3×10^{-1}		Hilal et al. (2008)	Q	
2,2',4,4',6-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-100) [189084-64-8] NSKIRYMHNFTRLR-UHFFFAOYSA-N	3.6	7300	Long et al. (2017)	M	288
	3.3×10^{-1}		Lau et al. (2006)	M	721
	3.2×10^{-1}		Lau et al. (2006)	M	722
	3.8	6800	Cetin and Odabasi (2005)	M	
	1.9×10^{-1}	12	Charles and Destailats (2005)	M	42
	1.4×10^1		Tittlemier et al. (2002)	V	
	2.6		Wania and Dugani (2003)	R	
	3.9	7400	Long et al. (2017)	Q	288
	3.7×10^{-1}		Hilal et al. (2008)	Q	
2,2',4,5,5'-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-101) [446254-65-5] QUZWDWNIWQAQDI-UHFFFAOYSA-N	1.4	7400	Long et al. (2017)	Q	288
2,2',4,5,6'-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-102) [446254-66-6] JHFMUCUVMIAQWRI-UHFFFAOYSA-N	2.8	7400	Long et al. (2017)	Q	288
2,2',4,5',6-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-103) [446254-67-7] RJEMKRNASVHYKR-UHFFFAOYSA-N	3.4	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',4,6,6'-pentabromodiphenyl ether C ₁₂ H ₅ Br ₅ O (PBDE-104) [446254-68-8] CRSCWEYUPEUKHPI-UHFFFAOYSA-N	6.7	7400	Long et al. (2017)	Q	288
2,3,3',4,4'-pentabromodiphenyl ether C ₁₂ H ₅ Br ₅ O (PBDE-105) [373594-78-6] LBPWAGZGYNOKAM-UHFFFAOYSA-N	6.1×10^{-1}	7400	Long et al. (2017)	Q	288
2,3,3',4,5-pentabromodiphenyl ether C ₁₂ H ₅ Br ₅ O (PBDE-106) [446254-69-9] KLQKWMYXEWUAFP-UHFFFAOYSA-N	8.5×10^{-1}	7400	Long et al. (2017)	Q	288
2,3,3',4',5-pentabromodiphenyl ether C ₁₂ H ₅ Br ₅ O (PBDE-107) [446254-70-2] OMGVAMFMRSETEG-UHFFFAOYSA-N	1.9	7400	Long et al. (2017)	Q	288
2,3,3',4,5'-pentabromodiphenyl ether C ₁₂ H ₅ Br ₅ O (PBDE-108) [446254-71-3] VBKPKHVLHGOKOJ-UHFFFAOYSA-N	2.0	7400	Long et al. (2017)	Q	288
2,3,3',4,6-pentabromodiphenyl ether C ₁₂ H ₅ Br ₅ O (PBDE-109) [446254-72-4] FXXXWTMLIQLDRP-UHFFFAOYSA-N	1.2	7400	Long et al. (2017)	Q	288
2,3,3',4',6-pentabromodiphenyl ether C ₁₂ H ₅ Br ₅ O (PBDE-110) [446254-73-5] LESZGJVTZILBTK-UHFFFAOYSA-N	9.4×10^{-1}	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3',5,5'-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-111) [446254-74-6] PCHDCOXHJBWEPW-UHFFFAOYSA-N	2.1	7400	Long et al. (2017)	Q	288
2,3,3',5,6-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-112) [446254-75-7] MFBMNSFADPTAKZ-UHFFFAOYSA-N	1.7	7400	Long et al. (2017)	Q	288
2,3,3',5',6-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-113) [446254-76-8] OGZHLJXRGZFLI-UHFFFAOYSA-N	3.1	7400	Long et al. (2017)	Q	288
2,3,4,4',5-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-114) [446254-77-9] SFNAUTSNWPPDSY-UHFFFAOYSA-N	6.2×10^{-1} 7.7×10^{-1} 8.8×10^{-1} 7.5×10^{-1}	4000 7400	Lau et al. (2006) Lau et al. (2006) Charles and Destailats (2005) Long et al. (2017)	M M M Q	721 722 42 288
2,3,4,4',6-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-115) [446254-78-0] BKTLDVXDOSTEV-UHFFFAOYSA-N	9.8×10^{-1}	7400	Long et al. (2017)	Q	288
2,3,4,5,6-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-116) [189084-65-9] ACRQLFSHISNWRY-UHFFFAOYSA-N	6.1×10^{-1}	7400	Long et al. (2017)	Q	288
2,3,4',5,6-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-117) [446254-79-1] SOJBOGWFBDDWEG-UHFFFAOYSA-N	8.6×10^{-1}	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3',4,4',5-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-118) [446254-80-4] VTMFEPLDDHZBGI-UHFFFAOYSA-N	9.2×10^{-1}	7400	Long et al. (2017)	Q	288
2,3',4,4',6-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-119) [189084-66-0] KXEOYBYEJCRPGB-UHFFFAOYSA-N	1.8	7400	Long et al. (2017)	Q	288
2,3',4,5,5'-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-120) [417727-71-0] AKSBEUHDCRZJAN-UHFFFAOYSA-N	1.7	7400	Long et al. (2017)	Q	288
2,3',4,5',6-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-121) [446254-81-5] GVGNVZBJVFDAAO-UHFFFAOYSA-N	5.9	7400	Long et al. (2017)	Q	288
2,3,3',4',5'-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-122) [446254-82-6] CDNHGSPFIUITT-UHFFFAOYSA-N	7.2×10^{-1}	7400	Long et al. (2017)	Q	288
2,3',4,4',5'-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-123) [446254-83-7] SBKMUEQNZNDYFW-UHFFFAOYSA-N	1.2	7400	Long et al. (2017)	Q	288
2,3',4',5,5'-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-124) [446254-84-8] FGHJTAAHIFEHLT-UHFFFAOYSA-N	1.1	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3',4',5',6-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-125) [446254-85-9] SESXKFPOVUVGLR-UHFFFAOYSA-N	1.3	7400	Long et al. (2017)	Q	288
3,3',4,4',5-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-126) [366791-32-4] SJNIIWPIAVQNRK-UHFFFAOYSA-N	5.6×10^{-1}	7400	Long et al. (2017)	Q	288
3,3',4,5,5'-pentabromodiphenyl ether $\text{C}_{12}\text{H}_5\text{Br}_5\text{O}$ (PBDE-127) [446254-86-0] RATMRXKBPDCKCZ-UHFFFAOYSA-N	1.1	7400	Long et al. (2017)	Q	288
2,2',3,3',4,4'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-128) [182677-28-7] WFLVELCLEGVBIH-UHFFFAOYSA-N	2.1	7400	Long et al. (2017)	Q	288
2,2',3,3',4,5-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-129) [446254-87-1] PRNCVYAUCSGSOE-UHFFFAOYSA-N	1.9	7400	Long et al. (2017)	Q	288
2,2',3,3',4,5'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-130) [446254-88-2] YURCHLXPAGSJHU-UHFFFAOYSA-N	3.7	7400	Long et al. (2017)	Q	288
2,2',3,3',4,6-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-131) [446254-89-3] MGKVPJFIGGBCBA-UHFFFAOYSA-N	1.0×10^1	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,6'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-132) [446254-90-6] FFFKBOKDYRZGRV-UHFFFAOYSA-N	4.0	7400	Long et al. (2017)	Q	288
2,2',3,3',5,5'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-133) [446254-91-7] XTBFPFHQPGZZJX-UHFFFAOYSA-N	6.3	7400	Long et al. (2017)	Q	288
2,2',3,3',5,6-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-134) [446254-92-8] MIBDGPWSGDWIQR-UHFFFAOYSA-N	4.8	7400	Long et al. (2017)	Q	288
2,2',3,3',5,6'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-135) [446254-93-9] AMGHASDTWACNCS-UHFFFAOYSA-N	8.6	7400	Long et al. (2017)	Q	288
2,2',3,3',6,6'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-136) [446254-94-0] NTWGDLSLWUPCDW-UHFFFAOYSA-N	7.8	7400	Long et al. (2017)	Q	288
2,2',3,4,4',5-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-137) [446254-95-1] HSTYYNPYXZYIAG-UHFFFAOYSA-N	3.0	7400	Long et al. (2017)	Q	288
2,2',3,4,4',5'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-138) [182677-30-1] IZFQCEZFGCMHOM-UHFFFAOYSA-N	2.7	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4,4',6'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-140) [243982-83-4] FLRODCDHJZNIGA-UHFFFAOYSA-N	7.7	7400	Long et al. (2017)	Q	288
2,2',3,4,5,5'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-141) [446254-97-3] XTXIYMGRRUJOIT-UHFFFAOYSA-N	2.6	7400	Long et al. (2017)	Q	288
2,2',3,4,5,6-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-142) [446254-98-4] LJDGJCNHVGGOFW-UHFFFAOYSA-N	1.4	7400	Long et al. (2017)	Q	288
2,2',3,4,5,6'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-143) [446254-99-5] RQLZDUSZXOBTM-UHFFFAOYSA-N	5.1	7400	Long et al. (2017)	Q	288
2,2',3,4,5',6-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-144) [446255-00-1] ZMSJCQOCTPYCQP-UHFFFAOYSA-N	5.2	7400	Long et al. (2017)	Q	288
2,2',3,4,6,6'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-145) [446255-01-2] BTKLHMBWCRVCLC-UHFFFAOYSA-N	1.0×10^1	7400	Long et al. (2017)	Q	288
2,2',3,4',5,5'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-146) [446255-02-3] HGXPYDNHBUCRTR-UHFFFAOYSA-N	5.3	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4',5,6-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-147) [116995-33-6] OWBKWMDBTWHGHS-UHFFFAOYSA-N	5.1	7400	Long et al. (2017)	Q	288
2,2',3,4',5,6'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-148) [446255-03-4] OJMHGSMQZEBFH-UHFFFAOYSA-N	1.2×10^1	7400	Long et al. (2017)	Q	288
2,2',3,4',5',6-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-149) [446255-04-5] UJOUSZKYGGTPEFQ-UHFFFAOYSA-N	5.1	7400	Long et al. (2017)	Q	288
2,2',3,4',6,6'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-150) [446255-05-6] SQNOZVDXXSLSG-UHFFFAOYSA-N	1.7×10^1	7400	Long et al. (2017)	Q	288
2,2',3,5,5',6-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-151) [446255-06-7] NGOQQUYCSISZMY-UHFFFAOYSA-N	4.4	7400	Long et al. (2017)	Q	288
2,2',3,5,6,6'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-152) [446255-07-8] BYBJJARTBKUIJD-UHFFFAOYSA-N	9.4	7400	Long et al. (2017)	Q	288
2,2',4,4',5,5'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-153) [68631-49-2] RZXIRSKYBISPGF-UHFFFAOYSA-N	3.7	7200	Long et al. (2017)	M	288
	3.5	7800	Cetin and Odabasi (2005)	M	
	6.1		Kuramochi et al. (2014)	V	
	1.5×10^1		Tittlemier et al. (2002)	V	
	2.9		Wania and Dugani (2003)	R	
	3.9	7400	Long et al. (2017)	Q	288
	8.4×10^{-1}		Hilal et al. (2008)	Q	

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',4,4',5,6'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-154) [207122-15-4] VHNPZYQKWIWOD-UHFFFAOYSA-N	7.1 7.3 4.2 1.1×10^1 7.2×10^{-1}	6800 6800 7400	Long et al. (2017) Cetin and Odabasi (2005) Tittlemier et al. (2002) Long et al. (2017) Hilal et al. (2008)	M M V Q Q	288 288
2,2',4,4',6,6'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-155) [35854-94-5] HRSCBOSGEKXXSI-UHFFFAOYSA-N	2.5×10^1	7400	Long et al. (2017)	Q	288
2,3,3',4,4',5-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-156) [405237-85-6] JSDPCMJWYRDQEV-UHFFFAOYSA-N	1.5	7400	Long et al. (2017)	Q	288
2,3,3',4,4',5'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-157) [446255-08-9] JUOAMVUIJQJZSZ-UHFFFAOYSA-N	1.9	7400	Long et al. (2017)	Q	288
2,3,3',4,4',6-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-158) [446255-09-0] KRYHHTVQOOJNHQ-UHFFFAOYSA-N	2.7	7400	Long et al. (2017)	Q	288
2,3,3',4,5,5'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-159) [446255-10-3] IDYFFNCFRLRCOPZ-UHFFFAOYSA-N	3.0	7400	Long et al. (2017)	Q	288
2,3,3',4,5,6-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-160) [446255-11-4] OCVOYHGOXIIONK-UHFFFAOYSA-N	2.8	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3',4,5',6-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-161) [446255-12-5] WEYWRBPPKSRGU-UHFFFAOYSA-N	9.0	7400	Long et al. (2017)	Q	288
2,3,3',4',5,5'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-162) [446255-13-6] UKPNCLHNMJCGCJ-UHFFFAOYSA-N	2.7	7400	Long et al. (2017)	Q	288
2,3,3',4',5,6-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-163) [446255-14-7] NUEAHMLXQFHEJN-UHFFFAOYSA-N	2.3	7400	Long et al. (2017)	Q	288
2,3,3',4',5',6-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-164) [446255-15-8] UJVVYXIHTJOJBZ-UHFFFAOYSA-N	3.1	7400	Long et al. (2017)	Q	288
2,3,3',5,5',6-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-165) [446255-16-9] KXERERDGMTWBGZ-UHFFFAOYSA-N	7.9	7400	Long et al. (2017)	Q	288
2,3,4,4',5,6-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-166) [189084-58-0] KVYODBMKQYVNEK-UHFFFAOYSA-N	1.2	7400	Long et al. (2017)	Q	288
2,3',4,4',5,5'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-167) [446255-17-0] NMUPLZRHSXJCJQ-UHFFFAOYSA-N	3.1	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3',4,4',5',6-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-168) [53551-87-4] HWZAPXGFMVEGPW-UHFFFAOYSA-N	5.0	7400	Long et al. (2017)	Q	288
3,3',4,4',5,5'-hexabromodiphenyl ether $\text{C}_{12}\text{H}_4\text{Br}_6\text{O}$ (PBDE-169) [446255-18-1] JKFBMDHBJYKFKL-UHFFFAOYSA-N	1.2	7400	Long et al. (2017)	Q	288
2,2',3,3',4,4',5-heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-170) [327185-13-7] DLPNCMQTNWLTHD-UHFFFAOYSA-N	4.9	7400	Long et al. (2017)	Q	288
2,2',3,3',4,4',6-heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-171) [446255-19-2] FRMMMROUUPQUMZ-UHFFFAOYSA-N	1.2×10^1	7400	Long et al. (2017)	Q	288
2,2',3,3',4,5,5'-heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-172) [407606-59-1] DSRRSKFMOJQETR-UHFFFAOYSA-N	1.6×10^1	7400	Long et al. (2017)	Q	288
2,2',3,3',4,5,6-heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-173) [446255-20-5] NLBLNZDNOSGPW-UHFFFAOYSA-N	6.7	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,5,6'- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-174) [446255-21-6] VUUWOHUOYUGBEO-UHFFFAOYSA-N	1.2×10^1	7400	Long et al. (2017)	Q	288
2,2',3,3',4,5',6- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-175) [6255-22-7] YATZWTXATDYQCK-UHFFFAOYSA-N	1.7×10^1	7400	Long et al. (2017)	Q	288
2,2',3,3',4,6,6'- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-176) [407606-61-5] SWUALKCOTZOSMY-UHFFFAOYSA-N	2.5×10^1	7400	Long et al. (2017)	Q	288
2,2',3,3',4,5',6'- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-177) [446255-23-8] ZHUHLPIXIJBQBJ-UHFFFAOYSA-N	9.9	7400	Long et al. (2017)	Q	288
2,2',3,3',5,5',6- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-178) [446255-24-9] UWUVZUPEEORCRG-UHFFFAOYSA-N	1.3×10^1	7400	Long et al. (2017)	Q	288
2,2',3,3',5,6,6'- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-179) [446255-25-0] COVXWWWKOLMNRQE-UHFFFAOYSA-N	2.2×10^1	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4,4',5,5'- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-180) [446255-26-1] STMBXVOJNOJRPZ-UHFFFAOYSA-N	7.3	7400	Long et al. (2017)	Q	288
2,2',3,4,4',5,6- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-181) [189084-67-1] GVNRIAPLVGNZPL-UHFFFAOYSA-N	8.9	7400	Long et al. (2017)	Q	288
2,2',3,4,4',5,6'- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-182) [442690-45-1] ZYHDTADADSNMLV-UHFFFAOYSA-N	1.9×10^1	7400	Long et al. (2017)	Q	288
2,2',3,4,4',5',6- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-183) [207122-16-5] ILPSCQCLBHQEM-UHFFFAOYSA-N	1.4×10^2		Tittlemier et al. (2002)	V	
2,2',3,4,4',6,6'- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-184) [117948-63-7] JHDCZVAQPRXHEL-UHFFFAOYSA-N	1.3×10^1	7400	Long et al. (2017)	Q	288
2,2',3,4,4',6,6'- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-184) [117948-63-7] JHDCZVAQPRXHEL-UHFFFAOYSA-N	3.7×10^1	7400	Long et al. (2017)	Q	288
2,2',3,4,5,5',6- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-185) [405237-86-7] YRNMIFAQDSUFTR-UHFFFAOYSA-N	5.1	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4,5,6,6'- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-186) [446255-27-2] WUFQDCMRKKDNSF-UHFFFAOYSA-N	1.4×10^1	7400	Long et al. (2017)	Q	288
2,2',3,4',5,5',6- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-187) [446255-28-3] RFZPXOBFDARWHV-UHFFFAOYSA-N	9.4	7400	Long et al. (2017)	Q	288
2,2',3,4',5,6,6'- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-188) [116995-32-5] YGYDHFDPVGAMTL-UHFFFAOYSA-N	3.5×10^1	7400	Long et al. (2017)	Q	288
2,3,3',4,4',5,5'- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-189) [259087-35-9] CQVLRUESBMMJW-UHFFFAOYSA-N	4.4	7400	Long et al. (2017)	Q	288
2,3,3',4,4',5,6- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-190) [189084-68-2] OUEYHQIMJGHOQN-UHFFFAOYSA-N	4.0	7400	Long et al. (2017)	Q	288
2,3,3',4,4',5',6- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-191) [446255-30-7] BNBFKFHSIPERIM-UHFFFAOYSA-N	8.4	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3',4,5,5',6- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-192) [407578-53-4] ABLZOLAUBUSUHT-UHFFFAOYSA-N	1.3×10^1	7400	Long et al. (2017)	Q	288
2,3,3',4',5,5',6- heptabromodiphenyl ether $\text{C}_{12}\text{H}_3\text{Br}_7\text{O}$ (PBDE-193) [446255-34-1] AUFJSWANTKXCFZ-UHFFFAOYSA-N	7.3	7400	Long et al. (2017)	Q	288
2,2',3,3',4,4',5,5'- octabromodiphenyl ether $\text{C}_{12}\text{H}_2\text{Br}_8\text{O}$ (PBDE-194) [32536-52-0] ORYGKUIDIMIRNN-UHFFFAOYSA-N	1.3×10^1	7400	Long et al. (2017)	Q	288
2,2',3,3',4,4',5,6- octabromodiphenyl ether $\text{C}_{12}\text{H}_2\text{Br}_8\text{O}$ (PBDE-195) [446255-38-5] GPQLSLKPHQEEOP-UHFFFAOYSA-N	1.6×10^1	7400	Long et al. (2017)	Q	288
2,2',3,3',4,4',5,6'- octabromodiphenyl ether $\text{C}_{12}\text{H}_2\text{Br}_8\text{O}$ (PBDE-196) [446255-39-6] IEWFKOVTVJNWFF-UHFFFAOYSA-N	3.7×10^1	7400	Long et al. (2017)	Q	288
2,2',3,3',4,4',6,6'- octabromodiphenyl ether $\text{C}_{12}\text{H}_2\text{Br}_8\text{O}$ (PBDE-197) [117964-21-3] AAFUUKPTSPVXJH-UHFFFAOYSA-N	7.1×10^1	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,5,5',6- octabromodiphenyl ether C ₁₂ H ₂ Br ₈ O (PBDE-198) [446255-42-1] IBKRHVDFHQOSC-UHFFFAOYSA-N	1.8×10^1	7400	Long et al. (2017)	Q	288
2,2',3,3',4,5,5',6'- octabromodiphenyl ether C ₁₂ H ₂ Br ₈ O (PBDE-199) [446255-43-2] JNSLJYRXDGBNBE-UHFFFAOYSA-N	3.3×10^1	7400	Long et al. (2017)	Q	288
2,2',3,3',4,5,6,6'- octabromodiphenyl ether C ₁₂ H ₂ Br ₈ O (PBDE-200) [446255-46-5] JWMXGEPFVCRXQR-UHFFFAOYSA-N	3.7×10^1	7400	Long et al. (2017)	Q	288
2,2',3,3',4,5',6,6'- octabromodiphenyl ether C ₁₂ H ₂ Br ₈ O (PBDE-201) [446255-50-1] HQWFMMKREWXIGN-UHFFFAOYSA-N	6.8×10^1	7400	Long et al. (2017)	Q	288
2,2',3,3',5,5',6,6'- octabromodiphenyl ether C ₁₂ H ₂ Br ₈ O (PBDE-202) [67797-09-5] AHNZLQAZTWRRDW-UHFFFAOYSA-N	5.7×10^1	7400	Long et al. (2017)	Q	288
2,2',3,4,4',5,5',6- octabromodiphenyl ether C ₁₂ H ₂ Br ₈ O (PBDE-203) [337513-72-1] RTUZOQFRIWPS-UHFFFAOYSA-N	2.0×10^1	7400	Long et al. (2017)	Q	288

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4,4',5,6,6'- octabromodiphenyl ether $C_{12}H_2Br_8O$ (PBDE-204) [446255-54-5] YZABCBQJTHQTSX-UHFFFAOYSA-N	6.2×10^1	7400	Long et al. (2017)	Q	288
2,3,3',4,4',5,5',6- octabromodiphenyl ether $C_{12}H_2Br_8O$ (PBDE-205) [446255-56-7] CVMKCYDBEYHNBM-UHFFFAOYSA-N	1.8×10^1	7400	Long et al. (2017)	Q	288
2,2',3,3',4,4',5,5',6- nonabromodiphenyl ether $C_{12}HBr_9O$ (PBDE-206) [63387-28-0] CYRHBNRLQMLULE-UHFFFAOYSA-N	4.7×10^1	7400	Long et al. (2017)	Q	288
2,2',3,3',4,4',5,6,6'- nonabromodiphenyl ether $C_{12}HBr_9O$ (PBDE-207) [437701-79-6] IEEVDIAVLGLVOW-UHFFFAOYSA-N	1.2×10^2	7400	Long et al. (2017)	Q	288
2,2',3,3',4,5,5',6,6'- nonabromodiphenyl ether $C_{12}HBr_9O$ (PBDE-208) [437701-78-5] ASGZXYIDLFWXID-UHFFFAOYSA-N	1.1×10^2	7400	Long et al. (2017)	Q	288
decabromodiphenyl ether $C_{12}Br_{10}O$ (PBDE-209) [1163-19-5] WHHGLZMJPIXIBIX-UHFFFAOYSA-N	1.8×10^1	7600	Long et al. (2017)	M	288
	1.8×10^1	7900	Cetin and Odabasi (2005)	M	
	2.7×10^1	7400	Long et al. (2017)	Q	288
	8.2×10^2		HSDB (2015)	Q	100
	8.2×10^2		Zhang et al. (2010)	Q	288, 289
	4.1×10^2		Zhang et al. (2010)	Q	288, 290
	1.3×10^3		Zhang et al. (2010)	Q	288, 291
	6.7×10^2		Zhang et al. (2010)	Q	288, 292

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dibromoacetonitrile $\text{C}_2\text{HBr}_2\text{N}$ [3252-43-5] NDSBDLSWTGLNQA-UHFFFAOYSA-N	2.4×10^1		HSDB (2015)	Q	100
bromoacetonitrile $\text{C}_2\text{H}_2\text{BrN}$ [590-17-0] REXUYBKPWIPONM-UHFFFAOYSA-N	2.8		HSDB (2015)	Q	449
2-bromopyridine $\text{C}_5\text{H}_4\text{BrN}$ [109-04-6] IMRWILPUOVGIMU-UHFFFAOYSA-N	1.3 1.8×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
3-bromopyridine $\text{C}_5\text{H}_4\text{BrN}$ [626-55-1] NYPYPOZNGOXSU-UHFFFAOYSA-N	8.3×10^{-1}		Ebert et al. (2023)	?	317
1,2-dibromo-2,4-dicyanobutane $\text{C}_6\text{H}_6\text{Br}_2\text{N}_2$ [35691-65-7] DHVLDKHFGEIP-UHFFFAOYSA-N	1.2×10^3		HSDB (2015)	V	
4-bromobenzenamine $\text{C}_6\text{H}_6\text{BrN}$ [106-40-1] WDFQBORIUYODSI-UHFFFAOYSA-N	1.1×10^1		HSDB (2015)	Q	449
2,4,6-tribromobenzenamine $\text{C}_6\text{H}_4\text{Br}_3\text{N}$ [147-82-0] GVPODVKBTHCGFU-UHFFFAOYSA-N	8.2×10^1 2.6 6.0×10^{-1} 1.2×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
N,N'-dimethyl-3,3',4,4',5,5'- hexabromo-2,2'-bipyrrrole $\text{C}_{10}\text{H}_6\text{Br}_6\text{N}_2$ (DBP-Br6) [253798-63-9] BUKWTHPBLJVYVZ-UHFFFAOYSA-N	5.0×10^2 5.1×10^1		Tittlemier et al. (2004) Hilal et al. (2008)	V Q	
1,1'-ethylene 2,2'-dipyridylum dibromide $\text{C}_{12}\text{H}_{12}\text{N}_2\text{Br}$ (diquat dibromide) [85-00-7] JXEXEPZXXFNEHA-UHFFFAOYSA-M	7.0×10^7		HSDB (2015)	Q	100

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tralomethrin $\text{C}_{22}\text{H}_{19}\text{NO}_3\text{Br}_4$ [66841-25-6] YWSCPYYRJKUDB-KAKFPZCNSA-N	2.5×10^4 2.5×10^4 1.2×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
bromomethyl peroxyxynitrate $\text{CH}_2\text{BrO}_2\text{NO}_2$ JTAFUKGUWIYDNI-UHFFFAOYSA-N	3.5×10^{-1}		Krysztofiak et al. (2012)	Q	
dibromomethyl peroxyxynitrate $\text{CHBr}_2\text{O}_2\text{NO}_2$ CRBGJNSRTFAVGH-UHFFFAOYSA-N	3.0		Krysztofiak et al. (2012)	Q	
tribromomethyl peroxyxynitrate $\text{CBr}_3\text{O}_2\text{NO}_2$ BVMOLEXBJGZUAI-UHFFFAOYSA-N	4.0		Krysztofiak et al. (2012)	Q	
MCM:BRETPAN $\text{C}_2\text{H}_2\text{NO}_5\text{Br}$ OOF SXJVGALRPLK-UHFFFAOYSA-N	2.0×10^1 8.7×10^1 3.3×10^{-3}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
2,2-dibromo-2-cyanoacetamide $\text{C}_3\text{H}_2\text{Br}_2\text{N}_2\text{O}$ (2,2-dibromo-3-nitripropionamide) [10222-01-2] UUIVKBHZENILKB-UHFFFAOYSA-N	5.2×10^2 5.2×10^2 8.5×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
bronopol $\text{C}_3\text{H}_6\text{BrNO}_4$ [52-51-7] LVDKZNITIUWNER-UHFFFAOYSA-N	7.6×10^5		HSDB (2015)	V	
2,6-dibromo-4-nitroaniline $\text{C}_6\text{H}_4\text{Br}_2\text{N}_2\text{O}_2$ [827-94-1] YMZIFDLWYUSZCC-UHFFFAOYSA-N	8.2×10^3 1.7×10^2 1.9×10^3 5.7×10^3		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2-bromo-4,6-dinitroaniline $\text{C}_6\text{H}_4\text{BrN}_3\text{O}_4$ [1817-73-8] KWMDHCLJYMBNS-UHFFFAOYSA-N	3.9×10^4 2.7×10^2 1.8×10^3 5.7×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
3-bromonitrobenzene $\text{C}_6\text{H}_4\text{BrNO}_2$ (<i>m</i> -bromonitrobenzene) [585-79-5] FWIROFMBWVMWLB-UHFFFAOYSA-N	5.3 5.4 1.8		Duchowicz et al. (2020) Schüürmann (2000) Duchowicz et al. (2020)	V V Q	187

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-bromonitrobenzene $\text{C}_6\text{H}_4\text{BrNO}_2$ (<i>p</i> -bromonitrobenzene) [586-78-7] ZDFBKZUDCQQKAC-UHFFFAOYSA-N	2.2×10^{-1}		Li et al. (2014)	Q	242
3,5-dibromo-4-hydroxy- benzonitrile $\text{C}_7\text{H}_3\text{Br}_2\text{NO}$ (bromoxynil) [1689-84-5] UPMXNNIRAGDFEH-UHFFFAOYSA-N	7.4×10^2 1.0×10^6 2.2×10^3 1.1×10^6		Mackay et al. (2006d) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	V ? ? ?	242, 575, 166 242, 579, 166 242, 495, 166
2,6-dibromo-3-methyl-4- nitroanisole $\text{C}_8\text{H}_7\text{Br}_2\text{NO}_3$ [62265-99-0] RBAJFFLBHVZCDY-UHFFFAOYSA-N	4.5×10^1 3.5×10^1 4.7 9.7		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
bromacil $\text{C}_9\text{H}_{13}\text{BrN}_2\text{O}_2$ [314-40-9] CTSLUCNDVMMDHG-UHFFFAOYSA-N	7.6×10^4 7.8×10^4 5.3×10^2 5.2 2.1×10^1		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	12 569 570
N'-(4-bromophenyl)-N-methoxy- N-methylurea $\text{C}_9\text{H}_{11}\text{BrN}_2\text{O}$ (metobromuron) [3060-89-7] WLFDQEVORAMCIM-UHFFFAOYSA-N	3.2×10^3 3.2×10^3 3.2×10^1 8.5 8.8×10^3		HSDB (2015) Mackay et al. (2006d) Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011)	V V X Q ?	569 570 12, 166
bromuron $\text{C}_9\text{H}_{11}\text{BrN}_2\text{O}$ [3408-97-7] GSNZNZUNAJCHDO-UHFFFAOYSA-N	2.0×10^4		MacBean (2012a)	?	
bromoxynil butyrate $\text{C}_{11}\text{H}_9\text{Br}_2\text{NO}_2$ [3861-41-4] PGMZYNZXIYOOHJ-UHFFFAOYSA-N	5.6×10^1		Maniere et al. (2011)	?	12, 166

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tris(2,3-dibromopropyl)isocyanurate $\text{C}_{12}\text{H}_{15}\text{Br}_6\text{N}_3\text{O}_3$ [52434-90-9] NZUPFZNVGSLQC-UHFFFAOYSA-N	8.2×10^{12}		Zhang et al. (2010)	Q	288, 289
	6.5×10^7		Zhang et al. (2010)	Q	288, 290
	2.7×10^8		Zhang et al. (2010)	Q	288, 291
	1.2×10^{10}		Zhang et al. (2010)	Q	288, 292
bromofenoxim $\text{C}_{13}\text{H}_7\text{Br}_2\text{N}_3\text{O}_6$ [13181-17-4] VTQWKUZUPOTXEH-UHFFFAOYSA-N	3.1×10^{-3}		Barcelo and Hennion (1997)	X	569
	8.1×10^{-4}		Goodarzi et al. (2010)	Q	570, 571
	1.3×10^5		MacBean (2012a)	?	12
tribromsalan $\text{C}_{13}\text{H}_8\text{Br}_3\text{NO}_2$ [87-10-5] KVSJGMLNBPAGKH-UHFFFAOYSA-N	9.7×10^5		Zhang et al. (2010)	Q	288, 289
	1.2×10^6		Zhang et al. (2010)	Q	288, 290
	1.6×10^6		Zhang et al. (2010)	Q	288, 291
	1.2×10^6		Zhang et al. (2010)	Q	288, 292
bromoxynil heptanoate $\text{C}_{14}\text{H}_{15}\text{Br}_2\text{NO}_2$ [56634-95-8] BHZWBQPHPLFZSV-UHFFFAOYSA-N	5.3		Maniere et al. (2011)	?	12, 166
1-amino-2,4-dibromo-9,10-anthracenedione $\text{C}_{14}\text{H}_7\text{Br}_2\text{NO}_2$ (1-amino-2,4-dibromoanthraquinone) [81-49-2] ZINRVIQBCHAZMM-UHFFFAOYSA-N	5.5×10^7		HSDB (2015)	Q	100
2,6-dibromo-4-cyanophenyl octanoate $\text{C}_{15}\text{H}_{17}\text{Br}_2\text{NO}_2$ [1689-99-2] DQKWXTIYGWPGOO-UHFFFAOYSA-N	3.1×10^{-1}		Duchowicz et al. (2020)	V	187
	3.1×10^{-1}		HSDB (2015)	V	
	4.1×10^1		Duchowicz et al. (2020)	Q	
	<5.3		Maniere et al. (2011)	?	12, 166
bromobutide $\text{C}_{15}\text{H}_{22}\text{BrNO}$ [74712-19-9] WZDDLZXYIVMU-UHFFFAOYSA-N	1.9×10^2		Ebert et al. (2023)	?	319
(2E)-N,N'-bis(2,4,6-tribromophenyl)-2-butenediamide $\text{C}_{16}\text{H}_8\text{Br}_6\text{N}_2\text{O}_2$ [92484-07-6] IJUNKLAVMFKPCX-OWOJBTEDSA-N	9.0×10^9		Zhang et al. (2010)	Q	288, 289
	5.1×10^8		Zhang et al. (2010)	Q	288, 290
	6.2×10^9		Zhang et al. (2010)	Q	288, 291
	7.2×10^{13}		Zhang et al. (2010)	Q	288, 292

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
SAYTEX BT 93 $\text{C}_{18}\text{H}_4\text{Br}_8\text{N}_2\text{O}_4$ [32588-76-4] DYIZJUDNMOIZQO-UHFFFAOYSA-N	2.7×10^{15} 2.7×10^{15} 2.3×10^{11} 3.5×10^9 2.3×10^{13}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
SAYTEX BN 451 $\text{C}_{20}\text{H}_{20}\text{Br}_4\text{N}_2\text{O}_4$ [52907-07-0] WOFYQUJNULCFLN-UHFFFAOYSA-N	2.5×10^{15} 1.4×10^{11} 5.7×10^{11} 1.6×10^{15}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
deltamethrin $\text{C}_{22}\text{H}_{19}\text{Br}_2\text{NO}_3$ [52918-63-5] OWZREIFADZCYQD-NSHGMRRFSA-N	2.0 2.0 4.0×10^{-1} 2.0 1.0×10^3 3.2×10^1		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Siebers and Mattusch (1996) Duchowicz et al. (2020) Maniere et al. (2011)	V V V V Q ?	187 12 166
2,2'-(methylenedi-4,1-phenylene)bis(4,5,6,7-tetrabromo-1H-isoindole-1,3(2H)-dione $\text{C}_{29}\text{H}_{10}\text{N}_2\text{O}_4\text{Br}_8$ [32588-74-2] RHFKNBDKARGKL-UHFFFAOYSA-N	5.3×10^{14} 1.7×10^{14} 9.5×10^9 4.7×10^{15}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

A7.3 Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br)

Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
bromotrifluoromethane CF ₃ Br [75-63-8] RJCQBQGAPKAMLL-UHFFFAOYSA-N	2.0 × 10 ⁻⁵ 2.0 × 10 ⁻⁵ 2.0 × 10 ⁻⁵ 6.4 × 10 ⁻⁶ 5.3 × 10 ⁻⁵ 4.7 × 10 ⁻⁵ 1.8 × 10 ⁻⁵ 3.2 × 10 ⁻⁵ 1.1 × 10 ⁻⁵ 2.7 × 10 ⁻⁵ 5.6 × 10 ⁻⁶ 2.0 × 10 ⁻⁵ 2.1 × 10 ⁻⁵		Hine and Mookerjee (1975) Yaws (2003) Irmann (1965) Keshavarz et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Nirmalakhandan and Speece (1988) Irmann (1965) Duchowicz et al. (2020) Yaws (1999)	V X C Q Q Q Q Q Q Q Q ? ?	238 300 247 68 186, 21 21
dibromodifluoromethane CBr ₂ F ₂ [75-61-6] AZSZCFSOHXEJQE-UHFFFAOYSA-N	3.3 × 10 ⁻⁴		HSDB (2015)	Q	100
1-bromo-1,2,2,2-tetrafluoroethane C ₂ HBrF ₄ (teflurane) [124-72-1] RZXZIZDRFQFCTA-UHFFFAOYSA-N	1.7 × 10 ⁻⁴ 1.2 × 10 ⁻⁴ 1.4 × 10 ⁻⁴ 1.5 × 10 ⁻³ 2.1 × 10 ⁻⁴ 6.7 × 10 ⁻⁵ 1.7 × 10 ⁻⁴ 1.3 × 10 ⁻⁴ 1.7 × 10 ⁻⁴	2700	Allott et al. (1973) Edelist et al. (1964) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020) Abraham and Weathersby (1994) Abraham et al. (1990)	L M Q Q Q Q ? ? ?	14 68 186, 21 21
1,2-dibromotetrafluoroethane C ₂ Br ₂ F ₄ [124-73-2] KVBKAPANDHPRDG-UHFFFAOYSA-N	2.7 × 10 ⁻⁷ 2.7 × 10 ⁻⁷ 2.4 × 10 ⁻⁴		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
1-bromo-2-fluorobenzene C ₆ H ₄ BrF [1072-85-1] IPWBF GUBXWMIPR-UHFFFAOYSA-N	4.1 × 10 ⁻³		Ebert et al. (2023)	?	317
1-bromo-3-fluorobenzene C ₆ H ₄ BrF [1073-06-9] QDFKKJYEIFBEFC-UHFFFAOYSA-N	2.9 × 10 ⁻³		Ebert et al. (2023)	?	317

Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
1-bromo-4-fluorobenzene $\text{C}_6\text{H}_4\text{BrF}$ [460-00-4] AITNMTXHTIIBB-UHFFFAOYSA-N	5.3×10^{-3}	4400	Hiatt (2013)	M	
bromopentafluorobenzene C_6BrF_5 [344-04-7] XEKTVXADUPBFOA-UHFFFAOYSA-N	2.1×10^{-3} 1.6×10^{-4} 1.4×10^{-4} 6.7×10^{-4}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
halfenprox $\text{C}_{24}\text{H}_{23}\text{BrF}_2\text{O}_3$ [111872-58-3] WIFXJBMOTMKRMM-UHFFFAOYSA-N	1.9×10^1		Ebert et al. (2023)	?	319
bromethalin $\text{C}_{14}\text{H}_7\text{Br}_3\text{F}_3\text{N}_3\text{O}_4$ [63333-35-7] USMZPYXTVKAYST-UHFFFAOYSA-N	2.5×10^3		HSDB (2015)	Q	100
brofluthrinat $\text{C}_{26}\text{H}_{22}\text{BrF}_2\text{NO}_4$ [160791-64-0] BUHNCQOJZAOMJ-UHFFFAOYSA-N	1.6×10^1		Ebert et al. (2023)	?	317
bromochloromethane CH_2BrCl [74-97-5] JPOXNPPZZKNXOV-UHFFFAOYSA-N	6.6×10^{-3} 7.8×10^{-3} 6.8×10^{-3} 5.8×10^{-3} 5.8×10^{-3} 6.2×10^{-3} 1.1×10^{-2} 2.5×10^{-2} 5.7×10^{-3} 5.3×10^{-3} 6.2×10^{-3}	4700 4600	Hiatt (2013) Kondoh and Nakajima (1997) HSDB (2015) Mackay et al. (2006b) Mackay et al. (1993) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Katritzky et al. (1998) Yaws (1999) Fogg and Sangster (2003)	M M V V V X Q Q Q Q ? W	238 247 230 21 793
bromodichloromethane CHCl_2Br [75-27-4] FMWLWUPQPKEARP-UHFFFAOYSA-N	4.0×10^{-3} 3.9×10^{-3} 4.0×10^{-3} 3.9×10^{-3} 4.0×10^{-3} 4.0×10^{-3} 4.8×10^{-3} 4.0×10^{-3} 4.0×10^{-3} 5.2×10^{-3}	5200 4900 5200 4900 5200 5200 3700 5200 5200 4700	Burkholder et al. (2019) Burkholder et al. (2019) Burkholder et al. (2015) Burkholder et al. (2015) Sander et al. (2011) Sander et al. (2006) Fogg and Sangster (2003) Staudinger and Roberts (2001) Staudinger and Roberts (1996) Hiatt (2013)	L L L L L L L L L M	71 71

Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.8×10^{-3}		Ruiz-Bevia and Fernandez-Torres (2010)	M	
	2.9×10^{-3}		Zhang et al. (2002)	M	14
	5.4×10^{-3}	4400	Kondoh and Nakajima (1997)	M	
	3.9×10^{-3}	4800	Moore et al. (1995)	M	794, 71
	4.8×10^{-3}	4200	Tse et al. (1992)	M	
	4.7×10^{-3}	5200	Nicholson et al. (1984)	M	
	3.5×10^{-3}	5200	Ervin et al. (1980)	M	
	4.7×10^{-3}		Warner et al. (1980)	M	
	4.1×10^{-3}		Mackay et al. (2006b)	V	
	4.1×10^{-3}		Mackay et al. (1993)	V	
	4.6×10^{-3}	1200	Goldstein (1982)	X	299
	7.7×10^{-3}		Hilal et al. (2008)	C	
	4.3×10^{-3}		Nicholson et al. (1984)	C	
	4.7×10^{-3}		Nicholson et al. (1984)	C	12
	4.7×10^{-3}		Shen (1982)	C	
	8.8×10^{-3}		Keshavarz et al. (2022)	Q	
	9.4×10^{-3}		Duchowicz et al. (2020)	Q	185
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	272, 244
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	3.9×10^{-3}		Hilal et al. (2008)	Q	
	2.4×10^{-3}		Modarresi et al. (2007)	Q	68
		4100	Kühne et al. (2005)	Q	
	4.8×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	3.2×10^{-3}		Katritzky et al. (1998)	Q	
	4.7×10^{-3}		Duchowicz et al. (2020)	?	186, 21
	6.2×10^{-3}		Mackay et al. (2006b)	?	
		3800	Kühne et al. (2005)	?	
	6.2×10^{-3}		Mackay et al. (1993)	?	
bromotrichloromethane CBrCl ₃ [75-62-7] XNNQFQFUQLJSQT-UHFFFAOYSA-N	2.7×10^{-2}		HSDB (2015)	Q	100
dibromochloromethane CHClBr ₂ [124-48-1] GATVIKZLVQHOMN-UHFFFAOYSA-N	8.6×10^{-3}	5500	Burkholder et al. (2019)	L	
	7.2×10^{-3}	5200	Burkholder et al. (2019)	L	71
	8.6×10^{-3}	5500	Burkholder et al. (2015)	L	
	7.2×10^{-3}	5200	Burkholder et al. (2015)	L	71
	8.6×10^{-3}	5500	Sander et al. (2011)	L	
	8.6×10^{-3}	5500	Sander et al. (2006)	L	
	8.7×10^{-3}	4400	Fogg and Sangster (2003)	L	
	8.6×10^{-3}	5500	Staudinger and Roberts (2001)	L	
	8.5×10^{-3}	5500	Staudinger and Roberts (1996)	L	
	1.1×10^{-2}	5300	Hiatt (2013)	M	

Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1×10^{-2}		Ruiz-Bevia and Fernandez-Torres (2010)	M	
	4.6×10^{-3}		Zhang et al. (2002)	M	14
	9.8×10^{-3}	5100	Kondoh and Nakajima (1997)	M	
	7.4×10^{-3}	4600	Moore et al. (1995)	M	795, 71
	9.3×10^{-3}	4600	Tse et al. (1992)	M	
	8.5×10^{-3}	6400	Ashworth et al. (1988)	M	279
	8.6×10^{-3}	5200	Nicholson et al. (1984)	M	
	8.5×10^{-3}	5000	Ervin et al. (1980)	M	
	1.3×10^{-2}		Warner et al. (1980)	M	
	1.2×10^{-2}		Mackay et al. (2006b)	V	
	1.2×10^{-2}		Goldstein (1982)	X	448
	1.2×10^{-2}	2500	Goldstein (1982)	X	299
	1.2×10^{-2}		Nicholson et al. (1984)	C	
	1.1×10^{-2}		Nicholson et al. (1984)	C	12
	1.3×10^{-2}		Shen (1982)	C	
	5.4×10^{-3}		Hilal et al. (2008)	Q	
	2.2×10^{-3}		Modarresi et al. (2007)	Q	68
		4800	Kühne et al. (2005)	Q	
	1.3×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	1.6×10^{-2}		Katritzky et al. (1998)	Q	
		4600	Kühne et al. (2005)	?	
	1.2×10^{-2}		Mackay et al. (1993)	?	
1-chloro-2-bromoethane $\text{C}_2\text{H}_4\text{BrCl}$ [107-04-0] IBYHHJPAARCAIE-UHFFFAOYSA-N	1.1×10^{-2}		Hine and Mookerjee (1975)	V	
	1.1×10^{-2}		Sieg et al. (2008)	C	
	1.2×10^{-2}		Keshavarz et al. (2022)	Q	
	3.6×10^{-3}		Duchowicz et al. (2020)	Q	
	1.8×10^{-2}		Hilal et al. (2008)	Q	
	5.5×10^{-3}		Modarresi et al. (2007)	Q	68
	1.2×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	1.7×10^{-2}		Katritzky et al. (1998)	Q	
	3.7×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.1×10^{-2}		Duchowicz et al. (2020)	?	186, 21
1,2-dibromo-1,1-dichloroethane $\text{C}_2\text{H}_2\text{Br}_2\text{Cl}_2$ [75-81-0] FIYBYNHDEOSJPL-UHFFFAOYSA-N	6.2×10^{-2}		HSDB (2015)	Q	100
1-bromo-3-chloropropane $\text{C}_3\text{H}_6\text{BrCl}$ [109-70-6] MFESCIUQSIBMSM-UHFFFAOYSA-N	3.9×10^{-2}		HSDB (2015)	Q	100

Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note	
1,2-dibromo-3-chloropropane $\text{C}_3\text{H}_5\text{Br}_2\text{Cl}$ [96-12-8] WBEJYOJBDISQU-UHFFFAOYSA-N	9.7×10^{-2}	7100	Hiatt (2013)	M		
	5.0×10^{-1}	10000	Kondoh and Nakajima (1997)	M		
	6.6×10^{-2}		HSDB (2015)	V		
	6.7×10^{-2}		Meylan and Howard (1991)	V		
	9.0×10^{-2}		Hilal et al. (2008)	Q		
	1.1×10^{-2}		Modarresi et al. (2007)	Q	68	
	6.4×10^{-2}		Yaffe et al. (2003)	Q	249, 250	
	2.1×10^{-1}		Katritzky et al. (1998)	Q		
	1.6×10^{-2}		Meylan and Howard (1991)	Q		
1,2,3,4,5-pentabromo-6-chlorocyclohexane $\text{C}_6\text{H}_6\text{Br}_5\text{Cl}$ [87-84-3] UZOSVZSBPTTWIG-UHFFFAOYSA-N	4.0×10^{-2}		MacBean (2012a)	?		
	1.0×10^1		Zhang et al. (2010)	Q	288, 289	
	1.1×10^2		Zhang et al. (2010)	Q	288, 290	
	1.8×10^3		Zhang et al. (2010)	Q	288, 291	
	1.2×10^1		Zhang et al. (2010)	Q	288, 292	
1,2,3,4-tetrabromo-5,6-dichlorocyclohexane $\text{C}_6\text{H}_6\text{Br}_4\text{Cl}_2$ GABFTOZBVQIDBB-UHFFFAOYSA-N	3.4		Zhang et al. (2010)	Q	288, 289	
	6.2×10^1		Zhang et al. (2010)	Q	288, 290	
	9.9×10^2		Zhang et al. (2010)	Q	288, 291	
1,2,3,4-tetrabromo-5,6-dichlorocyclohexane $\text{C}_6\text{H}_6\text{Br}_4\text{Cl}_2$ GABFTOZBVQIDBB-UHFFFAOYSA-N	6.2		Zhang et al. (2010)	Q	288, 292	
	1,2,3-tribromo-4,5,6-trichlorocyclohexane $\text{C}_6\text{H}_6\text{Br}_3\text{Cl}_3$ ZDEQCIGFZLZXBZ-UHFFFAOYSA-N	1.1		Zhang et al. (2010)	Q	288, 289
		3.6×10^1		Zhang et al. (2010)	Q	288, 290
4.1×10^2			Zhang et al. (2010)	Q	288, 291	
1,2,3-tribromo-4,5,6-trichlorocyclohexane $\text{C}_6\text{H}_6\text{Br}_3\text{Cl}_3$ ZDEQCIGFZLZXBZ-UHFFFAOYSA-N	3.0		Zhang et al. (2010)	Q	288, 292	
	1-bromo-4-chlorobenzene $\text{C}_6\text{H}_4\text{BrCl}$ [106-39-8] NHDODQWIKUYWMW-UHFFFAOYSA-N	6.8×10^{-3}		Duchowicz et al. (2020)	V	187
		6.8×10^{-3}		Mackay and Shiu (1981)	V	
		7.7×10^{-3}		Duchowicz et al. (2020)	Q	
		7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	272, 244
		1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
		6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	246
		9.0×10^{-3}		Hilal et al. (2008)	Q	
6.8×10^{-3}			Modarresi et al. (2007)	Q	68	
1,2,4-tribromo-3,5,6-trichlorobenzene $\text{C}_6\text{Br}_3\text{Cl}_3$ [13075-01-9] XAIKFWNTFEXDC-UHFFFAOYSA-N	6.9×10^{-3}		Yaffe et al. (2003)	Q	249, 250	
	3.3×10^{-2}		Katritzky et al. (1998)	Q		
1,2,4-tribromo-3,5,6-trichlorobenzene $\text{C}_6\text{Br}_3\text{Cl}_3$ [13075-01-9] XAIKFWNTFEXDC-UHFFFAOYSA-N	4.1×10^{-2}		HSDB (2015)	Q	100	

Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-(bromomethyl)-2-chlorobenzene $\text{C}_7\text{H}_6\text{BrCl}$ [611-17-6] PURSZYWBQIANP-UHFFFAOYSA-N	1.9×10^{-2}		HSDB (2015)	Q	449
2-bromo-4-chloro-1-methoxybenzene $\text{C}_7\text{H}_6\text{BrClO}$ (2-bromo-4-chloroanisole) [60633-25-2] YJEMGEBDXDPBSP-UHFFFAOYSA-N	1.8×10^{-2}		Pfeifer et al. (2001)	M	733
2-bromo-6-chloro-1-methoxybenzene $\text{C}_7\text{H}_6\text{BrClO}$ (2-bromo-6-chloroanisole) [174913-10-1] NWOYYECMNBWCNK-UHFFFAOYSA-N	1.4×10^{-2}		Pfeifer et al. (2001)	M	733
4-bromo-2-chloro-1-methoxybenzene $\text{C}_7\text{H}_6\text{BrClO}$ (4-bromo-2-chloroanisole) [50638-47-6] FPIQNBOUYZLESW-UHFFFAOYSA-N	1.3×10^{-2}		Pfeifer et al. (2001)	M	733
2-bromo-3,5-dichloro-1-methoxybenzene $\text{C}_7\text{H}_5\text{BrCl}_2\text{O}$ (2-bromo-3,5-dichloroanisole) [73931-43-8] LCHJNNXHVDVAT-UHFFFAOYSA-N	1.1×10^{-2}		Pfeifer et al. (2001)	M	733
2-bromo-4,6-dichloro-1-methoxybenzene $\text{C}_7\text{H}_5\text{BrCl}_2\text{O}$ (2-bromo-4,6-dichloroanisole) [60633-26-3] OEYKUHBCPJRXGZ-UHFFFAOYSA-N	8.2×10^{-3}	3100	Diaz et al. (2005)	M	
	1.2×10^{-2}		Pfeifer et al. (2001)	M	733
4-bromo-2,3-dichloro-1-methoxybenzene $\text{C}_7\text{H}_5\text{BrCl}_2\text{O}$ (4-bromo-2,3-dichloroanisole) [109803-52-3] BTRCDLZQISXWHZ-UHFFFAOYSA-N	1.1×10^{-2}		Pfeifer et al. (2001)	M	733

Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-bromo-2,6-dichloro-1-methoxybenzene $\text{C}_7\text{H}_5\text{BrCl}_2\text{O}$ (4-bromo-2,6-dichloroanisole) [19240-91-6] OAYSFAKCFYRCRU-UHFFFAOYSA-N	1.2×10^{-2}	4900	Diaz et al. (2005)	M	
4-bromo-2,6-dichloro-1-methoxybenzene $\text{C}_7\text{H}_5\text{BrCl}_2\text{O}$ (4-bromo-2,6-dichloroanisole) [19240-91-6] OAYSFAKCFYRCRU-UHFFFAOYSA-N	1.2×10^{-2}		Pfeifer et al. (2001)	M	733
4-bromo-3,5-dichloro-1-methoxybenzene $\text{C}_7\text{H}_5\text{BrCl}_2\text{O}$ (4-bromo-3,5-dichloroanisole) [174913-20-3] SVEZPKVUIXAEQX-UHFFFAOYSA-N	1.1×10^{-2}		Pfeifer et al. (2001)	M	733
3-bromo-2,4-dichloro-1-methoxybenzene $\text{C}_7\text{H}_5\text{BrCl}_2\text{O}$ (3-bromo-2,4-dichloroanisole) [174913-16-7] OXINPOQPENRUHL-UHFFFAOYSA-N	1.2×10^{-2}		Ebert et al. (2023)	?	791
3-bromo-2,6-dichloro-1-methoxybenzene $\text{C}_7\text{H}_5\text{BrCl}_2\text{O}$ (3-bromo-2,6-dichloroanisole) [174913-18-9] ANLVZYGYBXMIX-UHFFFAOYSA-N	1.1×10^{-2}	2700	Diaz et al. (2005)	M	792
5-bromo-2,4-dichloro-1-methoxybenzene $\text{C}_7\text{H}_5\text{BrCl}_2\text{O}$ (5-bromo-2,4-dichloroanisole) [174913-22-5] SJIIFORJBWPNPM-UHFFFAOYSA-N	1.1×10^{-2}		Pfeifer et al. (2001)	M	733
6-bromo-2,3-dichloro-1-methoxybenzene $\text{C}_7\text{H}_5\text{BrCl}_2\text{O}$ (6-bromo-2,3-dichloroanisole) [174913-23-6] PNLDDSLZYVNPQW-UHFFFAOYSA-N	1.1×10^{-2}		Pfeifer et al. (2001)	M	733
6-bromo-2,5-dichloro-1-methoxybenzene $\text{C}_7\text{H}_5\text{BrCl}_2\text{O}$ (6-bromo-2,5-dichloroanisole) [174913-14-5] BVSOVPUWHJWGEP-UHFFFAOYSA-N	7.7×10^{-3}	3000	Diaz et al. (2005)	M	

Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-bromo-3,4,5-trichloro-1-methoxybenzene $\text{C}_7\text{H}_4\text{BrCl}_3\text{O}$ (2-bromo-3,4,5-trichloroanisole) JIVCPRHFVZQL-UHFFFAOYSA-N	9.8×10^{-3}		Pfeifer et al. (2001)	M	733
3-bromo-2,4,6-trichloro-1-methoxybenzene $\text{C}_7\text{H}_4\text{BrCl}_3\text{O}$ (3-bromo-2,4,6-trichloroanisole) [174913-28-1] OIHRLYOSUNYTC-UHFFFAOYSA-N	1.0×10^{-2}		Pfeifer et al. (2001)	M	733
3-bromo-2,5,6-trichloro-1-methoxybenzene $\text{C}_7\text{H}_4\text{BrCl}_3\text{O}$ (3-bromo-2,5,6-trichloroanisole) [78647-93-5] ZUXVGCIQOSXRJN-UHFFFAOYSA-N	1.0×10^{-2}		Pfeifer et al. (2001)	M	733
4-bromo-2,3,6-trichloro-1-methoxybenzene $\text{C}_7\text{H}_4\text{BrCl}_3\text{O}$ (4-bromo-2,3,6-trichloroanisole) [78647-87-7] VZRSUQWPXPWCS-UHFFFAOYSA-N	1.0×10^{-2}		Pfeifer et al. (2001)	M	733
6-bromo-2,3,4-trichloro-1-methoxybenzene $\text{C}_7\text{H}_4\text{BrCl}_3\text{O}$ (6-bromo-2,3,4-trichloroanisole) GVDCDCZPXMGMNTR-UHFFFAOYSA-N	1.1×10^{-2}		Pfeifer et al. (2001)	M	733
4-bromo-2,3,5,6-tetrachloro-1-methoxybenzene $\text{C}_7\text{H}_3\text{BrCl}_4\text{O}$ (4-bromo-2,3,5,6-tetrachloroanisole) [174913-33-8] YSVAURKXNCNUNS-UHFFFAOYSA-N	9.2×10^{-3}		Pfeifer et al. (2001)	M	733
2,4-dibromo-3-chloro-1-methoxybenzene $\text{C}_7\text{H}_5\text{Br}_2\text{ClO}$ (2,4-dibromo-3-chloroanisole) XYJRJAVLYYNRCE-UHFFFAOYSA-N	1.0×10^{-2}		Ebert et al. (2023)	?	791

Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4-dibromo-5-chloro-1-methoxybenzene $\text{C}_7\text{H}_5\text{Br}_2\text{ClO}$ (2,4-dibromo-5-chloroanisole) [174913-38-3] OTZRCEAVEJYZQS-UHFFFAOYSA-N	1.0×10^{-2}		Ebert et al. (2023)	?	791
2,6-dibromo-3-chloro-1-methoxybenzene $\text{C}_7\text{H}_5\text{Br}_2\text{ClO}$ (2,6-dibromo-3-chloroanisole) AHBGIHFKTBTQJP-UHFFFAOYSA-N	7.4×10^{-3}	770	Diaz et al. (2005)	M	792
2,6-dibromo-4-chloro-1-methoxybenzene $\text{C}_7\text{H}_5\text{Br}_2\text{ClO}$ (2,6-dibromo-4-chloroanisole) [174913-44-1] WHRDPXDGAMJNGH-UHFFFAOYSA-N	2.0×10^{-2} 1.1×10^{-2}	6700	Diaz et al. (2005) Pfeifer et al. (2001)	M M	733
2,4-dibromo-3,5-dichloro-1-methoxybenzene $\text{C}_7\text{H}_4\text{Br}_2\text{Cl}_2\text{O}$ (2,4-dibromo-3,5-dichloroanisole) [174913-52-1] YZMXEWDTXSTFIJ-UHFFFAOYSA-N	9.1×10^{-3}		Pfeifer et al. (2001)	M	733
2,4-dibromo-5,6-dichloro-1-methoxybenzene $\text{C}_7\text{H}_4\text{Br}_2\text{Cl}_2\text{O}$ (2,4-dibromo-5,6-dichloroanisole) MUUDTVDSRYEMBU-UHFFFAOYSA-N	9.8×10^{-3}		Pfeifer et al. (2001)	M	733
2,3-dibromo-5,6-dichloro-1-methoxybenzene $\text{C}_7\text{H}_4\text{Br}_2\text{Cl}_2\text{O}$ (2,3-dibromo-5,6-dichloroanisole) WDRCOFFEZVLCLX-UHFFFAOYSA-N	9.1×10^{-3}		Pfeifer et al. (2001)	M	733
2,6-dibromo-3,4,5-trichloro-1-methoxybenzene $\text{C}_7\text{H}_3\text{Br}_2\text{Cl}_3\text{O}$ (2,6-dibromo-3,4,5-trichloroanisole) RFUGYJHXLQAXOX-UHFFFAOYSA-N	8.6×10^{-3}		Pfeifer et al. (2001)	M	733

Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4,6-tribromo-3-chloro-1-methoxybenzene $\text{C}_7\text{H}_4\text{Br}_3\text{ClO}$ (2,4,6-tribromo-3-chloroanisole) [174913-78-1] FWKUBDOTUFVPBX-UHFFFAOYSA-N	9.1×10^{-3}		Pfeifer et al. (2001)	M	733
2,3-dibromo-7,8-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_4\text{Br}_2\text{Cl}_2\text{O}_2$ [50585-40-5] SBSJXPIUKNBZND-UHFFFAOYSA-N	3.2		Ebert et al. (2023)	?	319
2',4',5',7'-tetrabromo-3,4,5,6-tetrachlorofluorescein $\text{C}_{20}\text{H}_4\text{Br}_4\text{Cl}_4\text{O}_5$ [13473-26-2] ZYIBVBKZZZDFOY-UHFFFAOYSA-N	1.5×10^{13}		Zhang et al. (2010)	Q	288, 289
	1.9×10^8		Zhang et al. (2010)	Q	288, 290
	8.0×10^{10}		Zhang et al. (2010)	Q	288, 291
	2.2×10^8		Zhang et al. (2010)	Q	288, 292
bromochloroacetonitrile C_2HBrClN [83463-62-1] BMWPPNAUMLRKML-UHFFFAOYSA-N	8.2		HSDB (2015)	Q	100
N,N'-dimethyl-3,3',4-tribromo-4,5,5'-trichloro-2,2'-bipyrrole $\text{C}_{10}\text{H}_6\text{Br}_3\text{Cl}_3\text{N}_2$ (DBP-Br3Cl3a) [400766-93-0] JSQYFPHYSOZLPT-UHFFFAOYSA-N	7.1		Tittlemier et al. (2004)	V	
	9.5		Hilal et al. (2008)	Q	
N,N'-dimethyl-3,4,4'-tribromo-3',5,5'-trichloro-2,2'-bipyrrole $\text{C}_{10}\text{H}_6\text{Br}_3\text{Cl}_3\text{N}_2$ (DBP-Br3Cl3b) [666856-68-4] GUWAXPTVCYBOMV-UHFFFAOYSA-N	3.3×10^1		Tittlemier et al. (2004)	V	
	9.5		Hilal et al. (2008)	Q	
N,N'-dimethyl-3,3',4,4'-tetrabromo-5,5'-dichloro-2,2'-bipyrrole $\text{C}_{10}\text{H}_6\text{Br}_4\text{Cl}_2\text{N}_2$ (DBP-Br4Cl2) [253798-64-0] FQGSQKFVAAJWFY-UHFFFAOYSA-N	2.8×10^1		Tittlemier et al. (2004)	V	
	1.8×10^1		Hilal et al. (2008)	Q	

Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N,N'-dimethyl-3,3',4,4',5- pentabromo-5'-chloro-2,2'- bipyrrole C ₁₀ H ₆ Br ₅ ClN ₂ (DBP-Br5Cl) [400767-00-2] LIYSVIAQQQEQT-UHFFFAOYSA-N	1.5×10^2		Tittlemier et al. (2004)	V	
1-bromo-3-chloro-5,5- dimethylhydantoin C ₅ H ₆ BrClN ₂ O ₂ [16079-88-2] PIEXCQIOSMOEQU-UHFFFAOYSA-N	3.0×10^1		Hilal et al. (2008)	Q	
1-bromo-3-chloro-5,5- dimethylhydantoin C ₅ H ₆ BrClN ₂ O ₂ [16079-88-2] PIEXCQIOSMOEQU-UHFFFAOYSA-N	1.2×10^1		HSDB (2015)	Q	100
3-(4-bromo-3-chlorophenyl)-1- methoxy-1-methylurea C ₉ H ₁₀ BrClN ₂ O ₂ (chlorbromuron) [13360-45-7] NLYNUTMZTCLNOO-UHFFFAOYSA-N	2.2×10^3		HSDB (2015)	V	
	3.2×10^3		Mackay et al. (2006d)	V	
	2.5×10^3		MacBean (2012a)	?	
N-(4-bromo-2,6-dichloro-3- methylphenyl)acetamide C ₉ H ₈ BrCl ₂ NO [68399-95-1] MRPNWLPYJSSISQ-UHFFFAOYSA-N	6.7×10^3		Zhang et al. (2010)	Q	288, 289
	6.2×10^2		Zhang et al. (2010)	Q	288, 290
	2.1×10^4		Zhang et al. (2010)	Q	288, 291
	6.5×10^3		Zhang et al. (2010)	Q	288, 292
halacrinat C ₁₂ H ₇ NO ₂ BrCl [34462-96-9] YDNLKBDXQCHOTH-UHFFFAOYSA-N	2.4×10^2		MacBean (2012a)	?	
bromuconazole C ₁₃ H ₁₂ BrCl ₂ N ₃ O [116255-48-2] HJJVPARKXDDIQD-UHFFFAOYSA-N	3.3×10^4		Duchowicz et al. (2020)	V	187
	1.2×10^5		HSDB (2015)	V	
	1.4×10^2		Duchowicz et al. (2020)	Q	
	1.1×10^5		Maniere et al. (2011)	?	12, 166
(±)-(2 <i>R</i> *,4 <i>S</i> *)-bromuconazole C ₁₃ H ₁₂ BrCl ₂ N ₃ O [114544-80-8]	6.4×10^4		Ebert et al. (2023)	?	367
(±)-(2 <i>R</i> *,4 <i>R</i> *)-bromuconazole C ₁₃ H ₁₂ BrCl ₂ N ₃ O [114544-81-9]	9.5×10^4		Ebert et al. (2023)	?	367

Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
5,7-dibromo-2-(5-bromo-7-chloro-1,3-dihydro-3-oxo-2H-indol-2-ylidene)-1,2-dihydro-3H-indol-3-one	4.2×10^9		Zhang et al. (2010)	Q	288, 289
$\text{C}_{16}\text{H}_6\text{Br}_3\text{ClN}_2\text{O}_2$ [85702-64-3] UOWUGDPSFZLTMZ-BUHFFOSPRSA-N	3.3×10^{15} 2.4×10^5 8.8×10^9		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	288, 290 288, 291 288, 292
chlordantraniliprole	7.0×10^{15}		HSDB (2015)	Q	100
$\text{C}_{18}\text{H}_{14}\text{BrCl}_2\text{N}_5\text{O}_2$ [500008-45-7] IZCBNTYXTMZSDP-UHFFFAOYSA-N	3.1×10^8		Maniere et al. (2011)	?	242, 166
cyantraniliprole	5.9×10^{12}		Maniere et al. (2011)	?	242, 166
$\text{C}_{19}\text{H}_{14}\text{BrClN}_6\text{O}_2$ [736994-63-1] DVBUIBGRQBEDP-UHFFFAOYSA-N					
tribromofluoromethane	1.5×10^{-3}		Fogg and Sangster (2003)	V	
CBr_3F [353-54-8] IHZAEIHJPNTART-UHFFFAOYSA-N					
bromochlorodifluoromethane	6.1×10^{-5}		Yaws (2003)	X	238, 154
CBrClF_2 [353-59-3] MEXUFEQDCXZEON-UHFFFAOYSA-N	1.0×10^{-4} 2.6×10^{-4} 6.4×10^{-5} 8.6×10^{-5} 6.0×10^{-5}		HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999)	Q Q Q Q ?	100 247 21, 154
1-bromo-1-chloro-2,2,2-trifluoroethane	5.6×10^{-4}	4700	Fogg and Sangster (2003)	L	
$\text{C}_2\text{HBrClF}_3$ (halothane) [151-67-7] BCQZXOMGPXTTIC-UHFFFAOYSA-N	3.1×10^{-4} 5.3×10^{-4} 2.8×10^{-4} 3.3×10^{-4} 5.3×10^{-4} 3.2×10^{-4} 3.4×10^{-4} 4.9×10^{-4} 4.2×10^{-4} 2.7×10^{-3} 4.8×10^{-4} 8.8×10^{-4} 1.7×10^{-4} 1.0×10^{-3} 4.9×10^{-4} 4.9×10^{-4}	4200 5000 4100	Steward et al. (1973) Allott et al. (1973) Guitart et al. (1989) Lerman et al. (1983) Smith et al. (1981b) Stoelting and Longshore (1972) Saidman et al. (1966) Yaws (2003) Keshavarz et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) English and Carroll (2001) Duchowicz et al. (2020) HSDB (2015)	L L M M M M M X Q Q Q Q Q Q Q Q ?	14 14 14 14 14 14 14 238, 80 185 247 68 231, 232 186, 21 421

Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
		5000	Kühne et al. (2005)	?	
	4.7×10^{-4}		Yaws (1999)	?	21, 80
	3.4×10^{-4}		Abraham and Weathersby (1994)	?	21
	4.8×10^{-4}		Abraham et al. (1990)	?	
tralopyril $\text{C}_{12}\text{H}_5\text{BrClF}_3\text{N}_2$ [122454-29-9] XNFIRYXKTXAHAC-UHFFFAOYSA-N	4.5×10^3		Ebert et al. (2023)	?	317
chlorfenapyr $\text{C}_{15}\text{H}_{11}\text{BrClF}_3\text{N}_2\text{O}$ [122453-73-0] CWFOCCVIPCEQCK-UHFFFAOYSA-N	1.7×10^3		HSDB (2015)	Q	100
fluazolate $\text{C}_{15}\text{H}_{12}\text{N}_2\text{O}_2\text{BrClF}_4$ [174514-07-9] FKLQIONHGFSFYJY-UHFFFAOYSA-N	1.3×10^1		MacBean (2012a)	?	

A8 Organic species with iodine (I)

A8.1 Iodocarbons (C, H, O, Cl, I)

Table A8.1: Iodocarbons (C, H, O, Cl, I)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
iodomethane	2.0×10^{-3}	3200	Burkholder et al. (2019)	L	1
CH ₃ I	1.5×10^{-3}	3900	Burkholder et al. (2019)	L	71
(methyl iodide)	2.0×10^{-3}	3600	Burkholder et al. (2015)	L	
[74-88-4]	1.5×10^{-3}	3900	Burkholder et al. (2015)	L	71
INQOMBQAUSQDDSD-UHFFFAOYSA-N	2.0×10^{-3}	3100	Brockbank (2013)	L	1
	2.0×10^{-3}	3600	Sander et al. (2011)	L	
	2.0×10^{-3}	3600	Sander et al. (2006)	L	
	2.0×10^{-3}	3600	Staudinger and Roberts (2001)	L	
	1.8×10^{-3}	3200	Hiatt (2013)	M	
	1.4×10^{-3}	3900	Ooki and Yokouchi (2011)	M	71
	1.9×10^{-3}		Gan and Yates (1996)	M	295
	1.4×10^{-3}	4100	Moore et al. (1995)	M	796, 71
	2.0×10^{-3}	3700	Elliott and Rowland (1993)	M	
	1.9×10^{-3}	3800	Hunter-Smith et al. (1983)	M	660
	2.0×10^{-3}	3100	Balls (1980)	M	
	1.8×10^{-3}	3000	Swain and Thornton (1962)	M	
	1.9×10^{-3}	3000	Glew and Moelwyn-Hughes (1953)	M	797
	1.9×10^{-3}	3700	Rex (1906)	M	
	1.8×10^{-3}		Mackay et al. (2006b)	V	
	1.9×10^{-3}	3600	Fogg and Sangster (2003)	V	
	1.8×10^{-3}		Mackay et al. (1993)	V	
	1.8×10^{-3}		Abraham (1984)	V	
	1.8×10^{-3}		Hine and Mookerjee (1975)	V	
	3.5×10^{-3}		Yaws (2003)	X	238
	1.7×10^{-3}		Liss and Slater (1974)	C	
	8.8×10^{-3}		Keshavarz et al. (2022)	Q	
	3.7×10^{-3}		Duchowicz et al. (2020)	Q	
	7.4×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	272, 244
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	3.4×10^{-3}		Gharagheizi et al. (2010)	Q	247
	2.1×10^{-3}		Hilal et al. (2008)	Q	
	6.8×10^{-4}		Modarresi et al. (2007)	Q	68
		3800	Kühne et al. (2005)	Q	
	1.9×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	2.1×10^{-4}		English and Carroll (2001)	Q	231, 232
	8.8×10^{-4}		Katritzky et al. (1998)	Q	
	1.8×10^{-3}		Suzuki et al. (1992)	Q	233
	3.6×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.9×10^{-3}		Duchowicz et al. (2020)	?	186, 21
	1.8×10^{-3}		Mackay et al. (2006b)	?	

Table A8.1: Iodocarbons (C, H, O, Cl, I) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
		3700	Kühne et al. (2005)	?	
	3.5×10^{-3}		Yaws (1999)	?	21
	1.8×10^{-3}		Mackay et al. (1993)	?	
	3.5×10^{-3}		Yaws and Yang (1992)	?	21
diiodomethane CH_2I_2 [75-11-6] NZZFYRREKKOMAT-UHFFFAOYSA-N	2.3×10^{-2}	5300	Burkholder et al. (2019)	L	71
	2.3×10^{-2}	5300	Burkholder et al. (2015)	L	71
	2.4×10^{-2}	4700	Moore et al. (1995)	M	798, 71
	3.2×10^{-2}		Mackay et al. (1993)	V	
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	272, 244
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	246
	7.3×10^{-2}		Hilal et al. (2008)	Q	
	1.3×10^{-3}		Modarresi et al. (2007)	Q	68
	2.7×10^{-2}		Yao et al. (2002)	Q	230
	3.1×10^{-2}		Katritzky et al. (1998)	Q	
	2.9×10^{-2}		Yaws (1999)	?	21
	2.8×10^{-2}		Yaws and Yang (1992)	?	21
	2.8×10^{-2}		Abraham et al. (1990)	?	
triiodomethane CHI_3 (iodoform) [75-47-8] OKJPEAGHQZHRQV-UHFFFAOYSA-N	6.2×10^{-3}		Fogg and Sangster (2003)	V	
	4.3×10^{-3}		Yaws (2003)	X	238
	3.2×10^{-6}		HSDB (2015)	Q	100
	4.3×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.3×10^{-3}		Hilal et al. (2008)	Q	
	3.4×10^{-3}		Yaws and Yang (1992)	?	21
iodoethane $\text{C}_2\text{H}_5\text{I}$ [75-03-6] HVTICUPFWKNHNG-UHFFFAOYSA-N	1.4×10^{-3}	4800	Burkholder et al. (2019)	L	71
	1.4×10^{-3}	4800	Burkholder et al. (2015)	L	71
	1.5×10^{-3}	3600	Brockbank (2013)	L	1
	1.5×10^{-3}	4200	Fogg and Sangster (2003)	L	799
	1.4×10^{-3}	4800	Ooki and Yokouchi (2011)	M	71
	1.4×10^{-3}		Li et al. (1993)	M	
	1.5×10^{-3}	4000	Rex (1906)	M	
	1.4×10^{-3}		Duchowicz et al. (2020)	V	187
	1.4×10^{-3}		Mackay et al. (2006b)	V	
	1.9×10^{-3}		Mackay et al. (1993)	V	
	1.4×10^{-3}		Abraham (1984)	V	
	1.4×10^{-3}		Hine and Mookerjee (1975)	V	
	1.7×10^{-3}		Yaws (2003)	X	238, 12
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	1.7×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.9×10^{-3}		Hilal et al. (2008)	Q	
		4200	Kühne et al. (2005)	Q	

Table A8.1: Iodocarbons (C, H, O, Cl, I) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1×10^{-3}		Yaffe et al. (2003)	Q	249, 273
	4.2×10^{-3}		Yao et al. (2002)	Q	230, 268
	2.2×10^{-4}		English and Carroll (2001)	Q	231, 232
	1.2×10^{-3}		Katritzky et al. (1998)	Q	
	1.3×10^{-3}		Suzuki et al. (1992)	Q	233
	1.2×10^{-3}	4100	Nirmalakhandan and Speece (1988)	Q	
			Kühne et al. (2005)	?	
	1.4×10^{-3}		Yaws (1999)	?	21, 12
	1.1×10^{-3}		Abraham and Weathersby (1994)	?	21
	1.8×10^{-3}		Yaws and Yang (1992)	?	21, 12
	1.4×10^{-3}		Abraham et al. (1990)	?	
(E)-1,2-diiodoethene $\text{C}_2\text{H}_2\text{I}_2$ [590-27-2] CVOGMKGEVNGRSK-OWOJBTEDSA-N	3.5×10^{-3}		Duchowicz et al. (2020)	V	187
	5.9×10^{-3}		Duchowicz et al. (2020)	Q	
1-iodopropane $\text{C}_3\text{H}_7\text{I}$ (propyl iodide) [107-08-4] PVWOIHVRPOBWPI-UHFFFAOYSA-N	1.1×10^{-3}	4500	Brockbank (2013)	L	
	1.1×10^{-3}		Li et al. (1993)	M	
	1.0×10^{-3}	4600	Rex (1906)	M	
	1.1×10^{-3}		Duchowicz et al. (2020)	V	187
	1.1×10^{-3}		Mackay et al. (2006b)	V	
	1.1×10^{-3}		Mackay et al. (1993)	V	
	9.9×10^{-4}		Abraham (1984)	V	
	1.1×10^{-3}		Hine and Mookerjee (1975)	V	
	1.2×10^{-3}		Yaws (2003)	X	238, 80
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	2.9×10^{-3}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	272, 244
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	1.0×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.6×10^{-3}		Hilal et al. (2008)	Q	
	2.4×10^{-4}	4500	Modarresi et al. (2007)	Q	68
			Kühne et al. (2005)	Q	
	1.1×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	1.9×10^{-3}		Yao et al. (2002)	Q	230
	1.1×10^{-3}		English and Carroll (2001)	Q	231, 232
	1.1×10^{-3}		Katritzky et al. (1998)	Q	
	9.9×10^{-4}		Suzuki et al. (1992)	Q	233
	9.5×10^{-4}	4500	Nirmalakhandan and Speece (1988)	Q	
			Kühne et al. (2005)	?	
	1.1×10^{-3}		Yaws (1999)	?	21, 80
	1.2×10^{-3}		Yaws and Yang (1992)	?	21, 80
	9.9×10^{-4}		Abraham et al. (1990)	?	

Table A8.1: Iodocarbons (C, H, O, Cl, I) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-iodopropane $\text{C}_3\text{H}_7\text{I}$ (isopropyl iodide) [75-30-9] FMKOJHQHASLBPH-UHFFFAOYSA-N	8.5×10^{-4}	4700	Brockbank (2013)	L	
	8.5×10^{-4}	4500	Rex (1906)	M	
	1.4×10^{-3}		Duchowicz et al. (2020)	V	187
	8.8×10^{-4}		Hine and Mookerjee (1975)	V	
	1.1×10^{-3}		Yaws (2003)	X	238, 12
	5.7×10^{-4}		Duchowicz et al. (2020)	Q	
	6.8×10^{-3}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	1.1×10^{-3}		Gharagheizi et al. (2010)	Q	247
	7.9×10^{-4}		Hilal et al. (2008)	Q	
	1.7×10^{-4}		Modarresi et al. (2007)	Q	68
		4500	Kühne et al. (2005)	Q	
	1.5×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	1.8×10^{-3}		Yao et al. (2002)	Q	230
	7.9×10^{-4}		English and Carroll (2001)	Q	231, 232
	9.7×10^{-4}		Katritzky et al. (1998)	Q	
	8.6×10^{-4}		Suzuki et al. (1992)	Q	233
	5.4×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
		4700	Kühne et al. (2005)	?	
	8.7×10^{-4}		Yaws (1999)	?	21, 12
	1.1×10^{-3}		Yaws and Yang (1992)	?	21, 12
1-iodobutane $\text{C}_4\text{H}_9\text{I}$ [542-69-8] KMGBZBJJOKUPIA-UHFFFAOYSA-N	6.9×10^{-4}		Brockbank (2013)	L	
	5.9×10^{-4}		Duchowicz et al. (2020)	V	187
	5.4×10^{-4}		Mackay et al. (2006b)	V	
	5.4×10^{-4}		Mackay et al. (1993)	V	
	6.1×10^{-4}		Abraham (1984)	V	
	6.2×10^{-4}		Hine and Mookerjee (1975)	V	
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	243, 244
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	246
	1.2×10^{-3}		Hilal et al. (2008)	Q	
	1.8×10^{-4}		Modarresi et al. (2007)	Q	68
	6.7×10^{-4}		Yaffe et al. (2003)	Q	249, 250
	7.9×10^{-4}		English and Carroll (2001)	Q	231, 232
	1.1×10^{-3}		Katritzky et al. (1998)	Q	
	7.5×10^{-4}		Suzuki et al. (1992)	Q	233
	7.5×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	6.1×10^{-4}		Abraham et al. (1990)	?	

Table A8.1: Iodocarbons (C, H, O, Cl, I) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-iodobutane $\text{C}_4\text{H}_9\text{I}$ [513-48-4] IQRUSQUYPCHEKN-UHFFFAOYSA-N	5.0×10^{-4} 5.7×10^{-4} 6.2×10^{-4} 4.9×10^{-4} 7.8×10^{-4} 7.0×10^{-4}		Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008)	V Q Q Q Q Q	187 243, 244 245 246
1-iodopentane $\text{C}_5\text{H}_{11}\text{I}$ [628-17-1] BLXSFCWMBESKV-UHFFFAOYSA-N	5.9×10^{-4} 1.2×10^{-3} 4.9×10^{-4} 4.9×10^{-4} 6.2×10^{-4} 9.9×10^{-4} 1.4×10^{-4} 5.8×10^{-4} 5.7×10^{-4} 5.1×10^{-4} 5.1×10^{-4}		Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhanda et al. (1997) Duchowicz et al. (2020) Abraham et al. (1990)	Q Q Q Q Q Q Q Q Q ? ?	185 243, 244 245 246 68 231, 232 186, 21
1-iodohexane $\text{C}_6\text{H}_{13}\text{I}$ [638-45-9] ANOOTOPTCJRUPK-UHFFFAOYSA-N	3.4×10^{-4} 8.0×10^{-4} 1.2×10^{-3} 8.2×10^{-4} 1.2×10^{-4} 4.2×10^{-4} 4.5×10^{-4} 3.5×10^{-4} 3.5×10^{-4}		Brockbank (2013) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhanda et al. (1997) Duchowicz et al. (2020) Abraham et al. (1990)	L Q Q Q Q Q Q ? ?	68 231, 261 186, 21
1-iodoheptane $\text{C}_7\text{H}_{15}\text{I}$ [4282-40-0] LMHCYRULPLGEEZ-UHFFFAOYSA-N	2.6×10^{-4} 1.1×10^{-3} 1.2×10^{-3} 3.1×10^{-4} 3.1×10^{-4} 3.1×10^{-4} 6.7×10^{-4} 9.7×10^{-5} 3.1×10^{-4} 3.5×10^{-4} 2.5×10^{-4} 2.5×10^{-4}		Abraham (1984) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhanda et al. (1997) Duchowicz et al. (2020) Abraham et al. (1990)	V Q Q Q Q Q Q Q Q Q ? ?	185 243, 244 245 246 68 231, 232 186, 21
iodocyclohexane $\text{C}_6\text{H}_{11}\text{I}$ [626-62-0] FUCOMWZKWIEKRK-UHFFFAOYSA-N	3.9×10^{-3}		Hilal et al. (2008)	Q	

Table A8.1: Iodocarbons (C, H, O, Cl, I) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-iodo-1-propene $\text{C}_3\text{H}_5\text{I}$ [556-56-9] HFEHLDPGIKPNKL-UHFFFAOYSA-N	3.8×10^{-3}		Hilal et al. (2008)	Q	
1-iodocyclohexene $\text{C}_6\text{H}_9\text{I}$ [17497-53-9] CAROGICRCNKEOD-UHFFFAOYSA-N	4.1×10^{-3}		Hilal et al. (2008)	Q	
iodobenzene $\text{C}_6\text{H}_5\text{I}$ [591-50-4] SNHMUERNLJLMHN-UHFFFAOYSA-N	7.7×10^{-3}		Mackay and Shiu (1981)	L	
	7.6×10^{-3}		Li and Carr (1993)	M	
	1.2×10^{-2}		Duchowicz et al. (2020)	V	187
	1.2×10^{-2}		HSDB (2015)	V	
	7.9×10^{-3}		Schüürmann (2000)	V	
	1.3×10^{-2}		Mackay et al. (1993)	V	
	6.9×10^{-3}		Yaws (2003)	X	238
	8.6×10^{-3}		Duchowicz et al. (2020)	Q	
	7.7×10^{-3}		Li et al. (2014)	Q	242
	8.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	243, 244
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	6.9×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-2}		Hilal et al. (2008)	Q	
	6.9×10^{-3}		Modarresi et al. (2007)	Q	68
	7.7×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	8.3×10^{-3}		Yao et al. (2002)	Q	230
	2.3×10^{-3}		English and Carroll (2001)	Q	231, 232
6.4×10^{-3}		Katritzky et al. (1998)	Q		
3.8×10^{-3}		Nirmalakhandan et al. (1997)	Q		
7.0×10^{-3}		Yaws (1999)	?	21	
7.4×10^{-3}		Yaws and Yang (1992)	?	21	
7.7×10^{-3}		Abraham et al. (1990)	?		
		Brockbank (2013)	W	800	
iodoacetic acid $\text{C}_2\text{H}_3\text{IO}_2$ [64-69-7] JDNTWHVOXJZDSN-UHFFFAOYSA-N	2.4×10^2		HSDB (2015)	Q	100
2-iodophenol $\text{C}_6\text{H}_5\text{IO}$ [533-58-4] KQDJTBPASNJQFQ-UHFFFAOYSA-N	1.4×10^1		Abraham et al. (1994a)	R	
	6.9		Hilal et al. (2008)	Q	
	1.4×10^1		Yaffe et al. (2003)	Q	249, 250
	1.5×10^1		English and Carroll (2001)	Q	231, 232
	1.6×10^2		Nirmalakhandan et al. (1997)	Q	

Table A8.1: Iodocarbons (C, H, O, Cl, I) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-iodophenol $\text{C}_6\text{H}_5\text{IO}$ [626-02-8] FXTKWBZFNQHA AO-UHFFFAOYSA-N	7.0×10^1		Hilal et al. (2008)	Q	
4-iodophenol $\text{C}_6\text{H}_5\text{IO}$ [540-38-5] VSM DINRNYEDRN-UHFFFAOYSA-N	4.6×10^1		Hilal et al. (2008)	Q	
erythrosine $\text{C}_{20}\text{H}_8\text{I}_4\text{O}_5$ [16423-68-0] OALHHIHQOFIMEF-UHFFFAOYSA-N	3.9×10^{13} 2.3×10^8 8.6×10^{10} 5.1×10^9		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
4-hydroxy-3,5-diiido-benzonitrile $\text{C}_7\text{H}_3\text{I}_2\text{NO}$ (ioxynil) [1689-83-4] NRXQIUSYP AHGNM-UHFFFAOYSA-N	1.3×10^2 1.8×10^4		Mackay et al. (2006d) HSDB (2015)	V Q	100
3-iodo-2-propynyl butylcarbamate $\text{C}_8\text{H}_{12}\text{INO}_2$ [55406-53-6] WYVVKGNFXHOCQV-UHFFFAOYSA-N	8.2×10^1		HSDB (2015)	V	
diatrizoic acid $\text{C}_{11}\text{H}_9\text{I}_3\text{N}_2\text{O}_4$ [117-96-4] YVPYQUNUQOZFHG-UHFFFAOYSA-N	3.5×10^{12} 5.4×10^8 1.2×10^{17} 3.3×10^{16}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
iothalamic acid $\text{C}_{11}\text{H}_9\text{I}_3\text{N}_2\text{O}_4$ [2276-90-6] UXIGWFXRQKWHHA-UHFFFAOYSA-N	4.4×10^{12} 4.8×10^9 4.2×10^{16} 1.9×10^{16}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
benodanil $\text{C}_{13}\text{H}_{10}\text{INO}$ [15310-01-7] LJZMWRYMKECFF-UHFFFAOYSA-N	6.2×10^5 $> 2.3 \times 10^{10}$		Mackay et al. (2006d) MacBean (2012a)	V ?	
proquinazid $\text{C}_{14}\text{H}_{17}\text{IN}_2\text{O}_2$ [189278-12-4] FLVBXVXXXMLMOX-UHFFFAOYSA-N	3.3×10^1		Maniere et al. (2011)	?	166
iopamidol $\text{C}_{17}\text{H}_{22}\text{I}_3\text{N}_3\text{O}_8$ [60166-93-0] XQZXYNRDCRIARQ-LURJTMIESA-N	9.0×10^{19}		HSDB (2015)	Q	100

Table A8.1: Iodocarbons (C, H, O, Cl, I) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
ioxaglic acid $\text{C}_{24}\text{H}_{21}\text{I}_6\text{N}_5\text{O}_8$ [59017-64-0] TYYBFXNZMFNZJT-UHFFFAOYSA-N	2.7×10^{35} 1.4×10^{27} 2.0×10^{29} 7.2×10^{38}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
perfluoroheptyl iodide $\text{C}_6\text{F}_{13}\text{I}$ [355-43-1] BULLJMKUVKYZDJ-UHFFFAOYSA-N	4.6×10^{-4}	8200	Abusallout et al. (2022)	M	
1,1,1,2,2,3,3,3-heptafluoro-5-iodopentane $\text{C}_5\text{H}_4\text{F}_7\text{I}$ [68188-12-5] TZNRNKRZXHADL-UHFFFAOYSA-N	4.6×10^{-6} 1.2×10^{-4} 3.8×10^{-4} 5.0×10^{-6}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1-fluoro-4-iodobenzene $\text{C}_6\text{H}_4\text{FI}$ [352-34-1] KGNQDBQYEBMPFZ-UHFFFAOYSA-N	4.5×10^{-3}		Ebert et al. (2023)	?	317
5-diethylamiloride $\text{C}_6\text{H}_4\text{F}_9\text{I}$ [2043-55-2] CXHFIVFPDGGZIS-UHFFFAOYSA-N	8.8×10^{-7} 5.6×10^{-5} 1.9×10^{-4} 1.0×10^{-6}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoro-8-iodooctane $\text{C}_8\text{H}_4\text{F}_{13}\text{I}$ [2043-57-4] NVVZEKTVIXIUKW-UHFFFAOYSA-N	1.3×10^{-3} 3.2×10^{-8} 3.4×10^{-6} 5.4×10^{-5} 4.3×10^{-8}		Abusallout et al. (2022) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	M Q Q Q Q	 288, 289 288, 290 288, 291 288, 292
1H,2H-perfluoro-1-iodooct-1-ene $\text{C}_8\text{H}_2\text{F}_{13}\text{I}$ [150223-14-6] WDWNMIBWWPZJNK-OWOJBTEDSA-N	8.4×10^{-4}		Abusallout et al. (2022)	M	
1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluoro-10-iododecane $\text{C}_{10}\text{H}_4\text{F}_{17}\text{I}$ [2043-53-0] XVKJSLBVVRCOIT-UHFFFAOYSA-N	1.2×10^{-9} 7.7×10^{-8} 2.0×10^{-5} 2.3×10^{-9}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A8.1: Iodocarbons (C, H, O, Cl, I) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
chloriodomethane CH ₂ CI [593-71-5] PJGJQVRXEUVAFU-UHFFFAOYSA-N	8.4×10^{-3}	5100	Burkholder et al. (2019)	L	71
	8.4×10^{-3}	5100	Burkholder et al. (2015)	L	71
	8.3×10^{-3}	6200	Ooki and Yokouchi (2011)	M	71
	9.1×10^{-3}	4100	Moore et al. (1995)	M	801, 71
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	272, 244
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	246
	2.0×10^{-2}		Hilal et al. (2008)	Q	
	5.0×10^{-4}		Modarresi et al. (2007)	Q	68
1-chloro-4-iodobenzene C ₆ H ₄ CI [637-87-6] GWQSENYKCGJTRI-UHFFFAOYSA-N	6.9×10^{-3}		Ebert et al. (2023)	?	317
bromiodomethane CH ₂ BrI [557-68-6] TUDWMIUPYRKEFN-UHFFFAOYSA-N	2.0×10^{-2}		Karagodina-Doyennel et al. (2021)	E	802
1-bromo-4-iodobenzene C ₆ H ₄ BrI [589-87-7] UCCUXODGPMARHL-UHFFFAOYSA-N	1.5×10^{-2}		Ebert et al. (2023)	?	317

A9 Organic species with sulfur (S)

A9.1 Sulfur (C, H, O, N, Cl, S)

Table A9.1: Sulfur (C, H, O, N, Cl, S)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methanethiol CH ₃ SH (methyl mercaptan) [74-93-1] LSDPWZHWYPCBBB-UHFFFAOYSA-N	3.8×10^{-3}	3400	Burkholder et al. (2019)	L	
	3.8×10^{-3}	3400	Burkholder et al. (2015)	L	
	3.8×10^{-3}	3400	Sander et al. (2011)	L	
	3.8×10^{-3}	3400	Sander et al. (2006)	L	
	2.8×10^{-3}	2900	Plyasunova et al. (2004)	L	
	2.8×10^{-3}	3100	Staudinger and Roberts (2001)	L	
	2.0×10^{-3}	2800	De Bruyn et al. (1995b)	M	
	2.3×10^{-3}	2700	Tsuji et al. (1990)	M	63
	3.9×10^{-3}	3400	Przyjazny et al. (1983)	M	
	3.3×10^{-3}		Hine and Weimar (1965)	M	
	3.2×10^{-3}		Duchowicz et al. (2020)	V	187
	3.2×10^{-3}		HSDB (2015)	V	
	3.3×10^{-3}		Hine and Mookerjee (1975)	V	
	2.4×10^{-3}		Yaws (2003)	X	238
	2.6×10^{-3}	1600	Goldstein (1982)	X	299
	1.4×10^{-1}		Duchowicz et al. (2020)	Q	
	2.3×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.0×10^{-3}		Gharagheizi et al. (2010)	Q	247
	3.5×10^{-3}		Hilal et al. (2008)	Q	
		3300	Kühne et al. (2005)	Q	
	4.1×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	1.0×10^{-2}		Yao et al. (2002)	Q	230
	2.1×10^{-3}		Katritzky et al. (1998)	Q	
	2.9×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	7.0×10^{-3}		Russell et al. (1992)	Q	280
	4.0×10^{-3}		Suzuki et al. (1992)	Q	233
		3400	Kühne et al. (2005)	?	
	2.4×10^{-3}		Yaws et al. (2003)	?	21
	5.1×10^{-3}		Yaws (1999)	?	21, 81
	4.0×10^{-3}		Abraham et al. (1990)	?	
ethanethiol C ₂ H ₅ SH (ethyl mercaptan) [75-08-1] DNJIEGIFACGWOD-UHFFFAOYSA-N	2.8×10^{-3}	3700	Burkholder et al. (2019)	L	
	2.8×10^{-3}	3700	Burkholder et al. (2015)	L	
	2.8×10^{-3}	3700	Sander et al. (2011)	L	
	2.8×10^{-3}	3700	Sander et al. (2006)	L	
	2.3×10^{-3}	3500	Plyasunova et al. (2004)	L	
	2.4×10^{-3}	2800	Jou et al. (2021)	M	
	2.8×10^{-3}	3700	Przyjazny et al. (1983)	M	
	2.2×10^{-3}		Vitenberg et al. (1975)	M	
	3.4×10^{-3}		Mackay et al. (2006d)	V	
	3.4×10^{-3}		Mackay et al. (1995)	V	
	3.4×10^{-3}		Hwang et al. (1992)	V	

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.6×10^{-3}		Hine and Mookerjee (1975)	V	
	3.4×10^{-3}		Yaws (2003)	X	238
	1.8×10^{-3}		Hayer et al. (2022)	Q	20
	1.8×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.9×10^{-3}		Gharagheizi et al. (2010)	Q	247
	3.9×10^{-3}		Hilal et al. (2008)	Q	
	5.6×10^{-3}		Modarresi et al. (2007)	Q	68
		3600	Kühne et al. (2005)	Q	
	2.2×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	5.8×10^{-3}		Yao et al. (2002)	Q	230
	3.6×10^{-3}		English and Carroll (2001)	Q	231, 232
	2.9×10^{-3}		Katritzky et al. (1998)	Q	
	1.9×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	1.0×10^{-2}		Russell et al. (1992)	Q	280
	2.9×10^{-3}		Suzuki et al. (1992)	Q	233
		3700	Kühne et al. (2005)	?	
	3.4×10^{-3}		Yaws et al. (2003)	?	21
	3.4×10^{-3}		Yaws (1999)	?	21
	3.4×10^{-3}		Yaws and Yang (1992)	?	21
	2.8×10^{-3}		Abraham et al. (1990)	?	
1,2-ethanedithiol $\text{C}_2\text{H}_6\text{S}_2$ [540-63-6] VYMPLPIFKRHAAC-UHFFFAOYSA-N	8.2×10^{-2}		HSDB (2015)	Q	100
thiirane $\text{C}_2\text{H}_4\text{S}$ (ethylene sulfide) [420-12-2] VOUARRWDCVURC-UHFFFAOYSA-N	2.8×10^{-2}		HSDB (2015)	Q	100
1-propanethiol $\text{C}_3\text{H}_7\text{SH}$ (propyl mercaptan) [107-03-9] SUVIGLJNEAMWEG-UHFFFAOYSA-N	1.7×10^{-3}	3600	Plyasunova et al. (2004)	L	
	1.8×10^{-3}	4100	Haimi et al. (2006)	M	803
	1.7×10^{-3}	3100	Coquelet and Richon (2005)	M	
	2.4×10^{-3}	3900	Przyjazny et al. (1983)	M	
	9.0×10^{-4}		Mazza (1980)	M	
	2.4×10^{-3}		Yaws et al. (2003)	V	804
	2.4×10^{-3}		Yaws (2003)	X	238
	1.6×10^{-2}		Keshavarz et al. (2022)	Q	
	4.7×10^{-2}		Duchowicz et al. (2020)	Q	300
	8.2×10^{-4}		Gharagheizi et al. (2012)	Q	
	2.3×10^{-3}		Gharagheizi et al. (2010)	Q	247
	3.4×10^{-3}		Hilal et al. (2008)	Q	
		4000	Kühne et al. (2005)	Q	
	3.9×10^{-3}		Yao et al. (2002)	Q	230, 268
	2.9×10^{-3}		English and Carroll (2001)	Q	231, 261
	1.5×10^{-3}		Nirmalakhandan et al. (1997)	Q	

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.4×10^{-3}	3800	Duchowicz et al. (2020)	?	186, 21
	2.2×10^{-3}		Kühne et al. (2005)	?	
	2.4×10^{-3}		Yaws (1999)	?	21
	2.4×10^{-3}		Abraham et al. (1990)	?	
2-propanethiol $\text{C}_3\text{H}_8\text{S}$ (isopropyl mercaptan) [75-33-2] KJRCEJOSASVSRA-UHFFFAOYSA-N	1.3×10^{-3}	3700	Brockbank (2013)	L	
	1.6×10^{-3}	4300	Zin et al. (2016)	M	805
	1.3×10^{-3}	3800	Haimi et al. (2006)	M	806
	2.2×10^{-3}		Yaws et al. (2003)	V	804
	2.2×10^{-3}		Yaws (2003)	X	238
	2.1×10^{-3}		HSDB (2015)	Q	100
	1.8×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.3×10^{-3}		Gharagheizi et al. (2010)	Q	247
	2.1×10^{-3}		Hilal et al. (2008)	Q	
	2.9×10^{-3}		Yao et al. (2002)	Q	230
	2.4×10^{-3}		Yaws (1999)	?	21
1-butanethiol $\text{C}_4\text{H}_9\text{SH}$ (butyl mercaptan) [109-79-5] WQAQPCDUOCURKW-UHFFFAOYSA-N	1.5×10^{-3}	4300	Brockbank (2013)	L	1
	1.4×10^{-3}	4400	Plyasunova et al. (2004)	L	
	1.5×10^{-3}	4300	Haimi et al. (2006)	M	807
	1.5×10^{-3}	3600	Coquelet and Richon (2005)	M	
	2.2×10^{-3}	4100	Przyjazny et al. (1983)	M	
	1.1×10^{-3}		Mackay et al. (2006d)	V	
	1.1×10^{-3}		Mackay et al. (1995)	V	
	1.4×10^{-3}		Hwang et al. (1992)	V	
	1.1×10^{-3}		Yaws (2003)	X	259
	1.1×10^{-3}		Yaws (2003)	X	238
	1.8×10^{-3}		Dupeux et al. (2022)	Q	260
	2.2×10^{-2}		Keshavarz et al. (2022)	Q	
	4.8×10^{-2}		Duchowicz et al. (2020)	Q	300
	6.1×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.7×10^{-3}		Gharagheizi et al. (2010)	Q	247
	2.7×10^{-3}		Hilal et al. (2008)	Q	
	3.4×10^{-3}		Modarresi et al. (2007)	Q	68
		4300	Kühne et al. (2005)	Q	
	2.2×10^{-3}		Yaffe et al. (2003)	Q	249, 273
	3.2×10^{-3}		Yao et al. (2002)	Q	230
	2.3×10^{-3}		English and Carroll (2001)	Q	231, 232
	2.5×10^{-3}		Katritzky et al. (1998)	Q	
	1.2×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	2.2×10^{-3}		Duchowicz et al. (2020)	?	186, 21
	1.1×10^{-3}		Bartelt-Hunt et al. (2008)	?	21
		4200	Kühne et al. (2005)	?	
	1.1×10^{-3}		Yaws et al. (2003)	?	21
	1.1×10^{-3}		Yaws (1999)	?	21
	1.1×10^{-3}		Yaws and Yang (1992)	?	21
	2.2×10^{-3}		Abraham et al. (1990)	?	

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-butanethiol $\text{C}_4\text{H}_{10}\text{S}$ (<i>sec</i> -butyl mercaptan) [513-53-1] LOCHFZBWPCLPAN-UHFFFAOYSA-N	1.3×10^{-3} 1.4×10^{-3} 1.4×10^{-3} 1.9×10^{-3} 1.9×10^{-3} 1.9×10^{-2} 9.4×10^{-4} 1.8×10^{-3} 1.7×10^{-3} 2.0×10^{-3} 1.5×10^{-3}		Plyasunova et al. (2004) Duchowicz et al. (2020) HSDB (2015) Yaws et al. (2003) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2007) Yao et al. (2002) Yaws (1999)	L V V V X Q Q Q Q Q ?	 187 804 238 247 68 230 21
2-methyl-1-propanethiol $\text{C}_4\text{H}_{10}\text{S}$ (<i>isobutyl</i> mercaptan) [513-44-0] BDFAOUQQXJIZDG-UHFFFAOYSA-N	1.0×10^{-3} 1.9×10^{-3} 1.9×10^{-3} 3.3×10^{-4} 2.1×10^{-3} 2.4×10^{-3} 2.0×10^{-3} 1.4×10^{-3}	3600	Zin et al. (2016) Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yao et al. (2002) Yaws (1999)	M V X Q Q Q Q ?	808 804 238 247 230, 268 21
2-methyl-2-propanethiol $\text{C}_4\text{H}_{10}\text{S}$ (<i>tert</i> -butyl mercaptan) [75-66-1] WMXCDAVJEZZYLT-UHFFFAOYSA-N	4.5×10^{-4} 1.9×10^{-3} 1.9×10^{-3} 1.6×10^{-3} 1.6×10^{-3} 1.9×10^{-3} 6.1×10^{-4} 1.1×10^{-3} 1.8×10^{-3}		Plyasunova et al. (2004) Yaws et al. (2003) Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yao et al. (2002) Yaws (1999)	L V X Q Q Q Q Q ?	 804 238 100 247 230 21
1,4-dithiane $\text{C}_4\text{H}_8\text{S}_2$ [505-29-3] LOZWAPSEEHRYPG-UHFFFAOYSA-N	2.4×10^{-1} 2.3×10^{-1} 6.9		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
1-pentanethiol $\text{C}_5\text{H}_{11}\text{SH}$ (<i>pentyl</i> mercaptan) [110-66-7] ZRKMQLGEGPLNS-UHFFFAOYSA-N	8.7×10^{-4} 8.2×10^{-4} 8.2×10^{-4} 1.4×10^{-3} 7.3×10^{-4} 1.4×10^{-3} 4.8×10^{-2} 4.6×10^{-4} 1.3×10^{-3} 2.3×10^{-3} 2.5×10^{-3}		Plyasunova et al. (2004) Duchowicz et al. (2020) HSDB (2015) Yaws et al. (2003) Amoore and Buttery (1978) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	L V V V V X Q Q Q Q Q	 187 804 238 247 68

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.6×10^{-3}		Yao et al. (2002)	Q	230, 268
	7.1×10^{-4}		Yaws (1999)	?	21
2,2-dimethyl-1-propanethiol $\text{C}_5\text{H}_{12}\text{S}$ [1679-08-9] LSUXMVNABVPWMF-UHFFFAOYSA-N	1.5×10^{-3}		Yaws et al. (2003)	V	804
	1.5×10^{-3}		Yaws (2003)	X	238
	1.1×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-3}		Gharagheizi et al. (2010)	Q	247
2-methyl-1-butanethiol $\text{C}_5\text{H}_{12}\text{S}$ [1878-18-8] WGQKBCSACFQGQY-UHFFFAOYSA-N	1.5×10^{-3}		Yaws et al. (2003)	V	804
	1.5×10^{-3}		Yaws (2003)	X	238
	2.6×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-3}		Gharagheizi et al. (2010)	Q	247
2-methyl-2-butanethiol $\text{C}_5\text{H}_{12}\text{S}$ [1679-09-0] IQIBYAHJXQVQGB-UHFFFAOYSA-N	1.5×10^{-3}		Yaws et al. (2003)	V	804
	1.5×10^{-3}		Yaws (2003)	X	238
	8.6×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-3}		Gharagheizi et al. (2010)	Q	247
	8.9×10^{-4}		Yao et al. (2002)	Q	230, 809
	1.0×10^{-3}		Yaws (1999)	?	21
2-pentanethiol $\text{C}_5\text{H}_{12}\text{S}$ [2084-19-7] QUSTYFNPKBDELJ-UHFFFAOYSA-N	1.5×10^{-3}		Yaws et al. (2003)	V	804
	1.5×10^{-3}		Yaws (2003)	X	259
	1.5×10^{-3}		Yaws (2003)	X	238
	1.0×10^{-3}		Dupeux et al. (2022)	Q	260
	6.3×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-3}		Gharagheizi et al. (2010)	Q	247
3-pentanethiol $\text{C}_5\text{H}_{12}\text{S}$ [616-31-9] WICKAMSPKJXSGN-UHFFFAOYSA-N	1.5×10^{-3}		Yaws et al. (2003)	V	804
	1.5×10^{-3}		Yaws (2003)	X	238
	4.5×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-3}		Gharagheizi et al. (2010)	Q	247
3-methyl-1-butanethiol $\text{C}_5\text{H}_{12}\text{S}$ [541-31-1] GIJGXNFNUUFEFGH-UHFFFAOYSA-N	9.5×10^{-4}		Plyasunova et al. (2004)	L	
	1.5×10^{-3}		Yaws et al. (2003)	V	804
	1.5×10^{-3}		Yaws (2003)	X	238
	3.7×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-3}		Gharagheizi et al. (2010)	Q	247
3-methyl-2-butanethiol $\text{C}_5\text{H}_{12}\text{S}$ [2084-18-6] BFLXFRNPNTTAA-UHFFFAOYSA-N	1.5×10^{-3}		Yaws et al. (2003)	V	804
	1.5×10^{-3}		Yaws (2003)	X	238
	4.0×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-3}		Gharagheizi et al. (2010)	Q	247
1-hexanethiol $\text{C}_6\text{H}_{14}\text{S}$ (hexyl mercaptan) [111-31-9] PMBXCGGQNSVESQ-UHFFFAOYSA-N	5.2×10^{-4}		Plyasunova et al. (2004)	L	
	1.1×10^{-3}		Yaws et al. (2003)	V	804
	1.1×10^{-3}		Yaws (2003)	X	238
	3.5×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.0×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.9×10^{-3}		Hilal et al. (2008)	Q	
	1.4×10^{-3}		Yao et al. (2002)	Q	230

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.5×10^{-4}		Yaws (1999)	?	21
2-hexanethiol $\text{C}_6\text{H}_{14}\text{S}$ [1679-06-7] ABNPJVOPTXYSQW-UHFFFAOYSA-N	1.2×10^{-3} 1.2×10^{-3} 4.9×10^{-4} 1.0×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
1-heptanethiol $\text{C}_7\text{H}_{16}\text{S}$ (heptyl mercaptan) [1639-09-4] VPIAKHNXCOTPAY-UHFFFAOYSA-N	4.2×10^{-4} 4.0×10^{-4} 9.5×10^{-4} 8.2×10^{-4} 4.8×10^{-2} 2.7×10^{-4} 8.4×10^{-4} 2.7×10^{-3} 1.2×10^{-3} 3.3×10^{-4}		Plyasunova et al. (2004) Duchowicz et al. (2020) Yaws et al. (2003) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yao et al. (2002) Yaws (1999)	L V V X Q Q Q Q Q ?	187 804 238 247 230, 268 21
2-heptanethiol $\text{C}_7\text{H}_{16}\text{S}$ [628-00-2] DAZNOIJVKASGS-UHFFFAOYSA-N	1.3×10^{-3} 8.2×10^{-4} 4.1×10^{-4} 8.3×10^{-4}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
1-octanethiol $\text{C}_8\text{H}_{18}\text{S}$ (octyl mercaptan) [111-88-6] KZCOBXFFBQJQHH-UHFFFAOYSA-N	7.1×10^{-4} 6.9×10^{-4} 4.3×10^{-4} 2.0×10^{-4} 7.4×10^{-4} 1.3×10^{-3} 1.1×10^{-3} 3.0×10^{-4}		Yaws et al. (2003) Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yao et al. (2002) Yaws (1999)	V X Q Q Q Q Q ?	804 238 100 247 247 230 21
<i>tert</i> -octanethiol $\text{C}_8\text{H}_{18}\text{S}$ (<i>tert</i> -octyl mercaptan) [141-59-3] QZLAEIZEPJAELS-UHFFFAOYSA-N	2.0×10^{-3} 6.2×10^{-4} 5.2×10^{-4} 2.8×10^{-4} 6.6×10^{-4} 4.2×10^{-4} 2.6×10^{-4}		Yaws et al. (2003) Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	V X Q Q Q Q ?	804 238 100 247 230 21
2-octanethiol $\text{C}_8\text{H}_{18}\text{S}$ [3001-66-9] BZXFEMZFRLXGCV-UHFFFAOYSA-N	9.9×10^{-4} 6.6×10^{-4} 3.0×10^{-4} 6.9×10^{-4}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
1-nonanethiol $\text{C}_9\text{H}_{20}\text{S}$ (nonyl mercaptan) [1455-21-6] ZVEZMVFBMOOHAT-UHFFFAOYSA-N	5.7×10^{-4} 6.7×10^{-4} 1.5×10^{-4} 7.1×10^{-4} 1.2×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008)	V X Q Q Q	804 238 247 230, 268
	8.9×10^{-4} 3.7×10^{-4}		Yao et al. (2002) Yaws (1999)	Q ?	21
2-nonanethiol $\text{C}_9\text{H}_{20}\text{S}$ [13281-11-3] UOMSUBPWUZCGQU-UHFFFAOYSA-N	7.7×10^{-4} 5.1×10^{-4} 2.3×10^{-4} 6.1×10^{-4}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
1-decanethiol $\text{C}_{10}\text{H}_{22}\text{S}$ (decyl mercaptan) [143-10-2] VTXVGVNLYGSIAR-UHFFFAOYSA-N	5.0×10^{-4} 8.1×10^{-4} 1.6×10^{-4} 7.7×10^{-4} 9.9×10^{-4}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008)	V X Q Q Q	804 238 247 230
	8.2×10^{-4} 6.5×10^{-4}		Yao et al. (2002) Yaws (1999)	Q ?	21
2-decanethiol $\text{C}_{10}\text{H}_{22}\text{S}$ [13402-60-3] NWXKKAHGQAWFQP-UHFFFAOYSA-N	6.5×10^{-4} 4.4×10^{-4} 2.5×10^{-4} 5.8×10^{-4}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
1-undecanethiol $\text{C}_{11}\text{H}_{24}\text{S}$ (undecyl mercaptan) [5332-52-5] CCIDWXHLGNEQSL-UHFFFAOYSA-N	4.9×10^{-4} 2.6×10^{-3} 9.3×10^{-4} 6.7×10^{-4} 3.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	V X Q Q ?	804 238 247 230 21
2-undecanethiol $\text{C}_{11}\text{H}_{24}\text{S}$ [62155-02-6] KRMLVHZORKTOLI-UHFFFAOYSA-N	6.1×10^{-4} 6.6×10^{-4} 2.9×10^{-4} 6.0×10^{-4}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
1-dodecanethiol $\text{C}_{12}\text{H}_{26}\text{S}$ (dodecyl mercaptan) [112-55-0] WNAHIZMDSQCWRP-UHFFFAOYSA-N	5.3×10^{-4} 5.8×10^{-4} 1.7×10^{-4} 1.9×10^{-4} 1.3×10^{-3}		Yaws et al. (2003) Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q Q	804 238 100 247 230
	5.3×10^{-4} 1.4×10^{-3}		Yao et al. (2002) Yaws (1999)	Q ?	21
2-dodecanethiol $\text{C}_{12}\text{H}_{26}\text{S}$ [14402-50-7] UROXMPKAGAWKPP-UHFFFAOYSA-N	6.3×10^{-4} 7.2×10^{-4} 3.0×10^{-4} 6.9×10^{-4}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
5-propyl-5-nonanethiol $\text{C}_{12}\text{H}_{26}\text{S}$ BGQHJKADBZPYGJ-UHFFFAOYSA-N	1.7×10^{-4} 5.8×10^{-4} 2.4×10^{-3} 9.7×10^{-5}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1-tridecanethiol $\text{C}_{13}\text{H}_{28}\text{S}$ [19484-26-5] IPBROXKVGHZHJV-UHFFFAOYSA-N	6.4×10^{-4} 2.8×10^{-3} 2.3×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2010)	V X Q	804 238 247
2-tridecanethiol $\text{C}_{13}\text{H}_{28}\text{S}$ [62155-03-7] ZAPRCDCVNIREGW-UHFFFAOYSA-N	7.3×10^{-4} 9.6×10^{-4} 3.2×10^{-4} 9.0×10^{-4}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
1-tetradecanethiol $\text{C}_{14}\text{H}_{30}\text{S}$ [2079-95-0] GEKDEMKPCKTKEC-UHFFFAOYSA-N	8.5×10^{-4} 5.1×10^{-3} 4.9×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2010)	V X Q	804 238 247
2-tetradecanethiol $\text{C}_{14}\text{H}_{30}\text{S}$ [62155-04-8] YESAYZVWGLMPDY-UHFFFAOYSA-N	9.2×10^{-4} 1.5×10^{-3} 3.4×10^{-4} 1.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
dimethyl sulfide CH_3SCH_3 (DMS) [75-18-3] QMMFVYPAHWMCMS-UHFFFAOYSA-N	5.3×10^{-3} 5.3×10^{-3} 5.4×10^{-3} 5.6×10^{-3} 5.3×10^{-3} 5.3×10^{-3} 5.3×10^{-3} 5.2×10^{-3} 5.3×10^{-3} 4.7×10^{-3} 4.6×10^{-3} 4.8×10^{-3} 5.2×10^{-3} 5.5×10^{-3} 4.9×10^{-3} 6.4×10^{-3} 4.9×10^{-3} 6.4×10^{-3} 7.2×10^{-3} 4.7×10^{-3} 4.9×10^{-3} 1.6×10^{-2} 4.2×10^{-3}	3500 3500 3500 3500 3500 3500 3800 3600 3500 4700 3700 2800 3600 3800 4100 4100 3700 4300	Burkholder et al. (2019) Burkholder et al. (2015) Brockbank (2013) Warneck and Williams (2012) Sander et al. (2011) Sander et al. (2006) Plyasunova et al. (2004) Fogg and Sangster (2003) Staudinger and Roberts (2001) Bruneel et al. (2016) Schuhfried et al. (2011) Falabella (2007) Coquelet and Richon (2005) Iliuta and Larachi (2005a) Straver and de Loos (2005) Barcellos da Rosa et al. (2003) Pollien et al. (2003) van Ruth et al. (2002) van Ruth and Villeneuve (2002) Gershenson et al. (2001) van Ruth et al. (2001) Marin et al. (1999) Wong and Wang (1997)	L L L L L L L L L M M M M M M M M M M M M M M M	1 11, 340 14 14, 363 14

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.7×10^{-3}	3100	De Bruyn et al. (1995b)	M	
	5.7×10^{-3}	2700	Tsuji et al. (1990)	M	63
	5.5×10^{-3}	3500	Dacey et al. (1984)	M	
	5.6×10^{-3}	4000	Przyjazny et al. (1983)	M	
	6.1×10^{-3}		Vitenberg et al. (1975)	M	12
	1.6×10^{-3}		Lovelock et al. (1972)	M	
			Mackay et al. (2006d)	V	560
	4.2×10^{-3}		Marin et al. (1999)	V	
	1.3×10^{-1}		Mackay et al. (1995)	V	
	5.4×10^{-3}		Hine and Mookerjee (1975)	V	
	5.5×10^{-3}		Hine and Weimar (1965)	V	
	7.0×10^{-3}		Vitenberg et al. (1975)	R	12
	6.0×10^{-3}	3700	Bagno et al. (1991)	T	475
	5.5×10^{-3}		Yaws (2003)	X	238
	6.1×10^{-3}		Gaffney and Senum (1984)	X	391
	4.4×10^{-3}		Cline and Bates (1983)	C	71
	2.3×10^{-3}		Keshavarz et al. (2022)	Q	
	1.7×10^{-1}		Duchowicz et al. (2020)	Q	185
	1.7×10^{-3}		Wang et al. (2017)	Q	81, 239
	1.7×10^{-2}		Wang et al. (2017)	Q	81, 240
	4.9×10^{-3}		Wang et al. (2017)	Q	81, 241
	1.9×10^{-3}		Gharagheizi et al. (2012)	Q	
	8.7×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.2×10^{-2}		Hilal et al. (2008)	Q	
	3.3×10^{-3}		Modarresi et al. (2007)	Q	68
	7.2×10^{-3}		Hertel et al. (2007)	Q	469
		3100	Kühne et al. (2005)	Q	
	6.2×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	4.8×10^{-3}		English and Carroll (2001)	Q	231, 232
	5.0×10^{-3}		Marin et al. (1999)	Q	
	3.1×10^{-3}		Katritzky et al. (1998)	Q	
	6.5×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	7.9×10^{-4}		Russell et al. (1992)	Q	280
	6.4×10^{-3}		Suzuki et al. (1992)	Q	233
	6.1×10^{-3}		Duchowicz et al. (2020)	?	186, 21
		3500	Kühne et al. (2005)	?	
	5.5×10^{-3}		Yaws et al. (2003)	?	21
	4.9×10^{-3}		Yaws (1999)	?	21
	1.7×10^{-3}		Abraham et al. (1990)	?	

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethyl methyl sulfide $\text{C}_2\text{H}_5\text{SCH}_3$ [624-89-5] WXEHBUMAEPOYKP-UHFFFAOYSA-N	4.2×10^{-3}		Burkholder et al. (2019)	L	
	4.2×10^{-3}		Burkholder et al. (2015)	L	
	4.2×10^{-3}		Schuhfried et al. (2011)	M	
	5.4×10^{-3}		Yaws et al. (2003)	V	804
	5.1×10^{-3}		Bagno et al. (1991)	T	475
	5.4×10^{-3}		Yaws (2003)	X	238
	2.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	5.3×10^{-3}		Gharagheizi et al. (2010)	Q	247
	8.6×10^{-3}		Hilal et al. (2008)	Q	
	5.1×10^{-3}		Yao et al. (2002)	Q	230
3.5×10^{-3}		English and Carroll (2001)	Q	231, 232	
4.4×10^{-3}		Nirmalakhandan et al. (1997)	Q		
5.0×10^{-3}		Yaws (1999)	?	21	
diethyl sulfide $\text{C}_2\text{H}_5\text{SC}_2\text{H}_5$ [352-93-2] LJSQFQKUNVCTIA-UHFFFAOYSA-N	3.5×10^{-3}		Burkholder et al. (2019)	L	
	3.5×10^{-3}		Burkholder et al. (2015)	L	
	4.7×10^{-3}	4800	Plyasunova et al. (2004)	L	
	3.5×10^{-3}		Schuhfried et al. (2011)	M	
	5.4×10^{-3}	4900	Przyjazny et al. (1983)	M	
	5.1×10^{-1}		Mackay et al. (2006d)	V	
	4.5×10^{-3}		Hine and Mookerjee (1975)	V	
	4.5×10^{-3}		Yaws (2003)	X	238
	4.3×10^{-3}		Keshavarz et al. (2022)	Q	
	2.0×10^{-2}		Duchowicz et al. (2020)	Q	185
	3.4×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.7×10^{-3}		Gharagheizi et al. (2010)	Q	247
	6.0×10^{-3}		Hilal et al. (2008)	Q	
	3.6×10^{-3}		Modarresi et al. (2007)	Q	68
	4.8×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	4.0×10^{-3}		Yao et al. (2002)	Q	230
	4.6×10^{-3}		English and Carroll (2001)	Q	231, 275
	2.6×10^{-3}		Katritzky et al. (1998)	Q	
	2.9×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	1.5×10^{-3}		Russell et al. (1992)	Q	280
3.9×10^{-3}		Suzuki et al. (1992)	Q	233	
5.9×10^{-3}		Duchowicz et al. (2020)	?	186, 21	
1.1×10^{-2}		Yaws et al. (2003)	?	21	
4.4×10^{-3}		Yaws (1999)	?	21, 12	
5.7×10^{-3}		Yaws and Yang (1992)	?	21, 12	
4.7×10^{-3}		Abraham et al. (1990)	?		

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methyl isopropyl sulfide $\text{C}_4\text{H}_{10}\text{S}$ [1551-21-9] ROSSIHMZZJOVOU-UHFFFAOYSA-N	4.5×10^{-3}		Yaws et al. (2003)	V	804
	4.5×10^{-3}		Yaws (2003)	X	238
	2.7×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.6×10^{-3}		Gharagheizi et al. (2010)	Q	247
	2.6×10^{-3} 3.5×10^{-3}		Yao et al. (2002) Yaws (1999)	Q ?	230 21
methyl propyl sulfide $\text{C}_4\text{H}_{10}\text{S}$ [3877-15-4] ZOASGOXWEHUTKZ-UHFFFAOYSA-N	4.3×10^{-3}		Plyasunova et al. (2004)	L	
	4.3×10^{-3}		Mazza (1980)	M	
	4.5×10^{-3}		Yaws et al. (2003)	V	804
	4.5×10^{-3}		Yaws (2003)	X	238
	1.1×10^{-3} 4.2×10^{-3}		Gharagheizi et al. (2012) Gharagheizi et al. (2010)	Q Q	 247
	4.1×10^{-3} 3.1×10^{-3}		Yao et al. (2002) Yaws (1999)	Q ?	230 21
tetrahydrothiophene $\text{C}_4\text{H}_8\text{S}$ [110-01-0] RAOIDOHSFRTOEL-UHFFFAOYSA-N	2.2×10^{-3}		Yaws et al. (2003)	V	804
	1.7×10^{-2}		Gharagheizi et al. (2012)	Q	
2-methyl-3-thiapentane $\text{C}_5\text{H}_{12}\text{S}$ [5145-99-3] NZUQQADVSWVNW-UHFFFAOYSA-N	3.7×10^{-3}		Yaws et al. (2003)	V	804
	3.7×10^{-3}		Yaws (2003)	X	238
	3.7×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.3×10^{-3}		Gharagheizi et al. (2010)	Q	247
3,3-dimethyl-2-thiabutane $\text{C}_5\text{H}_{12}\text{S}$ [6163-64-0] CJFVCTVYZFTORU-UHFFFAOYSA-N	3.6×10^{-3}		Yaws et al. (2003)	V	804
	3.6×10^{-3}		Yaws (2003)	X	238
	2.9×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-3}		Gharagheizi et al. (2010)	Q	247
3-methyl-2-thiapentane $\text{C}_5\text{H}_{12}\text{S}$ [10359-64-5] IJRCRFQMYAJPPPO-UHFFFAOYSA-N	3.6×10^{-3}		Yaws et al. (2003)	V	804
	3.5×10^{-3}		Yaws (2003)	X	238
	1.3×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.6×10^{-3}		Gharagheizi et al. (2010)	Q	247
4-methyl-2-thiapentane $\text{C}_5\text{H}_{12}\text{S}$ [5008-69-5] UYVGFIKOUAFDOZ-UHFFFAOYSA-N	3.5×10^{-3}		Yaws et al. (2003)	V	804
	3.5×10^{-3}		Yaws (2003)	X	238
	4.3×10^{-4}		Gharagheizi et al. (2012)	Q	
	4.2×10^{-3}		Gharagheizi et al. (2010)	Q	247
ethyl propyl sulfide $\text{C}_5\text{H}_{12}\text{S}$ [4110-50-3] ZDDDFDQTSXYYSSE-UHFFFAOYSA-N	3.5×10^{-3}		Yaws et al. (2003)	V	804
	3.5×10^{-3}		Yaws (2003)	X	238
	1.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.9×10^{-3}		Gharagheizi et al. (2010)	Q	247
	2.1×10^{-3} 1.9×10^{-3}		Yao et al. (2002) Yaws (1999)	Q ?	230 21

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methyl butyl sulfide $\text{C}_5\text{H}_{12}\text{S}$ [628-29-5] WCXXISMIJBRDQK-UHFFFAOYSA-N	3.4×10^{-3}		Yaws et al. (2003)	V	804
	3.4×10^{-3}		Yaws (2003)	X	238
	8.6×10^{-4}		Gharagheizi et al. (2012)	Q	
	3.0×10^{-3}		Gharagheizi et al. (2010)	Q	247
	2.2×10^{-3} 1.8×10^{-3}		Yao et al. (2002) Yaws (1999)	Q ?	230 21
dipropyl sulfide $\text{C}_3\text{H}_7\text{SC}_3\text{H}_7$ [111-47-7] ZERULLAPCVRMCO-UHFFFAOYSA-N	3.3×10^{-3}	5700	Plyasunova et al. (2004)	L	
	3.3×10^{-3}	4500	Przyjazny et al. (1983)	M	
	2.7×10^{-3}		Yaws et al. (2003)	V	804
	2.7×10^{-3}		Yaws (2003)	X	238
	7.8×10^{-3}		Keshavarz et al. (2022)	Q	
	2.0×10^{-2}		Duchowicz et al. (2020)	Q	300
	8.9×10^{-4}		Gharagheizi et al. (2012)	Q	
	2.3×10^{-3}		Gharagheizi et al. (2010)	Q	247
	3.4×10^{-3}		Hilal et al. (2008)	Q	
		4500	Kühne et al. (2005)	Q	
	4.8×10^{-3}		Yaffe et al. (2003)	Q	249, 273
	1.9×10^{-3}		Yao et al. (2002)	Q	230
	3.1×10^{-3}		English and Carroll (2001)	Q	231, 232
	1.8×10^{-3} 3.0×10^{-3}		Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	Q ?	
	4500	Kühne et al. (2005)	?	186, 21	
		Yaws (1999)	?	21	
		Abraham et al. (1990)	?		
di-(2-propyl)-sulfide $(\text{C}_3\text{H}_7)_2\text{S}$ (diisopropyl sulfide) [625-80-9] XYWDPYKBIRQXQS-UHFFFAOYSA-N	2.8×10^{-3}	4900	Brockbank (2013)	L	
	3.0×10^{-3}		Plyasunova et al. (2004)	L	
	3.0×10^{-3}	5000	Przyjazny et al. (1983)	M	
	2.9×10^{-3}		Yaws et al. (2003)	V	804
	2.9×10^{-3}		Yaws (2003)	X	238
	7.8×10^{-3}		Keshavarz et al. (2022)	Q	
	3.1×10^{-3}		Duchowicz et al. (2020)	Q	
	4.8×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.2×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.6×10^{-3}		Hilal et al. (2008)	Q	
		4500	Kühne et al. (2005)	Q	
	3.1×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	1.1×10^{-3}		Yao et al. (2002)	Q	230
	1.2×10^{-3} 3.0×10^{-3}		Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	Q ?	
	4200	Kühne et al. (2005)	?	186, 21	
		Yaws (1999)	?	21	
		Abraham et al. (1990)	?		

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2-dimethyl-3-thiapentane $\text{C}_6\text{H}_{14}\text{S}$ [14290-92-7] GZJUDUMQICJSFJ-UHFFFAOYSA-N	2.8×10^{-3} 2.8×10^{-3} 4.9×10^{-3} 2.8×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
2-methyl-3-thiahexane $\text{C}_6\text{H}_{14}\text{S}$ [5008-73-1] BDFDQOJDDORSR-UHFFFAOYSA-N	2.8×10^{-3} 2.7×10^{-3} 2.1×10^{-3} 2.6×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
3,3-dimethyl-2-thiapentane $\text{C}_6\text{H}_{14}\text{S}$ [13286-92-5] SJOHDSPLQVBOXF-UHFFFAOYSA-N	2.7×10^{-3} 2.7×10^{-3} 1.9×10^{-3} 3.0×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
3,4-dimethyl-2-thiapentane $\text{C}_6\text{H}_{14}\text{S}$ [53897-51-1] AUNQXXJGFDKEMS-UHFFFAOYSA-N	2.9×10^{-3} 2.9×10^{-3} 6.1×10^{-4} 3.2×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
3-ethyl-2-thiapentane $\text{C}_6\text{H}_{14}\text{S}$ [57093-84-2] ZQOHJVSSVAWXQZ-UHFFFAOYSA-N	3.0×10^{-3} 3.0×10^{-3} 6.6×10^{-4} 2.8×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
3-methyl-2-thiahexane $\text{C}_6\text{H}_{14}\text{S}$ [13286-91-4] WGBHWWSSUGCSCP-UHFFFAOYSA-N	2.8×10^{-3} 2.7×10^{-3} 1.2×10^{-3} 2.6×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
4,4-dimethyl-2-thiapentane $\text{C}_6\text{H}_{14}\text{S}$ [6079-57-8] YUFAJXXIXSYTMS-UHFFFAOYSA-N	2.7×10^{-3} 2.7×10^{-3} 3.1×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2010)	V X Q	804 238 247
4-methyl-2-thiahexane $\text{C}_6\text{H}_{14}\text{S}$ [15013-37-3] XMOUDDXUCXXDTJ-UHFFFAOYSA-N	2.7×10^{-3} 2.7×10^{-3} 3.9×10^{-4} 2.9×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
4-methyl-3-thiahexane $\text{C}_6\text{H}_{14}\text{S}$ [5008-72-0] JFNGZXUPUVUYST-UHFFFAOYSA-N	2.7×10^{-3} 2.7×10^{-3} 2.2×10^{-3} 2.6×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
5-methyl-2-thiahexane $\text{C}_6\text{H}_{14}\text{S}$ [13286-90-3] ABIKQXWLJOURPN-UHFFFAOYSA-N	2.8×10^{-3} 2.8×10^{-3} 5.4×10^{-4} 2.7×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
5-methyl-3-thiahexane $C_6H_{14}S$ [1613-45-2] OIRKGXWQBSPXLQ-UHFFFAOYSA-N	2.7×10^{-3} 2.7×10^{-3} 7.1×10^{-4} 2.5×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
ethyl butyl sulfide $C_6H_{14}S$ [638-46-0] XJIRSLHMKBUGMR-UHFFFAOYSA-N	2.6×10^{-3} 2.6×10^{-3} 1.2×10^{-3} 2.2×10^{-3} 1.9×10^{-3} 1.2×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	V X Q Q Q ?	804 238 247 230 21
methyl pentyl sulfide $C_6H_{14}S$ [1741-83-9] FOJGPFUFFHWGFQ-UHFFFAOYSA-N	3.8×10^{-3} 3.8×10^{-3} 2.3×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2010)	V X Q	804 238 247
ethyl pentyl sulfide $C_7H_{16}S$ [26158-99-6] SOGIWWXLDPPMMF-UHFFFAOYSA-N	1.0×10^{-3} 9.6×10^{-4} 1.1×10^{-3} 1.8×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
methyl hexyl sulfide $C_7H_{16}S$ [20291-60-5] LZRQHHKXDYOIC-UHFFFAOYSA-N	1.0×10^{-3} 9.6×10^{-4} 5.2×10^{-4} 1.8×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
propyl butyl sulfide $C_7H_{16}S$ [1613-46-3] ZBRWJPVULTZZCE-UHFFFAOYSA-N	1.0×10^{-3} 9.6×10^{-4} 7.6×10^{-4} 1.8×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
dibutyl sulfide $C_8H_{18}S$ [544-40-1] HTIRHQRTDBPHNZ-UHFFFAOYSA-N	1.3×10^{-3} 1.3×10^{-3} 3.9×10^{-4} 1.5×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
ethyl hexyl sulfide $C_8H_{18}S$ [7309-44-6] MGVUJBCOCITTRS-UHFFFAOYSA-N	6.2×10^{-4} 6.2×10^{-4} 8.7×10^{-4} 1.5×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
methyl heptyl sulfide $C_8H_{18}S$ [20291-61-6] FJDWJQOEZRIDJ-UHFFFAOYSA-N	6.2×10^{-4} 6.2×10^{-4} 4.0×10^{-4} 1.5×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
propyl pentyl sulfide $\text{C}_8\text{H}_{18}\text{S}$ [42841-80-5] MJRCCWJSYFOGBX-UHFFFAOYSA-N	6.2×10^{-4} 6.2×10^{-4} 5.9×10^{-4} 1.5×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
butyl pentyl sulfide $\text{C}_9\text{H}_{20}\text{S}$ [24768-42-1] RNEUXBDXTNIASG-UHFFFAOYSA-N	9.8×10^{-4} 9.7×10^{-4} 7.0×10^{-4} 1.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
ethyl heptyl sulfide $\text{C}_9\text{H}_{20}\text{S}$ [24768-44-3] PYPULUCCVXMPFP-UHFFFAOYSA-N	9.8×10^{-4} 9.7×10^{-4} 1.0×10^{-3} 1.3×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
methyl octyl sulfide $\text{C}_9\text{H}_{20}\text{S}$ [3698-95-1] AHCJTMBRROLNHV-UHFFFAOYSA-N	9.8×10^{-4} 9.7×10^{-4} 4.7×10^{-4} 1.3×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
propyl hexyl sulfide $\text{C}_9\text{H}_{20}\text{S}$ [24768-43-2] ABZLKKGJOVPBBL-UHFFFAOYSA-N	9.8×10^{-4} 9.7×10^{-4} 7.0×10^{-4} 1.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
butyl hexyl sulfide $\text{C}_{10}\text{H}_{22}\text{S}$ [16967-04-7] YZUHMAFUXBPUKH-UHFFFAOYSA-N	1.6×10^{-3} 1.6×10^{-3} 8.1×10^{-4} 1.3×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
dipentyl sulfide $\text{C}_{10}\text{H}_{22}\text{S}$ [872-10-6] JOZDADPMWLVEJK-UHFFFAOYSA-N	1.6×10^{-3} 1.6×10^{-3} 8.1×10^{-4} 1.3×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
ethyl octyl sulfide $\text{C}_{10}\text{H}_{22}\text{S}$ [3698-94-0] WAITXWGCJQLPGH-UHFFFAOYSA-N	1.6×10^{-3} 1.6×10^{-3} 1.2×10^{-3} 1.3×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
methyl nonyl sulfide $\text{C}_{10}\text{H}_{22}\text{S}$ [59973-07-8] FCRSULZJMFDBIK-UHFFFAOYSA-N	1.6×10^{-3} 1.6×10^{-3} 3.6×10^{-4} 1.3×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
propyl heptyl sulfide $\text{C}_{10}\text{H}_{22}\text{S}$ [24768-46-5] PCPVCHFVKVPNTBH-UHFFFAOYSA-N	1.6×10^{-3} 1.6×10^{-3} 8.1×10^{-4} 1.3×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
butyl heptyl sulfide $C_{11}H_{24}S$ [40813-84-1] HYUPOCGXBZUYFY-UHFFFAOYSA-N	1.7×10^{-3} 1.7×10^{-3} 9.1×10^{-4} 1.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
ethyl nonyl sulfide $C_{11}H_{24}S$ [59973-08-9] LUAABLIRQSWMGZ-UHFFFAOYSA-N	1.7×10^{-3} 1.7×10^{-3} 8.8×10^{-4} 1.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
methyl decyl sulfide $C_{11}H_{24}S$ [22438-39-7] HKGUUAACYBIID-UHFFFAOYSA-N	1.7×10^{-3} 1.7×10^{-3} 4.1×10^{-4} 1.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
propyl octyl sulfide $C_{11}H_{24}S$ [3698-93-9] GPJXDRJGQAKGLH-UHFFFAOYSA-N	1.7×10^{-3} 1.7×10^{-3} 9.1×10^{-4} 1.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
butyl octyl sulfide $C_{12}H_{26}S$ [16900-07-5] UNIAPWPIAGJFDG-UHFFFAOYSA-N	1.6×10^{-3} 1.5×10^{-3} 1.0×10^{-3} 1.8×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
dihexyl sulfide $C_{12}H_{26}S$ [6294-31-1] LHNRHYOMDUJLLM-UHFFFAOYSA-N	1.6×10^{-3} 1.5×10^{-3} 1.0×10^{-3} 1.8×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
ethyl decyl sulfide $C_{12}H_{26}S$ [19313-61-2] VSSRSPLEFYQIEK-UHFFFAOYSA-N	1.6×10^{-3} 1.5×10^{-3} 9.7×10^{-4} 1.8×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
methyl undecyl sulfide $C_{12}H_{26}S$ [7289-44-3] HDOADYQJIBYVGE-UHFFFAOYSA-N	1.6×10^{-3} 1.5×10^{-3} 4.5×10^{-4} 1.7×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
propyl nonyl sulfide $C_{12}H_{26}S$ [62103-66-6] AQAOPNMAEGBYHI-UHFFFAOYSA-N	1.6×10^{-3} 1.5×10^{-3} 6.6×10^{-4} 1.8×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
butyl nonyl sulfide $C_{13}H_{28}S$ [66577-32-0] FWRIVMHSSSAZFD-UHFFFAOYSA-N	1.8×10^{-3} 1.8×10^{-3} 7.1×10^{-4} 2.6×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethyl undecyl sulfide $C_{13}H_{28}S$ [66577-30-8] OSWITQLVZPPUIR-UHFFFAOYSA-N	1.8×10^{-3} 1.8×10^{-3} 1.0×10^{-3} 2.5×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
methyl dodecyl sulfide $C_{13}H_{28}S$ [3698-89-3] KJWHJDGMOQJLGF-UHFFFAOYSA-N	1.8×10^{-3} 1.8×10^{-3} 4.8×10^{-4} 2.5×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
propyl decyl sulfide $C_{13}H_{28}S$ [66577-31-9] HPJCKXDELORROO-UHFFFAOYSA-N	1.8×10^{-3} 1.8×10^{-3} 7.1×10^{-4} 2.6×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
butyl decyl sulfide $C_{14}H_{30}S$ [19313-57-6] CLBLVLKZMJDLT-UHFFFAOYSA-N	2.6×10^{-3} 2.6×10^{-3} 7.5×10^{-4} 4.7×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
diheptyl sulfide $C_{14}H_{30}S$ [629-65-2] LEMIDOZYVQXGLI-UHFFFAOYSA-N	2.6×10^{-3} 2.6×10^{-3} 1.2×10^{-3} 4.7×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
ethyl dodecyl sulfide $C_{14}H_{30}S$ [2851-83-4] QECBTJWQRXCSCU-UHFFFAOYSA-N	2.6×10^{-3} 2.6×10^{-3} 1.1×10^{-3} 4.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
methyl tridecyl sulfide $C_{14}H_{30}S$ [62155-09-3] QVXOOYOFFITGCV-UHFFFAOYSA-N	2.6×10^{-3} 2.6×10^{-3} 5.1×10^{-4} 4.5×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
propyl undecyl sulfide $C_{14}H_{30}S$ [66826-84-4] ITNOZFAANYXVSG-UHFFFAOYSA-N	2.6×10^{-3} 2.6×10^{-3} 7.5×10^{-4} 4.7×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
dimethyl disulfide CH_3SSCH_3 [624-92-0] WQOXQRCZOLPYPM-UHFFFAOYSA-N	5.8×10^{-3} 5.8×10^{-3} 8.3×10^{-3} 7.4×10^{-3} 6.7×10^{-3} 5.8×10^{-3} 6.5×10^{-3} 9.1×10^{-3} 7.8×10^{-3} 5.9×10^{-3}		Burkholder et al. (2019) Burkholder et al. (2015) Brockbank (2013) Plyasunova et al. (2004) Bruneel et al. (2016) Schuhfried et al. (2011) Falabella (2007) Iliuta and Larachi (2005b) Souchon et al. (2004) Pollien et al. (2003)	L L L L M M M M M M	 11, 340

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.6×10^{-3}		McIntosh and Heffron (2000)	M	14
	9.4×10^{-3}	4300	Przyjazny et al. (1983)	M	
	8.6×10^{-3}		Mazza (1980)	M	
	8.3×10^{-3}		Vitenberg et al. (1975)	M	12
	1.7×10^{-2}		Mackay et al. (2006d)	V	
	1.7×10^{-2}		Mackay et al. (1995)	V	
	9.0×10^{-3}		Vitenberg et al. (1975)	R	12
	3.0×10^{-2}		Hilal et al. (2008)	Q	
	8.7×10^{-2}		Modarresi et al. (2007)	Q	68
		1700	Kühne et al. (2005)	Q	
	4.6×10^{-3}		Nirmalakhandan et al. (1997)	Q	
		1600	Kühne et al. (2005)	?	
	9.0×10^{-3}		Abraham et al. (1990)	?	
diethyl disulfide $\text{C}_2\text{H}_5\text{SSC}_2\text{H}_5$ [110-81-6] CETBSQOFQKLHHZ-UHFFFAOYSA-N	3.7×10^{-3}		Burkholder et al. (2019)	L	
	3.7×10^{-3}		Burkholder et al. (2015)	L	
	4.0×10^{-3}	4900	Plyasunova et al. (2004)	L	
	3.7×10^{-3}		Schuhfried et al. (2011)	M	
	6.3×10^{-3}	4300	Przyjazny et al. (1983)	M	
	4.7×10^{-3}		Vitenberg et al. (1975)	M	12
	1.2×10^{-2}		Hilal et al. (2008)	Q	
	3.7×10^{-2}		Modarresi et al. (2007)	Q	68
	2.3×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	6.4×10^{-3}		Abraham et al. (1990)	?	
dipropyl disulfide $\text{C}_3\text{H}_7\text{SSC}_3\text{H}_7$ [629-19-6] ALVPFGSHPUROW-UHFFFAOYSA-N	2.2×10^{-3}	5400	Plyasunova et al. (2004)	L	
	2.4×10^{-3}		Schuhfried et al. (2011)	M	
	1.8×10^{-2}		Mazza (1980)	M	
carbon disulfide CS_2 [75-15-0] QGJOPFRUJISHPQ-UHFFFAOYSA-N	6.1×10^{-4}	4300	Burkholder et al. (2019)	L	
	6.1×10^{-4}	4300	Burkholder et al. (2015)	L	
	6.1×10^{-4}	3900	Warneck and Williams (2012)	L	
	6.1×10^{-4}	4300	Sander et al. (2011)	L	
	6.1×10^{-4}	4300	Sander et al. (2006)	L	
	5.5×10^{-4}	3700	Plyasunova et al. (2004)	L	
	5.7×10^{-4}	3800	Hiatt (2013)	M	
	5.4×10^{-4}	2800	De Bruyn et al. (1995b)	M	
	6.2×10^{-4}	3800	Elliott (1989)	M	
	5.4×10^{-4}	4300	Rex (1906)	M	
	5.7×10^{-4}		Mackay et al. (2006d)	V	
	5.7×10^{-4}		Mackay et al. (1995)	V	
	8.0×10^{-4}		Hwang et al. (1992)	V	
	4.5×10^{-4}	4100	Winkler (1906)	V	
	5.1×10^{-4}		Yaws (2003)	X	238
	7.5×10^{-4}	1200	Goldstein (1982)	X	299
	5.0×10^{-4}		Hayer et al. (2022)	Q	20

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.3×10^{-2}		Gharagheizi et al. (2012)	Q	
	5.1×10^{-4}		Gharagheizi et al. (2010)	Q	247
	9.4×10^{-5}		Yaws (1999)	?	21
	3.2×10^{-4}		Abraham and Weathersby (1994)	?	21
	5.1×10^{-4}		Yaws and Yang (1992)	?	21
			Schäfer and Lax (1962)	?	810
			Booth and Jolley (1943)	?	811
			Booth and Jolley (1943)	?	812
2,3,4-trithiapentane $\text{C}_2\text{H}_6\text{S}_3$ (dimethyl trisulfide) [3658-80-8] YWHLKXPLRWGSE-UHFFFAOYSA-N	1.2×10^{-2}		Plyasunova et al. (2004)	L	
	1.4×10^{-2}		Souchon et al. (2004)	M	
	2.1×10^{-2}		Roberts and Pollien (1997)	M	
dicyclohexyldisulfide $\text{C}_{12}\text{H}_{22}\text{S}_2$ [2550-40-5] ODHAQPXNQDBHSH-UHFFFAOYSA-N	2.5×10^{-3}		HSDB (2015)	Q	100
allyl mercaptan $\text{C}_3\text{H}_6\text{S}$ [870-23-5] ULIKDJVNUXNQHS-UHFFFAOYSA-N	1.2×10^{-2}		Hilal et al. (2008)	Q	
3,3'-thiobis-1-propene $(\text{C}_3\text{H}_5)_2\text{S}$ (diallyl sulfide) [592-88-1] UBJVUCKUDDKUJF-UHFFFAOYSA-N	4.1×10^{-3}		Lindinger et al. (1998)	M	813
	7.1×10^{-3}		Mazza (1980)	M	
	7.6×10^{-3}		HSDB (2015)	Q	100
	9.9×10^{-3}		Hilal et al. (2008)	Q	
allyl methyl sulfide $\text{CH}_2\text{CHCH}_2\text{SCH}_3$ (2-propenyl methyl sulfide) [10152-76-8] NVLPQIPTCCLBEU-UHFFFAOYSA-N	4.2×10^{-3}		Burkholder et al. (2019)	L	
	4.2×10^{-3}		Burkholder et al. (2015)	L	
	4.2×10^{-3}		Schuhfried et al. (2011)	M	
	5.0×10^{-3}		Mazza (1980)	M	
thiophene $\text{C}_4\text{H}_4\text{S}$ [110-02-1] YTPLMLYBLZKORZ-UHFFFAOYSA-N	4.1×10^{-3}	4300	Haimi et al. (2006)	M	814
	4.4×10^{-3}	4000	Przyjazny et al. (1983)	M	
	3.4×10^{-3}		HSDB (2015)	V	
	4.5×10^{-3}		Mackay et al. (2006d)	V	560
	4.5×10^{-3}		Mackay et al. (1995)	V	
	3.4×10^{-3}		Yaws (2003)	X	238
	8.2×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.1×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-3}		Hilal et al. (2008)	Q	
	9.8×10^{-3}		Modarresi et al. (2007)	Q	68
		2800	Kühne et al. (2005)	Q	
	3.4×10^{-3}		Yaffe et al. (2003)	Q	249, 250

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	9.3×10^{-3}		Yao et al. (2002)	Q	230, 268
	8.8×10^{-3}		English and Carroll (2001)	Q	231, 232
	6.9×10^{-4}		Katritzky et al. (1998)	Q	
	4.5×10^{-3}	1900	Mackay et al. (2006d)	?	
			Kühne et al. (2005)	?	
	3.4×10^{-3}		Yaws et al. (2003)	?	21
	3.4×10^{-3}		Yaws (1999)	?	21
	3.4×10^{-3}		Yaws and Yang (1992)	?	21
	4.4×10^{-3}		Abraham et al. (1990)	?	
2-methylthiophene $\text{CH}_3\text{C}_4\text{H}_3\text{S}$ [554-14-3] XQQBUAPQHNYRS-UHFFFAOYSA-N	4.1×10^{-3}	4300	Brockbank (2013)	L	
	4.1×10^{-3}	4300	Przyjazny et al. (1983)	M	
	2.2×10^{-3}		Yaws et al. (2003)	V	804
	1.9×10^{-3}		Yaws (2003)	X	238
	2.9×10^{-2}		Keshavarz et al. (2022)	Q	
	2.7×10^{-2}		Duchowicz et al. (2020)	Q	
	1.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.9×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.4×10^{-3}		Hilal et al. (2008)	Q	
	8.0×10^{-3}		English and Carroll (2001)	Q	231, 232
	4.1×10^{-3}		Duchowicz et al. (2020)	?	186, 21
	4.1×10^{-3}		Abraham et al. (1990)	?	
3-methylthiophene $\text{CH}_3\text{C}_4\text{H}_3\text{S}$ [616-44-4] QENGPZGAWFQWCZ-UHFFFAOYSA-N	1.4×10^{-3}		Duchowicz et al. (2020)	V	187
	1.4×10^{-3}		Yaws (2003)	X	238
	2.7×10^{-2}		Duchowicz et al. (2020)	Q	
	4.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.9×10^{-3}		Gharagheizi et al. (2010)	Q	247
	1.7×10^{-3}		Hilal et al. (2008)	Q	
	8.2×10^{-3}		Modarresi et al. (2007)	Q	68
	1.4×10^{-3}		Yaffe et al. (2003)	Q	249, 250
	1.8×10^{-3}		Katritzky et al. (1998)	Q	
	1.4×10^{-3}		Yaws et al. (2003)	?	21
propyl allyl disulfide $\text{C}_6\text{H}_{12}\text{S}_2$ [2179-59-1] FCSSPCOFDUKHPV-UHFFFAOYSA-N	3.5×10^{-3}		HSDB (2015)	Q	100
4,5-dithia-1,7-octadiene $\text{C}_6\text{H}_{10}\text{S}_2$ (diallyl disulfide) [2179-57-9] PFRGXCVKLLPLIP-UHFFFAOYSA-N	7.5×10^{-3}		Mazza (1980)	M	

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3-dimethylthiophene $\text{C}_6\text{H}_8\text{S}$ [632-16-6] BZYUMXXOAYSFOW-UHFFFAOYSA-N	1.5×10^{-3} 1.3×10^{-3} 4.8×10^{-3} 1.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
2,4-dimethylthiophene $\text{C}_6\text{H}_8\text{S}$ [638-00-6] CPULIKNSOUFMPL-UHFFFAOYSA-N	1.5×10^{-3} 1.3×10^{-3} 4.7×10^{-3} 1.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
2,5-dimethylthiophene $\text{C}_6\text{H}_8\text{S}$ [638-02-8] GWQOOADXMVQEFT-UHFFFAOYSA-N	3.7×10^{-3} 1.6×10^{-3} 1.4×10^{-3} 1.3×10^{-2} 1.4×10^{-3}		Mazza (1980) Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	M V X Q Q	 804 238 247
2-ethylthiophene $\text{C}_6\text{H}_8\text{S}$ [872-55-9] JCCMAAJYSNBPR-UHFFFAOYSA-N	1.4×10^{-3} 3.9×10^{-3} 1.5×10^{-3} 1.9×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (2003)	X Q Q ?	238 247 21
3,4-dimethylthiophene $\text{C}_6\text{H}_8\text{S}$ [632-15-5] GPSFYJDZKSRMKZ-UHFFFAOYSA-N	1.5×10^{-3} 1.2×10^{-3} 1.7×10^{-3} 1.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
3-ethylthiophene $\text{C}_6\text{H}_8\text{S}$ [1795-01-3] SLDBAXYJAIRQMX-UHFFFAOYSA-N	1.6×10^{-3} 1.4×10^{-3} 1.9×10^{-3} 1.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
2,3,4-trimethylthiophene $\text{C}_7\text{H}_{10}\text{S}$ [1795-04-6] MAVVDCDMBKUFES-UHFFFAOYSA-N	1.3×10^{-3} 1.1×10^{-3} 2.9×10^{-3} 1.0×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
2,3,5-trimethylthiophene $\text{C}_7\text{H}_{10}\text{S}$ [1795-05-7] QKZJQIHBRFCFDGQ-UHFFFAOYSA-N	1.1×10^{-3} 9.3×10^{-4} 7.2×10^{-3} 9.7×10^{-4}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
2-isopropylthiophene $\text{C}_7\text{H}_{10}\text{S}$ [4095-22-1] LOXBELRNKUFSDR-UHFFFAOYSA-N	1.3×10^{-3} 1.1×10^{-3} 1.8×10^{-3} 1.1×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
2-methyl-3-ethylthiophene $\text{C}_7\text{H}_{10}\text{S}$ [53119-51-0] RBRAJDCWXUJHIY-UHFFFAOYSA-N	1.2×10^{-3} 1.0×10^{-3} 2.8×10^{-3} 1.0×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-4-ethylthiophene $C_7H_{10}S$ [13678-54-1] KIWVMUQUYOKTKU-UHFFFAOYSA-N	1.1×10^{-3} 9.6×10^{-4} 3.3×10^{-3} 1.0×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
2-methyl-5-ethylthiophene $C_7H_{10}S$ [40323-88-4] VOIVNYVBGCJFRW-UHFFFAOYSA-N	1.2×10^{-3} 9.9×10^{-4} 6.6×10^{-3} 1.1×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
2-propylthiophene $C_7H_{10}S$ [1551-27-5] BTXIJTYYMLCUHI-UHFFFAOYSA-N	1.2×10^{-3} 1.0×10^{-3} 3.1×10^{-3} 1.0×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
3-isopropylthiophene $C_7H_{10}S$ [29488-27-5] LJPDBPCGTFUDE-UHFFFAOYSA-N	1.1×10^{-3} 9.7×10^{-4} 1.4×10^{-3} 1.0×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
3-methyl-2-ethylthiophene $C_7H_{10}S$ [31805-48-8] VWSCP YCHXFEKLF-UHFFFAOYSA-N	1.2×10^{-3} 9.8×10^{-4} 2.1×10^{-3} 1.1×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
3-methyl-4-ethylthiophene $C_7H_{10}S$ [66577-03-5] QMHN YDJBWOPGHE-UHFFFAOYSA-N	1.3×10^{-3} 1.1×10^{-3} 8.1×10^{-4} 1.0×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
3-methyl-5-ethylthiophene $C_7H_{10}S$ (2-ethyl-4-methylthiophene) [66577-04-6] NZOYEHXPXDWJOCDD-UHFFFAOYSA-N	1.3×10^{-3} 1.1×10^{-3} 1.8×10^{-3} 1.1×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
3-propylthiophene $C_7H_{10}S$ [1518-75-8] QZNF RMXKQCIPQY-UHFFFAOYSA-N	1.2×10^{-3} 9.9×10^{-4} 1.5×10^{-3} 1.0×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	804 238 247
benzenethiol C_6H_5SH (thiophenol) [108-98-5] RMVRSNDYEFQCLF-UHFFFAOYSA-N	2.9×10^{-2} 2.9×10^{-2} 3.0×10^{-2} 3.0×10^{-2} 3.0×10^{-2} 3.2×10^{-1} 4.1×10^{-2} 2.6×10^{-2} 2.9×10^{-2}		Duchowicz et al. (2020) HSDB (2015) Hine and Mookerjee (1975) Hine and Weimar (1965) Schüürmann (2000) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003)	V V V V C Q Q Q Q	187 21 68 249, 250

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.6×10^{-2}		English and Carroll (2001)	Q	231, 232
	1.8×10^{-2}		Katritzky et al. (1998)	Q	
	1.0×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	3.0×10^{-2}		Suzuki et al. (1992)	Q	233
	3.0×10^{-2}		Abraham et al. (1990)	?	
methyl phenyl sulfide $\text{C}_6\text{H}_5\text{SCH}_3$ (thioanisole) [100-68-5] HNKJADCVZUBCPG-UHFFFAOYSA-N	4.0×10^{-2}		Hine and Mookerjee (1975)	V	
	4.1×10^{-2}		Hine and Weimar (1965)	V	
	5.8×10^{-2}		Hilal et al. (2008)	Q	
	4.3×10^{-2}		Yaffe et al. (2003)	Q	249, 250
	2.3×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	4.0×10^{-2}		Suzuki et al. (1992)	Q	233
2-methylbenzenethiol $\text{C}_7\text{H}_8\text{S}$ (2-thiocresol) [137-06-4] LXUNZSDDXMPKLP-UHFFFAOYSA-N	2.7×10^{-2}		HSDB (2015)	Q	100
3-methylbenzenethiol $\text{C}_7\text{H}_8\text{S}$ (3-thiocresol) [108-40-7] WRXOZRLZDJAYDR-UHFFFAOYSA-N	2.7×10^{-2}		HSDB (2015)	Q	100
4-methylbenzenethiol $\text{C}_7\text{H}_8\text{S}$ (4-thiocresol) [106-45-6] WLHCBQAPPJAWLW-UHFFFAOYSA-N	2.7×10^{-2}		HSDB (2015)	Q	100
benzenemethanethiol $\text{C}_7\text{H}_8\text{S}$ [100-53-8] UENWRTRMUIOCKN-UHFFFAOYSA-N	4.7×10^{-2}		HSDB (2015)	Q	100
benzo[<i>b</i>]thiophene $\text{C}_8\text{H}_6\text{S}$ [95-15-8] FCEHBMOGCRZNNI-UHFFFAOYSA-N	4.1×10^{-2}		Mackay et al. (2006d)	V	560
	3.6×10^{-2}		Mackay et al. (1995)	V	
	3.0×10^{-2}		Smith and Bomberger (1980)	V	24
	3.0×10^{-2}		Yaws (1999)	?	21, 12
dibenzothiophene $\text{C}_{12}\text{H}_8\text{S}$ [132-65-0] IYYZUPMFVPLQIF-UHFFFAOYSA-N	2.9×10^{-1}		Duchowicz et al. (2020)	V	187
	2.9×10^{-1}		HSDB (2015)	V	
	2.3×10^{-2}		Mackay et al. (2006d)	V	
	2.3×10^{-2}		Mackay et al. (1995)	V	
	2.3×10^{-2}		Smith and Bomberger (1980)	V	24
	1.2		Duchowicz et al. (2020)	Q	
	3.3×10^{-1}		Parnis et al. (2015)	Q	371

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
thianthrene $\text{C}_{12}\text{H}_8\text{S}_2$ [92-85-3] GVIJXXMTUZIOD-UHFFFAOYSA-N	4.0		Abraham et al. (2019)	Q	
2-methyldibenzothiophene $\text{C}_{13}\text{H}_{10}\text{S}$ [20928-02-3] VHUXLBPAMBOJS-UHFFFAOYSA-N	2.7×10^{-1}		Parnis et al. (2015)	Q	371
2,3-dimethyldibenzothiophene $\text{C}_{14}\text{H}_{12}\text{S}$ [31317-17-6] KEIKATUAMBEIQN-UHFFFAOYSA-N	3.1×10^{-1}		Parnis et al. (2015)	Q	371
2,8-dimethyldibenzothiophene $\text{C}_{14}\text{H}_{12}\text{S}$ [1207-15-4] RRYWCJRYULRSJM-UHFFFAOYSA-N	2.4×10^{-1}		Parnis et al. (2015)	Q	371
benzyl sulfide $\text{C}_{14}\text{H}_{14}\text{S}$ [538-74-9] LUFPJNWMYZRQE-UHFFFAOYSA-N	1.9		HSDB (2015)	Q	100
2,3,7-trimethyldibenzothiophene $\text{C}_{15}\text{H}_{14}\text{S}$ HJSMFSZKADBZIO-UHFFFAOYSA-N	2.7×10^{-1}		Parnis et al. (2015)	Q	371
2,3,8-trimethyldibenzothiophene $\text{C}_{15}\text{H}_{14}\text{S}$ QSOGKFSFLARZIE-UHFFFAOYSA-N	2.7×10^{-1}		Parnis et al. (2015)	Q	371
2,4,7-trimethyldibenzothiophene $\text{C}_{15}\text{H}_{14}\text{S}$ [216983-03-8] YDWNRFQOADVGC-UHFFFAOYSA-N	1.9×10^{-1}		Parnis et al. (2015)	Q	371
4,6-diethyldibenzothiophene $\text{C}_{16}\text{H}_{16}\text{S}$ [132034-91-4] UMQGGSYHJPHWFV-UHFFFAOYSA-N	1.3×10^{-1}		Parnis et al. (2015)	Q	371
2-butyldibenzothiophene $\text{C}_{16}\text{H}_{16}\text{S}$ [147792-31-2] BEQMTJNPMZQPKZ-UHFFFAOYSA-N	1.6×10^{-1}		Parnis et al. (2015)	Q	371

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
carbon oxide sulfide	2.0×10^{-4}	3500	Burkholder et al. (2019)	L	
OCS	2.0×10^{-4}	3500	Burkholder et al. (2015)	L	
(carbonyl sulfide)	2.1×10^{-4}	3300	Warneck and Williams (2012)	L	
[463-58-1]	2.0×10^{-4}	3500	Sander et al. (2011)	L	
JJWKPURADFRFRB-UHFFFAOYSA-N	2.0×10^{-4}	3500	Sander et al. (2006)	L	
	2.1×10^{-4}	3000	Wilhelm et al. (1977)	L	
	2.2×10^{-4}	2100	De Bruyn et al. (1995b)	M	
	1.5×10^{-4}	3800	Johnson and Harrison (1986)	M	71
	1.5×10^{-4}	3500	Hoyt (1982)	M	71
	2.4×10^{-4}		Stock and Kuß (1917)	M	
	2.1×10^{-4}	3300	Winkler (1907)	M	
	2.1×10^{-4}	3300	Winkler (1906)	M	
	3.4×10^{-4}		Hempel (1901)	M	621
	1.6×10^{-5}		Duchowicz et al. (2020)	V	187
	1.6×10^{-5}		HSDB (2015)	V	
	1.9×10^{-4}		Yaws (2003)	X	238
	2.0×10^{-4}		Hayer et al. (2022)	Q	20
	5.4		Duchowicz et al. (2020)	Q	
	2.0×10^{-4}		Gharagheizi et al. (2010)	Q	247
		2900	Kühne et al. (2005)	Q	
		3300	Kühne et al. (2005)	?	
	2.0×10^{-4}		Yaws (1999)	?	21
	2.1×10^{-4}	3000	Yaws et al. (1999)	?	21
	1.9×10^{-4}		Yaws and Yang (1992)	?	21
methanesulfonic acid			Brimblecombe and Clegg (1988)	T	815
CH ₃ SO ₃ H	7.3×10^3		Wang et al. (2017)	Q	81, 239
(MSA)	1.2×10^6		Wang et al. (2017)	Q	81, 240
[75-75-2]	5.0×10^5		Wang et al. (2017)	Q	81, 241
AFVFAQIVMOAPDHO-UHFFFAOYSA-N					
MCM:CH ₃ SO ₂ OOH	1.9×10^5		Wang et al. (2017)	Q	81, 239
CH ₄ O ₄ S	1.0×10^7		Wang et al. (2017)	Q	81, 240
BENVNICSYZXTGE-UHFFFAOYSA-N	1.8×10^4		Wang et al. (2017)	Q	81, 241
MCM:CH ₃ SO ₃ OOH	4.3×10^7		Wang et al. (2017)	Q	81, 239
CH ₄ O ₃ S	5.6×10^6		Wang et al. (2017)	Q	81, 240
IZTYBZWDPIUSAG-UHFFFAOYSA-N	2.7×10^3		Wang et al. (2017)	Q	81, 241
MCM:MSIA	1.6×10^6		Wang et al. (2017)	Q	81, 239
CH ₄ O ₂ S	8.0×10^3		Wang et al. (2017)	Q	81, 240
XNEFVTBPCXGIRX-UHFFFAOYSA-N	3.6×10^5		Wang et al. (2017)	Q	81, 241
sulfuric acid, dimethyl ester	6.9		Hilal et al. (2008)	Q	
C ₂ H ₆ O ₄ S	2.5		Yaws (1999)	?	21, 28
(dimethyl sulfate)					
[77-78-1]					
VAYGXNSJCAHWJZ-UHFFFAOYSA-N					

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:DMSO2OOH $\text{C}_2\text{H}_6\text{O}_4\text{S}$ GCLQZLAJAMWHP5-UHFFFAOYSA-N	2.6×10^5 6.5×10^6 6.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CH3SCH2OH $\text{C}_2\text{H}_6\text{OS}$ ZSSFPSNLAUYOFG-UHFFFAOYSA-N	4.2 7.6×10^1 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:DMSO2OH $\text{C}_2\text{H}_6\text{O}_3\text{S}$ ICHBUPLXTAHKLA-UHFFFAOYSA-N	1.0×10^4 5.6×10^6 5.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CH3SCHO $\text{C}_2\text{H}_4\text{OS}$ LFJRGYNYRORDDM-UHFFFAOYSA-N	1.3 1.5×10^{-1} 4.8×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
MCM:CH3SO2CHO $\text{C}_2\text{H}_4\text{O}_3\text{S}$ LUGQISNSRPQOGS-UHFFFAOYSA-N	3.1×10^3 3.6×10^2 2.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241
mercaptoacetic acid, methyl ester $\text{C}_3\text{H}_6\text{O}_2\text{S}$ (methyl thioglycolate) [2365-48-2] MKIJJIMOAABWGF-UHFFFAOYSA-N	1.6		HSDB (2015)	Q	100
1,3-propane sultone $\text{C}_3\text{H}_6\text{O}_3\text{S}$ [1120-71-4] FSSPGSAQUIYDCN-UHFFFAOYSA-N	1.6×10^3		Ebert et al. (2023)	?	317
methanesulfonic acid, ethyl ester $\text{C}_3\text{H}_8\text{O}_3\text{S}$ [62-50-0] PLUBXMRUUVWRLT-UHFFFAOYSA-N	3.8×10^1 2.8×10^{-2} 1.8		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015)	V Q Q	187 100
2,3-dimercapto-1-propanol $\text{C}_3\text{H}_8\text{OS}_2$ [59-52-9] WQABCVAJNWAXTE-UHFFFAOYSA-N	1.1×10^3 4.1×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
divinyl sulfoxide $\text{C}_4\text{H}_6\text{OS}$ (vinyl sulfoxide) [1115-15-7] HQSMEHLVLOGBCK-UHFFFAOYSA-N	2.5×10^1		HSDB (2015)	Q	100
divinyl sulphone $\text{C}_4\text{H}_6\text{O}_2\text{S}$ [77-77-0] AFOSIXZFDONLBT-UHFFFAOYSA-N	2.0×10^{-1}		HSDB (2015)	Q	100

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,5-dihydrothiophene sulfone $\text{C}_4\text{H}_6\text{O}_2\text{S}$ (2,5-dihydrothiophene 1,1-dioxide) [77-79-2] MBDNRNMTZADMQ-UHFFFAOYSA-N	2.3		HSDB (2015)	Q	100
thiodiacetic acid $\text{C}_4\text{H}_6\text{O}_4\text{S}$ [123-93-3] UVZIGZIVKIMRNE-UHFFFAOYSA-N	2.2×10^8		HSDB (2015)	Q	100
thiophene, tetrahydro-, 1,1-dioxide $\text{C}_4\text{H}_8\text{O}_2\text{S}$ (sulfolane) [126-33-0] HXJUTPCZVOIRIF-UHFFFAOYSA-N	2.1		HSDB (2015)	Q	100
2-(ethylthio)ethanol $\text{C}_4\text{H}_{10}\text{OS}$ [110-77-0] LNRIEBFNWGMXKP-UHFFFAOYSA-N	1.9×10^2		HSDB (2015)	Q	100
thiodiglycol $\text{C}_4\text{H}_{10}\text{O}_2\text{S}$ [111-48-8] YODZTKMDCQEPHD-UHFFFAOYSA-N	5.2×10^3		HSDB (2015)	Q	100
methanesulfonic acid, 1-methylethyl ester $\text{C}_4\text{H}_{10}\text{O}_3\text{S}$ [926-06-7] SWWHCQCMVCPLEQ-UHFFFAOYSA-N	1.4		HSDB (2015)	Q	100
diethyl sulfate $\text{C}_4\text{H}_{10}\text{O}_4\text{S}$ [64-67-5] DENRZWYUOJLTMF-UHFFFAOYSA-N	1.6		Ebert et al. (2023)	?	317
S-methyl butanethioate $\text{C}_5\text{H}_{10}\text{OS}$ [2432-51-1] GRLJIIJNZJVMGP-UHFFFAOYSA-N	2.6×10^{-2}		Souchon et al. (2004)	M	
4-hydroxybenzenesulfonic acid $\text{C}_6\text{H}_6\text{O}_4\text{S}$ [98-67-9] FEPBITJSIHRMRT-UHFFFAOYSA-N	3.8×10^7		HSDB (2015)	Q	100

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
benzenesulfonic acid $\text{C}_6\text{H}_6\text{O}_3\text{S}$ [98-11-3] SRSXLGNVWSONIS-UHFFFAOYSA-N	3.9×10^3		HSDB (2015)	Q	100
dimethipin $\text{C}_6\text{H}_{10}\text{O}_4\text{S}_2$ [55290-64-7] PHVNLLCAQHGKNU-UHFFFAOYSA-N	4.3×10^5 7.0×10^5 4.3×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020) MacBean (2012a)	V Q ?	187
4-methylbenzenesulfonic acid $\text{C}_7\text{H}_8\text{O}_3\text{S}$ [104-15-4] JOXIMZWYDAKGHI-UHFFFAOYSA-N	3.6×10^3		HSDB (2015)	Q	100
phenylmethanesulfonic acid $\text{C}_7\text{H}_8\text{O}_3\text{S}$ (benzylsulfonic acid) [100-87-8] NIXKBAZVOQAHGK-UHFFFAOYSA-N	9.9×10^3		HSDB (2015)	Q	100
isoprothiolane $\text{C}_{12}\text{H}_{18}\text{O}_4\text{S}_2$ [50512-35-1] UFHLMYOGRXOCSL-UHFFFAOYSA-N	9.8×10^{-2} 2.8×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
4,4'-sulfonyldiphenol $\text{C}_{12}\text{H}_{10}\text{O}_4\text{S}$ (bisphenol S) [80-09-1] VPWNQTHUCYVMVMZ-UHFFFAOYSA-N	3.7×10^9		HSDB (2015)	Q	449
benfuresate $\text{C}_{12}\text{H}_{16}\text{O}_4\text{S}$ [68505-69-1] QGQSRQPXXMTJCM-UHFFFAOYSA-N	3.7×10^2		Ebert et al. (2023)	?	319
lauryl sulfate $\text{C}_{12}\text{H}_{26}\text{O}_4\text{S}$ (dodecyl sulfate) [151-41-7] MOTZDAYCYVMXPC-UHFFFAOYSA-N	5.5×10^1		HSDB (2015)	Q	100
ethofumesate $\text{C}_{13}\text{H}_{18}\text{O}_5\text{S}$ [26225-79-6] IRCMYGHKLLGHV-UHFFFAOYSA-N	2.7×10^2 2.7×10^2 4.5×10^1 7.7		Duchowicz et al. (2020) HSDB (2015) Barcelo and Hennion (1997) Duchowicz et al. (2020)	V V X Q	187 569
	1.1×10^2 2.7×10^2		Goodarzi et al. (2010) Maniere et al. (2011)	Q ?	570, 571 166

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1'-sulfonylbis(4-(1-methylethyl)-benzene $\text{C}_{18}\text{H}_{22}\text{O}_2\text{S}$ [57913-35-6] PKQWGBLKCJIMDP-UHFFFAOYSA-N	1.0×10^1		Zhang et al. (2010)	Q	288, 289
propargite $\text{C}_{19}\text{H}_{26}\text{O}_4\text{S}$ [2312-35-8] ZYHMJXZULPZUED-UHFFFAOYSA-N	1.5×10^1 1.5×10^1 1.0×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
kadethrin $\text{C}_{23}\text{H}_{24}\text{O}_4\text{S}$ [58769-20-3] UGWALRUNBSBTGI-QJLCOAGJSA-N	1.2×10^4		HSDB (2015)	Q	100
spironolactone $\text{C}_{24}\text{H}_{32}\text{O}_4\text{S}$ [52-01-7] LXMSZDCAJNLERA-PJKOONHSA-N	9.0×10^4		HSDB (2015)	Q	100
2,2'-thiobis(4-(1,1,3,3-tetramethylbutyl)phenol) $\text{C}_{28}\text{H}_{42}\text{O}_2\text{S}$ [3294-03-9] WQYFETFRI RDUPJ-UHFFFAOYSA-N	4.5×10^5 1.2×10^4 2.2×10^7 1.8×10^5		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
propanoic acid, 3,3'-thiobis-, didodecyl ester $\text{C}_{30}\text{H}_{58}\text{O}_4\text{S}$ (dilauryl thiodipropionate) [123-28-4] GHKOFFNLGXMVNJ-UHFFFAOYSA-N	2.5		HSDB (2015)	Q	449
dioctadecyl 3,3'-thiodipropionate $\text{C}_{42}\text{H}_{82}\text{O}_4\text{S}$ [693-36-7] PWWSSIVTQUJQQ-UHFFFAOYSA-N	8.2×10^{-2}		HSDB (2015)	Q	449
methyl isothiocyanate CH_3NCS [556-61-6] LGDSHSYDSCRFB-UHFFFAOYSA-N	1.7×10^{-1} 1.7×10^{-1} 1.7×10^{-1} 1.6×10^{-1} 2.2×10^{-1} 2.2×10^{-1} 2.1 1.8×10^{-2}		Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Worthington and Wade (2007) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Modarresi et al. (2007)	L L L M V V Q Q	187 68

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
thiourea CH ₄ N ₂ S [62-56-6] UMGDCJDMYOKAJW-UHFFFAOYSA-N	5.0 × 10 ³ 4.9 × 10 ³ 1.7 × 10 ⁵		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
hydrazinecarbothioamide CH ₅ N ₃ S (1-amino-2-thiourea) [79-19-6] BRWIZMBXBBOCCF-UHFFFAOYSA-N	1.5 × 10 ⁴		HSDB (2015)	Q	100
thiocyanic acid, methyl ester C ₂ H ₃ NS [556-64-9] VYHVQEYOFIYNJP-UHFFFAOYSA-N	2.2 × 10 ⁻¹		HSDB (2015)	Q	100
ethanethioamide C ₂ H ₅ NS (thioacetamide) [62-55-5] YUKQRDCYNOVPGJ-UHFFFAOYSA-N	1.5		HSDB (2015)	Q	100
mercaptamine C ₂ H ₇ NS (cysteamine) [60-23-1] UFULAYFCSOUIOV-UHFFFAOYSA-N	2.7 × 10 ¹		HSDB (2015)	Q	100
thiocyanic acid, ethyl ester C ₃ H ₅ NS [542-90-5] WFCLYEAZTHWNEH-UHFFFAOYSA-N	1.7 × 10 ⁻¹		HSDB (2015)	Q	100
2-imidazolidinethione C ₃ H ₆ N ₂ S (ethylene thiourea) [96-45-7] PDQAZBWRQCGBEV-UHFFFAOYSA-N	2.9 × 10 ¹		HSDB (2015)	Q	100
ethylthiourea C ₃ H ₈ N ₂ S [625-53-6] GMEHFXXZSWDEDB-UHFFFAOYSA-N	4.2 × 10 ²		HSDB (2015)	Q	100
allyl isothiocyanate C ₄ H ₅ NS [57-06-7] ZOJBYZNEUISWFT-UHFFFAOYSA-N	2.1 × 10 ⁻² 4.1 × 10 ⁻² 4.1 × 10 ⁻² 2.7 2.3 × 10 ⁻¹		Souchon et al. (2004) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Modarresi et al. (2007)	M V V Q Q	187 68

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dazomet $\text{C}_5\text{H}_{10}\text{N}_2\text{S}_2$ [533-74-4] QAYICIQNSGETAS-UHFFFAOYSA-N	2.0×10^4 4.6×10^4 3.7×10^4 3.7×10^5 2.0×10^4		Duchowicz et al. (2020) Mackay et al. (2006d) MacBean (2012b) Duchowicz et al. (2020) Maniere et al. (2011)	V V X Q ?	187 352 12, 166
N,N'-diethylthiourea $\text{C}_5\text{H}_{12}\text{N}_2\text{S}$ [105-55-5] FLVIGYVXZHLUHP-UHFFFAOYSA-N	1.4×10^2		HSDB (2015)	Q	100
tetramethylthiourea $\text{C}_5\text{H}_{12}\text{N}_2\text{S}$ [2782-91-4] MNOILHPDHOHILI-UHFFFAOYSA-N	8.5×10^2		HSDB (2015)	Q	100
thiram $\text{C}_6\text{H}_{12}\text{N}_2\text{S}_4$ [137-26-8] KUAZQDVKQLNFPE-UHFFFAOYSA-N	9.3×10^1 3.0×10^1		Mackay et al. (2006d) MacBean (2012b)	V X	352
bis(dimethylthiocarbamyl) sulfide $\text{C}_6\text{H}_{12}\text{N}_2\text{S}_3$ (bis(dimethylthiocarbamoyl) sulfide) [97-74-5] REQPQFUJGGOFQL-UHFFFAOYSA-N	5.8×10^{-1}		HSDB (2015)	Q	100
benzothiazole $\text{C}_7\text{H}_5\text{NS}$ [95-16-9] IOJUPLGTWVMSFF-UHFFFAOYSA-N	2.7×10^1 2.7×10^1 2.8 1.1×10^1 2.0		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
2-mercaptobenzothiazole $\text{C}_7\text{H}_5\text{NS}_2$ [149-30-4] YXIWHUQXZSMYRE-UHFFFAOYSA-N	2.7×10^2 2.7×10^2 2.8×10^3 2.2×10^2 2.1×10^1		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
2-benzothiazolamine $\text{C}_7\text{H}_6\text{N}_2\text{S}$ [136-95-8] UHGULLIUJBCTEF-UHFFFAOYSA-N	7.6×10^4		HSDB (2015)	Q	100
phenylthiourea $\text{C}_7\text{H}_8\text{N}_2\text{S}$ [103-85-5] FULZLIGZKMKICU-UHFFFAOYSA-N	9.9×10^4		HSDB (2015)	Q	100

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
aziprotryn $\text{C}_7\text{H}_{11}\text{N}_7\text{S}$ [4658-28-0] AFIIBUOYKYSPKB-UHFFFAOYSA-N	4.0×10^2 9.2×10^2		Abraham et al. (2007) MacBean (2012a)	Q ?	
isothiocyanatobenzene $\text{C}_7\text{H}_5\text{NS}$ [103-72-0] QKFJKGMPGYROCL-UHFFFAOYSA-N	3.3×10^{-3} 5.1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
simetryn $\text{C}_8\text{H}_{15}\text{N}_5\text{S}$ [1014-70-6] MGLWZSOBALDPEK-UHFFFAOYSA-N	2.2×10^4 2.2×10^4 3.8×10^6 2.9×10^4 1.0×10^4		Duchowicz et al. (2020) Mackay et al. (2006d) Duchowicz et al. (2020) Hilal et al. (2008) Abraham et al. (2007)	V V Q Q Q	187
desmetryn $\text{C}_8\text{H}_{15}\text{N}_5\text{S}$ [1014-69-3] HCRWJJJUKUVORR-UHFFFAOYSA-N	2.1×10^4 5.0×10^7 2.2×10^4 2.0×10^4 1.4×10^9 3.9×10^7 2.1×10^4		HSDB (2015) Delgado and Alderete (2003) Hilal et al. (2008) Abraham et al. (2007) Delgado and Alderete (2003) Delgado and Alderete (2003) MacBean (2012a)	V C Q Q Q Q ?	
thioquinox $\text{C}_9\text{H}_4\text{N}_2\text{S}_3$ [93-75-4] ILERPRJWJPJZDN-UHFFFAOYSA-N	1.3×10^2		HSDB (2015)	Q	100
thiocyanic acid, (2-benzothiazolylthio)methyl ester $\text{C}_9\text{H}_6\text{N}_2\text{S}_3$ [21564-17-0] TUBQDCKAWGHZPF-UHFFFAOYSA-N	1.5×10^6		HSDB (2015)	Q	100
ametryn $\text{C}_9\text{H}_{17}\text{N}_5\text{S}$ [834-12-8] RQVYBGPQFYCBGX-UHFFFAOYSA-N	2.1×10^1 4.1×10^3 8.1×10^3 8.3×10^3 8.2×10^1 4.1×10^3 1.3×10^2 1.2×10^4 5.1×10^3 8.9×10^7 1.1×10^7		Chao et al. (2017) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Delgado and Alderete (2003) Goodarzi et al. (2010) Hilal et al. (2008) Abraham et al. (2007) Delgado and Alderete (2003) Delgado and Alderete (2003)	M V V V X C Q Q Q Q Q Q	12 569 570

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cimetidine $\text{C}_{10}\text{H}_{16}\text{N}_6\text{S}$ [51481-61-9] AQIXAKUUQRKLN-UHFFFAOYSA-N	1.0×10^{10}		HSDB (2015)	Q	100
prometryn $\text{C}_{10}\text{H}_{19}\text{N}_5\text{S}$ [7287-19-6] AAEVYOVXGOFMJO-UHFFFAOYSA-N	8.2×10^2 2.0×10^3 2.0×10^3 2.0×10^1 2.9×10^6 7.6×10^2 2.5×10^2 7.5×10^2 2.5×10^3 5.1×10^6 1.4×10^6		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Delgado and Alderete (2003) Delgado and Alderete (2003) Goodarzi et al. (2010) Hilal et al. (2008) Abraham et al. (2007) Delgado and Alderete (2003) Delgado and Alderete (2003)	V V V X C C Q Q Q Q Q	12 569 570
terbutryn $\text{C}_{10}\text{H}_{19}\text{N}_5\text{S}$ [886-50-0] IROINLKCQGIITA-UHFFFAOYSA-N	4.7×10^2 7.0×10^2 7.7×10^2 7.6 1.2×10^6 8.7×10^2 1.7×10^2 4.5×10^3 1.6×10^3 5.1×10^6 1.4×10^6		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Delgado and Alderete (2003) Delgado and Alderete (2003) Goodarzi et al. (2010) Hilal et al. (2008) Abraham et al. (2007) Delgado and Alderete (2003) Delgado and Alderete (2003)	V V V X C C Q Q Q Q Q	12 569 570
disulfiram $\text{C}_{10}\text{H}_{20}\text{N}_2\text{S}_4$ [97-77-8] AUZONCFQVSMFAP-UHFFFAOYSA-N	1.2×10^{-1}		HSDB (2015)	Q	100
1-naphthalenylthiourea $\text{C}_{11}\text{H}_{10}\text{N}_2\text{S}$ [86-88-4] PIVQQUNOTICCSA-UHFFFAOYSA-N	1.2×10^3		HSDB (2015)	Q	100
4,4'-thiobisbenzenamine $\text{C}_{12}\text{H}_{12}\text{N}_2\text{S}$ (bis(4-aminophenyl) sulfide) [139-65-1] ICNFHJVPAJKPHW-UHFFFAOYSA-N	2.5×10^6		HSDB (2015)	Q	100
dipropetryn $\text{C}_{11}\text{H}_{19}\text{N}_5\text{S}$ [4147-51-7] NPWMZOGDXOFZIN-UHFFFAOYSA-N	6.0×10^2 1.6×10^3 6.5×10^2		Hilal et al. (2008) Abraham et al. (2007) MacBean (2012a)	Q Q ?	

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dimethametryn $\text{C}_{11}\text{H}_{21}\text{N}_5\text{S}$ [22936-75-0] IKYICRRUVNIHPP-UHFFFAOYSA-N	8.2×10^3 1.0×10^3		Hilal et al. (2008) Abraham et al. (2007)	Q Q	
phenothiazine $\text{C}_{12}\text{H}_9\text{NS}$ [92-84-2] WJFKNYWRSNBZNX-UHFFFAOYSA-N	1.0×10^2 3.5×10^2 3.5×10^2 6.9×10^2 9.7×10^1 4.3×10^2		Abraham et al. (2019) HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
cymiazole $\text{C}_{12}\text{H}_{14}\text{N}_2\text{S}$ [61676-87-7] YUAUPYJCVKNAEC-UHFFFAOYSA-N	1.5×10^2		Ebert et al. (2023)	?	319
2,2'-dithiobisbenzothiazole $\text{C}_{14}\text{H}_8\text{N}_2\text{S}_4$ (2,2'-dibenzothiazyl disulfide) [120-78-5] AFZSMODLJCVPP-UHFFFAOYSA-N	4.2×10^7		HSDB (2015)	Q	100
methapyrilene $\text{C}_{14}\text{H}_{19}\text{N}_3\text{S}$ [91-80-5] HNJJXZKZRAWDPF-UHFFFAOYSA-N	3.6×10^1		HSDB (2015)	V	
olanzapine $\text{C}_{17}\text{H}_{20}\text{N}_4\text{S}$ [132539-06-1] KVVDHTXUZHCGIO-UHFFFAOYSA-N	1.3×10^9		HSDB (2015)	Q	100
N-(1,1-dimethylethyl)bis(2-benzothiazolesulfen)amide $\text{C}_{18}\text{H}_{17}\text{N}_3\text{S}_4$ [3741-80-8] VILGDADBAQFRJE-UHFFFAOYSA-N	2.4×10^8 1.7×10^3 2.3×10^3 3.9×10^8		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
buthiobate $\text{C}_{21}\text{H}_{28}\text{N}_2\text{S}_2$ [51308-54-4] ZZVVDIVVGXTDRQ-UHFFFAOYSA-N	3.4×10^1		Ebert et al. (2023)	?	319
MCM:CH3SO4NO2 $\text{CH}_3\text{NO}_6\text{S}$ IMLJWBRSRKRPAQ-UHFFFAOYSA-N	7.8×10^3 1.6×10^4 3.2×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	81, 239 81, 240 81, 241

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CH3SOO2NO2	1.7×10^6		Wang et al. (2017)	Q	81, 239
CH ₃ NO ₅ S	3.9×10^8		Wang et al. (2017)	Q	81, 240
PGTDFOBGUOOGGZ-UHFFFAOYSA-N	8.3×10^{-2}		Wang et al. (2017)	Q	81, 241
taurine C ₂ H ₇ NO ₃ S [107-35-7] XOAAWQZATWQOTB-UHFFFAOYSA-N	5.8×10^6		HSDB (2015)	Q	449
2-amino-5-nitrothiazole C ₃ H ₃ N ₃ O ₂ S [121-66-4] MIHADVKEHAFNPG-UHFFFAOYSA-N	1.9×10^6		HSDB (2015)	Q	100
N-(aminothioxomethyl)acetamide C ₃ H ₆ N ₂ OS (1-acetyl-2-thiourea) [591-08-2] IPCRBOOJBPETMF-UHFFFAOYSA-N	3.8×10^5		HSDB (2015)	Q	100
acesulfame C ₄ H ₅ NO ₄ S [33665-90-6] YGCFIWQZPHFLU-UHFFFAOYSA-N	1.0×10^3		HSDB (2015)	Q	100
methomyl C ₅ H ₁₀ N ₂ O ₂ S [16752-77-5] UHXUZOCRWRNSJ-UHFFFAOYSA-N	2.0×10^2 5.0×10^5 5.2×10^5 5.3×10^4		Chao et al. (2017) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d)	M V V V	187
	1.5×10^4 1.5×10^2 1.0×10^4 1.3×10^2		Suntio et al. (1988) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010)	V X Q Q	12 569 570, 571
4-aminobenzenesulfonic acid C ₆ H ₇ NO ₃ S (sulfanilic acid) [121-57-3] HVBSAKJJOYLTLQU-UHFFFAOYSA-N	1.1×10^7		HSDB (2015)	Q	449
sulfanilamide C ₆ H ₈ N ₂ O ₂ S [63-74-1] FDDDEECHVMSUSB-UHFFFAOYSA-N	6.6×10^4		HSDB (2015)	Q	100
nithiazide C ₆ H ₈ N ₄ O ₃ S [139-94-6] FQSUTLQHSDDLAN-UHFFFAOYSA-N	6.2×10^9		HSDB (2015)	Q	100

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methylbenzenesulfonamide $\text{C}_7\text{H}_9\text{NO}_2\text{S}$ (<i>o</i> -toluenesulfonamide) [88-19-7] YCMLQMDWSXFTIF-UHFFFAOYSA-N	2.1×10^1		HSDB (2015)	Q	100
4-methylbenzenesulfonamide $\text{C}_7\text{H}_9\text{NO}_2\text{S}$ (<i>p</i> -toluenesulfonamide) [70-55-3] LMYRWZFFENFIFIT-UHFFFAOYSA-N	2.1×10^1		HSDB (2015)	Q	100
ethidimuron $\text{C}_7\text{H}_{12}\text{N}_4\text{O}_3\text{S}_2$ [30043-49-3] KCOGSOWTADCKOL-UHFFFAOYSA-N	1.4×10^8		MacBean (2012a)	?	
oxamyl $\text{C}_7\text{H}_{13}\text{N}_3\text{O}_3\text{S}$ [23135-22-0] KZAUOCCYDRDERY-UITAMQMPSA-N	4.2×10^4 4.2×10^4 4.2×10^4 3.8×10^3 3.8×10^1 3.4×10^7 6.4×10^1 2.0×10^7		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010) Maniere et al. (2011)	V V V V X Q Q ?	187 12 569 570 166
aldicarb $\text{C}_7\text{H}_{14}\text{N}_2\text{O}_2\text{S}$ [116-06-3] QGLZXHRNAYXIBU-WEVVVXLNSA-N	6.9×10^3 6.6×10^3 7.9×10^3 3.1×10^3 3.1×10^1 1.9 8.0×10^3 2.6×10^1		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Suntio et al. (1988) Duchowicz et al. (2020) Goodarzi et al. (2010)	V V V V X C Q Q	187 12 569 12 570, 573
aldicarb sulfoxide $\text{C}_7\text{H}_{14}\text{N}_2\text{O}_3\text{S}$ [1646-87-3] BXPMAGSOWXBZHS-UHFFFAOYSA-N	1.0×10^4 4.2×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
aldicarb sulfone $\text{C}_7\text{H}_{14}\text{N}_2\text{O}_4\text{S}$ [1646-88-4] YRRKLBKDXSTNC-UHFFFAOYSA-N	2.9×10^3 4.4×10^6 3.7×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020) MacBean (2012a)	V Q ?	187
butocarboxim $\text{C}_7\text{H}_{14}\text{N}_2\text{O}_2\text{S}$ [34681-10-2] SFNPDDSJBGRLW-UHFFFAOYSA-N	1.7×10^4 1.7×10^4		HSDB (2015) MacBean (2012a)	V ?	

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
butoxycarboxim $\text{C}_7\text{H}_{14}\text{N}_2\text{O}_4\text{S}$ [34681-23-7] CTJBHIROCMPUKL-UHFFFAOYSA-N	3.5×10^6		HSDB (2015)	V	
saccharin $\text{C}_7\text{H}_5\text{NO}_3\text{S}$ [81-07-2] CVHZOJJKTDOEJC-UHFFFAOYSA-N	8.2×10^3		HSDB (2015)	Q	100
acibenzolar-S-methyl $\text{C}_8\text{H}_6\text{N}_2\text{OS}_2$ [135158-54-2] UELITFHSLAHR-UHFFFAOYSA-N	8.3×10^1 8.2×10^1 1.5×10^6 7.7×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	187 242, 166
quinomethionate $\text{C}_8\text{H}_6\text{N}_2\text{OS}_2$ [2439-01-2] FBQQHUGEACOBND-UHFFFAOYSA-N	1.6×10^2 1.6×10^2		HSDB (2015) MacBean (2012a)	V ?	
nifurthiazole $\text{C}_8\text{H}_6\text{N}_4\text{O}_4\text{S}$ [3570-75-0] DUWYZHLZDVCZIO-UHFFFAOYSA-N	1.3×10^{12}		HSDB (2015)	Q	100
4-methylbenzenesulfonyl isocyanate $\text{C}_8\text{H}_7\text{NO}_3\text{S}$ [4083-64-1] VLJQDHDVZJXNQL-UHFFFAOYSA-N	1.7×10^{-1} 3.2×10^1 6.7 4.0×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
tinidazole $\text{C}_8\text{H}_{13}\text{N}_3\text{O}_4\text{S}$ [19387-91-8] HJLSLZFTKLNLI-UHFFFAOYSA-N	1.9×10^5		HSDB (2015)	Q	100
metribuzin $\text{C}_8\text{H}_{14}\text{N}_4\text{OS}$ [21087-64-9] FOXFZRUHNHCZPX-UHFFFAOYSA-N	8.2×10^4 5.0×10^4		HSDB (2015) Maniere et al. (2011)	V ?	242, 166
tricyclazole $\text{C}_9\text{H}_7\text{N}_3\text{S}$ [41814-78-2] DQJCHOQLCLEDLL-UHFFFAOYSA-N	3.2×10^5 3.2×10^5 5.5×10^5		Duchowicz et al. (2020) Mackay et al. (2006d) Duchowicz et al. (2020)	V V Q	187
benzthiazuron $\text{C}_9\text{H}_9\text{N}_3\text{OS}$ [1929-88-0] DTCJYIIKPVVDD-UHFFFAOYSA-N	1.9×10^6		Ebert et al. (2023)	?	367

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
thidiazuron $\text{C}_9\text{H}_8\text{N}_4\text{OS}$ [51707-55-2] HFCYZXMHUIHAQI-UHFFFAOYSA-N	3.0×10^7		HSDB (2015)	V	
sulfathiazole $\text{C}_9\text{H}_9\text{N}_3\text{O}_2\text{S}_2$ [72-14-0] JNMRHUJNC SQMMB-UHFFFAOYSA-N	1.7×10^8		HSDB (2015)	Q	100
sulfamethizole $\text{C}_9\text{H}_{10}\text{N}_4\text{O}_2\text{S}_2$ [144-82-1] VACCAVUAMIDAGB-UHFFFAOYSA-N	3.8×10^8		HSDB (2015)	Q	100
ethiozin $\text{C}_9\text{H}_{16}\text{N}_4\text{OS}$ [64529-56-2] ADZSGNDOZREKJK-UHFFFAOYSA-N	2.0×10^2		MacBean (2012a)	?	
tebuthiuron $\text{C}_9\text{H}_{16}\text{N}_4\text{OS}$ [34014-18-1] HBPKDSDLXWAOE-UHFFFAOYSA-N	6.9×10^4 3.2×10^4 8.2×10^4		Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	Q Q ?	186, 21
molinat $\text{C}_9\text{H}_{17}\text{NOS}$ [2212-67-1] DEDOPGXGQYYMW-UHFFFAOYSA-N	7.7 2.2 1.7 6.9 1.1×10^1 1.0×10^1 7.6 7.3 2.3	7300	Watanabe (1993) Sagebiel et al. (1992) Sagebiel et al. (1992) Mackay et al. (2006d) Sagebiel et al. (1992) Woodrow et al. (1990) Armbrust (2000) Hilal et al. (2008) Modarresi et al. (2007)	M M M V V V C Q Q	12 12 68
thiofanox $\text{C}_9\text{H}_{18}\text{N}_2\text{O}_2\text{S}$ [39196-18-4] FZSVSABTBYGOQH-UHFFFAOYSA-N	1.1×10^3 3.4×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
amidofur $\text{C}_9\text{H}_{15}\text{N}_5\text{O}_7\text{S}_2$ [120923-37-7] CTTHWASMBLQOFR-UHFFFAOYSA-N	6.4×10^5 1.9×10^3 1.5×10^5		Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	? ? ?	12, 495, 166 12, 579, 166 12, 575, 166

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
S-ethyl dipropylthiocarbamate $\text{C}_9\text{H}_{19}\text{NOS}$ (eptam; EPTC) [759-94-4] GUVLYNGULCJVDO-UHFFFAOYSA-N	5.6×10^{-1} 3.8×10^{-2} 6.2×10^{-1} 9.8×10^{-1} 4.2×10^{-1} 9.8×10^{-1} 7.4×10^{-1} 1.0×10^{-2} 1.1×10^{-2} 8.2×10^{-1} 1.2	9100 4800	Reyes-Pérez et al. (2008) Breiter et al. (1998) HSDB (2015) Mackay et al. (2006d) Breiter et al. (1998) Suntio et al. (1988) Burkhard and Guth (1981) Barcelo and Hennion (1997) Goodarzi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Kühne et al. (2005)	M M V V V V V X Q Q Q Q ?		
thiabendazole $\text{C}_{10}\text{H}_7\text{N}_3\text{S}$ [148-79-8] WJCNZQLZVWNLKY-UHFFFAOYSA-N	4.7×10^5 4.7×10^5 4.7×10^5 1.3×10^5 2.7×10^5		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020) Maniere et al. (2011)	V V V Q ?	187 242, 166	
benzo[<i>b</i>]thiophene-4-ol, methylcarbamate $\text{C}_{10}\text{H}_9\text{NO}_2\text{S}$ (mobam) [1079-33-0] BOTUVXISJHKZKJ-UHFFFAOYSA-N	5.8×10^3		HSDB (2015)	Q	100	
sulfamethoxazole $\text{C}_{10}\text{H}_{11}\text{N}_3\text{O}_3\text{S}$ [723-46-6] JLKIGFTWXXRPMF-UHFFFAOYSA-N	1.5×10^7		HSDB (2015)	Q	100	
bentazone $\text{C}_{10}\text{H}_{12}\text{N}_2\text{O}_3\text{S}$ [25057-89-0] ZOMSMJKLGFBRBS-UHFFFAOYSA-N	4.5×10^3 1.3×10^2 3.6×10^2 1.4×10^4 4.7×10^5		HSDB (2015) Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011) Maniere et al. (2011)	V X Q ? ?	569 570, 571 12, 166 12, 166	
buthidazole $\text{C}_{10}\text{H}_{16}\text{N}_4\text{O}_2\text{S}$ [55511-98-3] SWMGXKSQWDSBKV-UHFFFAOYSA-N	4.8×10^6		MacBean (2012a)	?		
thiodicarb $\text{C}_{10}\text{H}_{18}\text{N}_4\text{O}_4\text{S}_3$ [59669-26-0] XDOTVMNBCQVZKG-UHFFFAOYSA-N	1.1×10^1 2.3×10^1		HSDB (2015) Mackay et al. (2006d)	V V		

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pebulate $\text{C}_{10}\text{H}_{21}\text{NOS}$ [1114-71-2] SGEJQUSYQTVSIU-UHFFFAOYSA-N	4.1×10^{-2} 3.8×10^{-1} 8.6×10^{-2} 8.4×10^{-4}		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997)	V V V X	
	6.6×10^{-3} 6.4×10^{-1} 8.9×10^{-1} $> 2.3 \times 10^{10}$		Goodarzi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) MacBean (2012a)	Q Q Q ?	570 569 68
vernolate $\text{C}_{10}\text{H}_{21}\text{NOS}$ [1929-77-7] OKUGPJPKMAEJOE-UHFFFAOYSA-N	3.2×10^{-1} 4.9×10^{-1} 4.9×10^{-1} 4.8×10^{-3}		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997)	V V V X	
	2.9×10^{-3} 6.5×10^{-1} 9.0×10^{-1}		Goodarzi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	Q Q Q	570 569 68
biotin $\text{C}_{10}\text{H}_{16}\text{N}_2\text{O}_3\text{S}$ [58-85-5] YBJHBAHKTGYVGT-ZKWXMUHSA-N	5.6×10^2		Abraham et al. (2019)	Q	
methabenzthiazuron $\text{C}_{10}\text{H}_{11}\text{N}_3\text{OS}$ [18691-97-9] RRVIAQKBTUQODI-UHFFFAOYSA-N	1.8×10^4 6.6×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
sulfisoxazole $\text{C}_{11}\text{H}_{13}\text{N}_3\text{O}_3\text{S}$ [127-69-5] NHUHCSRWZMLRLA-UHFFFAOYSA-N	6.2×10^6		HSDB (2015)	Q	100
ethiofencarb $\text{C}_{11}\text{H}_{15}\text{NO}_2\text{S}$ [29973-13-5] HEZNVYQEUHLNI-UHFFFAOYSA-N	8.6×10^3 8.2×10^3 7.7×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
methiocarb $\text{C}_{11}\text{H}_{15}\text{NO}_2\text{S}$ [2032-65-7] YFBPRJGDJKVWAH-UHFFFAOYSA-N	8.3 8.4×10^3		Mackay et al. (2006d) MacBean (2012b)	V X	352
cycloate $\text{C}_{11}\text{H}_{21}\text{NOS}$ [1134-23-2] DFCAFRGABIXSDS-UHFFFAOYSA-N	1.9 3.7 3.2		HSDB (2015) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q	

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methoprotryn $\text{C}_{11}\text{H}_{21}\text{N}_5\text{OS}$ [841-06-5] DDUIUBPJPOKOMV-UHFFFAOYSA-N	3.1×10^4 1.5×10^5 2.0×10^5 3.1×10^4		HSDB (2015) Hilal et al. (2008) Abraham et al. (2007) MacBean (2012a)	V Q Q ?	
butylate $\text{C}_{11}\text{H}_{23}\text{NOS}$ [2008-41-5] BMTAFVWTTSTOG-UHFFFAOYSA-N	1.2×10^{-1} 1.8 1.8×10^{-2} 2.1×10^{-1} 5.8×10^{-1} 6.0×10^{-1}		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V V V X Q Q Q	560 12 569 570 68
2-octyl-3(2H)-isothiazolone $\text{C}_{11}\text{H}_{19}\text{NOS}$ [26530-20-1] JPMIIZHYWMDHT-UHFFFAOYSA-N	4.8×10^2 1.8		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
metsulfovax $\text{C}_{12}\text{H}_{12}\text{N}_2\text{OS}$ [21452-18-6] UDSJPFDPKCMYBD-UHFFFAOYSA-N	9.2×10^5		Ebert et al. (2023)	?	319
carboxin $\text{C}_{12}\text{H}_{13}\text{NO}_2\text{S}$ [5234-68-4] GYSSRZJIHXQEHQ-UHFFFAOYSA-N	3.1×10^4 3.1×10^4 6.4×10^4 7.6×10^2 3.1×10^4		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020) Maniere et al. (2011)	V V V Q ?	187 242, 166
oxycarboxin $\text{C}_{12}\text{H}_{13}\text{NO}_4\text{S}$ [5259-88-1] AMEKQAFGQBKLLKX-UHFFFAOYSA-N	9.3×10^5 9.0×10^5 2.8×10^3 5.3×10^5		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	187
thifensulfuron-methyl $\text{C}_{12}\text{H}_{13}\text{N}_5\text{O}_6\text{S}_2$ [79277-27-3] AHTPATJNIAFOLR-UHFFFAOYSA-N	3.4×10^8 1.0×10^{14} 3.6×10^{12}		HSDB (2015) Maniere et al. (2011) Maniere et al. (2011)	V ? ?	242, 495, 166 242, 572, 166
sulfamethazine $\text{C}_{12}\text{H}_{14}\text{N}_4\text{O}_2\text{S}$ [57-68-1] ASWWTGNCAZCNR-UHFFFAOYSA-N	3.2×10^7		HSDB (2015)	Q	100
thiophanate-methyl $\text{C}_{12}\text{H}_{14}\text{N}_4\text{O}_4\text{S}_2$ [23564-05-8] QGHREAKMXXNCOA-UHFFFAOYSA-N	8.2×10^3 7.9×10^2 6.0×10^3		HSDB (2015) Mackay et al. (2006d) Maniere et al. (2011)	V V ?	242, 166

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,4'-oxydi(benzenesulphonohydrazide) $\text{C}_{12}\text{H}_{14}\text{N}_4\text{O}_5\text{S}_2$ [80-51-3] NBOCQTNZUPTTEI-UHFFFAOYSA-N	7.8×10^{11}		HSDB (2015)	Q	100
albendazole $\text{C}_{12}\text{H}_{15}\text{N}_3\text{O}_2\text{S}$ [54965-21-8] HXHWSAZORRCQMX-UHFFFAOYSA-N	1.3×10^8		HSDB (2015)	Q	100
oryzalin $\text{C}_{12}\text{H}_{18}\text{N}_4\text{O}_6\text{S}$ [19044-88-3] UNAHYJYOSSSJHH-UHFFFAOYSA-N	5.2×10^3 5.3×10^3 3.6×10^7		HSDB (2015) Mackay et al. (2006d) Maniere et al. (2011)	V V ?	12, 572, 166
	2.5×10^8 3.0×10^7		Maniere et al. (2011) Maniere et al. (2011)	? ?	12, 574, 166 12, 495, 166
STK366145 $\text{C}_{12}\text{H}_{19}\text{N}_3\text{O}_3\text{S}$ (N-(2-ethyl(3-methyl-4-nitrosophenyl)amino)ethyl)-methanesulfonamide) [56046-62-9] XWQURWIJAIIPQP-UHFFFAOYSA-N	9.9×10^4		HSDB (2015)	V	
isomethiozin $\text{C}_{12}\text{H}_{20}\text{N}_4\text{OS}$ [57052-04-7] MZTLOILRKLURU-UHFFFAOYSA-N	7.9×10^2		MacBean (2012a)	?	
thiencarbazone-methyl $\text{C}_{12}\text{H}_{14}\text{N}_4\text{O}_7\text{S}_2$ [317815-83-1] XSKZXGDFSCCXQX-UHFFFAOYSA-N	2.1×10^{12} 5.0×10^{12} 1.3×10^{13} 1.2×10^{13}		Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	? ? ? ?	242, 817, 166 242, 579, 166 242, 495, 166 242, 575, 166
2,8-dinitrodibenzothiophene $\text{C}_{12}\text{H}_6\text{N}_2\text{O}_4\text{S}$ [109041-38-5] VMQHOWOVMIROE-UHFFFAOYSA-N	4.0×10^4		Parnis et al. (2015)	Q	371

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-nitrodibenzothiophene $\text{C}_{12}\text{H}_7\text{NO}_2\text{S}$ [6639-36-7] GXLYVLHWXVRVKI-UHFFFAOYSA-N	1.2×10^2		Parnis et al. (2015)	Q	371
azimsulfuron $\text{C}_{13}\text{H}_{16}\text{N}_{10}\text{O}_5\text{S}$ [120162-55-2] MAHPNPYYQAIQJN-UHFFFAOYSA-N	2.0×10^9 1.2×10^8 1.1×10^{10}		Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	? ? ?	242, 495, 166 242, 572, 166 242, 575, 166
fenothiocarb $\text{C}_{13}\text{H}_{19}\text{NO}_2\text{S}$ [62850-32-2] HMIBKHHNXANVHR-UHFFFAOYSA-N	5.3×10^2		Ebert et al. (2023)	?	317
isobornyl thiocanoacetate $\text{C}_{13}\text{H}_{19}\text{NO}_2\text{S}$ [115-31-1] IXEVGHXRDXBAOB-RUETXSTFSA-N	3.8×10^1		HSDB (2015)	Q	100
nitralin $\text{C}_{13}\text{H}_{19}\text{N}_3\text{O}_6\text{S}$ [4726-14-1] UMKANAFDOQQUKE-UHFFFAOYSA-N	1.4×10^3 7.2×10^{-3} 7.2×10^{-3}		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988)	V V V	12
bupirimate $\text{C}_{13}\text{H}_{24}\text{N}_4\text{O}_3\text{S}$ [41483-43-6] DSKJPMWIHSOYEA-UHFFFAOYSA-N	6.9×10^2 1.0×10^2 1.5×10^3 7.4×10^{-1}		Duchowicz et al. (2020) Mackay et al. (2006d) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	187 12, 166
timolol $\text{C}_{13}\text{H}_{24}\text{N}_4\text{O}_3\text{S}$ [26839-75-8] BLJRIMJGRPQVNF-JTQLQIEISA-N	2.3×10^{11}		HSDB (2015)	Q	100
triazamate $\text{C}_{13}\text{H}_{22}\text{N}_4\text{O}_3\text{S}$ [112143-82-5] NKNFWVNSBIXGLL-UHFFFAOYSA-N	8.6×10^4 1.2×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
dithianone $\text{C}_{14}\text{H}_4\text{N}_2\text{O}_2\text{S}_2$ [3347-22-6] PYZSVQVRHDXQSL-UHFFFAOYSA-N	1.7×10^5 7.4×10^6		HSDB (2015) Mackay et al. (2006d) Maniere et al. (2011)	V V ?	560 12, 166

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N-(cyclohexylthio)phthalimide $\text{C}_{14}\text{H}_{15}\text{NO}_2\text{S}$ [17796-82-6] UEZWYKZHXASYJN-UHFFFAOYSA-N	1.5×10^2		HSDB (2015)	Q	100
metsulfuron-methyl $\text{C}_{14}\text{H}_{15}\text{N}_5\text{O}_6\text{S}$ [74223-64-6] RSMUVYRMZCOLBH-UHFFFAOYSA-N	7.5×10^{10} 2.1×10^8		HSDB (2015) Maniere et al. (2011)	V ?	242, 166
rimsulfuron $\text{C}_{14}\text{H}_{17}\text{N}_5\text{O}_7\text{S}_2$ [122931-48-0] MEFOUWRMVYJCQC-UHFFFAOYSA-N	1.5×10^4 9.1×10^6 2.2×10^5 1.2×10^7		HSDB (2015) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	V ? ? ?	575, 166 572, 166 495, 166
thiophanate $\text{C}_{14}\text{H}_{18}\text{N}_4\text{O}_4\text{S}_2$ [23564-06-9] YFNCATAIYKQPOO-UHFFFAOYSA-N	1.9×10^7		HSDB (2015)	Q	100
sumatriptan $\text{C}_{14}\text{H}_{21}\text{N}_3\text{O}_2\text{S}$ [103628-46-2] KQKPFRRSPSRPDEB-UHFFFAOYSA-N	2.2×10^8		HSDB (2015)	Q	100
mesotrione $\text{C}_{14}\text{H}_{13}\text{NO}_7\text{S}$ [104206-82-8] KPUREKXXPHOJQT-UHFFFAOYSA-N	$>2.0 \times 10^6$		Maniere et al. (2011)	?	12, 166
prosulfocarb $\text{C}_{14}\text{H}_{21}\text{NOS}$ [52888-80-9] NQLVQOSNDJXLKG-UHFFFAOYSA-N	7.6×10^2 9.5×10^1 6.6×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	187 12, 166
pyrifthalid $\text{C}_{15}\text{H}_{14}\text{N}_2\text{O}_4\text{S}$ [135186-78-6] RRKHAIYNPVQKEF-UHFFFAOYSA-N	2.5×10^5		Ebert et al. (2023)	?	319
nicosulfuron $\text{C}_{15}\text{H}_{18}\text{N}_6\text{O}_6\text{S}$ [111991-09-4] RTCUGUMHFFWOJV-UHFFFAOYSA-N	6.8×10^{10}		Maniere et al. (2011)	?	12, 166
sulfometuron methyl $\text{C}_{15}\text{H}_{16}\text{N}_4\text{O}_5\text{S}$ [74222-97-2] ZDXMLEQEMNLCQG-UHFFFAOYSA-N	8.2×10^{12} 1.9×10^8		Armbrust (2000) HSDB (2015)	C Q	100

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tribenuron-methyl $\text{C}_{15}\text{H}_{17}\text{N}_5\text{O}_6\text{S}$ [101200-48-0] VLCQZHSMCYCDJL-UHFFFAOYSA-N	9.7×10^7 6.1×10^7 8.4×10^8 9.7×10^7 1.1×10^9		MacBean (2012b) Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	X Q Q ? ?	352 186, 21 242, 572, 166
ethametsulfuron-methyl $\text{C}_{15}\text{H}_{18}\text{N}_6\text{O}_6\text{S}$ [97780-06-8] ZINJLDJMHCBIP-UHFFFAOYSA-N	2.1×10^9		Ebert et al. (2023)	?	319
propoxycarbazone $\text{C}_{15}\text{H}_{18}\text{N}_4\text{O}_7\text{S}$ [145026-81-9] JTHMVYBOQLDDIY-UHFFFAOYSA-N	7.0×10^{11}		HSDB (2015)	Q	100
dimepiperate $\text{C}_{15}\text{H}_{21}\text{NOS}$ [61432-55-1] BWUPSGJXXPATLU-UHFFFAOYSA-N	2.8×10^2		Ebert et al. (2023)	?	319
esprocarb $\text{C}_{15}\text{H}_{23}\text{NOS}$ [85785-20-2] BXEHUCNTIZGSOJ-UHFFFAOYSA-N	1.8×10^1 1.5×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
valdecoxib $\text{C}_{16}\text{H}_{14}\text{N}_2\text{O}_3\text{S}$ [181695-72-7] LNPDTQAFDNKSHK-UHFFFAOYSA-N	4.5×10^5		HSDB (2015)	Q	100
topramezone $\text{C}_{16}\text{H}_{17}\text{N}_3\text{O}_5\text{S}$ [210631-68-8] BPPVUXSMLBXYGG-UHFFFAOYSA-N	1.0×10^{12}		HSDB (2015)	Q	100
sulfosulfuron $\text{C}_{16}\text{H}_{18}\text{N}_6\text{O}_7\text{S}_2$ [141776-32-1] RBSXHDIPCIWOMG-UHFFFAOYSA-N	4.3×10^5 3.4×10^7 1.2×10^6 1.1×10^8		HSDB (2015) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	V ? ? ?	12, 575, 166 12, 572, 166 12, 495, 166

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
orthosulfamuron $\text{C}_{16}\text{H}_{20}\text{N}_6\text{O}_6\text{S}$ [213464-77-8] UCDPMNSCCRBWIC-UHFFFAOYSA-N	1.3×10^4		HSDB (2015)	V	
cafenstrole $\text{C}_{16}\text{H}_{22}\text{N}_4\text{O}_3\text{S}$ [125306-83-4] HFEJHAAIJZXXRE-UHFFFAOYSA-N	8.0×10^5		Ebert et al. (2023)	?	319
buprofezin $\text{C}_{16}\text{H}_{23}\text{N}_3\text{OS}$ [69327-76-0] PRLVTUNWOQKEAI-UHFFFAOYSA-N	2.4 2.3 2.5×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
bensulfuron methyl $\text{C}_{16}\text{H}_{18}\text{N}_4\text{O}_7\text{S}$ [83055-99-6] XMQFTWRPUQYINF-UHFFFAOYSA-N	7.0×10^{10} 2.5×10^{12} 5.0×10^{10} 1.7×10^9		Armbrust (2000) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	C ? ? ?	 575, 166 495, 166 572, 166
mefenacet $\text{C}_{16}\text{H}_{14}\text{N}_2\text{O}_2\text{S}$ [73250-68-7] XIGAUIHYSDTJHW-UHFFFAOYSA-N	2.1×10^4 3.4×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
alanycarb $\text{C}_{17}\text{H}_{25}\text{N}_3\text{O}_4\text{S}_2$ [83130-01-2] GMAUQNJOSOMMHI-JXAWBTAJSA-N	1.1×10^4 1.8×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
fenamidone $\text{C}_{17}\text{H}_{17}\text{N}_3\text{OS}$ [161326-34-7] LMVPQMGRYSRMIW-KRWDZBQOSA-N	8.6×10^4		Ebert et al. (2023)	?	367
esomeprazole $\text{C}_{17}\text{H}_{19}\text{N}_3\text{O}_3\text{S}$ [119141-88-7] SUBDBMMJDZJVOS-UHFFFAOYSA-N	3.3×10^{13}		HSDB (2015)	Q	100
foramsulfuron $\text{C}_{17}\text{H}_{20}\text{N}_6\text{O}_7\text{S}$ [173159-57-4] PXDNXJSDGQBLKS-UHFFFAOYSA-N	1.7×10^{11} 1.7×10^{11}		HSDB (2015) Maniere et al. (2011)	V ?	 12, 166
sethoxydim $\text{C}_{17}\text{H}_{29}\text{NO}_3\text{S}$ [74051-80-2] NMHGQXYVOKDNHF-UHFFFAOYSA-N	4.5×10^5		HSDB (2015)	Q	100

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
mesosulfuron-methyl $\text{C}_{17}\text{H}_{21}\text{N}_5\text{O}_9\text{S}_2$ [208465-21-8] NIFKBBMCXCMCAO-UHFFFAOYSA-N	9.0×10^{10} 8.7×10^{12} 2.7×10^{11} 4.1×10^9		HSDB (2015) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	V ? ? ?	12, 575, 166 12, 495, 166 12, 572, 166
cycloxydim $\text{C}_{17}\text{H}_{27}\text{NO}_3\text{S}$ [101205-02-1] HAHCNFVGRVWFIP-VKAVYKQESA-N	1.6×10^4		Maniere et al. (2011)	?	12, 166
fenpyrazamine $\text{C}_{17}\text{H}_{21}\text{N}_3\text{O}_2\text{S}$ [473798-59-3] UTOHZQYBSYOOGC-UHFFFAOYSA-N	6.2×10^3		Maniere et al. (2011)	?	12, 166
cyprosulfamide $\text{C}_{18}\text{H}_{18}\text{N}_2\text{O}_5\text{S}$ [221667-31-8] OAWUUPVZMNKZRY-UHFFFAOYSA-N	7.0×10^6 9.1×10^2 2.9×10^5		Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	? ? ?	242, 575, 166 242, 579, 166 242, 495, 166
rosiglitazone $\text{C}_{18}\text{H}_{19}\text{N}_3\text{O}_3\text{S}$ [122320-73-4] YASAKUCUGLMORW-UHFFFAOYSA-N	5.8×10^8		HSDB (2015)	Q	100
rabeprazole $\text{C}_{18}\text{H}_{21}\text{N}_3\text{O}_3\text{S}$ [117976-89-3] YREYEVYICVEVJK-UHFFFAOYSA-N	8.2×10^{11}		HSDB (2015)	Q	100
pyributicarb $\text{C}_{18}\text{H}_{22}\text{N}_2\text{O}_2\text{S}$ [88678-67-5] VTRWMTJQBQJKQH-UHFFFAOYSA-N	4.3×10^1		Ebert et al. (2023)	?	319
furathiocarb $\text{C}_{18}\text{H}_{26}\text{N}_2\text{O}_5\text{S}$ [65907-30-4] HAWJXYBZNNRMNO-UHFFFAOYSA-N	7.6×10^3		HSDB (2015)	V	
lincomycin $\text{C}_{18}\text{H}_{34}\text{N}_2\text{O}_6\text{S}$ [154-21-2] OJMMVQQUTAEWLP-UHFFFAOYSA-N	3.3×10^{17}		HSDB (2015)	Q	100

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pioglitazone $\text{C}_{19}\text{H}_{20}\text{N}_2\text{O}_3\text{S}$ [111025-46-8] HYAFETHFCAUJAY-UHFFFAOYSA-N	5.8×10^6		HSDB (2015)	Q	100
isofetamid $\text{C}_{20}\text{H}_{25}\text{NO}_3\text{S}$ [875915-78-9] WMKZDPFZIZQROT-UHFFFAOYSA-N	3.5×10^4		Ebert et al. (2023)	?	319
tamsulosin $\text{C}_{20}\text{H}_{28}\text{N}_2\text{O}_5\text{S}$ [106133-20-4] DRHKJLXJIQTDTD-OAHLLOKOSA-N	2.0×10^9		HSDB (2015)	Q	100
carbosulfan $\text{C}_{20}\text{H}_{32}\text{N}_2\text{O}_3\text{S}$ [55285-14-8] JLQUFIHWVLZVTJ-UHFFFAOYSA-N	1.9×10^1 1.7		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
sufentanil $\text{C}_{22}\text{H}_{30}\text{N}_2\text{O}_2\text{S}$ [56030-54-7] GGCSSNBKKAUURC-UHFFFAOYSA-N	2.4×10^9		HSDB (2015)	Q	100
sildenafil $\text{C}_{22}\text{H}_{30}\text{N}_6\text{O}_4\text{S}$ [139755-83-2] BNRNXUUZRGQAQC-UHFFFAOYSA-N	1.4×10^{15}		HSDB (2015)	Q	100
benfuracarb $\text{C}_{20}\text{H}_{30}\text{N}_2\text{O}_5\text{S}$ [82560-54-1] FYZBOYWSHKHDMT-UHFFFAOYSA-N	4.9×10^2		Ebert et al. (2023)	?	319
tirofiban $\text{C}_{22}\text{H}_{36}\text{N}_2\text{O}_5\text{S}$ [144494-65-5] COKMIXFXJJBQG-NRFANRHFSA-N	1.3×10^9		HSDB (2015)	Q	100
vardenafil $\text{C}_{23}\text{H}_{32}\text{N}_6\text{O}_4\text{S}$ [224785-90-4] SECKRCOLJRRGGV-UHFFFAOYSA-N	5.2×10^{15}		HSDB (2015)	Q	100
taurocholic acid $\text{C}_{26}\text{H}_{45}\text{NO}_7\text{S}$ [81-24-3] WBWWGRHZICKQGZ-HZAMXZRMSA-N	1.9×10^{15}		HSDB (2015)	Q	449

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dalfopristin $\text{C}_{34}\text{H}_{50}\text{N}_4\text{O}_9\text{S}$ [112362-50-2] SUYRLXYYZQTJHF-FUODUHIRSA-N	2.2×10^{24}		HSDB (2015)	Q	100
C.I. acid green 3 $\text{C}_{37}\text{H}_{37}\text{N}_2\text{O}_6\text{S}_2$ [4680-78-8] SRRJCDUOSQWHGS-UHFFFAOYSA-O	2.0×10^{23}		HSDB (2015)	Q	449
tinopal $\text{C}_{40}\text{H}_{40}\text{N}_{12}\text{O}_8\text{S}_2$ [24231-46-7] YGUMVDWOQQJBGA-VAWYXSNFSA-N	1.2×10^{38} 1.4×10^{40} 4.2×10^{26} 2.2×10^{37}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
quinupristin $\text{C}_{53}\text{H}_{67}\text{N}_9\text{O}_{10}\text{S}$ [120138-50-3] WTHRRGMBUAHGNI-UHFFFAOYSA-N	4.9×10^{22}		HSDB (2015)	Q	100
3,3,4,4,4-pentafluorobutane-1-thiol $\text{C}_4\text{H}_5\text{F}_5\text{S}$ [68140-18-1] WEILNYJKAUGBAU-UHFFFAOYSA-N	5.2×10^{-5} 1.4×10^{-3} 1.5×10^{-3} 1.2×10^{-5}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
3,3,4,4,5,5,6,6,6-nonafluoro-1-hexanethiol $\text{C}_6\text{H}_5\text{F}_9\text{S}$ [68140-20-5] GQJXVHYUQPXZOL-UHFFFAOYSA-N	1.9×10^{-6} 4.7×10^{-4} 3.1×10^{-4} 1.9×10^{-6}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
3,3,4,4,5,5,7,7,8,8,9,9,10,10,10-pentadecafluoro-1-decanethiol $\text{C}_{10}\text{H}_7\text{F}_{15}\text{S}$ [68140-21-6] ROKKEEDUUQVHFZ-UHFFFAOYSA-N	9.7×10^{-9} 6.5×10^{-6} 8.6×10^{-4} 1.3×10^{-8}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
3,3,4,4,5,5-hexafluoro-1-(3,3,4,4,5,5-hexafluorohexyldisulfanyl)hexane $\text{C}_{12}\text{H}_{14}\text{F}_{12}\text{S}_2$ [118400-71-8] CIZUOSOWGOENRE-UHFFFAOYSA-N	1.2×10^{-7} 9.0×10^{-6} 1.9×10^{-2} 3.5×10^{-7}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
methanesulfonyl fluoride $\text{CH}_3\text{FO}_2\text{S}$ [558-25-8] KNWQLFOXQZGPX-UHFFFAOYSA-N	1.6×10^{-1}		Ebert et al. (2023)	?	319

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
perfluorobutane sulfonic acid $\text{C}_4\text{HF}_9\text{O}_3\text{S}$ (PFBS) [375-73-5] JGTNAGYHADQMCM-UHFFFAOYSA-N	2.0		Plassmann et al. (2011)	E	
4-(pentafluorosulfanyl)phenol $\text{C}_6\text{H}_5\text{F}_5\text{OS}$ [774-94-7] XHJLGVUIMCBMHL-UHFFFAOYSA-N	4.0×10^1		Ebert et al. (2023)	?	373
1H,1H,2H,2H-perfluorohexane sulfonic acid $\text{C}_6\text{H}_5\text{F}_9\text{O}_3\text{S}$ (4:2 FTS) [757124-72-4] TXGIGTRUEITPSC-UHFFFAOYSA-N	4.5×10^{-3}		Abusallout et al. (2022)	M	
perfluorohexane sulfonic acid $\text{C}_6\text{HF}_{13}\text{O}_3\text{S}$ (PFHxS) [355-46-4] QZHDEAJFRJCDMF-UHFFFAOYSA-N	5.1×10^{-1}		Plassmann et al. (2011)	E	
1H,1H,2H,2H-perfluorooctane sulfonic acid $\text{C}_8\text{H}_5\text{F}_{13}\text{O}_3\text{S}$ (6:2 FTS) [27619-97-2] VIONGDJUYAYOPU-UHFFFAOYSA-N	2.1×10^{-3}	11000	Abusallout et al. (2022)	M	
perfluorooctane sulfonic acid $\text{C}_8\text{HF}_{17}\text{O}_3\text{S}$ (PFOS) [1763-23-1] YFSUTJLHUFNCNZ-UHFFFAOYSA-N	9.0×10^{-4} 8.6×10^{-3} 1.6×10^{-1} 9.9×10^{-3} 1.0×10^{-1} 4.6×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Arp et al. (2006) Arp et al. (2006)	Q Q Q Q Q Q	288, 289 288, 290 288, 291 288, 292 635 636
heptadecafluorooctanesulfonyl fluoride $\text{C}_8\text{F}_{18}\text{O}_2\text{S}$ (perfluorooctylsulfonyl fluoride) [307-35-7] BHFJBHMTEDLICO-UHFFFAOYSA-N	1.5×10^{-7}		HSDB (2015)	Q	100

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1H,1H,2H,2H-perfluorodecane sulfonic acid $\text{C}_{10}\text{H}_5\text{F}_{17}\text{O}_3\text{S}$ (8:2 FTS) [39108-34-4] ALVYVCQIFHTIRD-UHFFFAOYSA-N	2.2×10^{-3}		Abusallout et al. (2022)	M	
fluticasone $\text{C}_{22}\text{H}_{27}\text{F}_3\text{O}_4\text{S}$ [90566-53-3] MGNNYOODZCAHBA-GQKYHHCASA-N	4.3×10^3		HSDB (2015)	Q	100
3-aminophenylsulfur pentafluoride $\text{C}_6\text{H}_6\text{F}_5\text{NS}$ [2993-22-8] NUFLICUHOXHWER-UHFFFAOYSA-N	6.4		Ebert et al. (2023)	?	373
4-aminophenylsulfur pentafluoride $\text{C}_6\text{H}_6\text{F}_5\text{NS}$ [2993-24-0] MZGZUHNSMNSRJ-UHFFFAOYSA-N	4.0		Ebert et al. (2023)	?	373
flubenzimine $\text{C}_{17}\text{H}_{10}\text{F}_6\text{N}_4\text{S}$ [37893-02-0] IZFZCMFMJKDHJZ-UHFFFAOYSA-N	$> 2.3 \times 10^{10}$		MacBean (2012a)	?	
thiazafluron $\text{C}_6\text{H}_7\text{F}_3\text{N}_4\text{OS}$ [25366-23-8] BBJPZPLAZVZTGR-UHFFFAOYSA-N	3.2×10^4		MacBean (2012a)	?	
4-nitrophenylsulfur pentafluoride $\text{C}_6\text{H}_4\text{F}_5\text{NO}_2\text{S}$ [2613-27-6] AGNCKMHGYZKMLN-UHFFFAOYSA-N	1.6×10^{-1}		Ebert et al. (2023)	?	373
undecafluoro-N-methyl-1- pentanesulfonamide $\text{C}_6\text{H}_4\text{F}_{11}\text{NO}_2\text{S}$ [68298-13-5] BKKNZBSSSAGIB-UHFFFAOYSA-N	3.5×10^{-4}		Zhang et al. (2010)	Q	288, 289
	4.4×10^{-2}		Zhang et al. (2010)	Q	288, 290
	5.6×10^{-4}		Zhang et al. (2010)	Q	288, 291
	6.2×10^{-1}		Zhang et al. (2010)	Q	288, 292
1,1,2,2,3,3,4,4,4-nonafluoro-N-(2- hydroxyethyl)-N-methylbutane-1- sulfonamide $\text{C}_7\text{H}_8\text{F}_9\text{NO}_3\text{S}$ [34454-97-2] DSRUAYIFDCHEEV-UHFFFAOYSA-N	1.8×10^1		Zhang et al. (2010)	Q	288, 289
	1.1×10^1		Zhang et al. (2010)	Q	288, 290
	4.6×10^{-1}		Zhang et al. (2010)	Q	288, 291
	2.7×10^2		Zhang et al. (2010)	Q	288, 292

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tridecafluoro-N-methyl-1-hexanesulfonamide $\text{C}_7\text{H}_4\text{F}_{13}\text{NO}_2\text{S}$ [68259-15-4] HPPDPHZGXWMRHN-UHFFFAOYSA-N	6.7×10^{-5}		Zhang et al. (2010)	Q	288, 289
	9.2×10^{-3}		Zhang et al. (2010)	Q	288, 290
	2.5×10^{-4}		Zhang et al. (2010)	Q	288, 291
	1.2×10^{-1}		Zhang et al. (2010)	Q	288, 292
perfluorooctane sulfonamide $\text{C}_8\text{H}_2\text{F}_{17}\text{NO}_2\text{S}$ (PFOSA) [754-91-6] RRRXPPIDPYTNJG-UHFFFAOYSA-N	5.5×10^{-6}		HSDB (2015)	Q	100
	3.4		Arp et al. (2006)	Q	635
	7.9×10^{-6}		Arp et al. (2006)	Q	636
emtricitabine $\text{C}_8\text{H}_{10}\text{FN}_3\text{O}_3\text{S}$ [143491-57-0] XQSPYNMVSIKOC-NTSWFWBYSA-N	9.0×10^{11}		HSDB (2015)	Q	100
N-ethyl-1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)butane-1-sulfonamide $\text{C}_8\text{H}_{10}\text{F}_9\text{NO}_3\text{S}$ [34449-89-3] ZSBOIPHQFKYRMG-UHFFFAOYSA-N	1.3×10^1		Zhang et al. (2010)	Q	288, 289
	8.8		Zhang et al. (2010)	Q	288, 290
	1.4×10^{-1}		Zhang et al. (2010)	Q	288, 291
	2.1×10^2		Zhang et al. (2010)	Q	288, 292
1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-N-methylheptane-1-sulphonamide $\text{C}_8\text{H}_4\text{NO}_2\text{F}_{15}\text{S}$ [68259-14-3] KDHCALLFPWZTPN-UHFFFAOYSA-N	1.3×10^{-5}		Zhang et al. (2010)	Q	288, 289
	1.6×10^{-3}		Zhang et al. (2010)	Q	288, 290
	1.2×10^{-4}		Zhang et al. (2010)	Q	288, 291
	2.4×10^{-2}		Zhang et al. (2010)	Q	288, 292
1,1,2,2,3,3,4,4,5,5,5-undecafluoro-N-(2-hydroxyethyl)-N-methylpentane-1-sulphonamide $\text{C}_8\text{H}_8\text{NO}_3\text{F}_{11}\text{S}$ [68555-74-8] BRBCKWCOTRYPYGH-UHFFFAOYSA-N	3.4		Zhang et al. (2010)	Q	288, 289
	2.9		Zhang et al. (2010)	Q	288, 290
	2.1×10^{-1}		Zhang et al. (2010)	Q	288, 291
	5.6×10^1		Zhang et al. (2010)	Q	288, 292
N-(3-(dimethylamino)propyl)-nonafluoro-1-butanefulfonamide $\text{C}_9\text{H}_{13}\text{F}_9\text{N}_2\text{O}_2\text{S}$ [68555-77-1] XMRMVBVJGSKMEN-UHFFFAOYSA-N	2.1		Zhang et al. (2010)	Q	288, 289
	3.1×10^1		Zhang et al. (2010)	Q	288, 290
	1.1		Zhang et al. (2010)	Q	288, 291
	6.0×10^2		Zhang et al. (2010)	Q	288, 292

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N- methylperfluorooctanesulphonamide	4.4×10^{-4}		Abusallout et al. (2022)	M	
$\text{C}_9\text{H}_4\text{F}_{17}\text{NO}_2\text{S}$ (N-MeFOSA) [31506-32-8] SRMWNTGHHXHOWBT-UHFFFAOYSA-N	2.4×10^{-6} 2.1×10^{-4} 5.2×10^{-5} 5.0×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
N-ethyl-1,1,2,2,3,3,4,4,5,5,5- undecafluoro-N-(2-hydroxyethyl)- 1-pentanesulfonamide	2.5		Zhang et al. (2010)	Q	288, 289
$\text{C}_9\text{H}_{10}\text{NO}_3\text{F}_{11}\text{S}$ [68555-72-6] GBPAQIZWHVCENQ-UHFFFAOYSA-N	2.3 6.0×10^{-2} 4.1×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	288, 290 288, 291 288, 292
1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluoro-N-(2-hydroxyethyl)- N-methyl-1-hexanesulfonamide	6.4×10^{-1}		Zhang et al. (2010)	Q	288, 289
$\text{C}_9\text{H}_8\text{NO}_3\text{F}_{13}\text{S}$ [68555-75-9] UYIBZOUSVFOPJK-UHFFFAOYSA-N	6.0×10^{-1} 9.2×10^{-2} 9.9		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	288, 290 288, 291 288, 292
N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluoro-N-(2- hydroxyethyl)hexane-1- sulfonamide	4.7×10^{-1}		Zhang et al. (2010)	Q	288, 289
$\text{C}_{10}\text{H}_{10}\text{F}_{13}\text{NO}_3\text{S}$ [34455-03-3] SSGYCIQAXNQIBC-UHFFFAOYSA-N	4.6×10^{-1} 3.1×10^{-2} 8.8		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	288, 290 288, 291 288, 292
2- methyl[(nonafluorobutyl)sulfonyl] aminoethyl acrylate	5.1×10^{-1}		Zhang et al. (2010)	Q	288, 289
$\text{C}_{10}\text{H}_{10}\text{F}_9\text{NO}_4\text{S}$ [67584-55-8] KEMCLRGAIUJRRAN-UHFFFAOYSA-N	5.3×10^{-1} 8.2×10^1 4.8×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	288, 290 288, 291 288, 292
N- ethylperfluorooctanesulfonamide	9.4×10^{-4}		Abusallout et al. (2022)	M	
$\text{C}_{10}\text{H}_6\text{F}_{17}\text{NO}_2\text{S}$ (N-EtFOSA) [4151-50-2] CCEKAJIANROZEO-UHFFFAOYSA-N	1.8×10^{-6} 1.8×10^{-6} 1.4×10^{-4} 9.5×10^{-6} 3.8×10^{-3} 6.4×10^{-3} 7.5×10^{-3}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Arp et al. (2006) Arp et al. (2006)	Q Q Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292 635 636

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-N-(2-hydroxyethyl)-N-methylheptane-1-sulphonamide $\text{C}_{10}\text{H}_8\text{NO}_3\text{F}_{15}\text{S}$ [68555-76-0] UIZUTEDYGNRNSW-UHFFFAOYSA-N	1.2×10^{-1} 9.5×10^{-2} 4.5×10^{-2} 2.1		Zhang et al. (2010)	Q	288, 289
N-methyl perfluorooctane sulfonamidoethanol $\text{C}_{11}\text{H}_8\text{F}_{17}\text{NO}_3\text{S}$ (MeFOSE) [24448-09-7] PLGACQRCZCVKKG-UHFFFAOYSA-N	2.3×10^{-2} 1.2×10^{-2} 1.9×10^{-2} 4.3×10^{-1} 4.8×10^{-1} 2.1×10^{-3}		Zhang et al. (2010)	Q	288, 289
N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-N-(2-hydroxyethyl)-1-heptanesulfonamide $\text{C}_{11}\text{H}_{10}\text{NO}_3\text{F}_{15}\text{S}$ [68555-73-7] HINASMOVHGCAG-UHFFFAOYSA-N	9.0×10^{-2} 7.2×10^{-2} 1.5×10^{-2} 1.8		Zhang et al. (2010)	Q	288, 289
mefluidide $\text{C}_{11}\text{H}_{13}\text{F}_3\text{N}_2\text{O}_3\text{S}$ [53780-34-0] OKIBNKKYNPBDERS-UHFFFAOYSA-N	7.6×10^5		HSDB (2015)	Q	100
N-(3-(dimethylamino)propyl)-1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonamide $\text{C}_{11}\text{H}_{13}\text{N}_2\text{O}_2\text{F}_{13}\text{S}$ [50598-28-2] INDOGKYZLAGEM-UHFFFAOYSA-N	7.7×10^{-2} 1.5 2.2×10^{-1} 2.5×10^1		Zhang et al. (2010)	Q	288, 289
2-(methyl((undecafluoropentyl)sulfonyl)amino)ethyl prop-2-enoate $\text{C}_{11}\text{H}_{10}\text{F}_{11}\text{NO}_4\text{S}$ [67584-56-9] FZWFDJBZTLTRGH-UHFFFAOYSA-N	9.7×10^{-2} 2.0×10^{-1} 7.5×10^1 9.7		Zhang et al. (2010)	Q	288, 289

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-(methyl((nonafluorobutyl) sulphonyl)amino)ethyl methacrylate C ₁₁ H ₁₂ F ₉ NO ₄ S [67584-59-2] BEIWUHUHJDEMQO-UHFFFAOYSA-N	3.3 × 10 ⁻¹		Zhang et al. (2010)	Q	288, 289
N-(3-(dimethylamino)propyl) pentadecafluoro-1-heptanesulfonamide C ₁₂ H ₁₃ F ₁₅ N ₂ O ₂ S [67584-54-7] RFJQYRXZGNILY-UHFFFAOYSA-N	5.0 × 10 ⁻¹		Zhang et al. (2010)	Q	288, 290
	1.9 × 10 ⁻¹		Zhang et al. (2010)	Q	288, 291
	2.9 × 10 ¹		Zhang et al. (2010)	Q	288, 292
acrylic acid 2-[methyl[(tridecafluorohexyl)sulfonyl] amino]ethyl ester C ₁₂ H ₁₀ F ₁₃ NO ₄ S [67584-57-0] HLKZFXWGVPPYAY-UHFFFAOYSA-N	1.5 × 10 ⁻²		Zhang et al. (2010)	Q	288, 289
	2.3 × 10 ⁻¹		Zhang et al. (2010)	Q	288, 290
	1.8 × 10 ⁻²		Zhang et al. (2010)	Q	288, 291
N-ethyl perfluorooctane sulfonamidoethanol C ₁₂ H ₁₀ F ₁₇ NO ₃ S (EtFOSE) [1691-99-2] HUFHNYZNTFSKCT-UHFFFAOYSA-N	5.2		Zhang et al. (2010)	Q	288, 292
	1.8 × 10 ⁻²		Zhang et al. (2010)	Q	288, 289
	6.0 × 10 ⁻²		Zhang et al. (2010)	Q	288, 290
flumetsulam C ₁₂ H ₉ F ₂ N ₅ O ₂ S [98967-40-9] RXCPQSJAVKGNOC-UHFFFAOYSA-N	3.4 × 10 ¹		Zhang et al. (2010)	Q	288, 291
	2.0		Zhang et al. (2010)	Q	288, 292
	1.7 × 10 ⁻²		Zhang et al. (2010)	Q	288, 289
florasulam C ₁₂ H ₈ F ₃ N ₅ O ₃ S [145701-23-1] QZATCCPQKOEIH-UHFFFAOYSA-N	8.6 × 10 ⁻³		Zhang et al. (2010)	Q	288, 290
	6.2 × 10 ⁻³		Zhang et al. (2010)	Q	288, 291
	3.3 × 10 ⁻¹		Zhang et al. (2010)	Q	288, 292
2-(methyl((pentadecafluoroheptyl) sulphonyl)amino)ethyl acrylate C ₁₃ H ₁₀ F ₁₅ NO ₄ S [68084-62-8] BEYGZVFVOTUDDJK-UHFFFAOYSA-N	5.7 × 10 ⁻²		Arp et al. (2006)	Q	635
	1.2 × 10 ⁻³		Arp et al. (2006)	Q	636
	1.5 × 10 ¹¹		Ebert et al. (2023)	?	317
2-(methyl((nonafluorobutyl) sulphonyl)amino)ethyl methacrylate C ₁₁ H ₁₂ F ₉ NO ₄ S [67584-59-2] BEIWUHUHJDEMQO-UHFFFAOYSA-N	1.7 × 10 ⁶		HSDB (2015)	V	
	2.3 × 10 ⁶		Maniere et al. (2011)	?	12, 495, 166
	3.4 × 10 ⁷		Maniere et al. (2011)	?	12, 575, 166
N-(3-(dimethylamino)propyl) pentadecafluoro-1-heptanesulfonamide C ₁₂ H ₁₃ F ₁₅ N ₂ O ₂ S [67584-54-7] RFJQYRXZGNILY-UHFFFAOYSA-N	3.0 × 10 ⁴		Maniere et al. (2011)	?	12, 572, 166
	3.5 × 10 ⁻³		Zhang et al. (2010)	Q	288, 289
	1.5 × 10 ⁻²		Zhang et al. (2010)	Q	288, 290
N-ethyl perfluorooctane sulfonamidoethanol C ₁₂ H ₁₀ F ₁₇ NO ₃ S (EtFOSE) [1691-99-2] HUFHNYZNTFSKCT-UHFFFAOYSA-N	9.9		Zhang et al. (2010)	Q	288, 291
	4.2 × 10 ⁻¹		Zhang et al. (2010)	Q	288, 292

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
flzasulfuron $\text{C}_{13}\text{H}_{12}\text{F}_3\text{N}_5\text{O}_5\text{S}$ [104040-78-0] HWATZEJQIXKWQS-UHFFFAOYSA-N	1.6×10^6 $> 3.9 \times 10^5$		HSDB (2015) Maniere et al. (2011)	Q ?	100 166
tritosulfuron $\text{C}_{13}\text{H}_9\text{F}_6\text{N}_5\text{O}_4\text{S}$ [142469-14-5] KVEQCVKVIFQSGC-UHFFFAOYSA-N	$> 1.0 \times 10^4$		Maniere et al. (2011)	?	12, 166
pyroxsulam $\text{C}_{14}\text{H}_{13}\text{F}_3\text{N}_6\text{O}_5\text{S}$ [422556-08-9] GLBLPMUBLHYFCW-UHFFFAOYSA-N	1.4×10^6		Maniere et al. (2011)	?	242, 166
N-methyl perfluorooctane sulfonamidoethylacrylate $\text{C}_{14}\text{H}_{10}\text{F}_{17}\text{NO}_4\text{S}$ (MeFOSEA) [25268-77-3] RTJZWOGSCLVJLD-UHFFFAOYSA-N	4.4×10^{-2} 2.2×10^{-3}		Arp et al. (2006) Arp et al. (2006)	Q Q	635 636
pyrasulfotole $\text{C}_{14}\text{H}_{13}\text{F}_3\text{N}_2\text{O}_4\text{S}$ [365400-11-9] CZRVDACSCJKRFL-UHFFFAOYSA-N	7.0×10^8		HSDB (2015)	V	
triafamone $\text{C}_{14}\text{H}_{13}\text{F}_3\text{N}_4\text{O}_5\text{S}$ [874195-61-6] GBHVIVKSEHWFFDD-UHFFFAOYSA-N	8.2×10^3		Ebert et al. (2023)	?	319
flufenacet $\text{C}_{14}\text{H}_{13}\text{F}_4\text{N}_3\text{O}_2\text{S}$ [142459-58-3] IANUJLZYFUDJIH-UHFFFAOYSA-N	1.7×10^3 1.1×10^3		HSDB (2015) Maniere et al. (2011)	V ?	12, 166
N-butyl- 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- heptafluoro-N-(2- hydroxyethyl)-1- octanesulfonamide $\text{C}_{14}\text{H}_{14}\text{F}_{17}\text{NO}_3\text{S}$ [2263-09-4] AQWROZBAYZBWIH-UHFFFAOYSA-N	9.7×10^{-3} 4.1×10^{-3} 3.8×10^{-2} 2.2×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethyl N-ethyl-N-[(heptadecafluorooctyl) sulphonyl]glycinate $\text{C}_{14}\text{H}_{12}\text{NO}_4\text{F}_{17}\text{S}$ [1869-77-8] LMUUXHHNCDERBQ-UHFFFAOYSA-N	1.3×10^{-5} 1.8×10^{-3} 4.3 3.0×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	288, 289 288, 290 288, 291 288, 292
perfluidone $\text{C}_{14}\text{H}_{12}\text{F}_3\text{NO}_4\text{S}_2$ [37924-13-3] WHTBVLXUSXVMEV-UHFFFAOYSA-N	1.3×10^2 1.6×10^8		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
2-(((heptadecafluorooctyl)sulfonyl) methylamino)ethyl methacrylate $\text{C}_{15}\text{H}_{12}\text{F}_{17}\text{NO}_4\text{S}$ [14650-24-9] UZMOXNBUTMPDCX-UHFFFAOYSA-N	4.2×10^{-4} 3.3×10^{-3} 2.5 5.4×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	288, 289 288, 290 288, 291 288, 292
2-(N-ethylperfluorooctane- sulfonamido)ethyl acrylate $\text{C}_{15}\text{H}_{12}\text{F}_{17}\text{NO}_4\text{S}$ [423-82-5] ZAZJGBCGMUKZEL-UHFFFAOYSA-N	1.1		Ebert et al. (2023)	?	373
isoxaflutole $\text{C}_{15}\text{H}_{12}\text{F}_3\text{NO}_4\text{S}$ [141112-29-0] OYIKARCXOQLFHF-UHFFFAOYSA-N	5.3×10^4 5.3×10^4		MacBean (2012b) Maniere et al. (2011)	X ?	352 12, 166
primisulfuron-methyl $\text{C}_{15}\text{H}_{12}\text{F}_4\text{N}_4\text{O}_7\text{S}$ [86209-51-0] ZTYVMAQSHCZXLFF-UHFFFAOYSA-N	7.0×10^6		HSDB (2015)	Q	100
dithiopyr $\text{C}_{15}\text{H}_{16}\text{F}_5\text{NO}_2\text{S}_2$ [97886-45-8] YUBJPYNISGLJZPQ-UHFFFAOYSA-N	6.5		Ebert et al. (2023)	?	741
penoxsulam $\text{C}_{16}\text{H}_{14}\text{F}_5\text{N}_5\text{O}_5\text{S}$ [219714-96-2] SYJGKVOENHZYMQ-UHFFFAOYSA-N	9.0×10^{12} 1.2×10^{14} 4.7×10^{11} 3.4×10^{13}		HSDB (2015) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	V ? ? ?	242, 575, 166 242, 572, 166 242, 495, 166

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pantoprazole $\text{C}_{16}\text{H}_{15}\text{F}_2\text{N}_3\text{O}_4\text{S}$ [102625-70-7] IQPSEEYGBUAQFF-UHFFFAOYSA-N	1.7×10^{14}		HSDB (2015)	Q	100
2-(N-ethylperfluorooctanesulfamido)ethyl methacrylate $\text{C}_{16}\text{H}_{14}\text{F}_{17}\text{NO}_4\text{S}$ [376-14-7] DBCGADAHIXHJCE-UHFFFAOYSA-N	3.2×10^{-4} 3.9×10^{-3} 1.5 4.1×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	288, 289 288, 290 288, 291 288, 292
thiazopyr $\text{C}_{16}\text{H}_{17}\text{F}_5\text{N}_2\text{O}_2\text{S}$ [117718-60-2] YIJZJEYQBAAWRJ-UHFFFAOYSA-N	2.1×10^1 2.1×10^1 8.7×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
penthiopyrad $\text{C}_{16}\text{H}_{20}\text{F}_3\text{N}_3\text{OS}$ [183675-82-3] PFFIDZXUXFLSSR-UHFFFAOYSA-N	7.1×10^3 1.3×10^2 2.4×10^3 1.6×10^2		Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	? ? ? ?	12, 572, 166 12, 495, 166 12, 579, 166 12, 574, 166
triflusulfuron-methyl $\text{C}_{17}\text{H}_{19}\text{F}_3\text{N}_6\text{O}_6\text{S}$ [126535-15-7] IMEVJVISCHQJRM-UHFFFAOYSA-N	$>4.2 \times 10^2$		Maniere et al. (2011)	?	242, 579, 166
celecoxib $\text{C}_{17}\text{H}_{14}\text{F}_3\text{N}_3\text{O}_2\text{S}$ [169590-42-5] RZEKVG VHFLEQIL-UHFFFAOYSA-N	1.3×10^7		HSDB (2015)	Q	100
2-(butyl((heptadecafluorooctyl)sulfonyl)amino)ethyl acrylate $\text{C}_{17}\text{H}_{16}\text{F}_{17}\text{NO}_4\text{S}$ [383-07-3] AQQNNAXBGPWALO-UHFFFAOYSA-N	2.9×10^{-4} 4.1×10^{-3} 1.8 4.3×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
thidiazimin $\text{C}_{18}\text{H}_{17}\text{N}_4\text{O}_2\text{FS}$ [123249-43-4] HZKBYBNLTLVSPX-JZJYNLBSA-N	3.5×10^8		MacBean (2012a)	?	

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
benthiavalicarb isopropyl $\text{C}_{18}\text{H}_{24}\text{FN}_3\text{O}_3\text{S}$ [177406-68-7] USRKFIXLGMKMU-IAQYHMDHSA-N	1.1×10^2 $> 1.1 \times 10^2$		MacBean (2012b) Maniere et al. (2011)	X ?	352 12, 166
flutianil $\text{C}_{19}\text{H}_{14}\text{F}_4\text{N}_2\text{O}_2\text{S}_2$ [958647-10-4] KGXUEPOHGFQKF-ZCXUNETKSA-N	7.2×10^1		Ebert et al. (2023)	?	319
rosuvastatin $\text{C}_{22}\text{H}_{28}\text{N}_3\text{O}_6\text{FS}$ [287714-41-4] BPRHUIZQVSMCRT-YXWZHEERSA-N	2.9×10^{14}		HSDB (2015)	Q	100
oxathiapiprolin $\text{C}_{24}\text{H}_{22}\text{F}_5\text{N}_5\text{O}_2\text{S}$ [1003318-67-9] IAQLCKZJGNTRDO-UHFFFAOYSA-N	2.8×10^2		Maniere et al. (2011)	?	12, 166
trichloromethanesulfonyl chloride CCl_4S [594-42-3] RYFZYUJIAZYQLC-UHFFFAOYSA-N	4.1×10^{-2} 6.9×10^{-4} 9.5×10^{-4} 5.3×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1,1,2,2-tetrachloroethanesulfonyl chloride $\text{C}_2\text{HCl}_5\text{S}$ [1185-09-7] LCVOCDOSGJHZFH-UHFFFAOYSA-N	8.8×10^{-2} 3.7×10^{-3} 1.9×10^{-2} 6.7×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
2-chloroethyl methyl sulfide $\text{C}_3\text{H}_7\text{ClS}$ [542-81-4] MYFKLQFBFShBPA-UHFFFAOYSA-N	5.3×10^{-2}		Bartelt-Hunt et al. (2008)	?	21
2-chloroethyl ethyl sulfide $\text{C}_4\text{H}_9\text{ClS}$ [693-07-2] GBNVXYXIRHSYEG-UHFFFAOYSA-N	2.0×10^{-2} 2.7×10^{-2}		HSDB (2015) Bartelt-Hunt et al. (2008)	Q ?	100 21
2,2'-dichlorodiethylsulfide $(\text{ClCH}_2\text{CH}_2)_2\text{S}$ (mustard gas) [505-60-2] QKSKPIVNLNLA AV-UHFFFAOYSA-N	3.0×10^{-1} 2.2×10^{-2} 1.5×10^{-1} 1.6×10^{-1} 4.0×10^{-1} 4.1×10^{-1} 4.1×10^{-1}		Hine and Mookerjee (1975) Keshavarz et al. (2022) Duchowicz et al. (2020) Modarresi et al. (2007) Duchowicz et al. (2020) Bartelt-Hunt et al. (2008) Opresko et al. (1998)	V Q Q Q ? ? ?	 300 68 186, 21 21

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2-bis(2-chloroethylthio)ethane $\text{C}_6\text{H}_{12}\text{Cl}_2\text{S}_2$ (sesquimustard) [3563-36-8] AMGNHZVUZWILSB-UHFFFAOYSA-N	8.8×10^1		Ebert et al. (2023)	?	319
pentachlorobenzenethiol $\text{C}_6\text{HCl}_5\text{S}$ [133-49-3] LLMLGZUZTFMXSA-UHFFFAOYSA-N	6.6×10^{-2} 8.4×10^{-2} 2.7×10^{-2} 1.3 2.2×10^{-2}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
chloroethyl phenyl sulfide $\text{C}_8\text{H}_9\text{ClS}$ [5535-49-9] QDXIHHOPZFCEAP-UHFFFAOYSA-N	1.3×10^{-1}		Bartelt-Hunt et al. (2008)	?	21
tetrasul $\text{C}_{12}\text{H}_6\text{Cl}_4\text{S}$ [2227-13-6] QUWSDLYBOVGOCW-UHFFFAOYSA-N	9.3×10^{-1}		MacBean (2012a)	?	
methanesulfonyl chloride $\text{CH}_3\text{ClO}_2\text{S}$ [124-63-0] QARBMVPHQWIHKH-UHFFFAOYSA-N	2.2×10^{-1}		HSDB (2015)	Q	100
bis(trichloromethyl)sulfone $\text{C}_2\text{Cl}_6\text{O}_2\text{S}$ [3064-70-8] YBNLWIZAWPBUKQ-UHFFFAOYSA-N	8.2×10^2 8.2×10^2 1.2×10^{-2} 3.1×10^3 1.0×10^1		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
benzenesulfonyl chloride $\text{C}_6\text{H}_5\text{ClO}_2\text{S}$ [98-09-9] CSKNSYBAZOQPLR-UHFFFAOYSA-N	1.1 1.7×10^1 6.7 1.6×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
4-methylbenzenesulfonyl chloride $\text{C}_7\text{H}_7\text{ClO}_2\text{S}$ [98-59-9] YYROPELSRYBVMQ-UHFFFAOYSA-N	1.0 1.8×10^1 1.2×10^1 9.2×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
endosulfan $\text{C}_9\text{H}_6\text{Cl}_6\text{O}_3\text{S}$ [115-29-7] RDYMFSUJUJZBWLH-UHFFFAOYSA-N	9.4×10^{-1} 1.1×10^2 2.4×10^1 1.1×10^2 2.3×10^8 3.1×10^1 7.8×10^{-1}		Mackay et al. (2006d) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q Q Q Q	288, 289 288, 290 288, 291 288, 292 288, 292 68

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
α -endosulfan $\text{C}_9\text{H}_6\text{Cl}_6\text{O}_3\text{S}$ (endosulfan I) [959-98-8] RDYMFJSUJZBWLH-AMHWMVONSA-N	1.4		Shen and Wania (2005)	L	368
	1.4		Shen and Wania (2005)	L	369
	1.4		Muir et al. (2004)	L	369
	1.4		Muir et al. (2004)	L	368
	1.2		Chao et al. (2017)	M	
	1.3	4200	Cetin et al. (2006)	M	
	1.4		Altschuh et al. (1999)	M	
	1.5×10^{-1}		Rice et al. (1997b)	M	12
	1.3×10^{-1}	2300	Rice et al. (1997a)	M	
	1.5		Cotham and Bidleman (1989)	V	
	3.4×10^{-1}		Suntio et al. (1988)	V	12
	9.2×10^{-1}		Suntio et al. (1988)	C	
	9.6×10^{-2}		Keshavarz et al. (2022)	Q	
	5.2×10^1		Duchowicz et al. (2020)	Q	
	8.0×10^{-1}		Modarresi et al. (2007)	Q	68
		3200	Kühne et al. (2005)	Q	
	1.4		Duchowicz et al. (2020)	?	186, 21
		2300	Kühne et al. (2005)	?	
β -endosulfan $\text{C}_9\text{H}_6\text{Cl}_6\text{O}_3\text{S}$ (endosulfan II) [33213-65-9] RDYMFJSUJZBWLH-MDBBVBHRHSA-N	2.5×10^1		Shen and Wania (2005)	L	368
	2.2×10^1		Shen and Wania (2005)	L	369
	6.4		Chao et al. (2017)	M	
	1.9×10^1	3700	Cetin et al. (2006)	M	
	2.5		Altschuh et al. (1999)	M	
	1.1		Rice et al. (1997b)	M	12
	1.1		Rice et al. (1997a)	M	12
	1.6×10^1		Cotham and Bidleman (1989)	V	
	1.6×10^3		Keshavarz et al. (2022)	Q	
	5.2×10^1		Duchowicz et al. (2020)	Q	185
	3.1×10^1		Hilal et al. (2008)	Q	
	8.0×10^{-1}		Modarresi et al. (2007)	Q	68
	2.5×10^1		Duchowicz et al. (2020)	?	186, 21
endosulfan sulfate $\text{C}_9\text{H}_6\text{Cl}_6\text{O}_4\text{S}$ [1031-07-8] AAPVQEMYVNZIOU-UHFFFAOYSA-N	8.2×10^5		HSDB (2015)	V	
mcpa-thioethyl $\text{C}_{11}\text{H}_{13}\text{ClO}_2\text{S}$ [25319-90-8] AZFKQCNGMSSWDS-UHFFFAOYSA-N	4.5×10^{-1}		Mackay et al. (2006d)	V	
1,1'-sulfonylbis(4-chlorobenzene) $\text{C}_{12}\text{H}_8\text{Cl}_2\text{O}_2\text{S}$ [80-07-9] GPAPPPVRLPGFEQ-UHFFFAOYSA-N	7.0×10^1		HSDB (2015)	Q	100
	7.2×10^1		Zhang et al. (2010)	Q	288, 289
	6.5×10^3		Zhang et al. (2010)	Q	288, 290
	5.0×10^4		Zhang et al. (2010)	Q	288, 291
	3.1×10^3		Zhang et al. (2010)	Q	288, 292

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2'-thiobis-4,6-dichlorophenol $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}_2\text{S}$ (bithionol) [97-18-7] JFIOVJDNOJYLKP-UHFFFAOYSA-N	1.1×10^5		Ebert et al. (2023)	?	319
1,2,4-trichloro-5-[(4-chlorophenyl)sulfonyl]benzene $\text{C}_{12}\text{H}_6\text{Cl}_4\text{O}_2\text{S}$ (tetradifon) [116-29-0] MLGCXEBRWGEOQX-UHFFFAOYSA-N	6.9×10^3		Duchowicz et al. (2020)	V	187
	6.9×10^3		HSDB (2015)	V	
	1.0×10^3		Duchowicz et al. (2020)	Q	
ovex $\text{C}_{12}\text{H}_8\text{Cl}_2\text{O}_3\text{S}$ (chlorfenson) [80-33-1] RZXLPPEOUENN-UHFFFAOYSA-N	6.2×10^1		HSDB (2015)	Q	100
sulphenone $\text{C}_{12}\text{H}_9\text{ClO}_2\text{S}$ [80-00-2] OFCFYWOKHPOXKF-UHFFFAOYSA-N	5.2×10^1		HSDB (2015)	Q	100
sulcotrione $\text{C}_{14}\text{H}_{13}\text{ClO}_5\text{S}$ [99105-77-8] PQBTIFWAXVEPB-UHFFFAOYSA-N	1.7×10^6		Maniere et al. (2011)	?	12, 818, 166
aramite $\text{C}_{15}\text{H}_{23}\text{ClO}_4\text{S}$ [140-57-8] YKFRAOGHWKADFJ-UHFFFAOYSA-N	5.2×10^1		HSDB (2015)	Q	100
6-chloro-2-(6-chloro-4-methyl-3-oxobenzo[b]thien-2(3H)-ylidene)-4-methylbenzo[b]thiophene-3(2H)-one $\text{C}_{18}\text{H}_{10}\text{Cl}_2\text{O}_2\text{S}_2$ [2379-74-0] NDDLTAIKYHPOD-ISLYRVAYSA-N	3.2×10^7		Zhang et al. (2010)	Q	288, 289
	1.2×10^7		Zhang et al. (2010)	Q	288, 290
	5.4×10^4		Zhang et al. (2010)	Q	288, 291
	2.4×10^6		Zhang et al. (2010)	Q	288, 292
5-chloro-3-(trichloromethyl)-1,2,4-thiadiazole $\text{C}_3\text{Cl}_4\text{N}_2\text{S}$ [5848-93-1] MARKPJMFLDWCID-UHFFFAOYSA-N	1.6×10^1		Zhang et al. (2010)	Q	288, 289
	1.9×10^1		Zhang et al. (2010)	Q	288, 290
	7.3×10^{-1}		Zhang et al. (2010)	Q	288, 291
	4.2×10^{-1}		Zhang et al. (2010)	Q	288, 292

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4-dichloro-6-(methylthio)-1,3,5-triazine $\text{C}_4\text{H}_3\text{Cl}_2\text{N}_3\text{S}$ [13705-05-0] MWPZLWRHHPWTFS-UHFFFAOYSA-N	1.3×10^1		Zhang et al. (2010)	Q	288, 289
	1.3×10^1		Zhang et al. (2010)	Q	288, 290
	9.7×10^{-1}		Zhang et al. (2010)	Q	288, 291
	1.7×10^1		Zhang et al. (2010)	Q	288, 292
chlorthiamid $\text{C}_7\text{H}_5\text{Cl}_2\text{NS}$ [1918-13-4] KGKGSIUWJCAFPX-UHFFFAOYSA-N	3.5×10^4		MacBean (2012a)	?	
(2-chlorophenyl)thiourea $\text{C}_7\text{H}_7\text{ClN}_2\text{S}$ [5344-82-1] YZUKKTCDYSIWKJ-UHFFFAOYSA-N	$>9.9 \times 10^1$		HSDB (2015)	Q	547
2-chloroallyl-N,N-diethylthiocarbamate $\text{C}_8\text{H}_{14}\text{ClNS}_2$ [95-06-7] XJCLWVXTCRQIDI-UHFFFAOYSA-N	1.5		Duchowicz et al. (2020)	V	187
	1.5		HSDB (2015)	V	
	2.1×10^2		Duchowicz et al. (2020)	Q	
	2.1×10^1		Hilal et al. (2008)	Q	
	4.1		Modarresi et al. (2007)	Q	68
thiacloprid $\text{C}_{10}\text{H}_9\text{ClN}_4\text{S}$ [111988-49-9] HOKKPVIRMVDYPB-UHFFFAOYSA-N	9.0×10^8		HSDB (2015)	V	
	2.1×10^9		Maniere et al. (2011)	?	242, 166
chloromethiuron $\text{C}_{10}\text{H}_{13}\text{N}_2\text{ClS}$ [28217-97-2] IBZZDPVVVSNQOY-UHFFFAOYSA-N	2.0×10^5		MacBean (2012a)	?	
imibenconazole $\text{C}_{17}\text{H}_{13}\text{Cl}_3\text{N}_4\text{S}$ [86598-92-7] AGKSTYPVMZODRV-UHFFFAOYSA-N	4.9×10^4		Duchowicz et al. (2020)	V	187
	6.8×10^3		Duchowicz et al. (2020)	Q	
etridiazole $\text{C}_5\text{H}_5\text{Cl}_3\text{N}_2\text{OS}$ [2593-15-9] KQTVWCSONPJPE-UHFFFAOYSA-N	3.6×10^1		Duchowicz et al. (2020)	V	187
	3.3×10^{-1}		HSDB (2015)	V	
	1.6×10^1		Mackay et al. (2006d)	V	
	5.3×10^1		Duchowicz et al. (2020)	Q	
4-chloro-3-nitrobenzenesulfonamide $\text{C}_6\text{H}_5\text{ClN}_2\text{O}_4\text{S}$ [97-09-6] SPZGXONNVLQDE-UHFFFAOYSA-N	8.2×10^3		HSDB (2015)	Q	100

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
clothianidin $\text{C}_6\text{H}_8\text{ClN}_5\text{O}_2\text{S}$ [210880-92-5] PGOBECDWQEAB-UHFFFAOYSA-N	3.4×10^{10} 3.4×10^{10}		MacBean (2012b) Maniere et al. (2011)	X ?	352 12, 166
chlobenthiazone $\text{C}_8\text{H}_6\text{NOClS}$ [63755-05-5] QCPASDYEQAVIJF-UHFFFAOYSA-N	1.3		MacBean (2012a)	?	
prothiocarb hydrochloride $\text{C}_8\text{H}_{19}\text{ClN}_2\text{OS}$ [19622-19-6] NMFAMPYSJHIYMR-UHFFFAOYSA-N	2.5×10^9		MacBean (2012a)	?	
thicyofen $\text{C}_8\text{H}_5\text{N}_2\text{OCIS}_2$ [116170-30-0] GNOOAFGERMHQJE-UHFFFAOYSA-N	$> 2.3 \times 10^{10}$		MacBean (2012a)	?	
thiamethoxam $\text{C}_8\text{H}_{10}\text{ClN}_5\text{O}_3\text{S}$ [153719-23-4] NWWZPOKUUAIWIW-DHZHZOJOSA-N	2.1×10^9 2.1×10^9		HSDB (2015) Maniere et al. (2011)	V ?	166
4-amino-3,5-dichloro-N-ethyl-2-methylbenzenesulfonamide $\text{C}_9\text{H}_{12}\text{Cl}_2\text{N}_2\text{O}_2\text{S}$ [151574-12-8] SBBHTEMLRJJIGK-UHFFFAOYSA-N	3.8×10^4 1.1×10^4 1.2×10^6 1.5×10^7		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
dichlofluamid $\text{C}_9\text{H}_{11}\text{Cl}_2\text{FN}_2\text{O}_2\text{S}_2$ [1085-98-9] WURGXGVFSMYFCG-UHFFFAOYSA-N	2.6×10^2 1.9×10^2 2.5×10^4 5.7×10^2 1.5×10^1		Duchowicz et al. (2020) Mackay et al. (2006d) Siebers and Mattusch (1996) Duchowicz et al. (2020) HSDB (2015)	V V V Q Q	187 12 100
captan $\text{C}_9\text{H}_8\text{Cl}_3\text{NO}_2\text{S}$ [133-06-2] LDVVMCZRFBMZSG-UHFFFAOYSA-N	1.4×10^3 1.5×10^3 1.7 1.6×10^{-2} 2.1×10^{-3} 3.3×10^3 5.0×10^3		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011) Maniere et al. (2011)	V V V X Q ? ?	12 569 570, 573 12, 572, 166 12, 495, 166

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
benazolin $\text{C}_9\text{H}_6\text{ClNO}_3\text{S}$ [3813-05-6] HYJSGOXICXYZGS-UHFFFAOYSA-N	4.2×10^6		Ebert et al. (2023)	?	317
folpet $\text{C}_9\text{H}_4\text{Cl}_3\text{NO}_2\text{S}$ [133-07-3] HKIOYBQGHSTUDB-UHFFFAOYSA-N	1.3×10^2 1.3×10^2 2.6 2.6×10^{-2}		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Barcelo and Hennion (1997)	V V V X	187 569
	1.9×10^1 1.2×10^{-1} 1.2×10^2		Duchowicz et al. (2020) Goodarzi et al. (2010) Maniere et al. (2011)	Q Q ?	570 166
captafol $\text{C}_{10}\text{H}_9\text{Cl}_4\text{NO}_2\text{S}$ (difolatan) [2425-06-1] JHRWWRDRBPCWTF-UHFFFAOYSA-N	2.0×10^3 3.7×10^3 3.7×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
diallate $\text{C}_{10}\text{H}_{17}\text{Cl}_2\text{NOS}$ (avadex) [2303-16-4] SPANOECCGNXGNR-UITAMQMPSA-N	2.6 9.3 4.0 2.6		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) MacBean (2012a)	V V V ?	12
triallate $\text{C}_{10}\text{H}_{16}\text{Cl}_3\text{NOS}$ [2303-17-5] MWBPRDONLNQCFV-UHFFFAOYSA-N	8.2×10^{-1} 8.8×10^{-1} 9.8×10^{-1} 1.0×10^{-2} 1.6×10^{-2} 1.1		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011)	V V V X Q ?	12 569 570 12, 166
tolyfluanid $\text{C}_{10}\text{H}_{13}\text{Cl}_2\text{FN}_2\text{O}_2\text{S}_2$ [731-27-1] HYVWIQDYBVKITD-UHFFFAOYSA-N	1.3×10^1 1.3×10^1 1.6×10^2 3.7×10^2		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	187
tiadinil $\text{C}_{11}\text{H}_{10}\text{ClN}_3\text{OS}$ [223580-51-6] VJQYLJSMBWXGDV-UHFFFAOYSA-N	5.3×10^4		Ebert et al. (2023)	?	319
benazolin-ethyl $\text{C}_{11}\text{H}_{10}\text{NO}_3\text{ClS}$ [25059-80-7] WQRCEBAZAUUQC-UHFFFAOYSA-N	4.7×10^2 5.2×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
orbencarb $\text{C}_{12}\text{H}_{16}\text{ClNO}_5$ [34622-58-7] LLLFASISUZUJEQ-UHFFFAOYSA-N	2.0×10^1		Ebert et al. (2023)	?	319
S-(4-chlorobenzyl) diethylthiocarbamate $\text{C}_{12}\text{H}_{16}\text{ClNO}_5$ (thiobencarb) [28249-77-6] QHTQREMOGMZHV-UHFFFAOYSA-N	1.9×10^1 4.9 3.7×10^1 5.8×10^1 3.7×10^1		Watanabe (1993) Kawamoto and Urano (1989) HSDB (2015) Woodrow et al. (1990) Armbrust (2000) Mackay et al. (2006d)	M M V V C W	 12 819
furosemide $\text{C}_{12}\text{H}_{11}\text{ClN}_2\text{O}_5\text{S}$ [54-31-9] ZZUFCTLCJUWOSV-UHFFFAOYSA-N	2.5×10^{10}		HSDB (2015)	Q	100
chlorsulfuron $\text{C}_{12}\text{H}_{12}\text{ClN}_5\text{O}_4\text{S}$ [64902-72-3] VJYIFXVZLXQVHO-UHFFFAOYSA-N	3.2×10^4 1.5×10^5 2.9×10^{10}		Mackay et al. (2006d) Armbrust (2000) Maniere et al. (2011)	V C ?	 242, 166
phosalone $\text{C}_{12}\text{H}_{15}\text{ClNO}_4\text{S}_2$ [2310-17-0] IOUNQDKNJZEDEP-UHFFFAOYSA-N	2.5×10^1		HSDB (2015)	Q	100
dimethenamid $\text{C}_{12}\text{H}_{18}\text{ClNO}_2\text{S}$ [87674-68-8] JLYFCTQDENRSOL-UHFFFAOYSA-N	8.9×10^2 4.7 4.5×10^2 2.3×10^2 1.2×10^2		Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	Q Q Q Q ?	 68 186, 21
dimethenamid-p $\text{C}_{12}\text{H}_{18}\text{ClNO}_2\text{S}$ [163515-14-8] JLYFCTQDENRSOL-VIFPVBQESA-N	2.1×10^3 2.1×10^3		MacBean (2012b) Maniere et al. (2011)	X ?	352 166
cyazofamid $\text{C}_{13}\text{H}_{13}\text{ClN}_4\text{O}_2\text{S}$ [120116-88-3] YXKMMRDKEKCERS-UHFFFAOYSA-N	2.5×10^1 $> 2.5 \times 10^1$		HSDB (2015) Maniere et al. (2011)	V ?	 242, 166
metosulam $\text{C}_{14}\text{H}_{13}\text{Cl}_2\text{N}_5\text{O}_4\text{S}$ [139528-85-1] VGHPMIFEKOFHHQ-UHFFFAOYSA-N	1.2×10^{12}		Maniere et al. (2011)	?	12, 166

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
prothioconazole $\text{C}_{14}\text{H}_{15}\text{Cl}_2\text{N}_3\text{OS}$ [178928-70-6] MNHVNIJQQRJYDH-UHFFFAOYSA-N	2.2×10^4 $> 3.3 \times 10^4$		HSDB (2015) Maniere et al. (2011)	V ?	12, 166
triasulfuron $\text{C}_{14}\text{H}_{16}\text{ClN}_5\text{O}_5\text{S}$ [82097-50-5] XOPFESVZMSQIKC-UHFFFAOYSA-N	8.0×10^8		Ebert et al. (2023)	?	317
chlorimuron-ethyl $\text{C}_{15}\text{H}_{15}\text{ClN}_4\text{O}_6\text{S}$ [90982-32-4] NSWAMPCUPHPTTC-UHFFFAOYSA-N	5.5×10^9		HSDB (2015)	V	
clopidogrel $\text{C}_{16}\text{H}_{16}\text{ClNO}_2\text{S}$ [113665-84-2] GKTWGGQPFXNFI-HNNXBMFYSA-N	4.5×10^3		HSDB (2015)	Q	100
thenylchlor $\text{C}_{16}\text{H}_{18}\text{ClNO}_2\text{S}$ [96491-05-3] KDWQYMPYJGPHS-UHFFFAOYSA-N	1.2×10^3 6.3×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
chlorpromazine $\text{C}_{17}\text{H}_{19}\text{ClN}_2\text{S}$ [50-53-3] ZPEIMTDSQAKGNT-UHFFFAOYSA-N	6.5×10^4		Ebert et al. (2023)	?	317
hexythiazox $\text{C}_{17}\text{H}_{21}\text{N}_2\text{O}_2\text{ClS}$ [78587-05-0] XGWIJUOSCAQSSV-XHDPSFHLA-N	4.2×10^2 8.4×10^1		HSDB (2015) Maniere et al. (2011)	V ?	12, 166
clethodim $\text{C}_{17}\text{H}_{26}\text{ClNO}_3\text{S}$ [99129-21-2] INNPZTGYZSAJFN-ZTVUPKSFSAN	8.2×10^5 7.1×10^6		HSDB (2015) Maniere et al. (2011)	Q ?	100 12, 166
clindamycin $\text{C}_{18}\text{H}_{33}\text{N}_2\text{O}_5\text{ClS}$ [18323-44-9] KDLRVYVGXIQJDK-AWPVFWJPSAN	3.4×10^{16}		HSDB (2015)	Q	100
pyridate $\text{C}_{19}\text{H}_{23}\text{ClN}_2\text{O}_2\text{S}$ [55512-33-9] JTZCTMAVMHRNTR-UHFFFAOYSA-N	3.0×10^2 4.9 8.3×10^3		Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011)	X Q ?	569 570 12, 166

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
vismodegib $\text{C}_{19}\text{H}_{14}\text{Cl}_2\text{N}_2\text{O}_3\text{S}$ [879085-55-9] BPQMGSKTAYIVFO-UHFFFAOYSA-N	6.2×10^{11}		HSDB (2015)	Q	100
pyridaben $\text{C}_{19}\text{H}_{25}\text{ClN}_2\text{OS}$ [96489-71-3] DWFZBUWUXWZWKD-UHFFFAOYSA-N	2.1×10^{-1}		HSDB (2015)	V	
tembotrione $\text{C}_{17}\text{H}_{16}\text{ClF}_3\text{O}_6\text{S}$ [335104-84-2] IUQAXCIUEPFSF-UHFFFAOYSA-N	5.8×10^9 5.8×10^9		HSDB (2015) Maniere et al. (2011)	V ?	12, 166
fluensulfone $\text{C}_7\text{H}_5\text{ClF}_3\text{NO}_2\text{S}_2$ [318290-98-1] XSNMWAPKHUGZGQ-UHFFFAOYSA-N	6.1×10^1		Ebert et al. (2023)	?	319
fluothiuron $\text{C}_{10}\text{H}_{10}\text{Cl}_2\text{F}_2\text{N}_2\text{OS}$ [33439-45-1] YFEUKKUPOVGUIW-UHFFFAOYSA-N	$> 2.3 \times 10^{10}$		MacBean (2012a)	?	
sulfentrazone $\text{C}_{11}\text{H}_{10}\text{Cl}_2\text{F}_2\text{N}_4\text{O}_3\text{S}$ [122836-35-5] OORLZFUTLGXMEF-UHFFFAOYSA-N	1.5×10^7 1.5×10^7 3.7×10^8		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
flurazole $\text{C}_{12}\text{H}_7\text{NO}_2\text{ClF}_3\text{S}$ [72850-64-7] MKQSWTQPLLC SOB-UHFFFAOYSA-N	4.0×10^1 1.2×10^2 4.0×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020) MacBean (2012a)	V Q ?	187
fipronil $\text{C}_{12}\text{H}_4\text{Cl}_2\text{F}_6\text{N}_4\text{OS}$ [120068-37-3] ZOC SXAVNDGMNBV-UHFFFAOYSA-N	1.2×10^4 1.2×10^4 4.4×10^7		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
flusulfamide $\text{C}_{13}\text{H}_7\text{Cl}_2\text{F}_3\text{N}_2\text{O}_4\text{S}$ [106917-52-6] GNVDAZSPJWC IQZ-UHFFFAOYSA-N	4.0×10^3		Ebert et al. (2023)	?	319
ethiprole $\text{C}_{13}\text{H}_9\text{Cl}_2\text{F}_3\text{N}_4\text{OS}$ [181587-01-9] FNELVJVBIYMIMC-UHFFFAOYSA-N	2.5×10^5		Ebert et al. (2023)	?	319

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
diclosulam $\text{C}_{13}\text{H}_{10}\text{Cl}_2\text{FN}_5\text{O}_3\text{S}$ [145701-21-9] QNXAVFXEJJCPCJO-UHFFFAOYSA-N	2.5×10^{10}		Ebert et al. (2023)	?	319
cloransulam-methyl $\text{C}_{15}\text{H}_{13}\text{ClFN}_5\text{O}_5\text{S}$ [147150-35-4] BIKACRYIQSLICJ-UHFFFAOYSA-N	1.6×10^{11}		Ebert et al. (2023)	?	319
fluthiacet-methyl $\text{C}_{15}\text{H}_{15}\text{ClFN}_3\text{O}_3\text{S}_2$ [117337-19-6] ZCNQYNHDRVPIH-UHFFFAOYSA-N	4.8×10^3 4.7×10^3 4.2×10^5 6.6×10^5		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Modarresi et al. (2007)	V V Q Q	187 68
vemurafenib $\text{C}_{23}\text{H}_{18}\text{ClF}_2\text{N}_3\text{O}_3\text{S}$ [918504-65-1] GPXBXXGIAQBQNI-UHFFFAOYSA-N	8.2×10^{11}		HSDB (2015)	Q	100
tetrabromobisphenol S $\text{C}_{12}\text{H}_6\text{Br}_4\text{O}_4\text{S}$ [39635-79-5] JHJUYGMZIWDHMO-UHFFFAOYSA-N	1.5×10^{11} 9.7×10^5 5.8×10^6 1.2×10^7		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
1,3-dibromo-5-[3,5-dibromo-4-(2,3-dibromopropoxy)benzenesulfonyl]-2-(2,3-dibromopropoxy)benzene $\text{C}_{18}\text{H}_{14}\text{Br}_8\text{O}_4\text{S}$ [42757-55-1] CWZVMVIHYSYLSI-UHFFFAOYSA-N	8.2×10^8 5.2×10^8 1.8×10^{11} 6.4×10^8		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
bromphenol blue $\text{C}_{19}\text{H}_{10}\text{Br}_4\text{O}_5\text{S}$ [115-39-9] UDSAIICHUKSCKT-UHFFFAOYSA-N	1.9×10^{13} 5.1×10^5 9.2×10^9 5.3×10^{10}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
bromocresol green $\text{C}_{21}\text{H}_{14}\text{Br}_4\text{O}_5\text{S}$ [76-60-8] FRPHFZCDPYBUAU-UHFFFAOYSA-N	1.5×10^{13} 1.0×10^6 1.8×10^9 1.6×10^{10}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
bromocresol purple $\text{C}_{21}\text{H}_{16}\text{Br}_2\text{O}_5\text{S}$ [115-40-2] ABIUHPWEYMSGSR-UHFFFAOYSA-N	9.9×10^{12}		HSDB (2015)	Q	100

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
difethialone $\text{C}_{31}\text{H}_{23}\text{BrO}_2\text{S}$ [104653-34-1] VSVAQRUUFVBBFS-UHFFFAOYSA-N	9.9 9.9 5.4×10^6		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
amisulbrom $\text{C}_{13}\text{H}_{13}\text{BrFN}_5\text{O}_4\text{S}_2$ [348635-87-0] BREATYVWRHIPIY-UHFFFAOYSA-N	4.7×10^1 3.6×10^4		MacBean (2012b) Maniere et al. (2011)	X ?	352 242, 166
thifluzamide $\text{C}_{13}\text{H}_6\text{Br}_2\text{F}_6\text{N}_2\text{O}_2\text{S}$ [130000-40-7] WOSNCVAPUOFXEH-UHFFFAOYSA-N	1.2×10^6		Ebert et al. (2023)	?	319
amical 48 $\text{C}_8\text{H}_8\text{I}_2\text{O}_2\text{S}$ (diiodomethyl <i>p</i> -tolyl sulfone) [20018-09-1] XOILGBPDXMVFIP-UHFFFAOYSA-N	1.3×10^3		HSDB (2015)	Q	100
flubendiamide $\text{C}_{23}\text{H}_{22}\text{F}_7\text{IN}_2\text{O}_4\text{S}$ [272451-65-7] ZGNITFSDLCMLGI-UHFFFAOYSA-N	4.5×10^{-2}		HSDB (2015)	V	

A10 Organic species with phosphorus (P)

A10.1 Phosphorus (C, H, O, N, Cl, Br, S, P)

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
9-icosyl-9-phosphabicyclo[4.2.1]nonane $\text{C}_{28}\text{H}_{55}\text{P}$ [13886-99-2] UNOQEFGBOLKBFW-UHFFFAOYSA-N	3.1×10^{-5} 3.1×10^{-3} 2.2×10^{-2} 8.0×10^{-6}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
triphenylphosphine $\text{C}_{18}\text{H}_{15}\text{P}$ [603-35-0] RIOQSEWOXXDEQQ-UHFFFAOYSA-N	4.3×10^2 9.5×10^{-3} 1.3×10^1 4.8		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
phosphoric acid, trimethyl ester $\text{C}_3\text{H}_9\text{O}_4\text{P}$ (trimethyl phosphate) [512-56-1] WVLBCYQITXONBZ-UHFFFAOYSA-N	1.4×10^3 6.3×10^1 6.1×10^1 1.4×10^3 5.2×10^1		Wolfenden and Williams (1983) Yaws (2003) Gharagheizi et al. (2010) Bartelt-Hunt et al. (2008) Yaws (1999)	M X Q ? ?	12 238 247 21 21
trimethyl phosphite $\text{C}_3\text{H}_9\text{O}_3\text{P}$ [121-45-9] CYTQBVOFDCPGCX-UHFFFAOYSA-N	9.0×10^{-1}		HSDB (2015)	Q	100
dimethyl methylphosphonate $\text{C}_3\text{H}_9\text{O}_3\text{P}$ [756-79-6] VONWDASPFIQPDY-UHFFFAOYSA-N	7.6 7.6		HSDB (2015) Bartelt-Hunt et al. (2008)	Q ?	100 21
diethyl hydrogen phosphite $\text{C}_4\text{H}_{11}\text{O}_3\text{P}$ [762-04-9] MJUJXFBTEFXVKU-UHFFFAOYSA-N	1.7 5.5×10^{-3}		HSDB (2015) Bartelt-Hunt et al. (2008)	Q ?	100 21
triethylphosphate $\text{C}_6\text{H}_{15}\text{O}_4\text{P}$ [78-40-0] DQWPFLDHJDLRL-UHFFFAOYSA-N	2.7×10^2 1.4×10^2 6.7×10^1 6.6×10^1 5.2×10^1 6.7×10^1 6.6 9.6×10^1		Wolfenden and Williams (1983) Abraham et al. (1994a) Yaws (2003) Yaws (2003) Dupeux et al. (2022) Gharagheizi et al. (2010) Bartelt-Hunt et al. (2008) Yaws (1999)	M R X X Q Q ? ?	12 259 238 260 247 21 21
diethyl ethyl phosphonate $\text{C}_6\text{H}_{15}\text{O}_3\text{P}$ [78-38-6] AATNZNJRDVOKDD-UHFFFAOYSA-N	3.4		Bartelt-Hunt et al. (2008)	?	21

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
mevinphos $\text{C}_7\text{H}_{13}\text{O}_6\text{P}$ [7786-34-7] GEPDYQSQVLXLEU-AATRIKPKSA-N	2.4×10^5 2.5×10^3		Mackay et al. (2006d) Sanders and Seiber (1983) HSDB (2015)	V V Q	560 88 100
diisopropyl methanephosphonate $\text{C}_7\text{H}_{17}\text{O}_3\text{P}$ [1445-75-6] WOAFDHWYKSOANX-UHFFFAOYSA-N	2.2×10^{-1} 2.2×10^{-1}		HSDB (2015) Bartelt-Hunt et al. (2008)	V ?	21
dibutyl hydrogen phosphite $\text{C}_8\text{H}_{19}\text{O}_3\text{P}$ [1809-19-4] NFJPGAKRJJKLOJK-UHFFFAOYSA-N	5.5×10^{-1}		HSDB (2015)	Q	100
dibutyl phosphate $\text{C}_8\text{H}_{19}\text{O}_4\text{P}$ [107-66-4] JYFHYPJRHGVZDY-UHFFFAOYSA-N	2.3×10^3		HSDB (2015)	Q	100
tetraethyl pyrophosphate $\text{C}_8\text{H}_{20}\text{O}_7\text{P}_2$ [107-49-3] IDCBOTIENDVCBQ-UHFFFAOYSA-N	4.5×10^4		HSDB (2015)	V	
tripropyl phosphate $\text{C}_9\text{H}_{21}\text{O}_4\text{P}$ [513-08-6] RXPQRKFMQDNODS-UHFFFAOYSA-N	1.5×10^1		Wolfenden and Williams (1983)	M	12
triallyl phosphate $\text{C}_9\text{H}_{15}\text{O}_4\text{P}$ [1623-19-4] XHGIFBQQEGRTPB-UHFFFAOYSA-N	1.8×10^1		HSDB (2015)	Q	100
tributylphosphate $\text{C}_{12}\text{H}_{27}\text{O}_4\text{P}$ [126-73-8] STCOOQWBFONSKY-UHFFFAOYSA-N	7.0 1.6×10^1 4.8		HSDB (2015) Glotfelty et al. (1987) Yoshida et al. (1983)	V V V	
hexaethyl tetraphosphate $\text{C}_{12}\text{H}_{30}\text{O}_{13}\text{P}_4$ [757-58-4] DAJYZXUXDOSMCG-UHFFFAOYSA-N	3.0×10^{11}		HSDB (2015)	Q	100
crotoxyphos $\text{C}_{14}\text{H}_{19}\text{O}_6\text{P}$ [7700-17-6] XXXSILNSXNPGKG-ZHACJKMWSA-N	1.7×10^3 1.7×10^3 1.7×10^3		HSDB (2015) Mackay et al. (2006d) MacBean (2012a)	V V ?	

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
phosphoric acid, dibutyl phenyl ester $\text{C}_{14}\text{H}_{23}\text{O}_4\text{P}$ [2528-36-1] YICSVBJRVMLQNS-UHFFFAOYSA-N	2.0×10^1		HSDB (2015)	Q	100
bis(2-ethylhexyl) hydrogen phosphite $\text{C}_{16}\text{H}_{35}\text{O}_3\text{P}$ [3658-48-8] HZIUHEQKVCPTAJ-UHFFFAOYSA-N	5.8×10^{-2} 6.6×10^{-4}		HSDB (2015) Bartelt-Hunt et al. (2008)	Q ?	100 21
bis(2-ethylhexyl)hydrogen phosphate $\text{C}_{16}\text{H}_{35}\text{O}_4\text{P}$ (bis(2-ethylhexyl) phosphate) [298-07-7] SEGLCEQVOFDUPX-UHFFFAOYSA-N	2.4×10^2		HSDB (2015)	Q	100
triphenyl phosphate $\text{C}_{18}\text{H}_{15}\text{O}_4\text{P}$ [115-86-6] XZZNDPSIHUTMOC-UHFFFAOYSA-N	3.0		HSDB (2015)	V	
tris(2-butoxyethyl) phosphate $\text{C}_{18}\text{H}_{39}\text{O}_7\text{P}$ [78-51-3] WTLBZVNBKAMVDP-UHFFFAOYSA-N	8.2×10^5		HSDB (2015)	Q	100
<i>p</i> -cresyl diphenyl phosphate $\text{C}_{19}\text{H}_{17}\text{O}_4\text{P}$ [78-31-9] OJUZRFGUKHQJX-UHFFFAOYSA-N	9.9×10^1		HSDB (2015)	Q	449
triphenylphosphine oxide $\text{C}_{18}\text{H}_{15}\text{OP}$ [791-28-6] FIQMHBFVRAXMOP-UHFFFAOYSA-N	1.9×10^4 4.6×10^4 1.1×10^7 2.5×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
phosphorous acid, triphenyl ester $\text{C}_{18}\text{H}_{15}\text{O}_3\text{P}$ [101-02-0] HVLLSGMXQDNUAL-UHFFFAOYSA-N	1.8×10^1 4.4×10^{-2} 1.5×10^2 7.0×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
triethylphosphine oxide $\text{C}_{18}\text{H}_{39}\text{OP}$ [3084-48-8] PPDZLUVUQQGIOJ-UHFFFAOYSA-N	4.5×10^{-3} 2.9×10^{-3} 5.8×10^4 3.5×10^{-7}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
phosphoric acid, octyl diphenyl ester $\text{C}_{20}\text{H}_{27}\text{O}_4\text{P}$ [115-88-8] YAFOVCNAQTZDQB-UHFFFAOYSA-N	3.9×10^1		HSDB (2015)	Q	100
octyldihexylphosphine oxide $\text{C}_{20}\text{H}_{43}\text{OP}$ [31160-64-2] XHRRUIJGMKIISX-UHFFFAOYSA-N	2.5×10^{-3} 3.1×10^{-3} 5.3×10^4 2.3×10^{-7}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
octicizer $\text{C}_{20}\text{H}_{27}\text{O}_4\text{P}$ [1241-94-7] CGSLYBDCEGBZCG-UHFFFAOYSA-N	1.0×10^{-1} 2.7 1.8×10^{-1}		Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	Q Q ?	186, 21
tris(methylphenyl) phosphate $\text{C}_{21}\text{H}_{21}\text{O}_4\text{P}$ (tricresyl phosphate) [1330-78-5] IUJIYUAKFBGBCG-UHFFFAOYSA-N	1.2×10^1		HSDB (2015)	V	
phosphoric acid, (1-methylethyl)phenyl diphenyl ester $\text{C}_{21}\text{H}_{21}\text{O}_4\text{P}$ [28108-99-8] JJXNVYMIYBNZQX-UHFFFAOYSA-N	1.3×10^2		HSDB (2015)	Q	100
phosphoric acid, tris(2-methylphenyl) ester $\text{C}_{21}\text{H}_{21}\text{O}_4\text{P}$ (tri- <i>o</i> -cresyl phosphate) [78-30-8] YSMPRWXYRXBRSND-UHFFFAOYSA-N	5.2		HSDB (2015)	Q	449
phosphoric acid, tris(3-methylphenyl) ester $\text{C}_{21}\text{H}_{21}\text{O}_4\text{P}$ (tri- <i>m</i> -cresyl phosphate) [563-04-2] RMLPZKRPSQVRAB-UHFFFAOYSA-N	1.4×10^{-1} 5.1 9.9 1.2×10^{-1}		Keshavarz et al. (2022) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	Q Q Q ?	449 186, 21
phosphoric acid, tris(4-methylphenyl) ester $\text{C}_{21}\text{H}_{21}\text{O}_4\text{P}$ (tri- <i>p</i> -cresyl phosphate) [78-32-0] BOSMZFHBAYFUBJ-UHFFFAOYSA-N	1.8×10^2		HSDB (2015)	Q	449

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(3- <i>tert</i> -butylphenyl) diphenyl phosphate $\text{C}_{22}\text{H}_{23}\text{O}_4\text{P}$ NIAVXHWUJRFNOW-UHFFFAOYSA-N	1.1×10^1		Ebert et al. (2023)	?	367
(4- <i>tert</i> -butylphenyl) diphenyl phosphate $\text{C}_{22}\text{H}_{23}\text{O}_4\text{P}$ [981-40-8] ULGAVXUJJBOWOD-UHFFFAOYSA-N	4.5×10^1 1.8×10^2 3.6 1.1×10^1		HSDB (2015) Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q Q ?	186, 21
isodecyl diphenyl phosphate $\text{C}_{22}\text{H}_{31}\text{O}_4\text{P}$ [29761-21-5] RYUJRXVZSJCHDZ-UHFFFAOYSA-N	2.3×10^1		HSDB (2015)	Q	100
dioctylhexylphosphine oxide $\text{C}_{22}\text{H}_{47}\text{OP}$ [31160-66-4] MKEFGIKZZDCMQC-UHFFFAOYSA-N	1.4×10^{-3} 3.4×10^{-3} 4.0×10^4 1.4×10^{-7}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
tris(2,4-dimethylphenyl)phosphate $\text{C}_{24}\text{H}_{27}\text{O}_4\text{P}$ [3862-12-2] KOWVWXQNQCRRS-UHFFFAOYSA-N	1.4×10^2		HSDB (2015)	Q	100
tris(2,5-dimethylphenyl)phosphate $\text{C}_{24}\text{H}_{27}\text{O}_4\text{P}$ [19074-59-0] MDHAARLWBHZGIP-UHFFFAOYSA-N	1.4×10^2		HSDB (2015)	Q	100
tris(2,6-dimethylphenyl)phosphate $\text{C}_{24}\text{H}_{27}\text{O}_4\text{P}$ [121-06-2] QLORRTLBSJTMSN-UHFFFAOYSA-N	1.4×10^2		HSDB (2015)	Q	100
tris(3,4-dimethylphenyl)phosphate $\text{C}_{24}\text{H}_{27}\text{O}_4\text{P}$ [3862-11-1] BCTKCHOESSAGCN-UHFFFAOYSA-N	1.4×10^2		HSDB (2015)	Q	100
tris(3,5-dimethylphenyl)phosphate $\text{C}_{24}\text{H}_{27}\text{O}_4\text{P}$ [25653-16-1] LLPMAOBOEQFPRE-UHFFFAOYSA-N	1.4×10^2		HSDB (2015)	Q	100
tris(4-isopropylphenyl) phosphate $\text{C}_{27}\text{H}_{33}\text{O}_4\text{P}$ [26967-76-0] ANVREEJNGJMLOV-UHFFFAOYSA-N	3.4×10^1		HSDB (2015)	Q	100

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
trioctylphosphine oxide $\text{C}_{24}\text{H}_{51}\text{OP}$ [78-50-2] ZMBHCYHQLYEYDV-UHFFFAOYSA-N	8.2×10^{-4} 3.7×10^{-3} 3.4×10^4 9.2×10^{-8}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
bis(2-ethylhexyl)-2-ethylhexyl phosphonate $\text{C}_{24}\text{H}_{51}\text{O}_3\text{P}$ [126-63-6] GOCVCBDBQYEFQD-UHFFFAOYSA-N	2.1×10^{-2} 6.2×10^{-6} 5.4×10^4 7.7×10^{-5} 1.3×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Bartelt-Hunt et al. (2008)	Q Q Q Q ?	288, 289 288, 290 288, 291 288, 292 21
didodecyl hydrogen phosphate $\text{C}_{24}\text{H}_{51}\text{O}_4\text{P}$ [7057-92-3] JTXUVYOABGUBMX-UHFFFAOYSA-N	2.5×10^1		HSDB (2015)	Q	100
phosphoric acid, tris(2-ethylhexyl) ester $\text{C}_{24}\text{H}_{51}\text{O}_4\text{P}$ (trioctyl phosphate) [78-42-2] GTVWRXDRKAHEAD-UHFFFAOYSA-N	1.2×10^2		HSDB (2015)	V	
diisodecylphenyl phosphite $\text{C}_{26}\text{H}_{47}\text{O}_3\text{P}$ [25550-98-5] SXXILWLQSQDLDL-UHFFFAOYSA-N	1.9 2.5 1.6×10^3 3.9×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
4-nonylphenyl diphenyl phosphate $\text{C}_{27}\text{H}_{33}\text{O}_4\text{P}$ [64532-97-4] LMCLPMXCYFSRNG-UHFFFAOYSA-N	8.1×10^2 2.5×10^1 7.0×10^2		Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	Q Q ?	 185 186, 21
resorcinol bis(diphenyl phosphate) $\text{C}_{30}\text{H}_{24}\text{O}_8\text{P}_2$ [57583-54-7] OWICEWMBIBPFAH-UHFFFAOYSA-N	3.4×10^7 1.4×10^{-2} 2.6×10^8 3.9×10^{16}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
hydroquinone bis(diphenyl phosphate) $\text{C}_{30}\text{H}_{24}\text{O}_8\text{P}_2$ [51732-57-1] RECLNCPBBUHRDY-UHFFFAOYSA-N	3.4×10^{12}		Abraham et al. (2019)	Q	
tris(4- <i>tert</i> -butylphenyl) phosphate $\text{C}_{30}\text{H}_{39}\text{O}_4\text{P}$ [78-33-1] LORSVOJSXMHDFH-UHFFFAOYSA-N	1.4×10^1 8.4×10^{-4} 1.6×10^3 3.5×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tris-(2,4-di- <i>tert</i> -butylphenyl) phosphite $\text{C}_{42}\text{H}_{63}\text{O}_3\text{P}$ [31570-04-4] JKIJEFPNVSHHEI-UHFFFAOYSA-N	6.1×10^{-2}		Zhang et al. (2010)	Q	288, 289
	6.5×10^{-5}		Zhang et al. (2010)	Q	288, 290
	1.5×10^2		Zhang et al. (2010)	Q	288, 291
	5.8		Zhang et al. (2010)	Q	288, 292
glyphosate $\text{C}_3\text{H}_8\text{NO}_5\text{P}$ [1071-83-6] XDDAORKBJWWYJS-UHFFFAOYSA-N	1.8×10^6		Mackay et al. (2006d)	V	
	4.8×10^6		Maniere et al. (2011)	?	166
krenite $\text{C}_3\text{H}_{11}\text{N}_2\text{O}_4\text{P}$ (fosamine-ammonium) [25954-13-6] OTSAMNSACVKIOJ-UHFFFAOYSA-N	2.0×10^7		HSDB (2015)	V	
tabun $\text{C}_5\text{H}_{11}\text{N}_2\text{O}_2\text{P}$ [77-81-6] PJVJTCIRVMBVIA-UHFFFAOYSA-N	6.6×10^1		HSDB (2015)	V	
	6.2×10^2		Bartelt-Hunt et al. (2008)	?	21
	6.5×10^1		Opresko et al. (1998)	?	
glufosinate-ammonium $\text{C}_5\text{H}_{15}\text{N}_2\text{O}_4\text{P}$ [77182-82-2] ZBMRKNMTMPPMMK-UHFFFAOYSA-N	2.2×10^8		MacBean (2012b)	X	352
hexamethylphosphoramide $\text{C}_6\text{H}_{18}\text{N}_3\text{OP}$ [680-31-9] GNOIPBMMFNUIFM-UHFFFAOYSA-N	4.9×10^2		Duchowicz et al. (2020)	V	187
	5.3×10^{-4}		Duchowicz et al. (2020)	Q	
monocrotophos $\text{C}_7\text{H}_{14}\text{NO}_5\text{P}$ [6923-22-4] KRTSDMXIXPKRQR-AATRIKPKSA-N	1.5×10^7		HSDB (2015)	V	
			Mackay et al. (2006d)	V	560
dicrotophos $\text{C}_8\text{H}_{16}\text{NO}_5\text{P}$ [141-66-2] VEENJGZXVHKXNB-VOTSOKGWSA-N	2.0×10^5		Mackay et al. (2006d)	V	
	7.8×10^4		Keshavarz et al. (2022)	Q	
	1.0×10^3		Duchowicz et al. (2020)	Q	
	2.0×10^5		Duchowicz et al. (2020)	?	186, 21
octamethyldiphosphoramidate $\text{C}_8\text{H}_{24}\text{N}_4\text{O}_3\text{P}_2$ (schradan) [152-16-9] SZKKRCSOSQAJDE-UHFFFAOYSA-N	1.6×10^{11}		HSDB (2015)	Q	100

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
fyrol 6 C ₉ H ₂₂ NO ₅ P (diethyl ((diethanolamino)methyl) phosphonate) [2781-11-5] CCJKFLLIJCGHMO-UHFFFAOYSA-N	6.2 × 10 ¹		HSDB (2015)	V	
diethyl 4-nitrophenyl phosphate C ₁₀ H ₁₄ NO ₆ P (paraoxon) [311-45-5] WYMSBXTXOHUIGT-UHFFFAOYSA-N	9.1 × 10 ⁴ 1.6 × 10 ³ 9.0 × 10 ¹ 1.5 × 10 ⁴ 2.7 × 10 ⁻¹		Duchowicz et al. (2020) Glotfelty et al. (1987) Duchowicz et al. (2020) HSDB (2015) Bartelt-Hunt et al. (2008)	V V Q Q ?	187 100 21
dimethyl 4-nitrophenyl phosphate C ₈ H ₁₀ NO ₆ P (methyl paraoxon) [950-35-6] BAFQDKPJCOLXFZ-UHFFFAOYSA-N	> 1.1 × 10 ⁴		Woodrow et al. (1990)	V	
buminafos C ₁₈ H ₃₈ NO ₃ P [51249-05-9] NMBXMBZBXUXAM-UHFFFAOYSA-N	5.0		MacBean (2012a)	?	12
methylphosphonyldifluoride CH ₃ F ₂ OP [676-99-3] PQIOSYKVBWRRRI-UHFFFAOYSA-N	4.5 × 10 ⁻¹		HSDB (2015)	Q	100
sarin C ₄ H ₁₀ FO ₂ P [107-44-8] DYAHQFWOVKZOOW-UHFFFAOYSA-N	1.7 × 10 ¹ 1.1 1.8 × 10 ¹		HSDB (2015) Bartelt-Hunt et al. (2008) Opresko et al. (1998)	V ? ?	 21
dimefox C ₄ H ₁₂ FN ₂ OP [115-26-4] PGJBQBDNXAZHBP-UHFFFAOYSA-N	4.5 × 10 ²		HSDB (2015)	V	
isofluorophate C ₆ H ₁₄ FO ₃ P (diisopropyl fluorophosphate) [55-91-4] MUCZHBLJLSDCSD-UHFFFAOYSA-N	3.1 7.6 × 10 ⁻⁵		HSDB (2015) Bartelt-Hunt et al. (2008)	Q ?	100 21

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cyclohexyl methylphosphonofluoridate C ₇ H ₁₄ FO ₂ P (cyclosarin) [329-99-7] SNTRKUOVAPUGAY-UHFFFAOYSA-N	3.5 3.5 4.3×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
soman C ₇ H ₁₆ FO ₂ P [96-64-0] GRXKLBBBQUKJJZ-UHFFFAOYSA-N	2.1 2.1 2.2		HSDB (2015) Bartelt-Hunt et al. (2008) Opresko et al. (1998)	V ? ?	21
mipafox C ₆ H ₁₆ FN ₂ OP [371-86-8] UOSHUBFBCPGQAY-UHFFFAOYSA-N	3.3×10^3		HSDB (2015)	V	
phenylphosphonous dichloride C ₆ H ₅ Cl ₂ P [644-97-3] IMDXZWRLUZPMDH-UHFFFAOYSA-N	6.5×10^{-1} 2.5×10^{-3} 6.2×10^{-2} 3.3×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
chlorphonium chloride C ₁₉ H ₃₂ Cl ₃ P [115-78-6] IVHVNMLJNASKHW-UHFFFAOYSA-M	2.8×10^7		MacBean (2012a)	?	12
triclofos C ₂ H ₄ Cl ₃ O ₄ P [306-52-5] YYQRGCZGSFRBAM-UHFFFAOYSA-N	7.0×10^7		HSDB (2015)	Q	100
(2-chloroethyl)-phosphonic acid C ₂ H ₆ ClO ₃ P (ethephon) [16672-87-0] UDPGUMQDCGORJQ-UHFFFAOYSA-N	6.9×10^7 $> 6.9 \times 10^6$		HSDB (2015) Maniere et al. (2011)	V ?	242, 166
1-hydroxy-2,2,2- trichloroethylphosphonic acid, dimethyl ester C ₄ H ₈ Cl ₃ O ₄ P (trichlorfon) [52-68-6] NFACJZMKEDPNKN-UHFFFAOYSA-N	5.5×10^1 $> 8.1 \times 10^2$ 5.8×10^5 6.0×10^5 5.9×10^5 5.8×10^3 3.8×10^1		Chao et al. (2017) Kawamoto and Urano (1989) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	M M V V V X Q	12 569 570

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dimethyl-2,2-dichlorovinyl phosphate $\text{C}_4\text{H}_7\text{Cl}_2\text{O}_4\text{P}$ (dichlorvos) [62-73-7] OEBRKCOSUFQWJD-UHFFFAOYSA-N	3.9×10^1	11000	Gautier et al. (2003)	M	
	8.1×10^{-2}		Kawamoto and Urano (1989)	M	
	1.7×10^1		HSDB (2015)	V	
	5.2		Mackay et al. (2006d)	V	
	5.3		Suntio et al. (1988)	V	12
	5.2×10^{-2}		Barcelo and Hennion (1997)	X	569
	9.7×10^{-1}		Goodarzi et al. (2010)	Q	570, 573
tris(2-chloroethyl) phosphate $\text{C}_6\text{H}_{12}\text{Cl}_3\text{O}_4\text{P}$ [115-96-8] HQUQLFOMPYWACS-UHFFFAOYSA-N	3.0		HSDB (2015)	V	
cyclophosphamide $\text{C}_7\text{H}_{15}\text{Cl}_2\text{N}_2\text{O}_2\text{P}$ [50-18-0] CMSMOCZEIVJLDB-UHFFFAOYSA-N	7.0×10^5		HSDB (2015)	Q	100
ifosfamide $\text{C}_7\text{H}_{15}\text{Cl}_2\text{N}_2\text{O}_2\text{P}$ [3778-73-2] HOMGKSMUEGBAAB-UHFFFAOYSA-N	7.0×10^5		HSDB (2015)	Q	100
butonate $\text{C}_8\text{H}_{14}\text{Cl}_3\text{O}_5\text{P}$ [126-22-7] BKAQXYNWONVOAX-UHFFFAOYSA-N	3.3×10^4		HSDB (2015)	Q	100
phosphoric acid, 7-chlorobicyclo[3.2.0]hepta-2,6- dien-6-yl dimethyl ester $\text{C}_9\text{H}_{12}\text{ClO}_4\text{P}$ (heptenophos) [23560-59-0] GBAWQJNHVWMTLU-UHFFFAOYSA-N	5.8×10^1		HSDB (2015)	V	
	4.3×10^3		MacBean (2012a)	?	
tris(2,3-dichloropropyl) phosphate $\text{C}_9\text{H}_{15}\text{Cl}_6\text{O}_4\text{P}$ [78-43-3] JZZBTMVTLBHJHL-UHFFFAOYSA-N	3.8×10^3		HSDB (2015)	Q	100
tris(1,3- dichloroisopropyl)phosphate $\text{C}_9\text{H}_{15}\text{Cl}_6\text{O}_4\text{P}$ [13674-87-8] ASLWPAWFJZFCKF-UHFFFAOYSA-N	3.8×10^3		HSDB (2015)	Q	100
	3.8×10^3		Zhang et al. (2010)	Q	288, 289
	4.1×10^{-2}		Zhang et al. (2010)	Q	288, 290
	1.3×10^7		Zhang et al. (2010)	Q	288, 291
	3.0		Zhang et al. (2010)	Q	288, 292

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tris(2-chloropropyl) phosphate $\text{C}_9\text{H}_{18}\text{Cl}_3\text{O}_4\text{P}$ [6145-73-9] GTRSAMFYSUBAGN-UHFFFAOYSA-N	1.6×10^2 1.4×10^{-3} 6.7×10^2 3.8×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
tri-(2-chloroisopropyl)phosphate $\text{C}_9\text{H}_{18}\text{Cl}_3\text{O}_4\text{P}$ [13674-84-5] KVMPUXDNESXNOH-UHFFFAOYSA-N	1.6×10^2 1.6×10^2 1.9×10^{-4} 3.6×10^4 3.8×10^{-1}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
bis(2-chloropropyl) 2-chloro-1-methylethyl phosphate $\text{C}_9\text{H}_{18}\text{Cl}_3\text{O}_4\text{P}$ [76649-15-5] WDLBXPJJVVVRGX-UHFFFAOYSA-N	1.6×10^2 7.2×10^{-4} 5.6×10^3 3.8×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
tetrachlorvinphos $\text{C}_{10}\text{H}_9\text{Cl}_4\text{O}_4\text{P}$ [22248-79-9] UBCKGWBNUFUST-YHYXMXQVSA-N	5.5×10^3 2.4×10^3 5.4×10^3		HSDB (2015) Ebert et al. (2023) MacBean (2012a)	V ? ?	317
dimethylvinphos $\text{C}_{10}\text{H}_{10}\text{Cl}_3\text{O}_4\text{P}$ [2274-67-1] QSGNQELHULIMSJ-UHFFFAOYSA-N	3.0×10^2		Ebert et al. (2023)	?	319
diphenyl chlorophosphate $\text{C}_{12}\text{H}_{10}\text{ClO}_3\text{P}$ [2524-64-3] BHIIGRBMZRSRI-UHFFFAOYSA-N	3.7×10^{-2}		Bartelt-Hunt et al. (2008)	?	21
chlorfenvinphos $\text{C}_{12}\text{H}_{14}\text{Cl}_3\text{O}_4\text{P}$ (clofenvinfos) [470-90-6] FSAVDKDPDSCCTO-XYOKQWHBSA-N	3.4×10^2 3.4×10^3 3.6×10^3 3.5×10^1 4.1		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	12 569 570
crufomate $\text{C}_{12}\text{H}_{19}\text{ClNO}_3\text{P}$ (ruelene) [299-86-5] BOFHKBZOVVHSI-UHFFFAOYSA-N	3.9×10^3		HSDB (2015)	Q	100
phosdiphen $\text{C}_{14}\text{H}_{11}\text{O}_4\text{Cl}_4\text{P}$ [36519-00-3] HEMINMLPKZELPP-UHFFFAOYSA-N	2.6×10^{-2}		MacBean (2012a)	?	

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
phosphamidon $\text{C}_{10}\text{H}_{19}\text{ClNO}_5\text{P}$ [13171-21-6] RGCLLPNLLBQHPF-HJWRWDBZSA-N	2.8 2.8 6.6×10^6		Mackay et al. (2006d) Suntio et al. (1988) HSDB (2015)	V V Q	 12 100
tris(2,3-dibromo-1-propyl) phosphate $\text{C}_9\text{H}_{15}\text{Br}_6\text{O}_4\text{P}$ [126-72-7] PQYJRMFWJJONBO-UHFFFAOYSA-N	3.8×10^{-1}		HSDB (2015)	V	
naled $\text{C}_4\text{H}_7\text{Br}_2\text{Cl}_2\text{O}_4\text{P}$ [300-76-5] BUYMVQAILCEWRR-UHFFFAOYSA-N	1.5×10^{-1}		HSDB (2015)	V	
2-bromo-1,1-dimethylethyl 2-bromoethyl 2-chloroethyl phosphate $\text{C}_9\text{H}_{18}\text{Br}_2\text{ClO}_4\text{P}$ [125997-20-8] GZSKSYDWLZIPOX-UHFFFAOYSA-N	1.5×10^3 1.3×10^{-2} 4.4×10^3 8.2×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
leptophos $\text{C}_{13}\text{H}_{10}\text{O}_3\text{BrCl}_2\text{P}$ [21609-90-5] CVRALZAYCYJELZ-UHFFFAOYSA-N	3.7 3.7 4.0 4.0 2.6×10^1		Mackay and Shiu (1981) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Hilal et al. (2008)	L V V V Q	 12
tributyl phosphorotrithioite $\text{C}_{12}\text{H}_{27}\text{PS}_3$ [150-50-5] KLAPGAOQRZTCBI-UHFFFAOYSA-N	4.3×10^{-1} 4.3×10^{-1} 6.0×10^{-4} 1.5×10^{-1} 5.1×10^{-2}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	100 288, 289 288, 290 288, 291 288, 292
bis(2,6,6- trimethylbicyclo[3.1.1]hept-2-enyl) bis(2,6,6- trimethylbicyclo[3.1.1]hept-2- enyl)thiodiphosphonate $\text{C}_{40}\text{H}_{60}\text{P}_2\text{S}_5$ [68400-79-3] ZZMOHCWFHCHISQ-UHFFFAOYSA-N	8.2×10^{-5} 5.8×10^4 1.9×10^5 1.6×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	288, 289 288, 290 288, 291 288, 292
thiometon $\text{C}_6\text{H}_{15}\text{O}_2\text{PS}_3$ [640-15-3] OPASCBHCTNLRM-UHFFFAOYSA-N	3.5×10^{-1}		HSDB (2015)	V	

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
demeton-S-methyl sulfone $\text{C}_6\text{H}_{15}\text{O}_5\text{PS}_2$ [17040-19-6] PZIRJMYRYORVIT-UHFFFAOYSA-N	$<2.3 \times 10^{10}$		MacBean (2012a)	?	
oxydemeton-methyl $\text{C}_6\text{H}_{15}\text{O}_4\text{PS}_2$ [301-12-2] PMCVMORKVPSKHZ-UHFFFAOYSA-N	6.2×10^7		HSDB (2015)	Q	100
demeton-O-methyl $\text{C}_6\text{H}_{15}\text{O}_3\text{PS}_2$ [867-27-6] ZVZQKNVMDKSGGF-UHFFFAOYSA-N	3.2		Ebert et al. (2023)	?	317
demeton-S-methyl $\text{C}_6\text{H}_{15}\text{O}_3\text{PS}_2$ [919-86-8] WEBQKRLKWNIIYKK-UHFFFAOYSA-N	3.7×10^2 3.6×10^2		HSDB (2015) Mackay et al. (2006d)	V V	
methacrifos $\text{C}_7\text{H}_{13}\text{O}_5\text{PS}$ [62610-77-9] NTAHCMPOMKHKEU-AATRIKPKSA-N	1.0×10^1		MacBean (2012a)	?	
phorate $\text{C}_7\text{H}_{17}\text{O}_2\text{PS}_3$ [298-02-2] BULVZWIRKLYCBC-UHFFFAOYSA-N	2.1 9.9×10^{-1} 1.5 1.5×10^{-2} 4.5×10^{-2}		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	12 569 570
salithion $\text{C}_8\text{H}_9\text{O}_3\text{PS}$ [3811-49-2] OUNSASXJZHBGAI-UHFFFAOYSA-N	4.7×10^{-1}		MacBean (2012a)	?	
acetoxon $\text{C}_8\text{H}_{17}\text{O}_5\text{PS}$ [2425-25-4] ZRCQYAQOWIQUBA-UHFFFAOYSA-N	1.3×10^4		HSDB (2015)	Q	100
demeton-O $\text{C}_8\text{H}_{19}\text{O}_3\text{PS}_2$ [298-03-3] DGLIBALSFRMUQDD-UHFFFAOYSA-N	6.1		MacBean (2012a)	?	12
demeton-S $\text{C}_8\text{H}_{19}\text{O}_3\text{PS}_2$ (isosystox) [126-75-0] GRPRVIYRYGLIJU-UHFFFAOYSA-N	2.0×10^2		HSDB (2015)	V	

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
sulfotep $\text{C}_8\text{H}_{20}\text{O}_5\text{P}_2\text{S}_2$ [3689-24-5] XIUROWKZWPIAIB-UHFFFAOYSA-N	2.2 3.4 9.9×10^{-3} 4.4×10^{-3}		HSDB (2015) Mackay et al. (2006d) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V X Q	 569 570, 573
tetrakis(hydroxymethyl) phosphonium sulfate $\text{C}_8\text{H}_{24}\text{O}_{12}\text{P}_2\text{S}$ [55566-30-8] YIEDHPBKZGLIK-UHFFFAOYSA-L	5.8×10^{17}		HSDB (2015)	Q	100
ethoprophos $\text{C}_8\text{H}_{19}\text{O}_2\text{PS}_2$ [13194-48-4] VJYFKVYYMZPMAB-UHFFFAOYSA-N	6.1×10^1 6.1×10^1		HSDB (2015) Mackay et al. (2006d)	V V	
disulfoton $\text{C}_8\text{H}_{19}\text{O}_2\text{PS}_3$ [298-04-4] DOFZAZXDOSGAJZ-UHFFFAOYSA-N	1.1×10^1 4.5 4.5 4.5 4.5×10^{-2} 6.4×10^{-1}		Muir et al. (2004) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	L V V V X Q	369 12 569 570, 573
endothion $\text{C}_9\text{H}_{13}\text{O}_6\text{PS}$ [2778-04-3] YCAGGFXSQFVQL-UHFFFAOYSA-N	1.5×10^6		HSDB (2015)	Q	100
terbufos $\text{C}_9\text{H}_{21}\text{O}_2\text{PS}_3$ [13071-79-9] XLNZEKHULJKQBA-UHFFFAOYSA-N	4.1×10^{-1} 4.1×10^{-1} 9.9×10^{-3} 3.0×10^{-1}		HSDB (2015) Mackay et al. (2006d) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V X Q	 569 570
ethion $\text{C}_9\text{H}_{22}\text{O}_4\text{P}_2\text{S}_4$ [563-12-2] RIZMRKKBZQXFOY-UHFFFAOYSA-N	2.6×10^1 3.1×10^1 3.1×10^1 3.1×10^{-1} 6.8×10^{-1}		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	 12 569 570
fonofos $\text{C}_{10}\text{H}_{15}\text{OPS}_2$ [944-22-9] KVGLBTYUCJYMND-UHFFFAOYSA-N	1.4 1.4 1.4 1.9×10^5		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	187
fenthion $\text{C}_{10}\text{H}_{15}\text{O}_3\text{PS}_2$ [55-38-9] PNVJTZOFSHSLTO-UHFFFAOYSA-N	6.8 4.5×10^1 4.5×10^1 4.5×10^{-1} 1.9		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	 12 569 570

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
malathion $\text{C}_{10}\text{H}_{19}\text{O}_6\text{PS}_2$ [121-75-5] JXSJBGJIGXNWCI-UHFFFAOYSA-N	2.0×10^1 1.5×10^1 6.7×10^2 2.0×10^3 4.4×10^2 2.5×10^2 4.3×10^2 1.7×10^2 7.3×10^3 2.6×10^1 4.3 1.8 1.5×10^2 2.0×10^3	8300	Brockbank (2013) Chao et al. (2017) Watanabe (1993) Fendinger and Glotfelty (1990) Mackay et al. (2006d) Cotham and Bidleman (1989) Suntio et al. (1988) Glotfelty et al. (1987) Sanders and Seiber (1983) Mackay and Shiu (1981) Barcelo and Hennion (1997) Goodarzi et al. (2010) Hilal et al. (2008) Bartelt-Hunt et al. (2008)	L M M M V V V V V V X Q Q ?		
malaoxon $\text{C}_{10}\text{H}_{19}\text{O}_7\text{PS}$ [1634-78-2] WSORODGWGUUOBO-UHFFFAOYSA-N	5.5×10^6		HSDB (2015)	Q	100	
cadusafos $\text{C}_{10}\text{H}_{23}\text{O}_2\text{PS}_2$ [95465-99-9] KXRPCFINVWWFHQ-UHFFFAOYSA-N	7.6		HSDB (2015)	V		
fensulfothion $\text{C}_{11}\text{H}_{17}\text{O}_4\text{PS}_2$ [115-90-2] XDNBQTQLKCIJBV-UHFFFAOYSA-N	7.0×10^4		HSDB (2015)	Q	100	
phenthoate $\text{C}_{12}\text{H}_{17}\text{O}_4\text{PS}_2$ [2597-03-7] XAMUDJHXFNRLCY-UHFFFAOYSA-N	1.8×10^3 9.8×10^1		HSDB (2015) Mackay et al. (2006d)	V V		
sulprofos $\text{C}_{12}\text{H}_{19}\text{O}_2\text{PS}_3$ [35400-43-2] JXHJNEJVUNHLKO-UHFFFAOYSA-N	1.1×10^1 1.1×10^1		HSDB (2015) MacBean (2012a)	V ?	12	
S,S,S-tributyl phosphorotrithioate $\text{C}_{12}\text{H}_{27}\text{OPS}_3$ (DEF) [78-48-8] ZOKXUAHKSQSS-UHFFFAOYSA-N	3.4×10^1 1.3		Fendinger and Glotfelty (1990) Glotfelty et al. (1987)	M V		

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
aspon $\text{C}_{12}\text{H}_{28}\text{O}_5\text{P}_2\text{S}_2$ (tetrapropyl dithiopyrophosphate) [3244-90-4] IIDFEIDMIKSJSV-UHFFFAOYSA-N	6.1		Ebert et al. (2023)	?	319
ipobenphos $\text{C}_{13}\text{H}_{21}\text{O}_3\text{PS}$ [26087-47-8] FCOAHACKGGIURQ-UHFFFAOYSA-N	2.6×10^2		Watanabe (1993)	M	
propaphos $\text{C}_{13}\text{H}_{21}\text{O}_4\text{PS}$ [7292-16-2] PWYIUEFFPNVCMW-UHFFFAOYSA-N	3.4×10^3 3.4×10^3 3.6×10^1 3.4×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) MacBean (2012a)	V V Q ?	187
edifenphos $\text{C}_{14}\text{H}_{15}\text{O}_2\text{PS}_2$ [17109-49-8] AWZOLILCOUMRDG-UHFFFAOYSA-N	5.0×10^3 1.3×10^4 1.4×10^1		Watanabe (1993) HSDB (2015) Mackay et al. (2006d)	M V V	
systox $\text{C}_{16}\text{H}_{38}\text{O}_6\text{P}_2\text{S}_4$ [8065-48-3] FAXIJTUDSBIMHY-UHFFFAOYSA-N	5.5×10^1		HSDB (2015)	V	
temefos $\text{C}_{16}\text{H}_{20}\text{O}_6\text{P}_2\text{S}_3$ (temephos) [3383-96-8] WWJZWCUNLNYAU-UHFFFAOYSA-N	1.7 4.9×10^3 4.4		Barcelo and Hennion (1997) HSDB (2015) Goodarzi et al. (2010)	X Q Q	569 100 570
methamidophos $\text{C}_2\text{H}_8\text{NOPS}_2$ [10265-92-6] NNKVPIKMPQWCG-UHFFFAOYSA-N	1.1×10^4		HSDB (2015)	Q	100
acephate $\text{C}_4\text{H}_{10}\text{NO}_3\text{PS}$ [30560-19-1] YASYVMFAVPKPKE-UHFFFAOYSA-N	2.0×10^7 2.0×10^7 1.9×10^5 4.4×10^2		HSDB (2015) Mackay et al. (2006d) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V X Q	569 570
dimethoate $\text{C}_5\text{H}_{12}\text{NO}_3\text{PS}_2$ [60-51-5] MCWXGJITAZMZEV-UHFFFAOYSA-N	4.1×10^4 8.7×10^3 9.1×10^3 9.0×10^1 5.3×10^2		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	12 569 570, 571

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
omethoate $\text{C}_5\text{H}_{12}\text{NO}_4\text{PS}$ [1113-02-6] PZXOQEXFMJCDPG-UHFFFAOYSA-N	2.1×10^8		HSDB (2015)	Q	100
methidathion $\text{C}_6\text{H}_{11}\text{N}_2\text{O}_4\text{PS}_3$ [950-37-8] MEBQXILRKZHVXCX-UHFFFAOYSA-N	1.4×10^3 5.8×10^3 5.8×10^3		HSDB (2015) Glotfelty et al. (1987) Burkhard and Guth (1981)	V V V	
fosthietan $\text{C}_6\text{H}_{12}\text{NO}_3\text{PS}_2$ [21548-32-3] RHJOIOVESMTJEK-UHFFFAOYSA-N	2.4×10^5 2.4×10^5		HSDB (2015) MacBean (2012a)	V ?	
formothion $\text{C}_6\text{H}_{12}\text{NO}_4\text{PS}_2$ [2540-82-1] AIKKULXCBHRFOS-UHFFFAOYSA-N	9.0×10^4		HSDB (2015)	V	
menazon $\text{C}_6\text{H}_{12}\text{N}_5\text{O}_2\text{PS}_2$ [78-57-9] SUYHYHLFUHHVJQ-UHFFFAOYSA-N	6.6×10^3		HSDB (2015)	V	
ethoate-methyl $\text{C}_6\text{H}_{14}\text{NO}_3\text{PS}_2$ [116-01-8] DICRHEJQCXFJBY-UHFFFAOYSA-N	3.5×10^5		HSDB (2015)	Q	100
glyphosate-trimesium $\text{C}_6\text{H}_{16}\text{NO}_5\text{PS}$ [81591-81-3] RUCAXVJQQJZGU-UHFFFAOYSA-M	$> 2.3 \times 10^{10}$		MacBean (2012a)	?	
phosfolan $\text{C}_7\text{H}_{14}\text{NO}_3\text{PS}_2$ (cyolane) [947-02-4] ILBONRFSLATCRE-UHFFFAOYSA-N	5.1×10^4		Ebert et al. (2023)	?	317
methylparathion $\text{C}_8\text{H}_{10}\text{NO}_5\text{PS}$ (parathion-methyl) [298-00-0] RLBIQVVOMOPOHC-UHFFFAOYSA-N	5.0×10^1 1.7×10^1 2.6×10^2 1.6×10^2 9.9×10^1 4.7×10^1 9.9×10^1 4.7×10^1 9.2×10^1		Mackay and Shiu (1981) Chao et al. (2017) Rice et al. (1997b) Fendinger and Glotfelty (1990) Metcalf et al. (1980) Mackay et al. (2006d) Woodrow et al. (1990) Suntio et al. (1988) Glotfelty et al. (1987)	L M M M M V V V V	12

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.1×10^3		Sanders and Seiber (1983)	V	88
	1.6×10^2		Metcalfe et al. (1980)	V	
	1.3×10^{-1}		Smith and Bomberger (1980)	V	24
	4.7×10^{-1}		Barcelo and Hennion (1997)	X	569
	2.1×10^1		Goodarzi et al. (2010)	Q	570
	1.5×10^1		Hilal et al. (2008)	Q	
zinophos $\text{C}_8\text{H}_{13}\text{N}_2\text{O}_3\text{PS}$ (thionazin) [297-97-2] IRVDMKJLOCGUBJ-UHFFFAOYSA-N	1.0×10^1		Mackay et al. (2006d)	V	
	1.2×10^1		Suntio et al. (1988)	V	12
	1.1×10^1		MacBean (2012a)	?	
vamidothion $\text{C}_8\text{H}_{18}\text{NO}_4\text{PS}_2$ [2275-23-2] LESVOLZBIFDZGS-UHFFFAOYSA-N	1.1×10^{10}		HSDB (2015)	Q	100
cyanophos $\text{C}_9\text{H}_{10}\text{NO}_3\text{PS}$ [2636-26-2] SCKHCCSZFSPSHGR-UHFFFAOYSA-N	1.8		HSDB (2015)	V	
fentirothion $\text{C}_9\text{H}_{12}\text{NO}_5\text{PS}$ [122-14-5] ZNOLGFHPUIJIMJ-UHFFFAOYSA-N	8.3×10^1		Watanabe (1993)	M	
	1.1×10^1		Metcalfe et al. (1980)	M	
	8.3×10^2		Mackay et al. (2006d)	V	
	2.8×10^2		Suntio et al. (1988)	V	12
	2.7×10^1		Mackay and Shiu (1981)	V	
	1.5×10^1		Metcalfe et al. (1980)	V	
	2.7		Barcelo and Hennion (1997)	X	569
	4.4×10^1		Goodarzi et al. (2010)	Q	570, 571
	5.3		Hilal et al. (2008)	Q	
fosthiazate-1 $\text{C}_9\text{H}_{18}\text{NO}_3\text{PS}_2$ [98886-44-3] DUFVKSUJRWYZQP-UHFFFAOYSA-N	7.5×10^1		MacBean (2012b)	X	352
	1.0×10^5		Keshavarz et al. (2022)	Q	
	5.7×10^4		Duchowicz et al. (2020)	Q	
	5.7×10^4		Duchowicz et al. (2020)	?	186, 21
	5.7×10^4		Maniere et al. (2011)	?	242, 166
prothoate $\text{C}_9\text{H}_{20}\text{NO}_3\text{PS}_2$ (trimethoate) [2275-18-5] QTXHFDHVLBDJIO-UHFFFAOYSA-N	1.5×10^5		HSDB (2015)	Q	100
amiton $\text{C}_{10}\text{H}_{24}\text{NO}_3\text{PS}$ [78-53-5] PJISLFCKHOHLLP-UHFFFAOYSA-N	3.5×10^4		Bartelt-Hunt et al. (2008)	?	21

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
azinphos-methyl $\text{C}_{10}\text{H}_{12}\text{N}_3\text{O}_3\text{PS}_2$ [86-50-0] CJJOSEISRRTUQB-UHFFFAOYSA-N	3.4×10^3 3.2×10^3 3.1×10^2 3.1 4.6×10^1		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	 12 569 570
parathion $\text{C}_{10}\text{H}_{14}\text{NO}_5\text{PS}$ (E 605) [56-38-2] LCCNCVORNKJIRZ-UHFFFAOYSA-N	1.2×10^2 7.1×10^1 5.0×10^1 5.0×10^1 8.3×10^1 4.2×10^1 1.6×10^3 8.1 1.3×10^1 1.0×10^1 3.3×10^1 8.0×10^{-1} 3.2×10^{-1} 6.5 3.4×10^1		Fendinger and Glotfelty (1990) Mackay et al. (2006d) Siebers and Mattusch (1996) Siebers et al. (1994) Suntio et al. (1988) Glotfelty et al. (1987) Sanders and Seiber (1983) Mackay and Shiu (1981) Burkhard and Guth (1981) Chiou et al. (1980) MacBean (2012b) Barcelo and Hennion (1997) Goodarzi et al. (2010) Hilal et al. (2008) Bartelt-Hunt et al. (2008)	M V V V V V V V V V X X Q Q ?	 12 12 88 352 569 570 21
isoparathion $\text{C}_{10}\text{H}_{14}\text{NO}_5\text{PS}$ [597-88-6] BGWJTLLALYACOG-UHFFFAOYSA-N	6.1×10^1		Ebert et al. (2023)	?	319
etrimfos $\text{C}_{10}\text{H}_{17}\text{N}_2\text{O}_4\text{PS}$ [38260-54-7] FGIWFCGDPUIBEZ-UHFFFAOYSA-N	1.6×10^1		HSDB (2015)	V	
propetamphos $\text{C}_{10}\text{H}_{20}\text{NO}_4\text{PS}$ [31218-83-4] BZNDWPRGXNILMS-VQHVLOKHSAN	2.1×10^2		HSDB (2015)	V	
mecarbam $\text{C}_{10}\text{H}_{20}\text{NO}_5\text{PS}_2$ [2595-54-2] KLGMSAQDHLCOU-UHFFFAOYSA-N	1.1×10^4		HSDB (2015)	Q	100
phosmet $\text{C}_{11}\text{H}_{12}\text{NO}_4\text{PS}_2$ [732-11-6] LMNZTLVDVJUSHT-UHFFFAOYSA-N	1.2×10^3 1.3×10^3 1.1×10^3 1.0×10^1 3.8 7.4×10^2		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011)	V V V X Q ?	 12 569 570 166

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
pirimiphos methyl $\text{C}_{11}\text{H}_{20}\text{N}_3\text{O}_3\text{PS}$ [29232-93-7] QHOQHJPRIBSPCY-UHFFFAOYSA-N	1.6×10^1 1.7×10^1		HSDB (2015) Maniere et al. (2011)	V ?	242, 166
imicyafos $\text{C}_{11}\text{H}_{21}\text{N}_4\text{O}_2\text{PS}$ [140163-89-9] PPCUNNLZTNMXFO-UHFFFAOYSA-N	1.5×10^9		Ebert et al. (2023)	?	319
Agent VX $\text{C}_{11}\text{H}_{26}\text{NO}_2\text{PS}$ [50782-69-9] JJIUCEJQJXNMHV-UHFFFAOYSA-N	9.1×10^2 2.8×10^3 1.2×10^3		HSDB (2015) Bartelt-Hunt et al. (2008) Opresko et al. (1998)	V ? ?	21
ditalimfos $\text{C}_{12}\text{H}_{14}\text{NO}_4\text{PS}$ [5131-24-8] MTBZIGHNGSTDJV-UHFFFAOYSA-N	2.3×10^3		Ebert et al. (2023)	?	317
quinalphos $\text{C}_{12}\text{H}_{15}\text{N}_2\text{O}_3\text{PS}$ [13593-03-8] JYQUHIFYBATCCY-UHFFFAOYSA-N	1.1×10^2		Ebert et al. (2023)	?	317
phoxim $\text{C}_{12}\text{H}_{15}\text{N}_2\text{O}_3\text{PS}$ [14816-18-3] ATROHALUCMTWTB-UHFFFAOYSA-N	5.0×10^1		Ebert et al. (2023)	?	317
triazophos $\text{C}_{12}\text{H}_{16}\text{N}_3\text{O}_3\text{PS}$ [24017-47-8] AMFGTOFWMRQMEM-UHFFFAOYSA-N	3.2×10^2		HSDB (2015)	V	
azinphos-ethyl $\text{C}_{12}\text{H}_{16}\text{N}_3\text{O}_3\text{PS}_2$ [2642-71-9] RQVGAIADHNPSME-UHFFFAOYSA-N	1.0×10^2		HSDB (2015)	V	
diazinon $\text{C}_{12}\text{H}_{21}\text{N}_2\text{O}_3\text{PS}$ (dimpylate) [333-41-5] FHIVAFMUCKRCQO-UHFFFAOYSA-N	4.6×10^1 9.2×10^1 1.5×10^1 1.1×10^1 8.4×10^1 8.8×10^1 2.5×10^1 1.5×10^1 6.7 1.0×10^2	12000	Muir et al. (2004) Muir et al. (2004) Feigenbrugel et al. (2004a) Watanabe (1993) Fendinger et al. (1989) Fendinger and Glotfelty (1988) Mackay et al. (2006d) Suntio et al. (1988) Glotfelty et al. (1987) Sanders and Seiber (1983)	L L M M M M V V V V V	369 368 73 73 12 88

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	1.3×10^1		Burkhard and Guth (1981)	V	
	1.5×10^{-1}		Barcelo and Hennion (1997)	X	569
	1.7×10^{-1}		Goodarzi et al. (2010)	Q	570
	1.4×10^2		Meylan and Howard (1991)	Q	
isoxathion $\text{C}_{13}\text{H}_{16}\text{NO}_4\text{PS}$ [18854-01-8] SDMSCIWHRZJSRN-UHFFFAOYSA-N	1.6×10^2		HSDB (2015)	Q	100
butamifos $\text{C}_{13}\text{H}_{21}\text{N}_2\text{O}_4\text{PS}$ [36335-67-8] OEYOMNZEMCPTKN-UHFFFAOYSA-N	3.4×10^1		Ebert et al. (2023)	?	317
fenamiphos $\text{C}_{13}\text{H}_{22}\text{NO}_3\text{PS}$ [22224-92-6] ZCJPOPBZHLUFHF-UHFFFAOYSA-N	1.1×10^3		HSDB (2015)	V	
tebupirimfos $\text{C}_{13}\text{H}_{23}\text{N}_2\text{O}_3\text{PS}$ [96182-53-5] AWYOMXWDGWUJHS-UHFFFAOYSA-N	3.5		HSDB (2015)	V	
pirimiphos ethyl $\text{C}_{13}\text{H}_{24}\text{N}_3\text{O}_3\text{PS}$ [23505-41-1] TZBPRYIJAJUOY-UHFFFAOYSA-N	1.8×10^{-1}		HSDB (2015)	V	
bensulide $\text{C}_{14}\text{H}_{24}\text{NO}_4\text{PS}_3$ [741-58-2] RRNIZKPFKNDERS-UHFFFAOYSA-N	1.1×10^3		HSDB (2015)	V	
ethyl <i>p</i> -nitrophenyl benzenethiophosphonate $\text{C}_{14}\text{H}_{14}\text{NO}_4\text{PS}$ [2104-64-5] AIGRXSNLSLVJMEA-UHFFFAOYSA-N	2.2×10^1		Duchowicz et al. (2020)	V	187
	2.2×10^1		HSDB (2015)	V	
	4.3×10^7		Duchowicz et al. (2020)	Q	
pyridaphenthion $\text{C}_{14}\text{H}_{17}\text{N}_2\text{O}_4\text{PS}$ [119-12-0] CXJSOEPQXUCJSA-UHFFFAOYSA-N	5.1×10^4		Ebert et al. (2023)	?	319
piperophos $\text{C}_{14}\text{H}_{28}\text{NO}_3\text{PS}_2$ [24151-93-7] UNLYSVIDNRIVFJ-UHFFFAOYSA-N	8.8×10^2		Ebert et al. (2023)	?	319

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
isofenphos $\text{C}_{15}\text{H}_{24}\text{NO}_4\text{PS}$ [25311-71-1] HOQADATXFBOEGG-UHFFFAOYSA-N	1.2×10^2 2.4×10^2 1.0×10^3 6.9×10^{-1} 2.4×10^2		Mackay et al. (2006d) MacBean (2012b) Barcelo and Hennion (1997) Goodarzi et al. (2010) MacBean (2012a)	V X X Q ?	 352 569 570, 571 12
chlormephos $\text{C}_5\text{H}_{12}\text{ClO}_2\text{PS}_2$ [24934-91-6] QGTYYWWGEWOBMAK-UHFFFAOYSA-N	3.4×10^{-2} 3.4×10^{-2} 3.2×10^5		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187
chlorthoxyfos $\text{C}_6\text{H}_{11}\text{Cl}_4\text{O}_3\text{PS}$ [54593-83-8] XFDJMIHUAHSGKG-UHFFFAOYSA-N	2.3		HSDB (2015)	Q	100
ronnel $\text{C}_8\text{H}_8\text{O}_3\text{Cl}_3\text{PS}$ [299-84-3] JHJOOSLFWRRSGU-UHFFFAOYSA-N	4.8×10^{-1} 1.7×10^{-2} 3.1×10^{-1} 5.7×10^{-2}		Mackay and Shiu (1981) Mackay et al. (2006d) Suntio et al. (1988) Hilal et al. (2008)	L V V Q	 12
tolclofos-methyl $\text{C}_9\text{H}_{11}\text{Cl}_2\text{O}_3\text{PS}$ [57018-04-9] OBZIQQJJIKNWNO-UHFFFAOYSA-N	1.7×10^{-2} 2.7		Mackay et al. (2006d) Maniere et al. (2011)	V ?	 12, 166
methyl trithion $\text{C}_9\text{H}_{12}\text{ClO}_2\text{PS}_3$ [953-17-3] OUCCVXVYGFBSXSV-UHFFFAOYSA-N	9.9×10^1		HSDB (2015)	Q	100
trichloronate $\text{C}_{10}\text{H}_{12}\text{Cl}_3\text{O}_2\text{PS}$ [327-98-0] ANIAQSUBRGXWLS-UHFFFAOYSA-N	8.8×10^{-1} 9.0×10^{-1} 2.6×10^4 7.5×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) MacBean (2012a)	V V Q ?	187
dichlofenthion $\text{C}_{10}\text{H}_{13}\text{Cl}_2\text{O}_3\text{PS}$ [97-17-6] WGOWCPGHOCIBW-UHFFFAOYSA-N	1.0×10^{-2} 1.0×10^{-2} 3.2×10^{-5} 3.2×10^{-5} 1.5×10^1		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Duchowicz et al. (2020)	V V V V Q	187 12
prothiofos $\text{C}_{11}\text{H}_{15}\text{Cl}_2\text{O}_2\text{PS}_2$ [34643-46-4] FITIWKDOCAUBQD-UHFFFAOYSA-N	3.4×10^{-1}		Ebert et al. (2023)	?	319

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
chlorthiophos $\text{C}_{11}\text{H}_{15}\text{Cl}_2\text{O}_3\text{PS}_2$ [21923-23-9] JAZJVWLGNLNDD-UHFFFAOYSA-N	8.2		HSDB (2015)	Q	100
carbophenothion $\text{C}_{11}\text{H}_{16}\text{ClO}_2\text{PS}_3$ [786-19-6] VEDTNTNSFWUXGQ-UHFFFAOYSA-N	4.9×10^1 2.2×10^1		HSDB (2015) Suntio et al. (1988)	V V	12
coumaphos $\text{C}_{14}\text{H}_{16}\text{ClO}_5\text{PS}$ [56-72-4] BXNANOICGRISHX-UHFFFAOYSA-N	9.0×10^1		HSDB (2015)	V	
methylchlorpyrifos $\text{C}_7\text{H}_7\text{NO}_3\text{Cl}_3\text{PS}$ [5598-13-0] HRBKVYFZANMGRE-UHFFFAOYSA-N	4.1 2.5 2.9 3.3 6.5×10^{-1} 4.3		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Mackay and Shiu (1981) Hilal et al. (2008) Maniere et al. (2011)	V V V V Q ?	12 242, 166
dicapthon $\text{C}_8\text{H}_9\text{NO}_5\text{ClPS}$ [2463-84-5] OTKXWJHPGBRXCR-UHFFFAOYSA-N	1.0×10^2 4.2×10^1 4.2×10^1 4.4×10^1 6.5		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Mackay and Shiu (1981) Hilal et al. (2008)	V V V V Q	12
chlorthion $\text{C}_8\text{H}_9\text{ClNO}_5\text{PS}$ [500-28-7] NZNRRXXETLSZRO-UHFFFAOYSA-N	2.5×10^2 2.4×10^2		HSDB (2015) MacBean (2012a)	V ?	
azamethiphos $\text{C}_9\text{H}_{10}\text{ClN}_2\text{O}_5\text{PS}$ [35575-96-3] VNKBTWQZTQIWDV-UHFFFAOYSA-N	3.0×10^5		Ebert et al. (2023)	?	319
isazophos $\text{C}_9\text{H}_{17}\text{ClN}_3\text{O}_3\text{PS}$ [42509-80-8] XRHWAGWAHHFLF-UHFFFAOYSA-N	1.9×10^1 1.1×10^2 7.2×10^1		HSDB (2015) Burkhard and Guth (1981) MacBean (2012a)	V V ?	
chlorpyrifos $\text{C}_9\text{H}_{11}\text{Cl}_3\text{NO}_3\text{PS}$ [2921-88-2] SBPBAQFWLVIQKP-UHFFFAOYSA-N	1.8 2.1 2.2×10^{-1} 3.1 2.4 9.2×10^{-1} 1.7 5.7×10^{-1}	7800	Muir et al. (2004) Muir et al. (2004) Cetin et al. (2006) Rice et al. (1997b) Fendinger and Glotfelty (1990) Mackay et al. (2006d) Siebers et al. (1994) Suntio et al. (1988)	L L M M M V V V	369 368 12 12

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
	8.1×10^{-1}		Glotfelty et al. (1987)	V	
	5.6×10^{-3}		Barcelo and Hennion (1997)	X	569
	3.4		HSDB (2015)	C	
	1.4		Armbrust (2000)	C	
	1.0×10^{-1}		Goodarzi et al. (2010)	Q	570, 571
	2.2×10^{-1}		Hilal et al. (2008)	Q	
	2.5×10^2		Meylan and Howard (1991)	Q	
	2.1		Maniere et al. (2011)	?	242, 166
chlorphoxim $\text{C}_{12}\text{H}_{14}\text{ClN}_2\text{O}_3\text{PS}$ [14816-20-7] GQKRUMZWUHSIJF-NTCAYCPXSA-N	$>2.3 \times 10^{10}$		MacBean (2012a)	?	
phosazetim $\text{C}_{14}\text{H}_{11}\text{Cl}_2\text{N}_2\text{O}_4\text{PS}$ [4104-14-7] XIBXUAZIZDFTG-UHFFFAOYSA-N	2.1×10^3		HSDB (2015)	Q	100
dialifor $\text{C}_{14}\text{H}_{17}\text{ClNO}_4\text{PS}_2$ [10311-84-9] MUMQYXACQUZOFU-UHFFFAOYSA-N	5.5×10^1		HSDB (2015)	V	
	7.1		Mackay et al. (2006d)	V	
	7.1		Suntio et al. (1988)	V	12
pyraclofos $\text{C}_{14}\text{H}_{18}\text{ClN}_2\text{O}_3\text{PS}$ [77458-01-6] QHGVXILFMXYDRS-UHFFFAOYSA-N	2.3×10^4		Ebert et al. (2023)	?	319
bromophos $\text{C}_8\text{H}_8\text{BrCl}_2\text{O}_3\text{PS}$ [2104-96-3] NYQDCVLCJXRDSK-UHFFFAOYSA-N	1.0×10^{-1}		HSDB (2015)	V	
	1.1×10^{-1}		MacBean (2012a)	?	12
bromophos-ethyl $\text{C}_{10}\text{H}_{12}\text{BrCl}_2\text{O}_3\text{PS}$ [4824-78-6] KWGUFOITWDSNQY-UHFFFAOYSA-N	6.2×10^{-1}		HSDB (2015)	Q	100
profenofos $\text{C}_{11}\text{H}_{15}\text{BrClO}_3\text{PS}$ [41198-08-7] QYMMJNLHFKGANY-UHFFFAOYSA-N	4.5×10^2		HSDB (2015)	V	
	6.2×10^2		Mackay et al. (2006d)	V	
iodofenphos $\text{C}_8\text{H}_8\text{Cl}_2\text{IO}_3\text{PS}$ [18181-70-9] LFVLUOAHQIVABZ-UHFFFAOYSA-N	2.2		HSDB (2015)	V	
	$>2.3 \times 10^{10}$		MacBean (2012a)	?	

A11 Organic species with other elements

A11.1 Sodium (Na)

Table A11.1: Sodium (Na)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
sesone $\text{C}_8\text{H}_7\text{Cl}_2\text{NaO}_5\text{S}$ (2,4-dichlorophenoxyethyl sulfate) [136-78-7] KISFEBPWFCGRGN-UHFFFAOYSA-M	3.8×10^5		HSDB (2015)	Q	100
iodosulfuron-methyl-sodium $\text{C}_{14}\text{H}_{14}\text{IN}_5\text{O}_6\text{SNa}$ [144550-36-7] JUJFQMPKBJPSFZ-UHFFFAOYSA-M	4.4×10^{10}		Maniere et al. (2011)	?	12, 166
propoxycarbazone-sodium $\text{C}_{15}\text{H}_{17}\text{N}_4\text{O}_7\text{NaS}$ [181274-15-7] JRQGGDDUXDKCWRF-UHFFFAOYSA-M	$> 1.0 \times 10^{10}$		Maniere et al. (2011)	?	12, 166
dioctyl sulfosuccinatesodium salt $\text{C}_{20}\text{H}_{37}\text{NaO}_7\text{S}$ (bis(2-ethylhexyl) sodium sulfosuccinate) [577-11-7] APSBXTVYXVQYAB-UHFFFAOYSA-M	2.0×10^6		HSDB (2015)	Q	100
dodecylbenzenesulfonic acid sodium salt $\text{C}_{18}\text{H}_{29}\text{NaO}_3\text{S}$ (sodium dodecylbenzenesulfonate) [25155-30-0] BWUAQXVVJWAXHR-UHFFFAOYSA-M	1.6×10^2		HSDB (2015)	Q	100
D&C yellow 10 $\text{C}_{20}\text{H}_{17}\text{NO}_8\text{Na}_2\text{S}_2$ [8004-92-0] NYMFWSWVZMTZQO-UHFFFAOYSA-L	3.4×10^{14}		HSDB (2015)	Q	100
D&C yellow 8 $\text{C}_{20}\text{H}_{10}\text{Na}_2\text{O}_5$ (fluorescein sodium) [518-47-8] NJDNXYGOVLYJHP-UHFFFAOYSA-L	3.5×10^{10}		HSDB (2015)	Q	449
D&C black 1 $\text{C}_{22}\text{H}_{14}\text{N}_6\text{Na}_2\text{O}_9\text{S}_2$ (amido black 10B) [1064-48-8] HKBVRFLHNUEVRO-DWTBGCDMSA-L	8.2×10^{25}		HSDB (2015)	Q	100

Table A11.1: Sodium (Na) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
D&C green 5 $\text{C}_{28}\text{H}_{20}\text{N}_2\text{Na}_2\text{O}_8\text{S}_2$ [4403-90-1] FPAYXBWMIYMERV-UHFFFAOYSA-L	3.1×10^{23}		HSDB (2015)	Q	449
FD&C green 2 $\text{C}_{37}\text{H}_{34}\text{N}_2\text{Na}_2\text{O}_9\text{S}_3$ [5141-20-8] DGOBMKYRQHEFGQ-UHFFFAOYSA-L	7.0×10^{30}		HSDB (2015)	Q	449

A11.2 Aluminum (Al)

Table A11.2: Aluminum (Al)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
fosetyl-aluminum $\text{C}_6\text{H}_{18}\text{AlO}_9\text{P}_3$ [39148-24-8] ZKZMJOFIHHZSRW-UHFFFAOYSA-K	3.1×10^9 $> 3.1 \times 10^9$		HSDB (2015) Maniere et al. (2011)	V ?	12, 166

A11.3 Silicon (Si)

Table A11.3: Silicon (Si)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tetramethylsilane $\text{C}_4\text{H}_{12}\text{Si}$ [75-76-3] CZDYPVPMEXLPK-UHFFFAOYSA-N	2.3×10^{-6} 2.3×10^{-6} 1.4×10^{-3} 2.4×10^{-6}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Abraham et al. (1990)	V V Q ?	187
tetraethylsilane $\text{C}_8\text{H}_{20}\text{Si}$ [631-36-7] VCZQFJFZMMALHB-UHFFFAOYSA-N	3.8×10^{-6}		Abraham et al. (1990)	?	
trimethylsilanol $(\text{CH}_3)_3\text{SiOH}$ (TMS) [1066-40-6] AAPLIUHOKVUFCC-UHFFFAOYSA-N	7.0×10^{-2} 2.2×10^{-1}		Xu and Kropscott (2014) Mazzoni et al. (1997)	M V	
silicic acid $\text{Si}(\text{OH})_4$ [10193-36-9] RMAQACBXLXPBSY-UHFFFAOYSA-N	2.3×10^{10}	14000	Plyasunov (2012)	M	820
dimethylsilanediol $\text{C}_2\text{H}_8\text{O}_2\text{Si}$ [1066-42-8] XCLIHJZGPCUBT-UHFFFAOYSA-N	2.8×10^3 2.9×10^{-1}		Xu and Kropscott (2012) Mazzoni et al. (1997)	M V	12
tetramethyl silicate $\text{C}_4\text{H}_{12}\text{O}_4\text{Si}$ [681-84-5] LFQCEHFDDXELDD-UHFFFAOYSA-N	1.5		HSDB (2015)	Q	100
pentamethyldisiloxanol $\text{C}_5\text{H}_{16}\text{O}_2\text{Si}_2$ [56428-93-4] FGOLZCPMTWJPOU-UHFFFAOYSA-N	7.3×10^{-4}		Mazzoni et al. (1997)	V	
tetraethyl silicate $\text{C}_8\text{H}_{20}\text{O}_4\text{Si}$ [78-10-4] BOTDANWDWHJENH-UHFFFAOYSA-N	4.9×10^{-1}		HSDB (2015)	Q	100
trimethoxysilylpropyl methacrylate $\text{C}_{10}\text{H}_{20}\text{O}_5\text{Si}$ [2530-85-0] XDLMVUHYZWKMMMD-UHFFFAOYSA-N	3.3×10^1		HSDB (2015)	Q	100

Table A11.3: Silicon (Si) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
hexamethyldisiloxane $\text{C}_6\text{H}_{18}\text{OSi}_2$ (L2) [107-46-0] UQEAHBTYFGYIE-UHFFFAOYSA-N	1.3×10^{-6} 1.7×10^{-4} 3.1×10^{-4} 7.7×10^{-7} 1.0×10^{-6} 1.0×10^{-6} 4.2×10^{-6} 2.2×10^{-4} 1.9×10^{-4} 2.2×10^{-4}		Xu and Kropscott (2014) Kochetkov et al. (2001) Kochetkov et al. (2001) David et al. (2000) Xu and Kropscott (2014) Kochetkov et al. (2001) Mazzoni et al. (1997) Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	M M M M V V V Q Q ?	 404, 332 404, 333 73 186, 21
octamethyltrisiloxane $\text{C}_8\text{H}_{24}\text{O}_2\text{Si}_3$ (L3) [107-51-7] CXQXSVUQTKDNFP-UHFFFAOYSA-N	3.4×10^{-7} 3.3×10^{-6} 2.7×10^{-6} 2.8×10^{-7} 2.8×10^{-7} 1.2×10^{-6} 1.3×10^{-5} 2.5×10^{-5} 3.0×10^{-6}		Xu and Kropscott (2014) Kochetkov et al. (2001) Kochetkov et al. (2001) Xu and Kropscott (2014) Kochetkov et al. (2001) Mazzoni et al. (1997) Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	M M M V V V Q Q ?	 404, 332 404, 333 186, 21
decamethyltetrasiloxane $\text{C}_{10}\text{H}_{30}\text{O}_3\text{Si}_4$ (L4) [141-62-8] YFCGDEUVHLPRCZ-UHFFFAOYSA-N	1.4×10^{-7} 5.8×10^{-7} 3.7×10^{-7} 4.3×10^{-7} 3.1×10^{-7} 8.1×10^{-7} 3.3×10^{-6} 5.8×10^{-7}		Xu and Kropscott (2014) Kochetkov et al. (2001) Xu and Kropscott (2014) Kochetkov et al. (2001) Mazzoni et al. (1997) Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	M M V V V Q Q ?	 404, 332 185 186, 21
dodecamethylpentasiloxane $\text{C}_{12}\text{H}_{36}\text{O}_4\text{Si}_5$ (L5) [141-63-9] FBZANXDWQAVSTQ-UHFFFAOYSA-N	8.7×10^{-8}		Mazzoni et al. (1997)	V	
silthiofam $\text{C}_{13}\text{H}_{21}\text{NOSSi}$ [175217-20-6] MXMXHPPIGKYTAR-UHFFFAOYSA-N	1.9		Maniere et al. (2011)	?	242, 166
tetradecamethylhexasiloxane $\text{C}_{14}\text{H}_{42}\text{O}_5\text{Si}_6$ (L6) [107-52-8] ADANNTOYRVPQLJ-UHFFFAOYSA-N	2.7×10^{-8}		Mazzoni et al. (1997)	V	

Table A11.3: Silicon (Si) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hexadecamethylheptasiloxane $\text{C}_{16}\text{H}_{48}\text{O}_6\text{Si}_7$ (L7) [541-01-5] NFVSFLUJRHRJSJG-UHFFFAOYSA-N	7.6×10^{-9}		Mazzoni et al. (1997)	V	
octadecamethyloctasiloxane $\text{C}_{18}\text{H}_{54}\text{O}_7\text{Si}_8$ (L8) [556-69-4] VWGDPBQTSZDFMX-UHFFFAOYSA-N	3.3×10^{-9}		Mazzoni et al. (1997)	V	
hexamethylcyclotrisiloxane $\text{C}_6\text{H}_{18}\text{O}_3\text{Si}_3$ (D3) [541-05-9] HTDJPCNNEPUOOQ-UHFFFAOYSA-N	5.6×10^{-6} 6.4×10^{-6} 1.6×10^{-5} 2.5×10^{-6}		Mazzoni et al. (1997) Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	V Q Q Q	 821 822 823
octamethylcyclotetrasiloxane $\text{C}_8\text{H}_{24}\text{O}_4\text{Si}_4$ (D4) [556-67-2] HMMGMWAXVFQUOA-UHFFFAOYSA-N	7.3×10^{-7} 8.3×10^{-7} 1.7×10^{-5} 1.7×10^{-5} 1.2×10^{-4} 1.5×10^{-6} 1.6×10^{-6} 8.3×10^{-7} 2.7×10^{-6} 5.4×10^{-7} 1.3×10^{-6} 1.1×10^{-6} 1.3×10^{-5} 4.2×10^{-5} 8.4×10^{-5}		Xu and Kropscott (2014) Xu and Kropscott (2012) Kochetkov et al. (2001) Kochetkov et al. (2001) Hamelink et al. (1996) Xu and Kropscott (2014) Kochetkov et al. (2001) Mazzoni et al. (1997) Hamelink et al. (1996) Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022) Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	M M M M M V V V V Q Q Q Q Q Q ?	 88 298, 332 298, 333 12 12 821 822 823 186, 21
decamethylcyclopentasiloxane $\text{C}_{10}\text{H}_{30}\text{O}_5\text{Si}_5$ (D5) [541-02-6] XMSXQFUHVRWGNA-UHFFFAOYSA-N	2.8×10^{-7} 3.0×10^{-7} 3.4×10^{-5} 3.1×10^{-5} 7.4×10^{-5} 2.3×10^{-6} 2.2×10^{-6} 1.5×10^{-6} 2.3×10^{-7} 1.2×10^{-6} 3.1×10^{-6}		Xu and Kropscott (2014) Xu and Kropscott (2012) Kochetkov et al. (2001) Kochetkov et al. (2001) David et al. (2000) Xu and Kropscott (2014) Kochetkov et al. (2001) Mazzoni et al. (1997) Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	M M M M M V V V Q Q Q	 374, 332 374, 333 73 821 822 823

Table A11.3: Silicon (Si) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dodecamethylcyclohexasiloxane $\text{C}_{12}\text{H}_{36}\text{O}_6\text{Si}_6$ (D6) [540-97-6] IUMSDRXLFWAGNT-UHFFFAOYSA-N	4.0×10^{-7} 6.8×10^{-5} 1.5×10^{-4} 3.9×10^{-6}		Xu and Kropscott (2012) Kochetkov et al. (2001) Kochetkov et al. (2001) Kochetkov et al. (2001)	M M M V	80 374, 332 374, 333
tetramethyldisiloxane-1,3-diol $\text{C}_4\text{H}_{14}\text{O}_3\text{Si}_2$ [1118-15-6] PFEAZKFNWPIFCV-UHFFFAOYSA-N	1.8×10^{-1}		Mazzoni et al. (1997)	V	
hexamethyltrisiloxane-1,5-diol $\text{C}_6\text{H}_{20}\text{O}_4\text{Si}_3$ [3663-50-1] XYBQTTAROGWZOZ-UHFFFAOYSA-N	3.4×10^{-3}		Mazzoni et al. (1997)	V	
octamethyltetrasiloxane-1,7-diol $\text{C}_8\text{H}_{26}\text{O}_5\text{Si}_4$ [3081-07-0] VERNMKKMBJGSQB-UHFFFAOYSA-N	2.7×10^{-3}		Mazzoni et al. (1997)	V	
pentamethylcyclotrisiloxanol $\text{C}_5\text{H}_{16}\text{O}_4\text{Si}_3$ (D3OH) [106916-50-1] OGNYZJXUXVWRE-UHFFFAOYSA-N	1.1×10^{-3} 1.2×10^{-1} 2.7×10^{-2} 1.5×10^{-3}		Mazzoni et al. (1997) Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	V Q Q Q	821 822 823
heptamethylcyclotetrasiloxanol $\text{C}_7\text{H}_{22}\text{O}_5\text{Si}_4$ (D4OH) [5290-02-8] MLGUQSFCJNMKPT-UHFFFAOYSA-N	2.3×10^{-4} 1.1×10^{-2} 1.1×10^{-2} 1.3×10^{-5}		Mazzoni et al. (1997) Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	V Q Q Q	821 822 823
nonamethylcyclopentasiloxanol $\text{C}_9\text{H}_{28}\text{O}_6\text{Si}_5$ (D5OH) [5290-04-0] DKTKKERLEMHMHS-UHFFFAOYSA-N	7.0×10^{-5} 4.6×10^{-3} 2.0×10^{-2} 4.4×10^{-5}		Mazzoni et al. (1997) Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	V Q Q Q	821 822 823
D3FormEst $\text{C}_6\text{H}_{16}\text{O}_5\text{Si}_3$ TZIXLALHTGGYNZ-UHFFFAOYSA-N	2.8×10^{-4} 3.2×10^{-4} 1.7×10^{-3}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
D3OHFormEst $\text{C}_5\text{H}_{14}\text{O}_6\text{Si}_3$ RMJPVGNUQFKGPC-UHFFFAOYSA-N	5.4 9.9 1.2×10^{-2}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
D3Hydroperoxide $\text{C}_6\text{H}_{18}\text{O}_5\text{Si}_3$ JKDUHABXPCJOJB-UHFFFAOYSA-N	6.9×10^{-2} 1.9×10^{-3} 8.9×10^{-6}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823

Table A11.3: Silicon (Si) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
D3EtherHydroperoxide $\text{C}_6\text{H}_{18}\text{O}_6\text{Si}_3$ LHGAYMWHCKTFJV-UHFFFAOYSA-N	8.4×10^{-1} 1.9×10^{-2} 1.7×10^{-2}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
D3FormEst2 $\text{C}_6\text{H}_{14}\text{O}_7\text{Si}_3$ WKTLUKWDJZJCN-UHFFFAOYSA-N	1.2×10^{-2} 9.2×10^{-3} 2.0×10^{-2}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
D3OH2O1 $\text{C}_4\text{H}_{14}\text{O}_5\text{Si}_3$ UGEQNRIBONGCP-UHFFFAOYSA-N	2.4×10^3 2.9 1.8×10^{-1}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
D4FormEst $\text{C}_8\text{H}_{22}\text{O}_6\text{Si}_4$ PWVQOGDRWKITJQ-UHFFFAOYSA-N	2.4×10^{-5} 8.5×10^{-5} 8.8×10^{-5}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
D4OHFormEst $\text{C}_7\text{H}_{20}\text{O}_7\text{Si}_4$ AXBVNNKTZSENOJ-UHFFFAOYSA-N	4.6×10^{-1} 3.1 1.2×10^{-4}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
1,1,1,3,5,5,5- heptamethyltrisiloxane $\text{C}_7\text{H}_{22}\text{O}_2\text{Si}_3$ [1873-88-7] QNWOFWLXQGHSRH-UHFFFAOYSA-N	1.1×10^{-7}		Ebert et al. (2023)	?	319
D4Hydroperoxide $\text{C}_8\text{H}_{24}\text{O}_6\text{Si}_4$ IEOAKTNTPADFJB-UHFFFAOYSA-N	5.8×10^{-3} 4.4×10^{-4} 1.8×10^{-6}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
D4EtherHydroperoxide $\text{C}_8\text{H}_{24}\text{O}_7\text{Si}_4$ BKBHFCQPJIYNBR-UHFFFAOYSA-N	7.1×10^{-2} 4.5×10^{-3} 1.5×10^{-5}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
D4FormEst2 $\text{C}_8\text{H}_{20}\text{O}_8\text{Si}_4$ WJOJQLFAIHHNFX-UHFFFAOYSA-N	1.0×10^{-3} 1.8×10^{-3} 2.9×10^{-4}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
D4OH2 $\text{C}_6\text{H}_{20}\text{O}_6\text{Si}_4$ ONACLRRZBYFKLA-UHFFFAOYSA-N	2.1×10^2 1.0 8.3×10^{-5}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
D5FormEst $\text{C}_{10}\text{H}_{28}\text{O}_7\text{Si}_5$ IGERVNZEGVJPED-UHFFFAOYSA-N	1.0×10^{-5} 1.2×10^{-4} 6.4×10^{-5}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
glycidoxypropyltrimethoxysilane $\text{C}_9\text{H}_{20}\text{O}_5\text{Si}$ [2530-83-8] BPSIOYPQMFLKFR-UHFFFAOYSA-N	1.4×10^2		Ebert et al. (2023)	?	319

Table A11.3: Silicon (Si) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
D5OHFormEst $\text{C}_9\text{H}_{26}\text{O}_8\text{Si}_5$ KNIXZSAQOHGMJX-UHFFFAOYSA-N	2.0×10^{-1} 5.6 4.7×10^{-5}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
D5Hydroperoxide $\text{C}_{10}\text{H}_{30}\text{O}_7\text{Si}_5$ VGMLSGIAATVHBV-UHFFFAOYSA-N	2.5×10^{-3} 6.3×10^{-4} 1.1×10^{-6}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
D5EtherHydroperoxide $\text{C}_{10}\text{H}_{30}\text{O}_8\text{Si}_5$ GSAPDUDDTPAQSH-UHFFFAOYSA-N	3.1×10^{-2} 6.8×10^{-3} 1.1×10^{-5}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
D5FormEst2 $\text{C}_{10}\text{H}_{26}\text{O}_9\text{Si}_5$ QFORSIVEJZTNKQ-UHFFFAOYSA-N	4.5×10^{-4} 2.5×10^{-3} 2.0×10^{-4}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
isobutyltriethoxysilane $\text{C}_{10}\text{H}_{24}\text{O}_3\text{Si}$ [17980-47-1] ALVYUZIFSCKIFP-UHFFFAOYSA-N	5.5×10^{-3}		Ebert et al. (2023)	?	317
methyltris(trimethylsiloxy)silane $\text{C}_{10}\text{H}_{30}\text{O}_3\text{Si}_4$ [17928-28-8] RGMZLNZABJYWAEC-UHFFFAOYSA-N	2.9×10^{-8}		Ebert et al. (2023)	?	317
vinyltris(2-methoxyethoxy)silane $\text{C}_{11}\text{H}_{24}\text{O}_6\text{Si}$ [1067-53-4] WOXXJEVNDJJOOLV-UHFFFAOYSA-N	5.9×10^2		Ebert et al. (2023)	?	319
tetrakis(trimethylsiloxy)silane $\text{C}_{12}\text{H}_{36}\text{O}_4\text{Si}_5$ [3555-47-3] VNRWTCZXQWOWIG-UHFFFAOYSA-N	2.6×10^{-8}		Ebert et al. (2023)	?	319
2-(3,4-epoxycyclohexyl) ethyltriethoxysilane $\text{C}_{14}\text{H}_{28}\text{O}_4\text{Si}$ [10217-34-2] UDUKMRHNZZLJRB-UHFFFAOYSA-N	9.9		Ebert et al. (2023)	?	319
D5OH2 $\text{C}_8\text{H}_{26}\text{O}_7\text{Si}_5$ AGIASGIZCMBNMT-UHFFFAOYSA-N	8.9×10^1 2.5 1.3×10^{-4}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
hexamethyldisilazane $\text{C}_6\text{H}_{19}\text{NSi}_2$ [999-97-3] FFUAGWLWBBFQJT-UHFFFAOYSA-N	1.1×10^{-1}		HSDB (2015)	Q	100

Table A11.3: Silicon (Si) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
D3Organonitrate $\text{C}_6\text{H}_{17}\text{NO}_6\text{Si}_3$ WGZJMUDCTAXYSF-UHFFFAOYSA-N	2.4×10^{-3} 1.6×10^{-4} 1.0×10^{-4}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
D3EtherOrganonitrate $\text{C}_6\text{H}_{17}\text{NO}_7\text{Si}_3$ CJWFNCZCCFYKPK-UHFFFAOYSA-N	2.9×10^{-2} 1.7×10^{-3} 1.4×10^{-3}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
D4Organonitrate $\text{C}_8\text{H}_{23}\text{NO}_7\text{Si}_4$ CYMCLGYPZZKOOI-UHFFFAOYSA-N	2.0×10^{-4} 4.1×10^{-5} 7.5×10^{-6}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
D4EtherOrganonitrate $\text{C}_8\text{H}_{23}\text{NO}_8\text{Si}_4$ XHFUWVKWVPBCDO-UHFFFAOYSA-N	2.4×10^{-3} 3.8×10^{-4} 1.6×10^{-5}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
(3-aminopropyl)triethoxysilane $\text{C}_9\text{H}_{23}\text{NO}_3\text{Si}$ [919-30-2] WYTZZXDRDKSJID-UHFFFAOYSA-N	1.2×10^2		Ebert et al. (2023)	?	319
D5Organonitrate $\text{C}_{10}\text{H}_{29}\text{NO}_8\text{Si}_5$ KWHVDACCYNMOAR-UHFFFAOYSA-N	8.7×10^{-5} 4.9×10^{-5} 1.2×10^{-5}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
D5EtherOrganonitrate $\text{C}_{10}\text{H}_{29}\text{NO}_9\text{Si}_5$ BQINUVPZWRBWB-UHFFFAOYSA-N	1.1×10^{-3} 5.7×10^{-4} 2.9×10^{-5}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	821 822 823
silafiuofen $\text{C}_{25}\text{H}_{29}\text{FO}_2\text{Si}$ [105024-66-6] HPYNBECUCGGPA-UHFFFAOYSA-N	4.0×10^{-1}		Ebert et al. (2023)	?	319
flusilazole $\text{C}_{16}\text{H}_{15}\text{F}_2\text{N}_3\text{Si}$ [85509-19-9] FQKUGOMFVDPBIZ-UHFFFAOYSA-N	2.7×10^1 4.4×10^2		Barcelo and Hennion (1997) Goodarzi et al. (2010)	X Q	569 570, 573
simeconazole $\text{C}_{14}\text{H}_{20}\text{FN}_3\text{OSi}$ [149508-90-7] YABFPHSQTSEFWQB-UHFFFAOYSA-N	4.0×10^3		Ebert et al. (2023)	?	319
dichloromethylsilane $\text{CH}_4\text{Cl}_2\text{Si}$ (methylchlorosilane) [75-54-7] NWKBSEBOBPHMKL-UHFFFAOYSA-N	7.6×10^{-4}		HSDB (2015)	Q	100

Table A11.3: Silicon (Si) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
etacelasil $\text{C}_{11}\text{H}_{25}\text{O}_6\text{ClSi}$ [37894-46-5] SLZWEMYSYKOWCG-UHFFFAOYSA-N	2.9×10^3		MacBean (2012a)	?	

A11.4 Calcium (Ca)

Table A11.4: Calcium (Ca)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
prohexadione-calcium $\text{C}_{20}\text{H}_{22}\text{O}_{10}\text{Ca}$ [127277-53-6] VQIYODJWCVPJRC-UHFFFAOYSA-N	5.2×10^4		Maniere et al. (2011)	?	242, 166

A11.5 Zinc (Zn)

Table A11.5: Zinc (Zn)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
zineb $\text{C}_4\text{H}_6\text{N}_2\text{S}_4\text{Zn}$ [12122-67-7] AMHNZOICSMBGDH-UHFFFAOYSA-L	2.7×10^3 $> 3.7 \times 10^3$ $> 1.9 \times 10^2$		Mackay et al. (2006d) MacBean (2012b) Maniere et al. (2011)	V X ?	 352 12, 166
ziram $\text{C}_6\text{H}_{12}\text{N}_2\text{S}_4\text{Zn}$ [137-30-4] DUBNHZYBDBBJHD-UHFFFAOYSA-L	1.6×10^4 2.1×10^5 1.8×10^2		HSDB (2015) Mackay et al. (2006d) Maniere et al. (2011)	V V ?	 166
mancozeb $\text{C}_8\text{H}_{12}\text{MnN}_4\text{S}_8\text{Zn}$ [8018-01-7] CHNQZRKUZNPOOH-UHFFFAOYSA-J	1.6×10^1		Maniere et al. (2011)	?	12, 166

A11.6 Arsenic (Sn)

Table A11.6: Arsenic (Sn)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methyarsine CH ₅ As [593-52-2] IDDBICIFODFKQO-UHFFFAOYSA-N	9.0×10^{-6}		Ebert et al. (2023)	?	319
ethylarsine C ₂ H ₇ As [593-59-9] OSAGMAAQRQLLW-UHFFFAOYSA-N	1.5×10^{-5}		Ebert et al. (2023)	?	317
diethyl arsine C ₄ H ₁₁ As [692-42-2] JZCIYTSNUPIOMK-UHFFFAOYSA-N	2.2×10^{-5}		HSDB (2015)	Q	100
phenylarsine oxide C ₆ H ₅ AsO [637-03-6] BQVCCPGCDUSGOE-UHFFFAOYSA-N	9.0×10^{-1}		Bartelt-Hunt et al. (2008)	?	21
diphenylarsanylformonitrile C ₁₃ H ₁₀ AsN [23525-22-6] BDHNJKLLVSRGDK-UHFFFAOYSA-N	1.1×10^3		Ebert et al. (2023)	?	319
dichloro(methyl)arsane CH ₃ AsCl ₂ [593-89-5] VXRMBBLRHSRVDK-UHFFFAOYSA-N	5.1×10^{-3}		Ebert et al. (2023)	?	319
lewisite C ₂ H ₂ AsCl ₃ [541-25-3] GIKLTQKNQXNBNY-OWOJBTEDSA-N	4.5×10^{-2} 3.1×10^{-2} 5.2×10^{-3} 3.7×10^{-2}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Bartelt-Hunt et al. (2008)	V V Q ?	187 21
diphenylchloroarsine C ₁₂ H ₁₀ AsCl [712-48-1] YHHKGGKCOLGRKKB-UHFFFAOYSA-N	6.1×10^1		Ebert et al. (2023)	?	319
lewisite oxide C ₂ H ₂ AsClO [3088-37-7] MVCVAGFCWDFQXQX-OWOJBTEDSA-N	5.2×10^{-3}		Bartelt-Hunt et al. (2008)	?	21

Table A11.6: Arsenic (Sn) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
phenyldichloroarsine $\text{C}_6\text{H}_5\text{AsCl}_2$ [696-28-6] UDHDFEGCOJAVRE-UHFFFAOYSA-N	3.3×10^{-1}		HSDB (2015)	Q	100
adamsite $\text{C}_{12}\text{H}_9\text{AsClN}$ [578-94-9] PBNSPNYJYOYWTA-UHFFFAOYSA-N	3.0×10^2		HSDB (2015)	Q	100

A11.7 Selenium (Se)

Table A11.7: Selenium (Se)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dimethyl selenide $\text{C}_2\text{H}_6\text{Se}$ [593-79-3] RVIXKDRPFPUUOO-UHFFFAOYSA-N	1.2×10^{-2} 4.3×10^{-3} 5.7×10^{-3}		Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	Q Q ?	 186, 21
dimethyl diselenide $\text{C}_2\text{H}_6\text{Se}_2$ [7101-31-7] VLXBWPOEOIIREY-UHFFFAOYSA-N	1.4×10^{-3}		Ebert et al. (2023)	?	319
2-amino-4-(methylselenyl)butyric acid $\text{C}_5\text{H}_{11}\text{NO}_2\text{Se}$ (selenium methionine) [1464-42-2] RJFAYQIBOAGBLC-UHFFFAOYSA-N	2.9×10^5		HSDB (2015)	Q	100

A11.8 Tin (Sn)

Table A11.8: Tin (Sn)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tetramethylstannane $\text{C}_4\text{H}_{12}\text{Sn}$ (tetramethyltin) [594-27-4] VXKWYPOMXBVZSJ-UHFFFAOYSA-N	9.4×10^{-6} 9.7×10^{-6} 1.2×10^{-5}	3800	Abraham and Nasehzadeh (1981) Abraham et al. (1990) Abraham (1979)	M ? ?	
tetraethylstannane $\text{C}_8\text{H}_{20}\text{Sn}$ (tetraethyltin) [597-64-8] RWWNQEOPUOCKGR-UHFFFAOYSA-N	1.6×10^{-5} 6.1×10^{-6} 5.7×10^{-6} 1.1×10^{-5}	6100	HSDB (2015) Abraham et al. (1990) Abraham and Nasehzadeh (1981) Abraham (1979)	Q ? ? ?	100 824
tetrabutylstannane $\text{C}_{16}\text{H}_{36}\text{Sn}$ (tetra-butyl tin) [1461-25-2] AFCAKJKUYFLYFK-UHFFFAOYSA-N	1.6×10^{-6}		HSDB (2015)	Q	100
triphenyltin hydroxide $\text{C}_{18}\text{H}_{16}\text{OSn}$ [76-87-9] BFWMWWWXRWVJXSE-UHFFFAOYSA-M	2.3×10^1 3.8×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187
hexabutylstannoxane $\text{C}_{24}\text{H}_{54}\text{OSn}_2$ (bis(tributyltin)oxide) [56-35-9] APQHKWPGGHMYKJ-UHFFFAOYSA-N	7.6×10^1		HSDB (2015)	V	
hexakis(2-methyl-2-phenylpropyl)distannoxane $\text{C}_{60}\text{H}_{78}\text{OSn}_2$ (fenbutatin oxide) [13356-08-6] HOXINJBQVZWYGZ-UHFFFAOYSA-N	4.9×10^3		HSDB (2015)	V	
fentin acetate $\text{C}_{20}\text{H}_{18}\text{O}_2\text{Sn}$ [900-95-8] WDQNIWFZKXZFAY-UHFFFAOYSA-M	2.0×10^3		Ebert et al. (2023)	?	367
1-(tricyclohexylstannyl)1H-1,2,4-triazole $\text{C}_{20}\text{H}_{35}\text{N}_3\text{Sn}$ (azocyclotin) [41083-11-8] ONHBDDJJTDLIR-UHFFFAOYSA-N	4.6×10^6 4.6×10^6 1.2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	187

A11.9 Mercury (Hg)

Table A11.9: Mercury (Hg)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dimethylmercury $\text{C}_2\text{H}_6\text{Hg}$ [593-74-8] ATZBPOVXVPIOMR-UHFFFAOYSA-N	1.3×10^{-3} 2.1×10^{-3} 1.3×10^{-3} 1.0×10^{-3} 1.5×10^{-3} 1.3×10^{-3} 3.1×10^{-3}	2700 2700 3000 3000 2700	Talmi and Mesmer (1975) Abraham et al. (2008) WHO (1990) Abraham et al. (2008) Schroeder and Munthe (1998) Schroeder and Munthe (1998) Iverfeldt and Persson (1985)	M C C Q ? ? ?	 219 21 21 220
diethylmercury $\text{C}_4\text{H}_{10}\text{Hg}$ [627-44-1] SPIUPAQJDZNUJH-UHFFFAOYSA-N	1.0×10^{-3}	3800	Abraham et al. (2008)	Q	219
dipropylmercury $\text{C}_6\text{H}_{14}\text{Hg}$ [628-85-3] UZTYBPPVOXULF-UHFFFAOYSA-N	5.6×10^{-4}	4600	Abraham et al. (2008)	Q	219
diisopropylmercury $\text{C}_6\text{H}_{14}\text{Hg}$ [1071-39-2] UVUGOJQWNVFTRT-UHFFFAOYSA-N	3.9×10^{-4}	4600	Abraham et al. (2008)	Q	219
dibutylmercury $\text{C}_8\text{H}_{18}\text{Hg}$ [629-35-6] CCYKQVBIPYDCKS-UHFFFAOYSA-N	2.9×10^{-4}	5400	Abraham et al. (2008)	Q	219
diphenylmercury $\text{C}_{12}\text{H}_{10}\text{Hg}$ [587-85-9] HWMTUNCVVYPZH-Z-UHFFFAOYSA-N	2.8×10^2	8800	Abraham et al. (2008)	Q	219
hydroxymethylmercury CH_3HgOH [1184-57-2] KRZWEBVPFGCYMY-UHFFFAOYSA-M	9.8×10^2 1.5×10^3	7700	Iverfeldt and Persson (1985) Shon et al. (2005)	M ?	 825
phenyl mercuric ethanoate $\text{C}_8\text{H}_8\text{HgO}_2$ [62-38-4] XEBWQGVWTUSTLN-UHFFFAOYSA-M	1.5×10^4		Suntio et al. (1988)	V	12
(3-cyanoguanidino)methylmercury $\text{C}_3\text{H}_6\text{N}_4\text{Hg}$ (methylmercuric dicyanamide) [502-39-6] JVJUWCMBRUMDDQ-UHFFFAOYSA-N	7.0×10^4		HSDB (2015)	Q	100

Table A11.9: Mercury (Hg) (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
chloromethylmercury CH ₃ HgCl [115-09-3] BABMCXWQNSQAOC-UHFFFAOYSA-M	2.2 × 10 ¹ 1.5 × 10 ¹ 2.0 × 10 ¹	1800 4100 5300	Iverfeldt and Lindqvist (1982) Talmi and Mesmer (1975) WHO (1990) Abraham et al. (2008)	M M C Q	33, 826 88 33 215
	2.6 × 10 ¹ 1.5 × 10 ¹		Schroeder and Munthe (1998) Iverfeldt and Persson (1985)	? ?	81, 21 220
chloroethylmercury C ₂ H ₅ HgCl [107-27-7] QWUGXIXRFGEYBD-UHFFFAOYSA-M	1.5 × 10 ¹	5600	Abraham et al. (2008)	Q	219
chloropropylmercury C ₃ H ₇ HgCl [2440-40-6] ZLAYJSKLDWSALK-UHFFFAOYSA-M	1.2 × 10 ¹	5900	Abraham et al. (2008)	Q	219
chloroisopropylmercury C ₃ H ₇ HgCl [30615-19-1] YOKZNIQICWABELX-UHFFFAOYSA-M	9.9	6000	Abraham et al. (2008)	Q	219
chlorobutylmercury C ₄ H ₉ HgCl [543-63-5] OKPMTXZRMGMMOO-UHFFFAOYSA-M	8.8	6300	Abraham et al. (2008)	Q	219
chloropentylmercury C ₅ H ₁₁ HgCl [544-15-0] UHFZINPMKCNPQL-UHFFFAOYSA-M	7.0	6700	Abraham et al. (2008)	Q	219
chlorophenylmercury C ₆ H ₅ HgCl [100-56-1] AWGTVRDHKJQFAX-UHFFFAOYSA-M	3.8 × 10 ² 9.2 × 10 ²	7400	Abraham et al. (2008) Abraham et al. (2008)	V Q	219
2-methoxyethylmercury chloride CH ₃ OC ₂ H ₄ HgCl (aretan) [123-88-6] VJTAZCKMHINUKO-UHFFFAOYSA-M	3.9 × 10 ³	8600	Abraham et al. (2008)	Q	219
bromomethylmercury CH ₃ HgBr [506-83-2] ZDHHIJSJLCLMPX-UHFFFAOYSA-M	3.7	4800	Abraham et al. (2008) Iverfeldt and Persson (1985)	Q ?	215 220

Table A11.9: Mercury (Hg) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
bromoethylmercury $\text{C}_2\text{H}_5\text{HgBr}$ [107-26-6] UREACWLAXSOUKG-UHFFFAOYSA-M	3.0	5200	Abraham et al. (2008)	Q	219
bromophenylmercury $\text{C}_6\text{H}_5\text{HgBr}$ [1192-89-8] PUPHNPSAIJQNEE-UHFFFAOYSA-M	1.8×10^2	6900	Abraham et al. (2008)	Q	219
iodomethylmercury CH_3HgI [143-36-2] JVDIOYBHEYUIBM-UHFFFAOYSA-M	2.0 5.8×10^{-1}	4800	Abraham et al. (2008) Iverfeldt and Persson (1985)	Q ?	219 220
iodoethylmercury $\text{C}_2\text{H}_5\text{HgI}$ [2440-42-8] BYIGJUQTUPMNMF-UHFFFAOYSA-M	2.5	5200	Abraham et al. (2008)	Q	219
iodophenylmercury $\text{C}_6\text{H}_5\text{HgI}$ [823-04-1] BISBXZWWFIOZSX-UHFFFAOYSA-M	9.0×10^1	6700	Abraham et al. (2008)	Q	219

A11.10 Lead (Pb)

Table A11.10: Lead (Pb)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tetramethyl lead $\text{C}_4\text{H}_{12}\text{Pb}$ [75-74-1] XOOGZRUBTYCLHG-UHFFFAOYSA-N	1.6×10^{-5}		HSDB (2015)	V	
ethyltrimethylplumbane $\text{C}_5\text{H}_{14}\text{Pb}$ [1762-26-1] KHQJREYATBQBHY-UHFFFAOYSA-N	2.8×10^{-5}		HSDB (2015)	Q	100
diethyldimethylplumbane $\text{C}_6\text{H}_{16}\text{Pb}$ (diethyldimethyl lead) [1762-27-2] OLOAJSHVLXNSQV-UHFFFAOYSA-N	2.1×10^{-5}		HSDB (2015)	Q	100
triethylmethylplumbane $\text{C}_7\text{H}_{18}\text{Pb}$ (methyltriethyl lead) [1762-28-3] KGFRUGHBHNUHOS-UHFFFAOYSA-N	1.6×10^{-5}		HSDB (2015)	Q	100
tetraethyl lead $\text{C}_8\text{H}_{20}\text{Pb}$ [78-00-2] MRMOZBOQVYRSEM-UHFFFAOYSA-N	1.3×10^{-5} 1.3×10^{-5}	6400	Feldhake and Stevens (1963) Abraham (1979)	M ?	
trimethyl lead chloride $\text{C}_3\text{H}_9\text{ClPb}$ [1520-78-1] HPQRSQZILKRDH-UHFFFAOYSA-M	2.5		Ebert et al. (2023)	?	317
triethyl lead chloride $\text{C}_6\text{H}_{15}\text{ClPb}$ [1067-14-7] UQWYUMLFPULRT-UHFFFAOYSA-M	2.1×10^5 1.1×10^{-3}		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	187

Appendix: Notes

- 1) A detailed temperature dependence with more than one parameter is available in the original publication. Here, only the temperature dependence at 298.15 K according to the van 't Hoff equation is presented.
- 2) Clever et al. (2014) recommend the data from Rettich et al. (2000).
- 3) The vapor pressure for water from Wagner and Pruss (1993) was used to calculate H_s .
- 4) The data from Millero et al. (2002a) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-130.91491 + 6700.12242/T + 17.04684 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 5) Almost the same data were also published in Millero et al. (2002b).
- 6) The data from Millero et al. (2002b) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-118.73105 + 6163.97787/T + 15.22401 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 7) Almost the same data were also published in Millero et al. (2002a).
- 8) The data from Rettich et al. (2000) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-179.13831 + 8707.17767/T + 24.33473 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 9) The data from Sherwood et al. (1991) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-197.67462 + 9515.09306/T + 27.11204 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 10) The data from Rettich et al. (1981) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-178.21340 + 8672.23354/T + 24.19307 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 11) Measured at high temperature and extrapolated to $T^\ominus = 298.15 \text{ K}$.
- 12) Value at $T = 293 \text{ K}$.
- 13) Value at $T = 273 \text{ K}$.
- 14) Value at $T = 310 \text{ K}$.
- 15) The data from Murray and Riley (1969) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-180.22078 + 8760.50130/T + 24.49289 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 16) The data from Shoor et al. (1969) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-91.44799 + 4548.67245/T + 11.38821 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 17) The data from Carpenter (1966) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-130.04464 + 6687.45227/T + 16.90114 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 18) The data from Morrison and Billett (1952) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-167.89288 + 8254.02144/T + 22.62741 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 19) The data from Winkler (1891b) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-155.30315 + 7638.78869/T + 20.77945 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 20) Calculated using machine learning matrix completion methods (MCMs).
- 21) Several references are given in the list of Henry's law constants but not assigned to specific species.
- 22) The data from Dean and Lange (1999) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-161.84252 + 7966.66767/T + 21.73409 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 23) The partial pressure of water vapor (needed to convert some Henry's law constants) was calculated using the formula given by Buck (1981). The quantities A and α from Dean and Lange (1999) were assumed to be identical.
- 24) Value at "room temperature".
- 25) Clever et al. (2014) recommend the data from Battino (1981).
- 26) Battino (1981) concludes that ozone aqueous chemistry needs further clarification. Data from Roth and Sullivan (1981) are recommended, in spite of limitations and assumptions of the data.
- 27) Roth and Sullivan (1981) found that H_s depends on the concentration of OH^- .
- 28) Value at $T = 291 \text{ K}$.
- 29) Value given here as quoted by Durham et al. (1981).
- 30) Lide and Frederikse (1995) present an unusually low value for the Henry solubility of ozone. They refer to Battino (1981) as the source, but the quoted value cannot be found there.
- 31) Parker (1992) assumes that the free energy of solvation of atomic hydrogen is equal to that of He because of a similar van der Waals radius.
- 32) Roduner and Bartels (1992) say that the free energy of solvation $\Delta G_{\text{solv}}^{\text{H}}$ (and therefore Henry's law constant) of atomic hydrogen is approximated well by that of molecular hydrogen. However, they apparently do not give a value for $\Delta G_{\text{solv}}^{\text{H}}$.
- 33) Fitting the temperature dependence $d \ln H / d(1/T)$ produced a low correlation coefficient ($r^2 < 0.9$). The data should be treated with caution.
- 34) Data digitized from Figs. 2 and 3 in Schmidt (1979).

- 35) The data from Gordon et al. (1977) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-158.95051 + 6959.76267/T + 21.73478 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 36) The data from Crozier and Yamamoto (1974) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-129.44163 + 5676.58091/T + 17.31002 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 37) The data presented for hydrogen in Table II of Shoor et al. (1969) appear to be incorrect and are not reproduced here.
- 38) Value at $T = 303 \text{ K}$.
- 39) The data from Morrison and Billett (1952) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-94.36490 + 4110.23880/T + 12.07743 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 40) The data from Braun (1900) were fitted to the three-parameter equation: $H_s^{cp} = \exp(171.59451 - 6856.02728/T - 28.14739 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 41) The data from Winkler (1891a) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-103.47250 + 4506.63123/T + 13.44160 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 42) Fitting the temperature dependence $d \ln H/d(1/T)$ produced a very low correlation coefficient ($r^2 < 0.5$). The data should be treated with caution.
- 43) The paper by Bunsen (1855a) was written in German. English versions with the same data were published by Bunsen (1855b) and Bunsen (1855c).
- 44) The data from Dean and Lange (1999) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-98.78036 + 4298.15060/T + 12.74131 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 45) Young (1981a) recommend the data from Muccitelli and Wen (1978).
- 46) The data from Muccitelli and Wen (1978) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-103.11330 + 4676.56978/T + 13.28348 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 47) The free energy of solution was calculated based on electrochemical reduction potentials and related free energies.
- 48) Calculated from correlation between the polarizabilities and solubilities of stable gases. The temperature dependence is an estimate of the upper limit.
- 49) Jacob (1986) assumed the temperature dependence to be the same as for water.
- 50) In the abstract, Schwartz (1984) gives a range of $9.9 \text{ mol m}^{-3} \text{ Pa}^{-1} < H_s^{cp} < 3.0 \times 10^1 \text{ mol m}^{-3} \text{ Pa}^{-1}$. The mean value of this range ($2.0 \times 10^1 \text{ mol m}^{-3} \text{ Pa}^{-1}$) has been used by Lelieveld and Crutzen (1991), Pandis and Seinfeld (1989), and Jacob (1986).
- 51) The value of H_s^\ominus was taken from Schwartz (1984).
- 52) Erratum for page 264 of Fogg and Sangster (2003): the second value from their Ref. [10] refers to 291.15 K, not 281.15 K.
- 53) This value is a correction of the solubility published by Lind and Kok (1986).
- 54) This value was measured at low pH. It is superseded by a later publication of the same group (Lind and Kok, 1994).
- 55) Pandis and Seinfeld (1989) cite an incorrect value from Lind and Kok (1986); see erratum by Lind and Kok (1994).
- 56) The data from Rettich et al. (1984) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-187.67954 + 8903.42524/T + 25.60079 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 57) The data from Murray et al. (1969) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-174.95275 + 8370.22025/T + 23.67878 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 58) The data from Morrison and Billett (1952) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-193.68175 + 9249.63150/T + 26.45117 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 59) Value at $T = 311 \text{ K}$.
- 60) The data from Braun (1900) were fitted to the three-parameter equation: $H_s^{cp} = \exp(291.66324 - 11637.66767/T - 46.44134 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 61) The data from Winkler (1891b) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-164.15156 + 7906.86704/T + 22.05399 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 62) The data from Dean and Lange (1999) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-163.64571 + 7887.30480/T + 21.97696 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 63) Tsuji et al. (1990) provide effective Henry's law constants at several pH values. Here, only the value at pH = 5.8 is shown for the (acidic) S compounds and the value at pH = 8.6 for the alkaline N compounds.
- 64) Value given here as quoted by Betterton (1992).
- 65) The data from Dean and Lange (1999) were fitted to the three-parameter equation: $H_s^{cp} = \exp(206.08500 - 7165.18642/T - 32.18383 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.

- 66)** Bone et al. (1983) give Carter et al. (1968) as the source. However, no data were found in that reference.
- 67)** There is a typo in Sander et al. (2011): the value for A should be -10.19 not 10.19 .
- 68)** Modarresi et al. (2007) use different descriptors for their calculations. They conclude that a genetic algorithm/radial basis function network (GA/RBFN) is the best QSPR model. Only these results are shown here.
- 69)** Incorrect data are given by Burkholder et al. (2019) for HN_3 . The correct parameter for the temperature dependence is $A = -10.19$ (Robert E. Huie, personal communication, 2021).
- 70)** Incorrect data are given by Burkholder et al. (2015) for HN_3 . The correct parameter for the temperature dependence is $A = -10.19$ (Robert E. Huie, personal communication, 2021).
- 71)** Solubility in sea water.
- 72)** The data from Weiss and Price (1980) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-180.63611 + 9824.20147/T + 24.46112 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 73)** Value at $T = 296 \text{ K}$.
- 74)** The data from Roth (1897) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-125.17909 + 7706.80638/T + 15.96486 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 75)** Value given here as quoted by Gabel and Schultz (1973).
- 76)** Value given here as quoted by Sy and Hasbrouck (1964).
- 77)** The H_{298} and A, B, C data listed in Table 5.4 of Sander et al. (2011) are inconsistent, with 94 % difference.
- 78)** The H_{298} and A, B, C data listed in Table 5.4 of Sander et al. (2006) are inconsistent, with 94 % difference.
- 79)** A minus sign is missing in the fitting parameter presented by Young (1981b). It should be -62.8086 , not 62.8086 .
- 80)** Value at $T = 297 \text{ K}$.
- 81)** Value at $T = 288 \text{ K}$.
- 82)** The data from Winkler (1901) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-184.00012 + 8924.34832/T + 25.13228 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 83)** The data from Loomis (1928) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-223.88313 + 10620.37030/T + 31.13453 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 84)** The data from Dean and Lange (1999) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-160.19223 + 7888.02642/T + 21.56401 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 85)** Incorrect data are given by Burkholder et al. (2019) for NO . The correct parameters for the temperature dependence are $A = -163.86$, $B = 8234$, $C = 22.816$ (Robert E. Huie, personal communication, 2021).
- 86)** Incorrect data are given by Burkholder et al. (2015) for NO . The correct parameters for the temperature dependence are $A = -163.86$, $B = 8234$, $C = 22.816$ (Robert E. Huie, personal communication, 2021).
- 87)** The fitting parameters A, B, C , and D in Table I of Wilhelm et al. (1977) do not reproduce the data in their Table III.
- 88)** Value at $T = 295 \text{ K}$.
- 89)** Pandis and Seinfeld (1989) refer to Schwartz (1984) as the source, but the quoted value cannot be found there.
- 90)** Value obtained by estimating the diffusion coefficient for NO_3 to be $D = 1.0 \times 10^{-5} \text{ cm}^2/\text{s}$.
- 91)** Jacob (1986) assumes that NO_3 has the same Henry's law constant as HNO_3 .
- 92)** Seinfeld and Pandis (1997) probably refer to the incorrect value given by Pandis and Seinfeld (1989).
- 93)** Calculated from the solvation free energy.
- 94)** Calculated from the solvation free energy.
- 95)** Calculated from the solvation free energy.
- 96)** This value was extrapolated from data at $T = 230 \text{ K}$ and $T = 273 \text{ K}$.
- 97)** Robinson et al. (1997) applied an empirical correlation between Henry's law solubilities and boiling points from Schwartz and White (1981).
- 98)** Estimate based on the relation between boiling points and Henry's law constants for other nitrogen oxides from Schwartz and White (1981).
- 99)** Fast, irreversible hydrolysis is assumed, which is equivalent to an infinite effective Henry's law constant.
- 100)** Calculated based on the method by Meylan and Howard (1991).
- 101)** Lelieveld and Crutzen (1991) assume the temperature dependence to be the same as for $\alpha(\text{H}^+) \alpha(\text{NO}_3^-) / p(\text{HNO}_3)$ in Schwartz and White (1981).
- 102)** $H'_s = 2.6 \times 10^7 \times \exp\left(8700 \text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$
- 103)** $H'_s = 2.4 \times 10^7 \times \exp\left(8700 \text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$

- 104** Pandis and Seinfeld (1989) refer to Schwartz (1984) as the source, but it is probably from Schwartz and White (1981).
- 105** The value is incorrect. See erratum by Brimblecombe and Clegg (1989).
- 106** Möller and Mauersberger (1992) assumed the solubility of HNO_4 to be comparable to that of HNO_3 .
- 107** $H'_s = 9.4 \times 10^1 \times \exp\left(7400 \text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$
- 108** The data from Dean et al. (1973) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-164.52717 + 8214.77776/T + 21.97482 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 109** The data from Ashton et al. (1968) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-279.21972 + 13536.60588/T + 38.97386 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 110** The data from Dean et al. (1973) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-318.29953 + 15733.17858/T + 44.55320 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 111** The value presented here appears to be the total solubility of chlorine (i.e., the sum of Cl_2 and HOCl) at a partial pressure of $p(\text{Cl}_2) = 101325 \text{ Pa}$. This is different from Henry's law constant, which is defined at extrapolation to infinite dilution.
- 112** Young (1983) recommends values calculated from Table 1 of Adams and Edmonds (1937). Thus, the data refer to effective values that take into account the hydrolysis in the aqueous phase:
- $$H_{s,\text{eff}} = ([\text{Cl}_2] + [\text{HOCl}])/p(\text{Cl}_2).$$
- In addition, the values apply to a partial pressure of $p(\text{Cl}_2) = 101325 \text{ Pa}$, and not to infinite dilution.
- 113** The same experimental data were also published by Whitney and Vivian (1941b).
- 114** The data from Yakovkin (1900) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-122.31264 + 7690.40834/T + 15.63947 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 115** Leait (1986) converted the total solubility of chlorine in pure water from Adams and Edmonds (1937) to an intrinsic Henry's law constant.
- 116** Adams and Edmonds (1937) re-analyzed the data from Yakovkin (1900) and Arkadiev (1918), considering deviations from the perfect gas law. They calculated the total solubility of chlorine (i.e., the sum of Cl_2 and HOCl) at several partial pressures of Cl_2 . This is different from Henry's law constant, which is defined at extrapolation to infinite dilution.
- 117** Arkadiev (1918) re-analyzed the measurements of Yakovkin (1900). In addition to the data between 15°C and 83.4°C , he also analyzed the experimental results at 0°C and obtained a dimensionless Henry solubility of $H_s^{cc} = 4.115$ at that temperature.
- 118** The value of ΔH° listed in Table 2 of Bartlett and Margerum (1999) is incorrect. The correct value can be found in the text on page 3411.
- 119** Wilhelm et al. (1977) present a fitting function for Cl_2 based on four papers which are cited in the footnotes of Table I. However, Bunsen (1855b) and Bunsen (1855c) do not contain any data for Cl_2 , and the data from Whitney and Vivian (1941a) and Whitney and Vivian (1941b) are inconsistent with the fitting function.
- 120** Calculated from the free energy of solution by Schwarz and Dodson (1984).
- 121** $H'_s = 2.0 \times 10^7 \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$
- 122** $H'_s = 2.0 \times 10^7 \times \exp\left(9000 \text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$
- 123** $H'_s = 2.0 \times 10^7 \times \exp\left(9000 \text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$
- 124** $H'_s = 2.0 \times 10^7 \times \exp\left(9000 \text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$
- 125** The data from Dean and Lange (1999) were fitted to the three-parameter equation: $H_s^{cp} = \exp(9.16427 + 45.13997/T - 1.92853 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 126** Pandis and Seinfeld (1989) refer to Marsh and McElroy (1985) as the source, but the quoted value cannot be found there.
- 127** This value was extrapolated from data at $T = 215 \text{ K}$ and $T = 263 \text{ K}$.
- 128** Value at $\text{pH} = 6.5$.
- 129** Value at $T = 200 \text{ K}$.
- 130** Secoy and Cady (1941) measured the gas–aqueous equilibrium constant $p(\text{Cl}_2\text{O})/c(\text{HOCl})^2$ but not the intrinsic Henry's law constant of Cl_2O .
- 131** Ourisson and Kastner (1939) measured the gas–aqueous equilibrium constant $p(\text{Cl}_2\text{O})/c(\text{HOCl})^2$ but not the intrinsic Henry's law constant of Cl_2O .
- 132** The data from this work were fitted to the three-parameter equation: $H_s^{cp} = \exp(1680.49677 - 69933.08019/T - 254.37188 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 133** The gas–aqueous equilibrium constant $p(\text{Cl}_2\text{O})/c(\text{HOCl})^2$ was combined with the temperature-dependent aqueous-phase hydration constant $c(\text{HOCl})^2/c(\text{Cl}_2\text{O})$ from Roth (1929) in order to calculate the intrinsic Henry's law constant of Cl_2O .

- 134)** Data for the equilibrium between gaseous Cl_2O and aqueous HOCl were taken from Secoy and Cady (1941).
- 135)** Data for the equilibrium between gaseous Cl_2O and aqueous HOCl were taken from Ourisson and Kastner (1939).
- 136)** Value at $T = 277\text{ K}$.
- 137)** The recommended value from Wilhelm et al. (1977) appears to be dubious as it refers to Secoy and Cady (1941), who do not provide a value for the intrinsic Henry's law constant of Cl_2O .
- 138)** Young (1983) cites data from Secoy and Cady (1941). However, that paper only describes the equilibrium between gas-phase Cl_2O and aqueous-phase HOCl . A Henry's law constant of Cl_2O is not provided. In addition, the values given by Young (1983) are not extrapolated to infinite dilution but to 1 atm partial pressure of Cl_2O . It is not explained how the nonlinear pressure dependence was extrapolated to 1 atm.
- 139)** Wilhelm et al. (1977) cite Secoy and Cady (1941) as the source for their value. However, that paper only describes the equilibrium between gas-phase Cl_2O and aqueous-phase HOCl . A Henry's law constant of Cl_2O is not provided.
- 140)** Even though Haller and Northgraves (1955) have been cited several times as the source of the ClO_2 solubility data, they did not perform any measurements. They took the data from the 1952 edition of the Kirk-Othmer Encyclopedia of Chemical Technology which apparently reproduced data from Holst (1944).
- 141)** Derived as a fitting parameter used in numerical modeling.
- 142)** Robinson et al. (1997) assumed that the entropy of vaporization is the same for HOCl and ClNO_3 according to Trouton's rule. On their page 3592, they mention a value of 7 M atm^{-1} at 250 K . However, checking their Fig. 9 and applying the temperature-dependence equation from their Table 3, it seems that the value of 7 M atm^{-1} refers to 298 K , not 250 K .
- 143)** Dubik et al. (1987) measured the solubility in concentrated salt solutions (natural brines).
- 144)** Value given here as quoted by McCoy et al. (1990).
- 145)** The data from Dean and Lange (1999) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-148.75612 + 9709.79389/T + 19.53402 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.
- 146)** $H_s' = 8.2 \times 10^9 \times \exp\left(10000\text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$
- 147)** $H_s' = 1.3 \times 10^{10} \times \exp\left(10000\text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$
- 148)** $H_s' = 7.0 \times 10^9 \times \exp\left(10000\text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$
- 149)** Chameides and Stelson (1992) give a value of $H_s' = 7.1 \times 10^9 \times \exp\left(6100\text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$. They refer to Jacob (1986) and Chameides (1984) as the source, but this value cannot be found there.
- 150)** The data from Dean and Lange (1999) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-60.28318 + 2830.41867/T + 8.66642 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 151)** The value is from Table 1 of the paper. However, *J. Geophys. Res.* forgot to print the tables, and I received them directly from the author.
- 152)** The value presented for HOBr is incorrect. A corrected version was later published by Burkholder et al. (2019).
- 153)** Fickert (1998) extracted a value from wetted-wall flow tube experiments. However, it was later discovered that under the experimental conditions no evaluation of H_s is possible (John Crowley, personal communication, 1999).
- 154)** Value at $T = 275\text{ K}$.
- 155)** Value at $T = 290\text{ K}$.
- 156)** Calculated using data from Wagman et al. (1982) and the aqueous-phase equilibrium $\text{Cl}_2 + \text{Br}_2 \rightleftharpoons 2\text{ BrCl}$ from Wang et al. (1994).
- 157)** Thompson and Zafiriou (1983) quote a paper as the source that gives only the solubility but not the Henry's law constant.
- 158)** Calculated from the free energy of solution by Schwarz and Bielski (1986).
- 159)** $H_s' = 2.5 \times 10^{10} \times \exp\left(9800\text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$
- 160)** $H_s' = 2.1 \times 10^{10} \times \exp\left(9800\text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$
- 161)** Saiz-Lopez et al. (2014) refer to Saiz-Lopez et al. (2008) as the source, but the quoted value cannot be found there.
- 162)** It is unclear to which isomer the value of the Henry's law constant refers to.
- 163)** Assumed to be infinity by analogy with INO_3 .
- 164)** Thompson and Zafiriou (1983) assume that $H_s^{cp}(\text{HOI})$ is between $4.4 \times 10^{-1} \text{ mol m}^{-3} \text{ Pa}^{-1}$ and $4.4 \times 10^2 \text{ mol m}^{-3} \text{ Pa}^{-1}$.
- 165)** Badia et al. (2019) assume that INO_2 has the same Henry's law constant as BrNO_2 .
- 166)** Data taken from the AGRITOX database file agritox-20210608.zip.

- 167)** Fogg and Young (1988) provide two different fitting functions: one for $T < 283.2$ K and one for $T > 283.2$ K. At $T = 283.2$ K, the functions have different values and different slopes. Here, only the function that is valid at T^\ominus is used.
- 168)** The data from Clarke and Glew (1971) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-133.37135 + 7422.07576/T + 17.82903 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.
- 169)** The data from Schoenfeld (1855) were fitted to the three-parameter equation: $H_s^{cp} = \exp(98.96644 - 3021.28876/T - 16.78233 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 170)** The data from Dean and Lange (1999) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-122.57010 + 6962.28299/T + 16.20245 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.
- 171)** The parameter fit for the temperature dependence is incorrect. A corrected version was later presented by Iliuta and Larachi (2007).
- 172)** The data from Clarke and Glew (1971) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-152.96053 + 8324.82999/T + 20.73129 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.
- 173)** Obtained with D₂O as solvent.
- 174)** Value at $T = 353$ K.
- 175)** The data from Schoenfeld (1855) were fitted to the three-parameter equation: $H_s^{cp} = \exp(265.79241 - 9131.99684/T - 42.01987 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 176)** Value given here as quoted by Rodríguez-Sevilla et al. (2002).
- 177)** The data from Dean and Lange (1999) were fitted to the three-parameter equation: $H_s^{cp} = \exp(153.05871 - 4328.05304/T - 25.05397 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 178)** Marti et al. (1997) give partial pressures of H₂SO₄ over a concentrated solution (e.g., 2.6×10^{-9} Pa for 54.1 wt % at 298 K). Extrapolating this to dilute solutions can only be considered an order-of-magnitude approximation for H_s .
- 179)** Ayers et al. (1980) give partial pressures of H₂SO₄ over concentrated solutions at high temperatures. Extrapolating this to dilute solutions can only be considered an order-of-magnitude approximation for H_s .
- 180)** Gmitro and Vermeulen (1964) give partial pressures of H₂SO₄ over a concentrated solution (e.g., 10^{-7} mmHg for 70 wt % at 298 K). Extrapolating this to dilute solutions can only be considered an order-of-magnitude approximation for H_s .
- 181)** Clegg et al. (1998) estimate a Henry's law constant of $5 \times 10^{11} \text{ atm}^{-1}$ at 303.15 K for the reaction $\text{H}_2\text{SO}_4(\text{g}) \rightleftharpoons 2 \text{H}^+(\text{aq}) + \text{SO}_4^{2-}(\text{aq})$ but do not give a definition for it. Probably it is defined as $x^2(\text{H}^+) \times x(\text{SO}_4^{2-})/p(\text{H}_2\text{SO}_4)$, where x is the aqueous-phase mixing ratio.
- 182)** The data from Bullister et al. (2002) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-281.50843 + 14256.43847/T + 38.73689 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 183)** The data presented for SF₆ in Table II of Shoor et al. (1969) appear to be incorrect and are not reproduced here.
- 184)** The data from Ashton et al. (1968) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-431.90650 + 20715.81650/T + 61.33841 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 185)** Value from the validation set for checking whether the model is satisfactory for compounds that are absent from the training set.
- 186)** Experimental value, extracted from HENRYWIN.
- 187)** Estimation based on the quotient between vapor pressure and water solubility, extracted from HENRYWIN.
- 188)** The data presented for helium in Table II of Shoor et al. (1969) appear to be incorrect and are not reproduced here.
- 189)** The data from Morrison and Johnstone (1954) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-267.15298 + 11440.04263/T + 37.95994 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.
- 190)** The data from Lannung (1930) were fitted to the three-parameter equation: $H_s^{cp} = \exp(84.35043 - 4135.59197/T - 14.55881 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 191)** Calculated employing molecular force field models for the solutes from Warr et al. (2015).
- 192)** The data from Dean and Lange (1999) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-153.15219 + 6434.36008/T + 20.89911 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.
- 193)** The data from Morrison and Johnstone (1954) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-171.84866 + 7492.61303/T + 23.58966 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.
- 194)** The data from Lannung (1930) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-40.04033 + 1266.80589/T + 4.12574 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 195)** The data from Dean and Lange (1999) were fitted to the three-parameter equation:

- $H_s^{cp} = \exp(-150.94728 + 6639.96438/T + 20.42365 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 196)** The data from Rettich et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-178.55165 + 8674.63293/T + 24.26764 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 197)** The data from Murray and Riley (1970) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-151.84230 + 7548.13106/T + 20.24085 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 198)** The data from Shoor et al. (1969) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-177.19900 + 8740.49327/T + 23.99118 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 199)** The data from Ashton et al. (1968) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-160.52023 + 7898.05096/T + 21.56102 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 200)** The data from Morrison and Johnstone (1954) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-159.49603 + 7859.86242/T + 21.39868 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 201)** The data from Lannung (1930) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-183.19260 + 8856.79081/T + 24.97248 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 202)** Calculated employing molecular force field models for the solutes from Vrabec et al. (2001).
- 203)** The data from Dean and Lange (1999) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-143.77232 + 7158.59719/T + 19.05403 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 204)** The data from Morrison and Johnstone (1954) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-153.87925 + 7855.39037/T + 20.51280 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 205)** Two series of measurements with considerably different results are presented by von Antropoff (1910) for krypton.
- 206)** The data from Dean and Lange (1999) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-220.92114 + 10903.79433/T + 30.49407 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 207)** The value b for Xe given by Himmelblau (1960) in their Table III is incorrect. Most likely, only a minus sign is missing.
- 208)** The data from Morrison and Johnstone (1954) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-165.83721 + 8808.62019/T + 22.15186 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 209)** The data from Dean and Lange (1999) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-199.40126 + 10306.10786/T + 27.18844 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 210)** The data from Lewis et al. (1987) were fitted to the three-parameter equation: $H_s^{cp} = \exp(5.03587 + 1555.37916/T - 3.42648 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 211)** Calculated employing molecular force field models for the solutes from Mick et al. (2016).
- 212)** The data from Dean and Lange (1999) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-240.66156 + 12686.97685/T + 33.12171 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 213)** The data from Sisi et al. (1971) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-81.82525 + 4954.57763/T + 10.19950 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 214)** Solubility in natural sea water. Measurements at different salinities were also performed but only at a fixed temperature of 296.15 K.
- 215)** Temperature dependence calculated using linear free energy relationships (LFERs).
- 216)** Petersen et al. (1998) give the invalid unit “ $\text{mol L}^{-1} \text{ ppm}^{-1}$ ”. Here, it is assumed that “ppm” is used as a synonym for “ 10^{-6} atm ”.
- 217)** Shon et al. (2005) refer to Petersen et al. (1998) as the source, but a different value is listed there.
- 218)** Value at $T = 333 \text{ K}$.
- 219)** Calculated using linear free energy relationships (LFERs).
- 220)** More than one reference is given as the source of this value.
- 221)** Hedgecock et al. (2005) refer to Hedgecock and Pirrone (2004) as the source, but this value cannot be found there.
- 222)** Clever and Young (1987) recommend the data from Rettich et al. (1981).
- 223)** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-133.87728 + 6629.97157/T + 17.62624 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 224)** The data from Scharlin and Battino (1995) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-206.41168 + 10058.77208/T + 28.34417 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 225)** The data from Shoor et al. (1969) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-201.05778 + 9920.37989/T + 27.48020 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.

- 226)** The same value was also published in McAuliffe (1963).
- 227)** The same value was also published in McAuliffe (1966).
- 228)** The data from Morrison and Billett (1952) were fitted to the three-parameter equation:
$$H_s^{cp} = \exp(-195.92072 + 9624.37184/T + 26.74976 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.
- 229)** The data from Winkler (1901) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-203.15902 + 9951.75251/T + 27.82679 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 230)** Yao et al. (2002) compared two QSPR methods and found that radial basis function networks (RBFNs) are better than multiple linear regression. In their paper, they provide neither a definition nor the unit of their Henry's law constants. Comparing the values with those that they cite from Yaws (1999), it is assumed that they use the variant H_v^{px} and the unit atm.
- 231)** English and Carroll (2001) provide several calculations. Here, the preferred value with explicit inclusion of hydrogen bonding parameters from a neural network is shown.
- 232)** Value from the training dataset.
- 233)** Calculated with a principal component analysis (PCA); see Suzuki et al. (1992) for details.
- 234)** The data from Dean and Lange (1999) were fitted to the three-parameter equation:
$$H_s^{cp} = \exp(-185.72813 + 9197.97387/T + 25.21142 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.
- 235)** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-109.51433 + 6313.03876/T + 13.60483 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 236)** The data from Morrison and Billett (1952) were fitted to the three-parameter equation:
$$H_s^{cp} = \exp(-215.51394 + 10861.98666/T + 29.50128 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.
- 237)** The data from Winkler (1901) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-277.60377 + 13887.90452/T + 38.63046 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 238)** Value given here as quoted by Gharagheizi et al. (2010).
- 239)** Calculated using linear free energy relationships (LFERs).
- 240)** Calculated using SPARC Performs Automated Reasoning in Chemistry (SPARC).
- 241)** Calculated using COSMOtherm.
- 242)** Temperature is not specified.
- 243)** Value from the training dataset.
- 244)** Calculated using the GROMHE model.
- 245)** Calculated using the SPARC approach.
- 246)** Calculated using the HENRYWIN method.
- 247)** Calculated using a combination of a group contribution method and neural networks.
- 248)** Modarresi et al. (2005) use different descriptors for the QSPR models. They conclude that their "COSA" method and the artificial neural network (ANN) are best. However, as COSA is not ideal for hydrocarbons with low solubility, only results obtained with ANN are shown here.
- 249)** Yaffe et al. (2003) present QSPR results calculated with the fuzzy ARTMAP (FAM) and with the back-propagation (BK-Pr) method. They conclude that FAM is better. Only the FAM results are shown here.
- 250)** Value from the training set.
- 251)** The data from Dean and Lange (1999) were fitted to the three-parameter equation:
$$H_s^{cp} = \exp(-249.13770 + 12672.58357/T + 34.34947 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.
- 252)** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-275.67877 + 14048.75446/T + 38.16041 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 253)** The data from Morrison and Billett (1952) were fitted to the three-parameter equation:
$$H_s^{cp} = \exp(-257.69118 + 13189.22089/T + 35.51019 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.
- 254)** The H298 and A, B, C data listed in Table 5-4 of Burkholder et al. (2019) are inconsistent, with 14 % difference.
- 255)** The H298 and A, B, C data listed in Table 5-4 of Burkholder et al. (2015) are inconsistent, with 14 % difference.
- 256)** The H298 and A, B, C data listed in Table 5.4 of Sander et al. (2011) are inconsistent, with 14 % difference.
- 257)** The H298 and A, B, C data listed in Table 5.4 of Sander et al. (2006) are inconsistent, with 14 % difference.
- 258)** The data from Morrison and Billett (1952) were fitted to the three-parameter equation:
$$H_s^{cp} = \exp(-257.40529 + 13425.82235/T + 35.27658 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.
- 259)** Value given here as quoted by Dupeux et al. (2022).
- 260)** Calculated using the COSMO-RS method.
- 261)** Value from the validation dataset.

- 262)** The H298 and *A*, *B*, *C* data listed in Table 5-4 of Burkholder et al. (2019) are inconsistent, with 6 % difference.
- 263)** The H298 and *A*, *B*, *C* data listed in Table 5-4 of Burkholder et al. (2015) are inconsistent, with 6 % difference.
- 264)** The H298 and *A*, *B*, *C* data listed in Table 5.4 of Sander et al. (2011) are inconsistent, with 6 % difference.
- 265)** The H298 and *A*, *B*, *C* data listed in Table 5.4 of Sander et al. (2006) are inconsistent, with 6 % difference.
- 266)** Fogg and Sangster (2003) cite an incorrect fitting function from Hayduk (1986).
- 267)** The fitting function and the data in the table on page 34 of Hayduk (1986) are inconsistent by a factor of about 3. A comparison with the original measurements by Wetlaufer et al. (1964) shows that the data in the table are correct. Refitting the data suggests that the third fitting parameter should be 52.4651, not 53.4651.
- 268)** Value from the test set.
- 269)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 15 % difference.
- 270)** The data from Jou and Mather (2000) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-400.38105 + 20169.61328/T + 56.35286 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with *T* in K.
- 271)** The paper by Jou and Mather (2000) also contains high-temperature data. However, only data up to 373.2 K were used here to calculate the temperature dependence.
- 272)** Value from the validation dataset.
- 273)** Value from the test set.
- 274)** The data from Shoor et al. (1969) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-311.59148 + 15699.27148/T + 43.32183 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with *T* in K.
- 275)** Value from the test dataset.
- 276)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.
- 277)** Apparently, the values in Table 2 of Park et al. (1997) show $\log_{10}(K_{aw})$ and not K_{aw} as their figure caption states.
- 278)** Extrapolated from data measured between 40 °C and 80 °C.
- 279)** Data are taken from the report by Howe et al. (1987).
- 280)** Value from the training set.
- 281)** In their Table 8, Staudinger and Roberts (1996) incorrectly cite a value given by Ashworth et al. (1988).
- 282)** The same data were also published in Hansen et al. (1995).
- 283)** Hansen et al. (1993) found that the solubility of 2-methylhexane increases with temperature.
- 284)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 5 % difference.
- 285)** The data from Dohányosová et al. (2004) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-670.94997 + 33188.34075/T + 95.95541 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with *T* in K.
- 286)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 21 % difference.
- 287)** The data from Dohányosová et al. (2004) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-792.29258 + 38089.35992/T + 114.36667 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with *T* in K.
- 288)** Data taken from the Supplement.
- 289)** Calculated using the EPI Suite (v4.0) method.
- 290)** Calculated using the SPARC (v4.2) method.
- 291)** Calculated using the COSMOtherm (v2.1) method.
- 292)** Calculated using the ABSOLV (ADMEBoxes v4.1) method.
- 293)** Mackay et al. (2006a) list a vapor pressure *p*, a solubility *c*, and a Henry's law constant calculated as *p/c*. However, the data are internally inconsistent and deviate by more than 10 %.
- 294)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 23 % difference.
- 295)** Value at *T* = 294 K.
- 296)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 13 % difference.
- 297)** The data listed in Tables 2 and 3 of Dewulf et al. (1999) are inconsistent, with 5 % difference.
- 298)** Value at *T* = 301 K.
- 299)** Value given here as quoted by Staudinger and Roberts (1996).
- 300)** Value from the test set for true external validation.
- 301)** The data from Dohányosová et al. (2004) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-365.40645 + 19821.40051/T + 50.78223 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with *T* in K.
- 302)** The data from Dohányosová et al. (2004) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-383.72514 + 20514.87228/T + 53.42859 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with *T* in K.
- 303)** The data from Dohányosová et al. (2004) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-369.42853 + 19642.40603/T + 51.34116 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with *T* in K.

- 304** Haynes (2014) refers to Mackay and Shiu (1981), but that article lists this value for 1,4-dimethylcyclohexane, not for 1,2-dimethylcyclohexane.
- 305** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.
- 306** The data from Dohányosová et al. (2004) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-346.32561 + 18710.63122/T + 47.87398 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.
- 307** The data from Maaßen (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-187.57836 + 9639.75245/T + 25.50544 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 308** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-166.44394 + 8613.39266/T + 22.39721 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 309** The data from Morrison and Billett (1952) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-175.14997 + 9028.26949/T + 23.67675 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.
- 310** The data from Dean and Lange (1999) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-221.00286 + 11107.47493/T + 30.50401 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.
- 311** The data from Maaßen (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-168.51157 + 9378.22622/T + 22.33127 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 312** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-241.54655 + 12718.75981/T + 33.18333 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 313** The data from Serra and Palavra (2003) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-261.78355 + 13728.91505/T + 36.10688 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.
- 314** According to Donahue and Prinn (1993), the value is incorrect.
- 315** Wang et al. (2017) provide separate data for *cis* and *trans*. However, since both isomers are identified by the same SMILES string in their study, it is unclear how the stereochemistry has been taken into account.
- 316** Values for the Henry's law constants shown in Fig. 3 of Martins et al. (2017) were obtained from Simão Pinho (personal communication, 2022).
- 317** Ebert et al. (2023) present “curated experimental” Henry's law constants from the literature but do not provide any references. It is only mentioned that the value is from multiple sources and obtained from experimental vapor pressure and water solubility.
- 318** The data from Dohányosová et al. (2004) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-169.70973 + 10843.51763/T + 21.91320 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.
- 319** Ebert et al. (2023) present “curated experimental” Henry's law constants from the literature but do not provide any references. It is only mentioned that the value is from a single database or data collection and obtained from experimental vapor pressure and water solubility.
- 320** Approximate value extracted from Fig. 1 of Maillard and Rosenthal (1952).
- 321** The same article was also published in *Monatshefte für Chemie* 23, 489–501 (1902).
- 322** Value given here as quoted by Fogg et al. (2002).
- 323** The data from Dean and Lange (1999) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-143.25283 + 7542.89338/T + 19.33269 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.
- 324** Incorrect data are given by Burkholder et al. (2019) for 1-butyne. The number in their table should probably be 0.0569, not 0.569.
- 325** Regression and individual data points of Simpson and Lovell (1962) are inconsistent, with 5 % difference.
- 326** Using the theoretical initial concentration (H_0); see Zhang et al. (2013) for details.
- 327** Average of all duplicates (H_1); see Zhang et al. (2013) for details.
- 328** Sieg et al. (2009) also provide data for supercooled water. Here, only data above 0 °C were used to calculate the temperature dependence.
- 329** Extrapolated from data above 298 K.
- 330** It was found that H_s changes with the concentration of the solution.
- 331** The data from Görgényi et al. (2002) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-346.88030 + 18421.52810/T + 48.91393 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.
- 332** Value obtained by applying a modified batch air-stripping method, otherwise called the vapor entry loop (VEL) method; see Kochetkov et al. (2001) for details.
- 333** Value obtained by applying the static head space (HS) method; see Kochetkov et al. (2001) for details.
- 334** The data from Khalfauoui and Newsham (1994b) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-129.36095 + 8999.48627/T + 16.29087 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$$
, with T in K.

- 335)** The data from Robbins et al. (1993) were fitted to the three-parameter equation: $H_s^{cp} = \exp(189.41389 - 5855.10843/T - 30.90289 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 336)** Value at $T = 302 \text{ K}$.
- 337)** The data from Cooling et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-231.38331 + 13640.47358/T + 31.46504 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 338)** Calculated using G_h and H_h from Table 2 in Andon et al. (1954). Note that the thermodynamic functions in that table are not based on their α in Table 1. Instead, the expression $\exp(-G_h/(RT))$ yields the Henry's law constant H_s^{sp} in the unit 1/atm.
- 339)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 11 % difference.
- 340)** Values for salt solutions are also available from this reference.
- 341)** The data from Görgényi et al. (2002) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-468.28203 + 24099.39947/T + 66.85565 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 342)** Value obtained by applying the EPICS method; see Ayuttaya et al. (2001) for details.
- 343)** Value obtained by applying the static cell (linear form) method; see Ayuttaya et al. (2001) for details.
- 344)** Value obtained by applying the direct phase concentration ratio method; see Ayuttaya et al. (2001) for details.
- 345)** Value obtained by applying the static cell (nonlinear form) method; see Ayuttaya et al. (2001) for details.
- 346)** The data from Robbins et al. (1993) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-573.76928 + 28956.65188/T + 82.51911 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 347)** The temperature dependence is recalculated using the data in Table 4 of Lamarche and Droste (1989) and not taken from their Table 5.
- 348)** Apparently, the vapor pressure of toluene was used to calculate its Henry's law constant. However, no source is provided.
- 349)** Value given here as quoted by Dewulf et al. (1995).
- 350)** The data from Robbins et al. (1993) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-1350.74178 + 64760.28328/T + 197.85937 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 351)** The data from Schwaradt et al. (2021) were fitted to the three-parameter equation: $H_s^{cp} = \exp(100.47045 - 2603.76722/T - 17.31043 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 352)** Value given here as quoted by HSDB (2015).
- 353)** The regression parameters for ethylbenzene in Table 1 of Schwaradt et al. (2021) are wrong. Corrected values from Schwaradt et al. (2022) are used here.
- 354)** The data from Schwaradt et al. (2021) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-176.88587 + 11290.74921/T + 23.22869 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 355)** Different types of Henry's law constants of Ryu and Park (1999) are inconsistent, with 14 % difference.
- 356)** The data from Robbins et al. (1993) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-371.46947 + 20514.07888/T + 51.95086 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 357)** The value listed as A for diethylbenzene is probably not A but the Henry's law volatility constant H_v^{px} at 298 K.
- 358)** Yaffe et al. (2003) list this species twice in their table, with different values. As it is unclear which is correct, the data are not reproduced here.
- 359)** Erratum for page 365 of Fogg and Sangster (2003): data from Kondoh and Nakajima (1997) are cited incorrectly, giving the same values at 308.2 K and 318.2 K, respectively.
- 360)** Value from the external prediction set.
- 361)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 8 % difference.
- 362)** Because of discrepancies between the values shown in Tables 4 and 5 of Shiu and Ma (2000), the data are not used here.
- 363)** Effective Henry's law constants at several pH values are provided by van Ruth and Villeneuve (2002). Here, only the value at pH = 3 is shown.
- 364)** The values of Dewulf et al. (1999) are not used here because, according to them, the calculated regression does not match the theoretical expectation for this species.
- 365)** Calculated using the COSMO-RS method.
- 366)** Value given here as quoted by Haynes (2014).
- 367)** Ebert et al. (2023) present "curated experimental" Henry's law constants from the literature but do not provide any references. It is only mentioned that the value is from a single database or data collection and measured directly.
- 368)** Literature-derived value.
- 369)** Final adjusted value.
- 370)** Value given here as quoted by Petrasek et al. (1983).
- 371)** Calculated using COSMOtherm.
- 372)** Calculated using the COSMO-RS method.

- 373)** Ebert et al. (2023) present “curated experimental” Henry's law constants from the literature but do not provide any references. It is only mentioned that the value is from a single original paper and obtained from experimental vapor pressure and water solubility.
- 374)** Value at $T = 299$ K.
- 375)** Value at $T = 283$ K.
- 376)** Cargill (1990) recommends the data from Rettich et al. (1982).
- 377)** The data from Rettich et al. (1982) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-188.21737 + 8974.05844/T + 25.72558 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 378)** The data from Douglas (1967) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-180.92848 + 8514.05914/T + 24.68060 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 379)** Solubility in sea water at 20.99 % chlorinity.
- 380)** The data from Winkler (1901) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-163.07031 + 7890.85881/T + 21.94517 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 381)** The data from Dean and Lange (1999) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-161.93492 + 7852.78262/T + 21.76812 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 382)** The data from Zheng et al. (1997) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-144.44443 + 8071.06186/T + 19.20040 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 383)** The data from Murray and Riley (1971) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-167.86941 + 9146.24434/T + 22.67331 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 384)** The data from Morrison and Billett (1952) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-126.83009 + 7302.88179/T + 16.55553 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 385)** The data from Bohr (1899) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-140.70007 + 7951.73013/T + 18.60961 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 386)** As mentioned by Fogg and Sangster (2003), the fitting equation by Scharlin (1996) is erroneous. It appears that a correction factor of about 10^6 is necessary for consistency with their own data in Table 1.
- 387)** The data from Dean and Lange (1999) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-138.54120 + 7859.16351/T + 18.28486 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 388)** Keßel et al. (2017) provide data at several pH values. Here, only the value at $\text{pH} = 2$ is shown because hydrolysis occurs in more alkaline solutions.
- 389)** The H298 and A , B , C data listed in Table 5.4 of Sander et al. (2011) are inconsistent, with 92 % difference.
- 390)** This paper supersedes earlier work with more concentrated solutions (Butler et al., 1933).
- 391)** Value given here as quoted by Gaffney et al. (1987).
- 392)** Value given here as quoted by Hine and Weimar (1965).
- 393)** The H298 and A , B , C data listed in Table 5-4 of Burkholder et al. (2019) are inconsistent, with 10 % difference.
- 394)** The H298 and A , B , C data listed in Table 5-4 of Burkholder et al. (2015) are inconsistent, with 10 % difference.
- 395)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 8 % difference.
- 396)** The H298 and A , B , C data listed in Table 5.4 of Sander et al. (2011) are inconsistent, with 10 % difference.
- 397)** Extrapolated from data above 298 K.
- 398)** Koga (1995) found that *tert*-butanol does not obey Henry's law at $c > 3.8$ mM.
- 399)** Incorrect data are given by Burkholder et al. (2019) for 2-methyl-2-propanol. The correct parameter for the temperature dependence is $C = 37.98$ (Robert E. Huie, personal communication, 2021).
- 400)** Incorrect data are given by Burkholder et al. (2015) for 2-methyl-2-propanol. The correct parameter for the temperature dependence is $C = 37.98$ (Robert E. Huie, personal communication, 2021).
- 401)** Calculated for an aqueous solution containing 60 % ethanol by volume as the solvent.
- 402)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.
- 403)** Value obtained by Saxena and Hildemann (1996) using the group contribution method.
- 404)** Value at $T = 300$ K.
- 405)** The error given by Suzuki et al. (1992) is not the difference between the observed and the calculated value, as it should be. It is unclear which of the numbers is wrong.
- 406)** The species is probably 2,3-dimethyl-2-butanol and not 2,3-dimethylbutanol as listed in Hine and Mookerjee (1975).
- 407)** Rumble (2021) refers to Moore et al. (1995) as the source, but this value cannot be found there.

- 408)** It is assumed here that entry number 72 in Table 1 of Yaws et al. (1997) refers to 2-methyl-1-heptanol, not 2-methyl-2-heptanol.
- 409)** KWAC and KAWp from Table 2 of Lei et al. (2007) are inconsistent, with 10 % difference.
- 410)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 8 % difference.
- 411)** Different types of Henry's law constants of Yaws and Yang (1992) are inconsistent, with 16 % difference.
- 412)** Different types of Henry's law constants of Yaws and Yang (1992) are inconsistent, with 10 % difference.
- 413)** Value at $T = 307$ K.
- 414)** Value given here as quoted by Mackay et al. (1995).
- 415)** Calculated using SPARC Performs Automated Reasoning in Chemistry (SPARC). It is assumed here that the value refers to $T = 298.15$ K.
- 416)** Value given here as quoted by Hine and Mookerjee (1975).
- 417)** Value at $T = 373$ K.
- 418)** Value at $T = 281$ K.
- 419)** It is assumed here that the thermodynamic data refer to the units $[\text{mol dm}^{-3}]$ and $[\text{atm}]$ as standard states.
- 420)** Value given here as quoted by Shiu et al. (1994).
- 421)** HSDB (2015) refers to Abraham et al. (1994b) as the source, but this value cannot be found there. Maybe the value is taken from Abraham et al. (1990).
- 422)** Mackay et al. (2006c) list a vapor pressure p , a solubility c , and a Henry's law constant calculated as p/c . However, the data are internally inconsistent and deviate by more than 10 %.
- 423)** Betterton (1992) gives Buttery et al. (1969) as the source. However, no data were found in that reference.
- 424)** Intermediate of estimates employing the bond method from the EPI HENRYWIN software.
- 425)** Although Mansfield (2020) writes that his "Table 6 summarizes numerical calculations for formaldehyde and acetaldehyde assuming the values given in Tables 4 and 5", different values for the Henry's law constants are shown in these tables.
- 426)** Saxena and Hildemann (1996) say that this value is unreliable.
- 427)** Calculated using the free energy perturbation (FEP) method.
- 428)** Calculated using the thermodynamic integration (TI) method.
- 429)** Calculated using the Bennett acceptance ratio (BAR) method.
- 430)** Saxena and Hildemann (1996) give a range of $9.9 \times 10^2 \text{ mol m}^{-3} \text{ Pa}^{-1} < H_s^{cp} < 5.9 \times 10^4 \text{ mol m}^{-3} \text{ Pa}^{-1}$.
- 431)** Saxena and Hildemann (1996) give a range of $5.9 \times 10^6 \text{ mol m}^{-3} \text{ Pa}^{-1} < H_s^{cp} < 3.9 \times 10^9 \text{ mol m}^{-3} \text{ Pa}^{-1}$.
- 432)** The formula of 1,2-butanediol is incorrectly given as "HOCH(OH)C₂H₅" by Burkholder et al. (2019).
- 433)** The formula of 1,2-butanediol is incorrectly given as "HOCH(OH)C₂H₅" by Burkholder et al. (2015).
- 434)** Saxena and Hildemann (1996) give a range of $9.9 \times 10^2 \text{ mol m}^{-3} \text{ Pa}^{-1} < H_s^{cp} < 4.9 \times 10^4 \text{ mol m}^{-3} \text{ Pa}^{-1}$.
- 435)** Saxena and Hildemann (1996) give a range of $3.9 \times 10^2 \text{ mol m}^{-3} \text{ Pa}^{-1} < H_s^{cp} < 3.9 \times 10^4 \text{ mol m}^{-3} \text{ Pa}^{-1}$.
- 436)** Calculated based on atmospheric measurements.
- 437)** Calculated using EPI.
- 438)** Calculated using SPARC.
- 439)** Henry's law constants calculated using the GROMHE model. Temperature dependences calculated with the method of Kühne et al. (2005).
- 440)** Isaacman-VanWertz et al. (2016) refer to Raventos-Duran et al. (2010) as the source, but the quoted value cannot be found there.
- 441)** Calculated using GROMHE.
- 442)** Isaacman-VanWertz et al. (2016) refer to a paper by Hilal et al. as the source, but the quoted value cannot be found there.
- 443)** Calculated using SPARC.
- 444)** Calculated using the bond contribution of HENRYWIN.
- 445)** Compernelle and Müller (2014b) recommend H_s^{cp} for 1,7-heptanediol in the range of $4.5 \times 10^4 \text{ mol m}^{-3} \text{ Pa}^{-1} < H_s^{cp} < 8.3 \times 10^4 \text{ mol m}^{-3} \text{ Pa}^{-1}$.
- 446)** Compernelle and Müller (2014b) recommend H_s^{cp} for 1,9-nonanediol in the range of $2.4 \times 10^4 \text{ mol m}^{-3} \text{ Pa}^{-1} < H_s^{cp} < 3.9 \times 10^4 \text{ mol m}^{-3} \text{ Pa}^{-1}$.
- 447)** Compernelle and Müller (2014b) recommend H_s^{cp} for 1,10-decanediol in the range of $2.5 \times 10^4 \text{ mol m}^{-3} \text{ Pa}^{-1} < H_s^{cp} < 3.0 \times 10^4 \text{ mol m}^{-3} \text{ Pa}^{-1}$.
- 448)** Value given here as quoted by Hilal et al. (2008).
- 449)** Calculated using the EPI Suite method at <https://www.epa.gov/tsca-screening-tools/epi-suitetm-estimation-program-interface> (last access: 18 September 2023).
- 450)** Value for the temperature range from 261 K to 281 K.
- 451)** Value at $T = 278$ K.

452) Leriche et al. (2000) assume

$$H_s(\text{ROO}) = H_s(\text{ROOH}) \times H_s(\text{HO}_2)/H_s(\text{H}_2\text{O}_2).$$

453) Lelieveld and Crutzen (1991) assume $H_s(\text{CH}_3\text{OO}) = H_s(\text{HO}_2)$.

454) Jacob (1986) assumes

$$H_s(\text{CH}_3\text{OO}) = H_s(\text{CH}_3\text{OOH}) \times H_s(\text{HO}_2)/H_s(\text{H}_2\text{O}_2).$$

455) Calculated using EVAPORATION and AIOMFAC.

456) Calculated using the GROMHE model.

457) Effective value that takes into account the hydration of HCHO:

$$H_s = ([\text{HCHO}] + [\text{CH}_2(\text{OH})_2])/p(\text{HCHO}).$$

458) Data from Table 1 by Zhou and Mopper (1990) were used to redo the regression analysis. The data for acetone in their Table 2 are incorrect.

459) Dong and Dasgupta (1986) found that the Henry's law constant for HCHO is not a true constant but that it increases with increasing concentration. Note that their expression does not converge asymptotically to a constant value at infinite dilution.

460) Ledbury and Blair (1925) (and also Blair and Ledbury (1925)) measured the solubility of HCHO at very high concentrations around 5 to 15 M. Their value of H_s increases with HCHO concentration. Lelieveld and Crutzen (1991), Hough (1991), and Pandis and Seinfeld (1989) all use these solubility data but do not specify how they extrapolated to lower concentrations. Since the concentration range is far from typical values in atmospheric chemistry, the value is not reproduced here.

461) Value given here as quoted by Möller and Mauersberger (1992).

462) Effective value that takes into account the hydration of the aldehyde:

$$H_s = ([\text{RCHO}] + [\text{RCH}(\text{OH})_2])/p(\text{RCHO}).$$

463) The data from Wieland et al. (2015) were fitted to the three-parameter equation: $H_s^{cp} = \exp(25.01220 + 3596.11696/T - 6.81730 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.

464) Value given here as quoted by Bone et al. (1983).

465) Value suitable for the conditions of a case study in Mexico City.

466) Volkamer et al. (2009) found average effective Henry's law constants for CHOCHO in the range $1.6 \times 10^6 \text{ mol m}^{-3} \text{ Pa}^{-1} < H_s^{cp} < 5.9 \times 10^6 \text{ mol m}^{-3} \text{ Pa}^{-1}$ for solutions containing ammonium sulfate and/or fulvic acid. A salting-in effect by fulvic acid was observed even in the absence of sulfate.

467) Solubility in sulfate aerosol.

468) Woo and McNeill (2015) say that the Henry's law constant was updated based on advances in the literature since McNeill et al. (2012) but do not provide further details.

469) Value at $T = 372 \text{ K}$.

470) The data from Wieland et al. (2015) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-176.35942 + 12895.73116/T + 22.70566 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.

471) The formula of propenal is incorrectly given as "CH₂CHO" by Burkholder et al. (2019).

472) The temperature dependence parameter C for 2-butenal is missing in Burkholder et al. (2019). The correct value is $C = 24.42$ (Robert E. Huie, personal communication, 2021).

473) The data from Buttery et al. (1971) for *trans*-2-octenal are incorrectly cited by Betterton (1992).

474) Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.

475) Calculated under the assumption that ΔG and ΔH are based on $[\text{mol L}^{-1}]$ and $[\text{atm}]$ as the standard states.

476) Calculated using the experimental value adjusted (EVA) method; see McFall et al. (2020) for details.

477) Value at $T = 359 \text{ K}$.

478) Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 5 % difference.

479) Calculated from the slope of $y_{ac}P$ vs x_{ac} , using data from Table VIII in Lichtenbelt and Schram (1985).

480) Value at $T = 313 \text{ K}$.

481) Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.

482) Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 7 % difference.

483) Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.

484) Table S2 in the Supplement of Wu et al. (2022a) contains incorrect data for 3-octanone. Here, the corrected data (Shuang Wu, personal communication, 2022) were used: 2.88×10^{-2} and 1.52×10^{-2} at 25 °C and 35 °C, respectively.

485) Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 7 % difference.

486) The value listed as A for 2,6,8-trimethyl-4-nonanone is probably not A but the Henry's law volatility constant H_v^{px} at 298 K.

487) The data from Wieland et al. (2015) were fitted to the three-parameter equation: $H_s^{cp} = \exp(116.85779 -$

- 1341.05519/ T - 19.91967 ln(T)) mol m⁻³ Pa⁻¹, with T in K.
- 488)** The data from Wieland et al. (2015) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-74.84087 + 9452.88617/T + 7.41865 \ln(T))$ mol m⁻³ Pa⁻¹, with T in K.
- 489)** The value given here was measured at a liquid-phase mixing ratio of 1 μmol mol⁻¹. Servant et al. (1991) found that the Henry's law constant changes at higher concentrations.
- 490)** Abraham (1984) smoothed the values from a plot of enthalpy against carbon number.
- 491)** The value of H_s^\ominus was taken from Keene and Galloway (1986).
- 492)** Calculated using thermodynamic data from Latimer (1952).
- 493)** Value at pH = 4.
- 494)** Calculated using HENRYWIN 3.2 (bond contribution method).
- 495)** At pH = 7.
- 496)** At pH = 10.8.
- 497)** Value at $T = 289$ K.
- 498)** Value at $T = 338$ K.
- 499)** Pecsar and Martin (1966) are quoted as the source. However, only activity coefficients and no vapor pressures are listed there.
- 500)** The H298 and A , B , C data listed in Table 5-4 of Burkholder et al. (2019) are inconsistent, with 6 % difference.
- 501)** The formula of methyl ethanoate is incorrectly given as "CH₃C(O)CH₃" by Burkholder et al. (2015).
- 502)** The H298 and A , B data listed in Table 5-4 of Burkholder et al. (2015) are inconsistent, with 74 % difference.
- 503)** The same data were also published in Kieckbusch and King (1979a).
- 504)** The H298 and A , B , C data listed in Table 5-4 of Burkholder et al. (2019) are inconsistent, with 7 % difference.
- 505)** The formula of propyl ethanoate is incorrectly given as "CH₃C(O)C₃H₈" by Burkholder et al. (2019).
- 506)** Katritzky et al. (1998) list this species twice in their table, with different values. As it is unclear which of them is correct, the data are not reproduced here.
- 507)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 5 % difference.
- 508)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.
- 509)** The value listed as A for n -heptyl acetate is probably not A but the Henry's law volatility constant H_v^{px} at 298 K.
- 510)** The value listed as A for n -octyl acetate is probably not A but the Henry's law volatility constant H_v^{px} at 298 K.
- 511)** Betterton (1992) gives Kieckbusch and King (1979b) as the source. However, no data were found in that reference.
- 512)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.
- 513)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 5 % difference.
- 514)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.
- 515)** The data from Wieland et al. (2015) were fitted to the three-parameter equation: $H_s^{cp} = \exp(34.46832 + 3269.29552/T - 8.76905 \ln(T))$ mol m⁻³ Pa⁻¹, with T in K.
- 516)** Burkholder et al. (2019) refer to Dohnal et al. (2010) but the quoted value cannot be found there.
- 517)** Burkholder et al. (2015) refer to Dohnal et al. (2010) but the quoted value cannot be found there.
- 518)** Dipropyl phthalate is listed twice with different values.
- 519)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 9 % difference.
- 520)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 17 % difference.
- 521)** Hwang et al. (2010) present regression parameters in their Table 6 and values extrapolated to 298.15 K in their Table 5. However, I was not able to reproduce their calculation. The data shown here are from my own regression of the measured data between 318.15 K and 333.15 K.
- 522)** The data from Haimi et al. (2006) were fitted to the three-parameter equation: $H_s^{cp} = \exp(752.39274 - 29351.83448/T - 115.55407 \ln(T))$ mol m⁻³ Pa⁻¹, with T in K.
- 523)** Different types of Henry's law constants of Arp and Schmidt (2004) are inconsistent, with 5 % difference.
- 524)** The data from Robbins et al. (1993) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-4264.16032 + 202439.46180/T + 628.54371 \ln(T))$ mol m⁻³ Pa⁻¹, with T in K.
- 525)** The data from Haimi et al. (2006) were fitted to the three-parameter equation: $H_s^{cp} = \exp(224.10069 - 4205.03828/T - 37.65761 \ln(T))$ mol m⁻³ Pa⁻¹, with T in K.

- 526)** The data from Haimi et al. (2006) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-780.30940 + 40758.59752/T + 112.07468 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 527)** The data from Haimi et al. (2006) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-565.00561 + 31411.46240/T + 79.73748 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 528)** Ebert et al. (2023) present “curated experimental” Henry's law constants from the literature but do not provide any references. It is only mentioned that the value is from a single original paper and obtained from experimental vapor pressure and the infinite-dilution activity coefficient.
- 529)** The data from Haimi et al. (2006) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-1125.52184 + 56732.54277/T + 163.04749 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 530)** The data from Haimi et al. (2006) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-1315.53726 + 64110.36765/T + 191.89554 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 531)** The value listed as A for di- n -pentyl ether is probably not A but the Henry's law volatility constant H_v^{px} at 298 K.
- 532)** The value listed as A for di- n -hexyl ether is probably not A but the Henry's law volatility constant H_v^{px} at 298 K.
- 533)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 5 % difference.
- 534)** The data from Wieland et al. (2015) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-157.10556 + 10203.60762/T + 20.42555 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 535)** Betterton (1992) gives Hine and Weimar (1965) as the source. However, no data were found in that reference.
- 536)** Betterton (1992) gives Vitenberg et al. (1975) as the source. However, no data were found in that reference.
- 537)** Based on gas chromatograph retention indices (GC-RIs).
- 538)** Warneck (2005) refers to Saxena and Hildemann (1996) as the source, but the quoted value cannot be found there.
- 539)** The formula of hydroxyethanoic acid is incorrectly given as “HC(OH)C(O)OH” by Burkholder et al. (2019).
- 540)** The formula of hydroxyethanoic acid is incorrectly given as “HC(OH)C(O)OH” by Burkholder et al. (2015).
- 541)** Temperature dependencies in Tables 1 and 2 of Ashworth et al. (1988) are inconsistent, with 31 % difference.
- 542)** Compernelle and Müller (2014a) recommend H_s^{cp} for tartaric acid in the range of $6.9 \times 10^{14} \text{ mol m}^{-3} \text{ Pa}^{-1} < H_s^{cp} < 9.2 \times 10^{15} \text{ mol m}^{-3} \text{ Pa}^{-1}$.
- 543)** Chan et al. (2010) give a range of $1.9 \times 10^5 \text{ mol m}^{-3} \text{ Pa}^{-1} < H_s^{cp} < 9.5 \times 10^6 \text{ mol m}^{-3} \text{ Pa}^{-1}$.
- 544)** Calculated using the HENRYWIN program and calibration to 1,3-propanediol.
- 545)** The value was chosen for a model study because it gave the best agreement with measurements.
- 546)** Center of the range (2.3...4.0) $\text{mol m}^{-3} \text{ Pa}^{-1}$.
- 547)** Calculated based on the method by Hine and Mookerjee (1975).
- 548)** Compernelle and Müller (2014a) recommend H_s^{cp} for citric acid in the range of $2.0 \times 10^{14} \text{ mol m}^{-3} \text{ Pa}^{-1} < H_s^{cp} < 5.9 \times 10^{15} \text{ mol m}^{-3} \text{ Pa}^{-1}$.
- 549)** The data from Wieland et al. (2015) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-96.39127 + 11107.87195/T + 10.76466 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 550)** In their Fig. 5b, Kish et al. (2013) apply an unspecified factor to the Henry's law constant, and it is not clear if the temperature dependence shown there is correct (Yong Liu, personal communication, 2014).
- 551)** Calculated using the method from Nguyen (2013).
- 552)** Calculated from the slope of $y_1 P$ vs x_1 , using the tabulated VLE data from Kim et al. (2008) between 40 °C and 100 °C. Only dilute solutions with $x_1 \leq 0.1$ were considered.
- 553)** Value at $T = 309 \text{ K}$.
- 554)** The data from Christie and Crisp (1967) for dipropylamine are incorrectly cited by Betterton (1992).
- 555)** Value at $T = 323 \text{ K}$.
- 556)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.
- 557)** Value at $T = 308 \text{ K}$.
- 558)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 5 % difference.
- 559)** Value at $T = 285 \text{ K}$.
- 560)** Mackay et al. (2006d) list a vapor pressure p , a solubility c , and a Henry's law constant calculated as p/c . However, the data are internally inconsistent and deviate by more than 10 %.

- 561)** Calculated using $\Delta G_s^{g \rightarrow H_2O}$ and $\Delta H_s^{g \rightarrow H_2O}$ from Table IV of Arnett and Chawla (1979). Since some of the values in this table are taken directly from Andon et al. (1954), it is assumed that the thermodynamic properties are defined in the same way. Since $\Delta H_s^{g \rightarrow H_2O}$ is defined relative to pyridine, a value of $-11.93 \text{ kcal mol}^{-1}$ from Arnett et al. (1977) was added.
- 562)** Due to an apparently incorrect definition of the Henry's law constant by Andon et al. (1954), Staudinger and Roberts (2001) quote incorrect values from that paper.
- 563)** The data from Wieland et al. (2015) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-12.48322 + 7833.96799/T - 2.23379 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 564)** Value given here as quoted by Feigenbrugel and Le Calvé (2021).
- 565)** Value calculated from the solubility of $9.4 \times 10^{-3} \text{ mol L}^{-1}$ and the vapor pressure of 0.255 mmHg, as shown on pages 7142-7143 of Arnett and Chawla (1979). It is inconsistent with the entry in Table IV of that paper.
- 566)** Value given here as quoted by Ma et al. (2010a).
- 567)** Nguyen (2013) refer to Kim et al. (2008) as the source, but this value cannot be found there.
- 568)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 7 % difference.
- 569)** Value given here as quoted by Goodarzi et al. (2010).
- 570)** Goodarzi et al. (2010) compared several QSPR methods and found that the Levenberg–Marquardt algorithm with Bayesian regularization produces the best results. Values obtained with other methods can be found in their Supplement.
- 571)** Value from the validation set.
- 572)** At pH = 5.
- 573)** Value from the test set.
- 574)** At pH = 10.
- 575)** At pH = 9.
- 576)** At pH = 5.2.
- 577)** At pH = 7.4.
- 578)** At pH = 9.3.
- 579)** At pH = 4.
- 580)** Kames and Schurath (1992) were unable to assign the values to the isomers.
- 581)** Ebert et al. (2023) present “curated experimental” Henry's law constants from the literature but do not provide any references. It is only mentioned that the value is from a single original paper and measured directly.
- 582)** The same data were also published in Fischer and Ballschmiter (1998a).
- 583)** The formula of 1,3-propanediol dinitrate is incorrectly given as “ $\text{O}_2\text{NO}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{ONO}_2$ ” by Burkholder et al. (2019).
- 584)** The formula of 1,3-propanediol dinitrate is incorrectly given as “ $\text{O}_2\text{NO}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{ONO}_2$ ” by Burkholder et al. (2015).
- 585)** Comparing the value with that from the cited publication (Kames and Schurath, 1995), it can be seen that the unit and the temperature listed in Table 3 of Warneck et al. (1996) are incorrect.
- 586)** The data from Kames and Schurath (1995) for peroxyacetyl nitrate are incorrectly cited by Schurath et al. (1996).
- 587)** The data from Kames and Schurath (1995) for peroxypropionyl nitrate are incorrectly cited by Schurath et al. (1996).
- 588)** The data from Kames and Schurath (1995) for peroxy-*n*-butyl nitrate are incorrectly cited by Schurath et al. (1996).
- 589)** The data from Kames and Schurath (1995) for peroxy-methacryloyl nitrate are incorrectly cited by Schurath et al. (1996).
- 590)** The data from Kames and Schurath (1995) for peroxy-*i*-butyl nitrate are incorrectly cited by Schurath et al. (1996).
- 591)** Estimate based on Raventos-Duran et al. (2010).
- 592)** The value at T^\ominus is the intrinsic Henry's law constant, but the temperature dependence refers to the effective Henry's law constant at pH = 3.0.
- 593)** The value at T^\ominus is the intrinsic Henry's law constant, but the temperature dependence refers to the effective Henry's law constant at pH = 3.08.
- 594)** Burkholder et al. (2019) refer to Borduas et al. (2016), but the quoted temperature dependence cannot be found there.
- 595)** The values for nitroethane in Tables VI and VIII of Friant and Suffet (1979) differ by a factor of 10. Apparently, the value in Table VIII is wrong.
- 596)** The data listed in Tables 2 and 3 of Dewulf et al. (1999) are inconsistent, with 27 % difference.
- 597)** Mackay et al. (2006d) list two values for dinoseb which differ by a factor of 1000. It is unclear which number is correct (if any), and the data are not reproduced here.
- 598)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.

- 599** The data from Glew and Moelwyn-Hughes (1953) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-135.82151 + 7593.40134/T + 18.05983 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 600** The data from Maaßen (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-163.70243 + 8973.31702/T + 22.17142 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 601** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-142.70480 + 8025.53525/T + 19.04459 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 602** The data from Zheng et al. (1997) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-190.61883 + 10088.26604/T + 25.94088 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 603** The data from Maaßen (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-177.44258 + 9554.69077/T + 23.94054 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 604** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-350.64777 + 16708.21486/T + 49.40261 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 605** The data from Scharlin and Battino (1995) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-552.21779 + 25529.81258/T + 79.59510 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 606** The data from Scharlin and Battino (1994) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-552.21779 + 25529.81258/T + 79.59510 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 607** The data from Wen and Muccitelli (1979) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-356.93310 + 16943.80173/T + 50.37092 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 608** The data from Ashton et al. (1968) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-320.94892 + 15261.58540/T + 45.04995 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 609** The data from Morrison and Johnstone (1954) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-174.44927 + 8434.85415/T + 23.34667 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 610** The H298 and A , B data listed in Table 5-7 of Burkholder et al. (2019) are inconsistent, with 8 % difference.
- 611** The H298 and A , B data listed in Table 5-7 of Burkholder et al. (2015) are inconsistent, with 8 % difference.
- 612** The data from Zheng et al. (1997) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-203.78636 + 11097.46295/T + 27.89781 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 613** The data from Maaßen (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-184.82864 + 10260.68840/T + 25.06659 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 614** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-175.64793 + 9805.36391/T + 23.71997 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 615** The data from Zheng et al. (1997) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-244.13803 + 12963.44791/T + 33.68869 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 616** The data from Maaßen (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-225.56576 + 12186.49271/T + 30.88527 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 617** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-208.89051 + 11387.65726/T + 28.42219 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 618** The data from Chang and Criddle (1995) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-1003.84803 + 45506.40253/T + 147.89569 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 619** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-164.25882 + 9381.26592/T + 21.50848 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 620** The data from Wen and Muccitelli (1979) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-499.57565 + 23563.38593/T + 71.28478 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 621** Value at $T = 287 \text{ K}$.
- 622** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-78.74672 + 5836.90728/T + 8.41930 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 623** The data from Clever et al. (2005) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-588.11467 + 28143.61522/T + 84.26598 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 624** In their Table 13, Clever et al. (2005) list Ostwald coefficients that are probably incorrect by a factor of 100. Therefore, these values are not used. Instead, H_s is calculated using the amount fraction x_1 from the same table.

- 625)** The data from Scharlin and Battino (1994) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-630.69809 + 30309.09484/T + 90.46889 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 626)** The data from Wen and Muccitelli (1979) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-673.45393 + 31915.35190/T + 97.01332 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 627)** The data from Maaßen (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-197.14327 + 10473.25304/T + 26.34780 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 628)** Calculated using the COSMO-RS method.
- 629)** Value given here as quoted by Kanakidou et al. (1995).
- 630)** Comparing with Abraham et al. (1994a), it seems that the compound called “trifluoroethanol” by Goss (2005) refers to 2,2,2-trifluoroethanol.
- 631)** Comparing with Abraham et al. (1994a), it seems that the compound called “hexafluoropropanol” by Goss (2005) refers to 1,1,1,3,3,3-hexafluoro-2-propanol.
- 632)** Value at $T = 284 \text{ K}$.
- 633)** Measured in aqueous hydrochloric acid and extrapolated to pure water as the solvent at 25°C . Measurements were also made at other temperatures; however, those were not extrapolated to pure water as the solvent.
- 634)** Calculated using the EPI Suite Bond estimation method.
- 635)** Calculated using the new SPARC method; see Arp et al. (2006) for details.
- 636)** Calculated using the COSMOtherm method; see Arp et al. (2006) for details.
- 637)** A refit yields $A = -18.99$, $B = 5493$, and $H(298 \text{ K}) = 0.57 \text{ M atm}^{-1}$ (Robert E. Huie, personal communication, 2021).
- 638)** A refit yields $A = -18.99$, $B = 5493$, and $H(298 \text{ K}) = 0.57 \text{ M atm}^{-1}$ (Robert E. Huie, personal communication, 2021).
- 639)** A refit yields $A = -21.67$, $B = 5776$, and $H(298 \text{ K}) = 0.10 \text{ M atm}^{-1}$ (Robert E. Huie, personal communication, 2021).
- 640)** The H298 and A , B data listed in Table 5-4 of Burkholder et al. (2019) are inconsistent, with 29 % difference.
- 641)** A refit yields $A = -21.67$, $B = 5776$, and $H(298 \text{ K}) = 0.10 \text{ M atm}^{-1}$ (Robert E. Huie, personal communication, 2021).
- 642)** The H298 and A , B data listed in Table 5-4 of Burkholder et al. (2015) are inconsistent, with 29 % difference.
- 643)** The H298 and A , B data listed in Table 5.4 of Sander et al. (2011) are inconsistent, with 29 % difference.
- 644)** The data from Clever et al. (2005) were fitted to the three-parameter equation: $H_s^{cp} = \exp(289.52696 - 11352.27202/T - 46.16631 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 645)** The Ostwald coefficient given by Clever et al. (2005) at 313.2 K is probably incorrect. Therefore, the Ostwald coefficients are not used. Instead, H_s is calculated using the amount fraction x_1 from the same table.
- 646)** Extrapolated based on number of carbons.
- 647)** Measured with the wetted-wall column at room temperature.
- 648)** The H298 and A , B data listed in Table 5.4 of Sander et al. (2011) are inconsistent, with 9 % difference.
- 649)** The H298 and A , B data listed in Table 5.4 of Sander et al. (2006) are inconsistent, with 9 % difference.
- 650)** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-251.05500 + 13259.10200/T + 35.01685 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 651)** The same data were also published in McConnell et al. (1975).
- 652)** The data from Glew and Moelwyn-Hughes (1953) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-171.13914 + 9743.00524/T + 23.09616 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 653)** Values at different temperatures are from different sources. Thus a temperature dependence was not calculated.
- 654)** Chiang et al. (1998) show vinyl chloride in their Table 2 but most probably they meant to refer to dichloromethane instead.
- 655)** The data from Wright et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-444.17924 + 22456.73010/T + 63.76504 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 656)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 7 % difference.
- 657)** The data from Görgényi et al. (2002) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-378.59438 + 20174.67146/T + 53.50889 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 658)** The data from Moore et al. (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(32.52949 + 1878.33965/T - 7.88669 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.

- 659)** The data from Wright et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-109.09283 + 8000.75665/T + 13.39152 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 660)** Probably an interpolation of the data from Balls (1980).
- 661)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 5 % difference.
- 662)** The data from Bullister and Wisegarver (1998) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-704.15798 + 34144.64622/T + 102.06046 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 663)** The data from Wright et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-426.63883 + 22457.44484/T + 60.22986 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 664)** The data from Maaßen (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-221.58683 + 12291.19608/T + 30.42274 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 665)** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-233.85465 + 12927.81251/T + 32.20905 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 666)** The data from Görgényi et al. (2002) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-372.18420 + 19566.35271/T + 52.67600 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 667)** The data from Wright et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-1295.59488 + 61538.96732/T + 190.02999 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 668)** The data from Wright et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-309.75754 + 17275.24359/T + 43.35857 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 669)** The data from Robbins et al. (1993) were fitted to the three-parameter equation: $H_s^{cp} = \exp(313.50875 - 12121.71831/T - 49.20602 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 670)** The data from Wright et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(255.46482 - 8896.18926/T - 40.90189 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 671)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 5 % difference.
- 672)** The data from Schwardt et al. (2021) were fitted to the three-parameter equation: $H_s^{cp} = \exp(200.57633 - 7128.32092/T - 31.87111 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 673)** The data from Wright et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-304.31063 + 17046.46392/T + 42.59182 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 674)** The data from Schwardt et al. (2021) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-1784.40256 + 88283.19114/T + 260.26556 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 675)** The data from Wright et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(608.52671 - 23622.70039/T - 93.86675 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 676)** The value for A in the table of Kondoh and Nakajima (1997) is incorrect. Recalculating the regression, it can be seen that it should be 13.95 and not 1.395.
- 677)** The data from Wright et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(2638.58362 - 114985.14319/T - 396.08684 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 678)** The H298 and A , B data listed in Table 5-4 of Burkholder et al. (2019) are inconsistent, with 9 % difference.
- 679)** The data from Wright et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-573.71583 + 28877.33987/T + 82.70652 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 680)** The data from Sarraute et al. (2006) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-503.53929 + 28223.72051/T + 70.89539 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 681)** As explained by Miller and Stuart (2003), the measurements were performed at 296 K.
- 682)** Value for $T = 295 \dots 298$ K.
- 683)** Value for $T = 293 \dots 298$ K.
- 684)** The data from Schwardt et al. (2021) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-20.66741 + 2604.13624/T + 0.71646 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 685)** Mackay et al. (2006b) list a vapor pressure p , a solubility c , and a Henry's law constant calculated as p/c . However, the data are internally inconsistent and deviate by more than 10 %.
- 686)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.
- 687)** The data from Schwardt et al. (2021) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-214.72727 + 12076.60512/T + 29.20360 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 688)** A typo in Ashworth et al. (1988) has been corrected by Howe et al. (1987).

- 689)** The data from Wright et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-332.68901 + 17925.88529/T + 46.77838 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 690)** The data from Schwarzt et al. (2021) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-6.68864 + 2211.35284/T - 1.35565 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 691)** The data from Khalfaoui and Newsham (1994b) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-593.56757 + 30300.79738/T + 85.11672 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 692)** The data from Wright et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-294.54970 + 16409.35487/T + 40.82700 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 693)** The data from Cooling et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-511.78322 + 26710.11950/T + 72.88403 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 694)** The data from Schwarzt et al. (2021) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-265.05147 + 15058.79780/T + 36.44507 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 695)** The data from Görgényi et al. (2002) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-480.92432 + 24776.46284/T + 68.60174 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 696)** The data from Knauss et al. (2000) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-389.28726 + 21123.08804/T + 54.69871 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 697)** The data from Khalfaoui and Newsham (1994b) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-511.93773 + 26713.30359/T + 72.90551 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 698)** The data from Robbins et al. (1993) were fitted to the three-parameter equation: $H_s^{cp} = \exp(176.56015 - 5511.47473/T - 28.96682 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 699)** The data from Wright et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(681.41357 - 27448.54898/T - 104.63745 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 700)** The data from Cooling et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-574.03630 + 29404.80442/T + 82.22224 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 701)** The data from Schwarzt et al. (2021) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-330.94781 + 18207.73829/T + 46.05991 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 702)** The data from Knauss et al. (2000) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-281.09217 + 15955.08953/T + 38.60107 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 703)** The data from Robbins et al. (1993) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-1145.60543 + 55089.35358/T + 167.32916 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 704)** The data from Wright et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-224.85290 + 13463.70772/T + 30.65123 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 705)** Henry's law constants were evaluated using data from Florida sandy field soil.
- 706)** According to Thomas et al. (2006), theoretical Henry's law constants were calculated using the "normal boiling point, the critical temperature, and the enthalpy of volatilization at the normal boiling point".
- 707)** Haynes (2014) refers to Mackay and Shiu (1981), but that article lists this value for 1-chloro-2-methylpropane (the saturated compound), not for 1-chloro-2-methylpropene.
- 708)** The regression parameters for chlorobenzene in Table 1 of Schwarzt et al. (2021) are wrong. Corrected values from Schwarzt et al. (2022) are used here.
- 709)** The data from Schwarzt et al. (2021) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-266.69788 + 14811.78372/T + 37.00246 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 710)** The data from Khalfaoui and Newsham (1994b) were fitted to the three-parameter equation:
 $H_s^{cp} = \exp(-757.46460 + 35956.18738/T + 110.75693 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 711)** The data from Cooling et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-820.00716 + 38880.20610/T + 120.01460 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 712)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 8 % difference.
- 713)** Erratum for page 344 of Fogg and Sangster (2003): their reference [89] does not contain 1,2-dichlorobenzene.
- 714)** The data listed in Tables 2 and 3 of Dewulf et al. (1999) are inconsistent, with 7 % difference.
- 715)** The data listed in Tables 2 and 3 of Dewulf et al. (1999) are inconsistent, with 7 % difference.
- 716)** Rumble (2021) refers to Oliver (1985) as the source, but this value cannot be found there.
- 717)** Value for $T = 298 \dots 303 \text{ K}$.

- 718)** Ebert et al. (2023) present “curated experimental” Henry's law constants from the literature but do not provide any references. It is only mentioned that the value is from multiple sources and obtained from the experimental octanol–water partition coefficient and the octanol–air partition coefficient.
- 719)** Ebert et al. (2023) present “curated experimental” Henry's law constants from the literature but do not provide any references. It is only mentioned that the value is from a single database or data collection and obtained from the experimental octanol–water partition coefficient and the octanol–air partition coefficient.
- 720)** Odabasi and Adali (2016) provide the parameters A and B for an equation to calculate temperature-dependent Henry's law constants. Values calculated with this equation at 298 K are slightly different than those measured at 298 K and given as H in their Table 1. Here, the values H and B are used.
- 721)** Modified gas-stripping method (MGSM); see Lau et al. (2006) for details.
- 722)** Integrated gas-stripping method (IGSM); see Lau et al. (2006) for details.
- 723)** Calculated with the principal component regression (PCR) method; see Lee (2007) for details.
- 724)** Calculated with the partial least-square regression (PLSR) method; see Lee (2007) for details.
- 725)** The same data were also published in Dunnivant et al. (1988).
- 726)** Value given here as quoted by Dunnivant et al. (1988).
- 727)** Calculated using the EPICS method.
- 728)** Calculated using the “Direct” method.
- 729)** Westcott et al. (1981) give a range of $1.9 \times 10^{-2} \text{ mol m}^{-3} \text{ Pa}^{-1} < H_s^{cp} < 3.2 \times 10^{-2} \text{ mol m}^{-3} \text{ Pa}^{-1}$.
- 730)** Westcott et al. (1981) give a range of $2.8 \times 10^{-2} \text{ mol m}^{-3} \text{ Pa}^{-1} < H_s^{cp} < 9.0 \times 10^{-2} \text{ mol m}^{-3} \text{ Pa}^{-1}$.
- 731)** Erratum for page 350 of Fogg and Sangster (2003): the equation describing the recommended temperature-dependent data appears to be incorrect and is not used here.
- 732)** Value at $\text{pH} = 4$.
- 733)** When comparing H in Table 4 with K_{gw} in Table 5 of Pfeifer et al. (2001), it can be seen that the values refer to $K_{\text{gw}} \times 100$ and not $K_{\text{gw}}/100$.
- 734)** Measured at $\text{pH} = 1$.
- 735)** The same data were also published in Brandsch et al. (1993).
- 736)** Erratum for page 376 of Fogg and Sangster (2003): data from Santl et al. (1994) are cited incorrectly; it should be 3.64, not 3.84.
- 737)** Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 8 % difference.
- 738)** Although pronamide and propyzamide are the same species, Mackay et al. (2006d) list two different values for them. It is unclear which number is correct (if any), and the data are not reproduced here.
- 739)** The value at 20 °C was calculated from published values of vapor pressure and water solubility. Data between 25 °C and 40 °C were calculated from the measured evaporation rate.
- 740)** At $\text{pH} = 5.4$.
- 741)** Ebert et al. (2023) present “curated experimental” Henry's law constants from the literature but do not provide any references. It is only mentioned that the value is from multiple sources and measured directly.
- 742)** The data from Zheng et al. (1997) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-206.94328 + 11372.60160/T + 28.22232 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 743)** The data from Maaßen (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-200.57402 + 11192.93914/T + 27.21798 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 744)** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-208.06388 + 11491.48483/T + 28.35421 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 745)** The data from Chang and Criddle (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-1756.79407 + 80807.02552/T + 259.24906 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 746)** The data from McLinden (1989) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-387.81156 + 19950.78638/T + 54.91348 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 747)** The temperature dependence was recalculated from the data on p. 20 of McLinden (1989).
- 748)** The data from McLinden (1989) for HCFC-22 are incorrectly cited by Kanakidou et al. (1995).
- 749)** The H298 and A , B data listed in Table 5-4 of Burkholder et al. (2019) are inconsistent, with 5 % difference.
- 750)** The H298 and A , B data listed in Table 5-4 of Burkholder et al. (2015) are inconsistent, with 5 % difference.
- 751)** The H298 and A , B data listed in Table 5.4 of Sander et al. (2011) are inconsistent, with 5 % difference.

- 752)** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(100.23590 - 3339.68982/T - 17.66849 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 753)** The data from Scharlin and Battino (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-291.40685 + 14224.53456/T + 40.73325 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 754)** The data from Scharlin and Battino (1994) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-291.40685 + 14224.53456/T + 40.73325 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 755)** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-147.53824 + 8643.05363/T + 18.97752 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 756)** The data from Scharlin and Battino (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-211.99699 + 11400.41036/T + 28.66283 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 757)** The data from Scharlin and Battino (1994) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-211.99699 + 11400.41036/T + 28.66283 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 758)** The data from Maaßen (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-278.68448 + 15169.41095/T + 38.36974 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 759)** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-129.78084 + 8533.77911/T + 16.20428 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 760)** The data from Bu and Warner (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-415.59157 + 21411.24346/T + 58.50528 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 761)** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(0.13353 + 5070.08549/T - 4.84639 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 762)** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-113.07654 + 6884.36758/T + 13.75470 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 763)** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-149.62353 + 7869.46528/T + 19.40044 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 764)** The data from Chang and Criddle (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-402.28495 + 20229.16189/T + 57.28419 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 765)** The data from Maaßen (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-277.88370 + 14905.51805/T + 38.38688 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 766)** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-195.56650 + 11207.08869/T + 26.12575 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 767)** The data from Maaßen (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-249.15404 + 13774.89590/T + 34.23234 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 768)** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-210.55601 + 11968.42846/T + 28.54087 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 769)** The data from Maaßen (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-155.04312 + 9704.04801/T + 20.06575 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 770)** The data from Maaßen (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-270.78344 + 14413.03953/T + 37.48366 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 771)** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-184.96240 + 10541.13831/T + 24.70437 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 772)** The data from Chang and Criddle (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-190.58060 + 10602.65774/T + 25.66197 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 773)** The data from Maaßen (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-237.50724 + 13032.41274/T + 32.48569 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 774)** The data from Reichl (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-200.95912 + 11406.81841/T + 27.03092 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 775)** The data from Smith et al. (1981b) were fitted to the three-parameter equation: $H_s^{cp} = \exp(678.00770 - 27346.39638/T - 103.92351 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 776)** Kanakidou et al. (1995) assume $H_s(\text{CClF}_2\text{OONO}_2) = H_s(\text{PAN})$.
- 777)** The H298 and A, B data listed in Table 5-4 of Burkholder et al. (2019) are inconsistent, with 11 % difference.
- 778)** The data from De Bruyn and Saltzman (1997) were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-521.17646 + 25057.64644/T + 75.60914 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}, \text{ with } T \text{ in K.}$$

779) The data from Glew and Moelwyn-Hughes (1953)

were fitted to the three-parameter equation:

$$H_s^{cp} = \exp(-184.73597 + 10636.09284/T + 25.03175 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}, \text{ with } T \text{ in K.}$$

780) Values at 298 K in Tables C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.

781) The data from Moore et al. (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-395.20167 + 20638.03484/T + 56.40082 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.

782) The data from Wright et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-82.06673 + 6867.92071/T + 9.56720 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.

783) The data from Moore et al. (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-408.59491 + 21699.59623/T + 58.19801 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.

784) The data from Wright et al. (1992) were fitted to the three-parameter equation: $H_s^{cp} = \exp(1124.79951 - 46767.40872/T - 170.54217 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.

785) Erratum for page 274 of Fogg and Sangster (2003): the value in the table is k_H , not $\ln k_H$.

786) Value at $T = 50 \text{ K}$.

787) Rumble (2021) refers to Hiatt (2013) as the source, but this value cannot be found there.

788) Haynes (2014) refers to Mackay et al. (1993) as the source, but this value cannot be found there.

789) The data from Sarraute et al. (2006) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-370.06283 + 22192.71634/T + 51.12683 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.

790) Erratum for page 321 of Fogg and Sangster (2003): data from Yates and Gan (1998) are cited with a typo. The value at 313.2 K should probably be 4.78×10^{-6} , not 4.78×10^{-2} .

791) Ebert et al. (2023) present “curated experimental” Henry's law constants from the literature but do not provide any references. It is only mentioned that the value is from a single original paper and obtained from the experimental octanol–water partition coefficient and the octanol–air partition coefficient.

792) Diaz et al. (2005) also cite a Henry's law constant from Pfeifer et al. (2001) even though this species is not mentioned there. There might be a mix up of the different haloanisoles.

793) Erratum for page 285 of Fogg and Sangster (2003): data in their table look strange (9.70R) and are not used here.

794) The data from Moore et al. (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-76.31131 + 7250.73360/T + 8.15388 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.

795) The data from Moore et al. (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-265.18008 + 15516.80509/T + 36.54803 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.

796) The data from Moore et al. (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-229.06923 + 13418.39257/T + 31.15669 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.

797) The data from Glew and Moelwyn-Hughes (1953) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-384.31677 + 19391.25580/T + 54.93602 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.

798) The data from Moore et al. (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-247.93525 + 14910.30572/T + 34.08071 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.

799) The regression given by Fogg and Sangster (2003) does not produce the data in their table. Thus the regression was recalculated.

800) The value listed as A for iodobenzene is probably not A but the Henry's law volatility constant H_v^{px} at 298 K. For the value of B , a minus sign is probably missing.

801) The data from Moore et al. (1995) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-242.58767 + 14043.89458/T + 33.48497 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.

802) Karagodin-Doyennel et al. (2021) probably assume that CH_2BrI has the same Henry's law constant as CH_2ClI .

803) The data from Haimi et al. (2006) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-266.45850 + 15036.99733/T + 36.80758 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.

804) Yaws et al. (2003) present Henry's law constants based on water solubility and vapor pressure. The water solubility is calculated using a correlation to the boiling point. For the vapor pressures, no references are provided.

805) The data from Zin et al. (2016) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-419.66332 + 22034.35758/T + 59.55571 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.

806) The data from Haimi et al. (2006) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-166.97891 +$

$10357.07398/T + 22.04420 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.

- 807)** The data from Haimi et al. (2006) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-406.56800 + 21428.82541/T + 57.60207 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 808)** The data from Zin et al. (2016) were fitted to the three-parameter equation: $H_s^{cp} = \exp(10.26074 + 2303.75755/T - 4.36399 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 809)** Presumably, the species called “42-methyl-2-butanethiol” in Table 1 of Yao et al. (2002) should be 2-methyl-2-butanethiol.
- 810)** Schäfer and Lax (1962) present data based on Booth and Jolley (1943). However, these data appear to be incorrect.
- 811)** Booth and Jolley (1943) converted data from Rex (1906) to another unit. However, this was apparently not done correctly.
- 812)** Booth and Jolley (1943) present data from Chancel and Parmentier (1885). However, in that paper only the solubility at an unknown partial pressure of CS_2 was measured.
- 813)** Value extracted from their Fig. 46.
- 814)** The data from Haimi et al. (2006) were fitted to the three-parameter equation: $H_s^{cp} = \exp(-233.39763 + 13839.16150/T + 31.85189 \ln(T)) \text{ mol m}^{-3} \text{ Pa}^{-1}$, with T in K.
- 815)** $H'_s = 6.4 \times 10^{14} \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$
- 816)** It is unclear how Fogg and Sangster (2003) obtained the data. Apparently, limiting activity coefficients γ^∞ were taken from Trampe and Eckert (1993), but a source for vapor pressure data is not mentioned. Also, the γ^∞ values listed in the table are different from those found in the original paper.
- 817)** At pH = 3.9.
- 818)** At pH = 4.8.
- 819)** Mackay et al. (2006d) list two values for thiobencarb which differ by a large factor. It is unclear which number is correct (if any), and the data are not reproduced here.
- 820)** Extrapolated from data at elevated temperatures.
- 821)** Calculated using HENRYWIN 3.21.
- 822)** Calculated using vapor pressures and water solubilities from HENRYWIN 3.21.
- 823)** Calculated using vapor pressures and water solubilities from the EPA Toxicity Estimation Software Tool (TEST).

824) Wilhelm et al. (1977) and Abraham (1979) are quoted as the source. However, the data cannot be found there.

825) Shon et al. (2005) refer to Petersen et al. (1998) as the source, but this value cannot be found there.

826) The value from their experiment 7 at 10 °C is not used in the determination of the temperature dependence because of very different ionic strengths and concentrations for that experiment.

Code and data availability. All code and data related to the Henry's law database can be found in the Supplement and at <https://www.henrys-law.org> (Sander, 2023).

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