

Supplement of Atmos. Chem. Phys., 15, 13615–13625, 2015
<http://www.atmos-chem-phys.net/15/13615/2015/>
doi:10.5194/acp-15-13615-2015-supplement
© Author(s) 2015. CC Attribution 3.0 License.



Supplement of

Viscosity controls humidity dependence of N_2O_5 uptake to citric acid aerosol

G. Gržinić et al.

Correspondence to: M. Ammann (markus.ammann@psi.ch)

The copyright of individual parts of the supplement might differ from the CC-BY 3.0 licence.

Measured uptake coefficient, γ , of N_2O_5 to citric acid aerosol

RH [%]	γ	error
17	2.75E-04	4.80E-05
27	1.07E-03	4.53E-04
36	3.10E-04	1.09E-04
45	1.67E-03	6.26E-04
53.3	8.70E-04	2.46E-04
61.5	2.40E-03	8.84E-04
70.3	3.30E-03	1.66E-03
53.3	8.10E-04	3.67E-04

Estimated diffusivity of N_2O_5

RH (%)	Diffusivity of N_2O_5 in citric acid (Reid) ($\text{cm}^2 \text{s}^{-1}$)	Diffusivity of N_2O_5 in citric acid (Laguerie) ($\text{cm}^2 \text{s}^{-1}$)	Diffusivity of N_2O_5 in citric acid (Berkemeier) ($\text{cm}^2 \text{s}^{-1}$)	Diffusivity of N_2O_5 in citric acid (Lienhard) ($\text{cm}^2 \text{s}^{-1}$)	Diffusivity of N_2O_5 in malonic acid (Berkemeier) ($\text{cm}^2 \text{s}^{-1}$)
10	3.46E-14	8.19E-09	4.68E-11	9.42E-14	8.50E-09
20	2.88E-12	1.46E-08	1.27E-10	2.39E-12	1.09E-08
30	8.64E-11	2.51E-08	4.62E-10	2.80E-10	1.81E-08
40	8.64E-10	4.21E-08	2.02E-09	1.32E-08	4.64E-08
50	4.32E-09	7.00E-08	9.58E-09	1.45E-07	1.54E-07
60	1.73E-08	1.19E-07	4.62E-08	5.68E-07	4.40E-07
70	8.64E-08	2.15E-07	2.13E-07	1.26E-06	1.04E-06
80	1.73E-07	4.54E-07	9.02E-07	2.21E-06	2.24E-06
90	1.08E-06	1.43E-06	3.36E-06	3.83E-06	4.79E-06