Reaction	ε / ‰	Method and remarks	Reference
$CH_3Cl + OH$	-264 ± 45	experimental: 3.5 m^3 smog chamber at 293 ± 1 K; IRMS	Exp. 1 to 3, this study
$CH_3Cl + OH$	-410 ± 50	experimental: smog chamber, long-path FTIR spectroscopy relative to CH_3Cl at 298 ± 2 K	Sellevåg et al. (2006)
$CH_3Cl + OH$	-330 to -430	theoretical calculations	Sellevåg et al. (2006)
$CH_3Cl + Cl$	-280 ± 11	experimental: 3.5 m^3 smog chamber at 293 ± 1 K; IRMS	Exp. 4, this study
$CH_3Cl + Cl$	-420 ± 40	experimental: smog chamber, long-path FTIR spectroscopy relative to CH_3Cl at 298 ± 2 K	Sellevåg et al. (2006)
$CH_3Cl + Cl$	-540 to -590	theoretical calculations	Sellevåg et al. (2006)
$CH_4 + OH$	-205 ± 6	experimental: 3.5 m^3 smog chamber at 293 ± 1 K; IRMS	Exp. 5, this study
$CH_4 + OH$	-227 ± 11	experimental: at 296 K, IRMS and tunable diode laser absorption spectroscopy	Saueressig et al. (2001)
$CH_4 + OH$	-231 ± 45	experimental: at 277 K	Gierczak et al. (1997)
$CH_4 + OH$	-251 ± 10	ab initio at 298 K	Xiao et al. (1993)
$CH_4 + OH$	-145 ± 30	experimental: at 298 K	DeMore et al. (1993)
$CH_4 + OH$	-294 ± 18	experimental: smog chamber, long-path FTIR spectroscopy relative to CH_3Cl at 298 ± 2 K	Sellevåg et al. (2006)
$CH_4 + OH$	-60 to -270	theoretical at 298 K	Sellevåg et al. (2006)