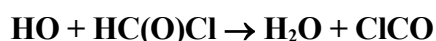


IUPAC Task Group on Atmospheric Chemical Kinetic Data Evaluation – Data Sheet IV.A2.135 oClOx61

Data sheets can be downloaded for personal use only and must not be retransmitted or disseminated either electronically or in hardcopy without explicit written permission. The citation for this data sheet is: Atkinson, R., Baulch, D. L., Cox, R. A., Crowley, J. N., Hampson, R. F., Hynes, R. G., Jenkin, M. E., Rossi, M. J., Troe, J., and Wallington, T. J.: Atmos. Chem. Phys., 9, 4141, 2008; IUPAC Task Group Atmospheric Chemical Kinetic Data Evaluation, <http://iupac.pole-ether.fr>.

This data sheet last evaluated: June 2015; last change in preferred values: November 2003.



Rate coefficient data

$k/\text{cm}^3 \text{ molecule}^{-1} \text{ s}^{-1}$	Temp./K	Reference	Technique/ Comments
<i>Relative Rate Coefficients</i> $\leq 3.2 \times 10^{-13}$	299.2	Libuda et al., 1990	RR (a)

Comments

- (a) HO radicals were generated by the thermal decomposition of HO₂NO₂ after addition of NO to HC(O)Cl-*n*-butane-HO₂NO₂-O₂-N₂ mixtures at 800 mbar pressure. The concentrations of HC(O)Cl and *n*-butane were monitored by FTIR spectroscopy and GC, respectively. No decay of HC(O)Cl was observed, leading to the upper limit to the rate coefficient cited in the table.

Preferred Values

Parameter	Value	T/K
$k/\text{cm}^3 \text{ molecule}^{-1} \text{ s}^{-1}$	$< 5 \times 10^{-13}$	298

Comments on Preferred Values

The preferred value is based on the upper limit to the rate coefficient reported by Libuda et al. (1990).

References

Libuda, H. G., Zabel, F., Fink, E. H. and Becker, K. H.: J. Phys. Chem., 94, 5860, 1990.