

IUPAC Task Group on Atmospheric Chemical Kinetic Data Evaluation - Data Sheet oClOx91; VII.A5.14

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This datasheet last evaluated: June 2015; last change in preferred values: June 2009.



Rate coefficient data ($k = k_1 + k_2$)

$k/\text{cm}^3 \text{ molecule}^{-1} \text{ s}^{-1}$	T/K	Reference	Technique/ Comments
<i>Absolute Rate Coefficients</i>			
$(2.45 \pm 0.24) \times 10^{-13}$	298	Wallington et al. (1988)	FP-RF (a)

Comments

- (a) HO radicals were generated by the photolysis ($\lambda \geq 165 \text{ nm}$) of H_2O in 25-50 Torr (33-67 mbar) of argon diluent at 298 K.

Preferred Values

Parameter	Value	T/K
$k / \text{cm}^3 \text{ molecule}^{-1} \text{ s}^{-1}$	2.5×10^{-13}	298
<i>Reliability</i>		
$\Delta \log k$	0.20	298

Comments on Preferred Values

The absolute rate coefficient reported by Wallington et al. (1988) forms the basis of the recommendation.

References

Wallington, T. J., Dagaut, P., and Kurylo, M. J.: J. Phys. Chem., 92, 5024, 1988.