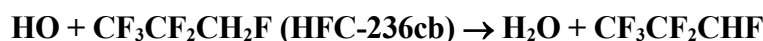


IUPAC Task Group on Atmospheric Chemical Kinetic Data Evaluation – Data Sheet oFOx23

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This datasheet last evaluated: June 2015; last change in preferred values: March 2005



Rate coefficient data

$k/\text{cm}^3 \text{ molecule}^{-1} \text{ s}^{-1}$	Temp./K	Reference	Technique/Comments
<i>Absolute Rate Coefficients</i>			
$2.6 \times 10^{-13} \exp[-(1107 \pm 202)/T]$	256-314	Garland et al., 1993	PLP-LIF
$(6.4 \pm 0.6) \times 10^{-15}$	295		

Preferred Values

$k = 6.5 \times 10^{-15} \text{ cm}^3 \text{ molecule}^{-1} \text{ s}^{-1}$ at 298 K.

$k = 2.6 \times 10^{-13} \exp(-1100/T) \text{ cm}^3 \text{ molecule}^{-1} \text{ s}^{-1}$ over the temperature range 250-320 K.

Reliability

$\Delta \log k = \pm 0.3$ at 298 K.

$\Delta(E/R) = \pm 400$ K.

Comments on Preferred Values

The preferred values are derived from the sole study of Garland et al. (1993).

References

Garland, N. L., Medhurst, L. J. and Nelson, H. H.: J. Geophys. Res. 98, 23107, 1993.