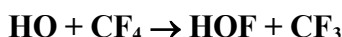


# IUPAC Task Group on Atmospheric Chemical Kinetic Data Evaluation – Data Sheet of FOx13

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



$$\Delta H^\circ = 327.2 \text{ kJ mol}^{-1}$$

## Rate coefficient data

$k/\text{cm}^3 \text{ molecule}^{-1} \text{ s}^{-1}$	Temp./K	Reference	Technique/ Comments
<i>Absolute Rate Coefficients</i>			
$<4 \times 10^{-16}$	$296 \pm 2$	Howard and Evenson, 1976	DF-LMR
$<1 \times 10^{-15}$	293	Clyne and Holt, 1979	DF-RF
$<2 \times 10^{-18}$	~298	Ravishankara et al., 1993	PLP-LIF (a)

## Comments

- (a) Not explicitly reported, but expected to be a pulsed photolysis system with LIF detection of HO radicals as carried out by Schmoltner et al. (1993) for HO radical reaction rate coefficient measurements with related hydrofluorocarbons.

## Preferred Values

$$k < 2 \times 10^{-18} \text{ cm}^3 \text{ molecule}^{-1} \text{ s}^{-1} \text{ at } 298 \text{ K.}$$

### Comments on Preferred Value

The preferred value is the upper limit to the rate coefficient reported by Ravishankara et al. (1993).

## References

- Clyne, M. A. A. and Holt, P. M.: J. Chem. Soc. Faraday Trans. 2, 75, 582, 1979.  
Howard C. J. and Evenson, K. M.: J. Chem. Phys. 64, 197, 1976.  
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Schmoltner, A. M., Talukdar, R. K., Warren, R. F., Mellouki, A., Goldfarb, L., Gierczak, T., McKeen, S. A. and Ravishankara, A. R.: J. Phys. Chem. 97, 8976, 1993.