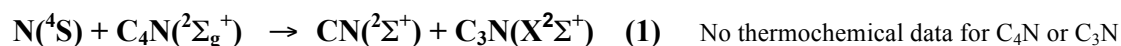


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Rate Coefficient Data k

$k / \text{cm}^3 \text{ molecule}^{-1} \text{ s}^{-1}$	T / K	Reference	Comments
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Rate Coefficient Measurements (k)

No measurements were found in the literature

Reviews and Evaluations

1.0×10^{-10}

10- 300

UMIST database

1.0×10^{-10}

no T -dependence

OSU website

Comments

This radical-radical reaction is presumably exothermic (but I can find no thermochemical data on C_4N . Reaction is spin-allowed (over triplet PESs). However, the reactants also correlate with quintet PESs.

Reliability

$\mathbf{F}_0 = 3$; $\mathbf{g} = 0$

Comments on Preferred Values

The UMIST and Ohio databases adopt the same rate coefficient value as for $\text{N} + \text{C}_2\text{N}$. This seems to be a reasonable estimate.

Preferred Values

Rate coefficient (10 – 300 K)

$$k(T) = 9.0 \times 10^{-11} (T/300)^{0.17} \text{ cm}^3 \text{ s}^{-1}$$

References