

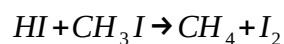
WW2: Activation Energy

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15. The activation energy E_a is $129.7 \text{ kJ mol}^{-1}$ for the gas phase reaction



Calculate the fraction of the molecules whose collisions would be energetic enough to react at:

- a. —
- b. —
- c. **500°C**

$$e = 3.64 \times 10^{-10}$$

- d. **1000°C**

$$e = 1.85 \times 10^{-6}$$