

Reaction coordinate diagram for the reaction:  $\text{N}_2 + 2\text{NH}_3 \rightarrow 2\text{NH}_2^* + 2\text{NH}_3^* + \text{NH}_3$ . The diagram shows the energy profile of the reaction, with the reactants  $\text{N}_2$  and  $2\text{NH}_3$  at a higher energy than the products  $2\text{NH}_2^*$  and  $2\text{NH}_3^* + \text{NH}_3$ . The transition state is labeled  $\text{H}_2\text{NNH}_2^*$ .

## Reaction Coordinate