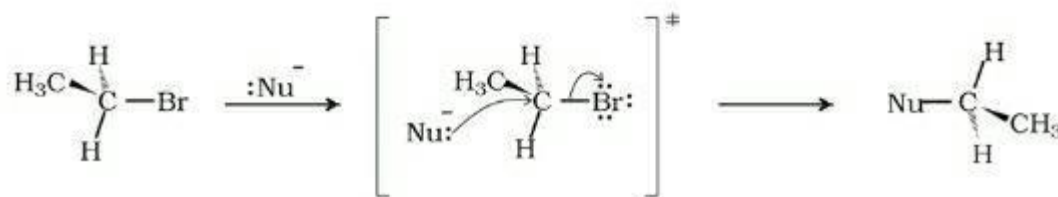
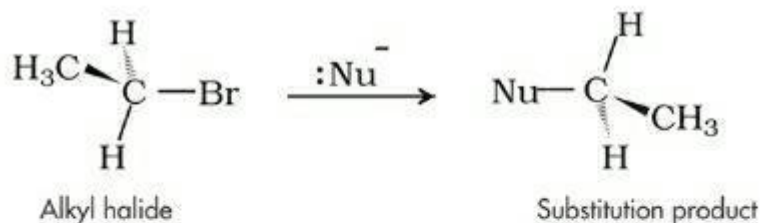


Answer on question #74611

reactivity of $\text{S}_{\text{N}}2$ reaction is $\text{CH}_3 > \text{p-RX} > \text{Sec-RX} > \text{tert-RX}$

This is due to steric hindrance because $\text{S}_{\text{N}}2$ reaction is back side attack of nucleophile. steric hindrance order of alkyl group is $\text{tert} > \text{sec} > \text{primary} > \text{CH}_3$



Steric effects in the substrate – the more substituted the carbon center is, the lower the rate of substitution. Reason:

The transition state is the most crowded species on the entire pathway from reactants to products. Therefore steric congestion

will have a pronounced effect on the energy of the Transition state. For tertiary substrates its energy is considerably higher.

Answer provided by AssignmentExpert.com