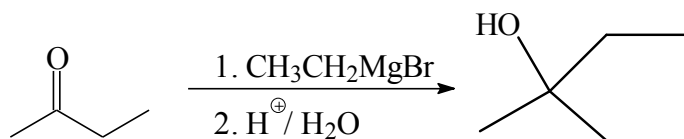


Marks
2

- Give the stick representation of the product formed when butanone is reacted with ethylmagnesium bromide ($\text{CH}_3\text{CH}_2\text{MgBr}$), followed by aqueous acid.



State whether the product formed by this reaction is *achiral*, the *(S)*-enantiomer, the *(R)*-enantiomer, a *meso*-compound or a *racemic mixture*.

Achiral. The central carbon has 2 identical CH_3CH_2 groups on it alongside the OH and CH_3 groups.