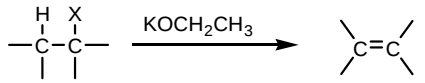
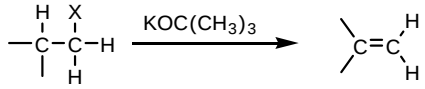
Methods for Making Alkenes Used in ChemCoach *Synthesis*
Reactions from Carey Chapters 4 – 6



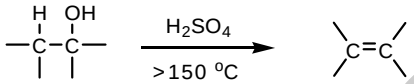
Use $KOCH_2CH_3$ for secondary & tertiary alkyl halides.

Mixtures of stereoisomers (E & Z) will result when two are possible. E generally is favored.

Mixtures of regioisomers will result when possible, but the more highly substituted alkene is favored to a synthetically useful extent.



Use $KOC(CH_3)_3$ for primary alkyl halides.



Mixtures of stereoisomers (E & Z) will result when two are possible. E generally is favored.

Mixtures of regioisomers will result when possible, but the more highly substituted alkene is favored to a synthetically useful extent.

Product alkene must be stable to strong acid.

When rearrangement is possible, mixtures of products are common, which limits the synthetic utility of the reaction.