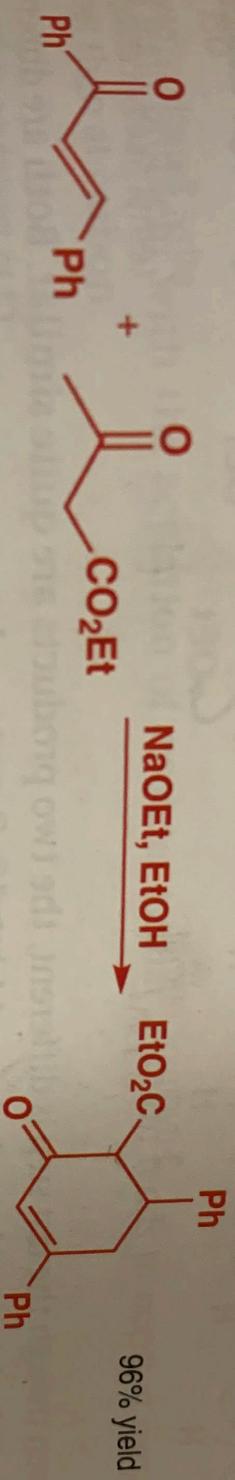


In this sequence the new ring is built onto the side of an old ring but this is not necessary. Any combination of an easily enolizable compound and an enone may give a Robinson annelation product. A simple example combines a non-enolizable enone with ethyl acetate to give an excellent yield of a cyclohexenone. As these compounds are so robust a stronger base can be used.



The Darzens reaction

Tandem reactions, in which a second enolate reaction follows on from the first, can allow us to make cyclopropanes (see Chapter 25, p. 586), by conjugate addition followed by C-alkylation, or epoxides, by aldol addition followed by O-alkylation. This epoxide was used in the synthesis of the drug Darusentan.

You will discover 41 that using the natural acid proline as the amine gives a single enantiomer of