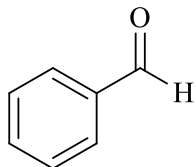


Marks
8

- Propene can be converted into 1,2-dimethyl-1-phenylpropene using a sequence of 6 reactions. Demonstrate your knowledge of Grignard reactions by suggesting a plausible sequence. Make sure you draw the correct structure for each intermediate product and clearly indicate the reagent(s) required for each reaction. The following list of suggested reagents is sufficient to accomplish all necessary reactions, but you may use other reagents if you wish. One of the intermediates is shown for you.

Suggested reagents:



HBr

dilute HCl

 $K_2Cr_2O_7 / H^+$

conc. HCl

Mg

 CH_3MgBr 