CHT 212

Problem Set 2 Solutions

Assuming that you have only alcohols or esters containing no more than four carbon atoms, show how you might synthesize the following compounds. Begin by writing a retrosynthetic analysis for each. You must use a Grignard reagent at one step in each synthesis. If needed, you may use oxirane and bromobenzene, but you must show the synthesis of any other required organic compounds. Assume you have available any solvents and any inorganic reagents that you require.

Some of these answers use compounds synthesized in previous problems.

1.
$$OH$$
 PCC
 H
 CrO_3, H_2SO_4
 Et_2O
 $MgBr$

2. OH
$$\frac{1. \text{ PBr}_3}{2. \text{ Mg / Et}_2\text{O}}$$
 MgBr $\frac{\text{OOEt}}{\text{OOEt}}$