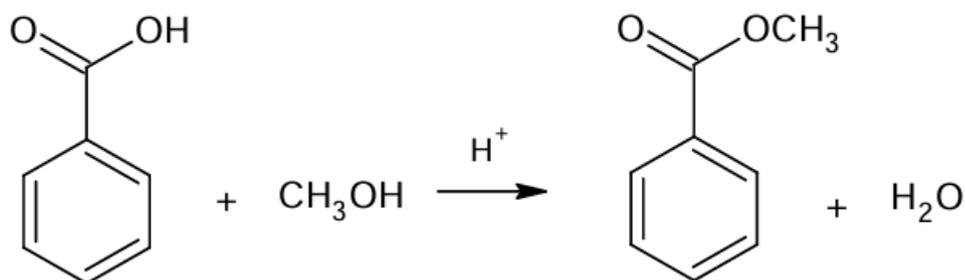


METHYL BENZOATE



Reagents:

benzoic acid – 15 g
anhydrous methanol - 50 ml
conc. H_2SO_4 – 2 ml
2M NaOH – 30 ml
 $MgSO_4$
NaCl
 $NaHCO_3$

Apparatus:

round-bottomed flask 250 ml
reflux condenser
separating funnel 250 ml
beakers 50 ml, 150ml
glass and PP funnel
conical flask with ground glass 100 ml
round-bottomed flask 100 ml
condenser with distillation insert
ground-glass thermometer up to $250^\circ C$
glass rod

Preparation:

In a 250ml round-bottomed flask, 15g of benzoic acid, 50ml of anhydrous methanol and 2ml of concentrated sulphuric acid are placed. The whole is heated under a reflux condenser for about 4 h. Excess alcohol is distilled until the mixture in the flask becomes cloudy. The residue is cooled and transferred to a separating funnel containing 2M NaOH (30ml). After shaking the mixture, water (50ml) is added to the contents. After separation of the layers, the upper aqueous layer is discarded.

The organic layer is washed with water (25ml), poured into a small flask and dried over anhydrous $MgSO_4$.

The ester is collected at $198-200^\circ C$ in distillation process.