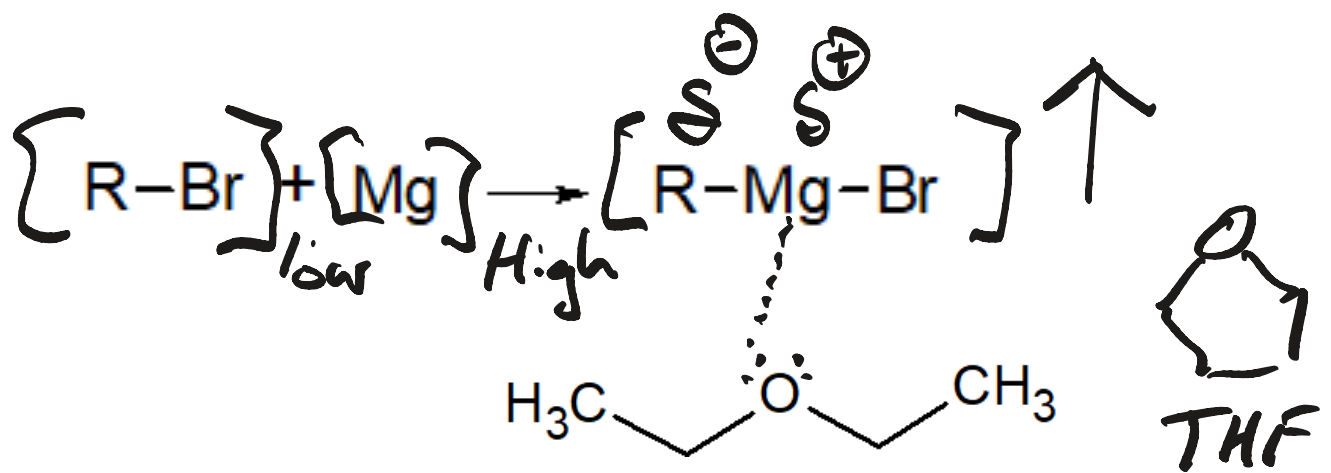


Organometallics

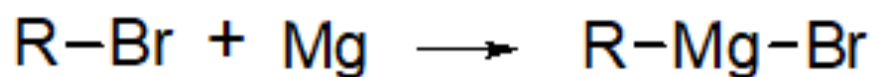
220C

10/15/26

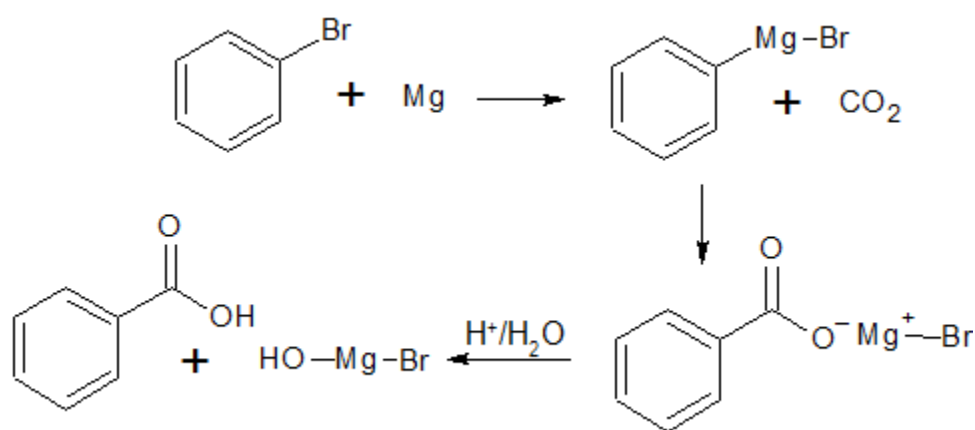
C - Mg Grignard



1. $\text{R}-\text{Mg}-\text{Br} + \text{O}=\text{O} \rightarrow \text{R}-\text{O}_2^{\ominus} \text{Mg}^{\oplus} \text{Br}$
2. $\text{R}-\text{Mg}-\text{Br} + \text{O}=\text{C}=\text{O} \rightarrow \text{R}-\text{CO}_2^{\ominus} \text{Mg}^{\oplus} \text{Br}$
3. $\text{R}-\text{Mg}-\text{Br} + \text{R}-\text{Br} \rightarrow \text{R}-\text{R} + \text{MgBr}_2$

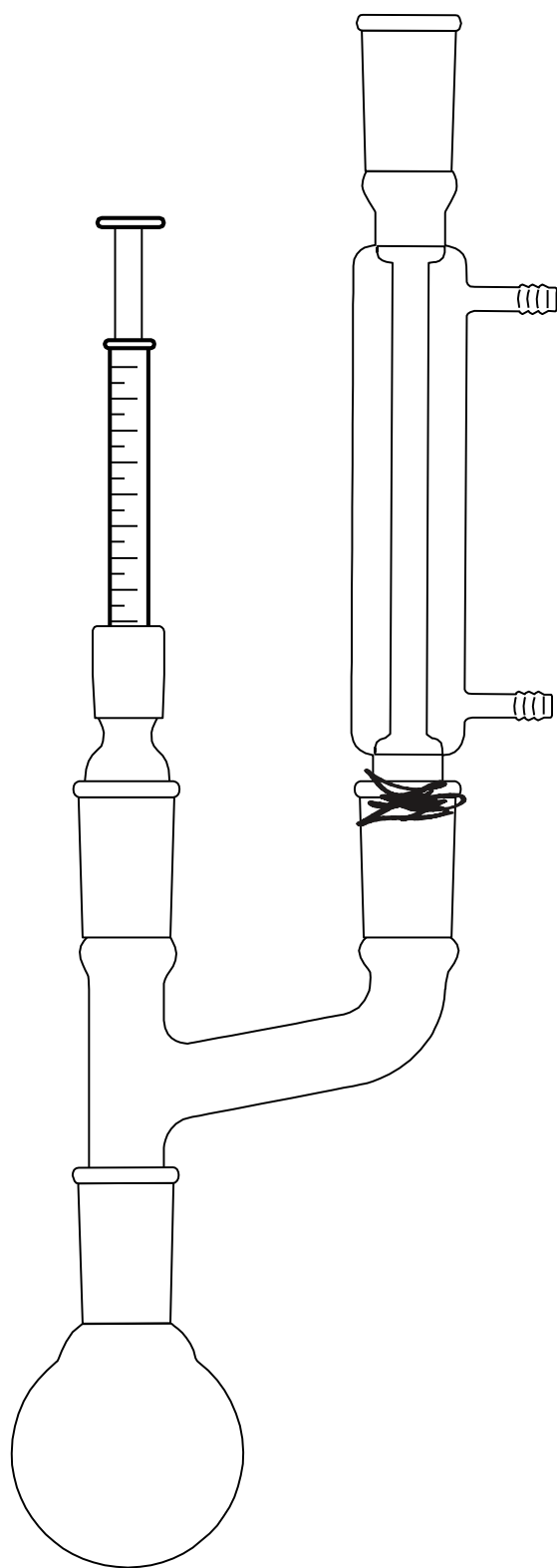


H_2O

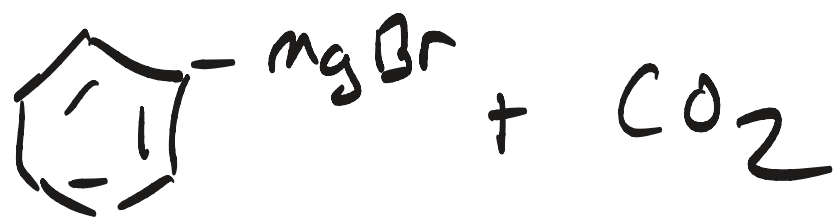


Sources of Water in a Reaction

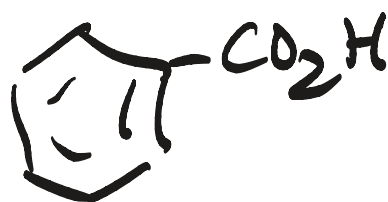
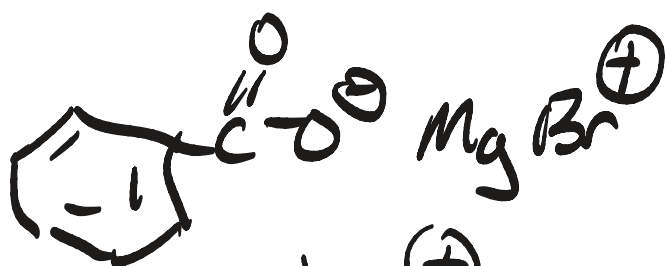
1. Solvent
 2. air
 3. glass
- dry anhydrous
air cond.



Mg
Powder

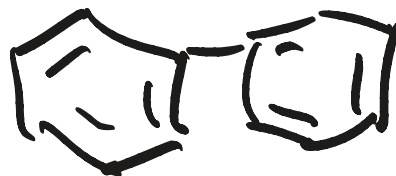


inverse addition



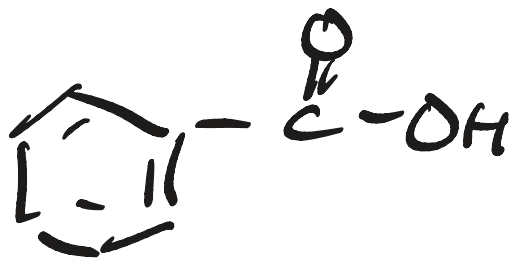
L/S

L/L



mp, % yield 60%
30-50

IR



aromatic C-H

Small

3000 cm^{-1}

Solid



Strong

OH

Small

Skinny

3200

3400 cm^{-1}

2 1/2 - 3 hrs