

Experiment

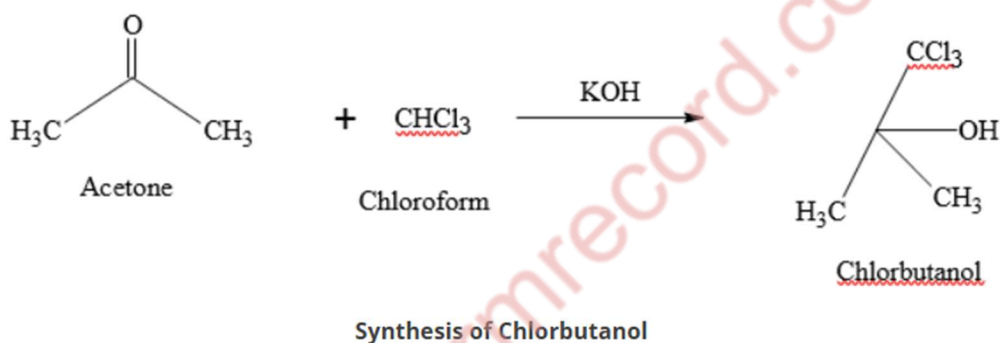
Synthesis of Chlorobutanol

Aim;- To synthesize Chlorobutanol and calculate its percentage yield.

Requirement;-

- **Chemicals-** acetone, chloroform, potassium hydroxide.
- **Glassware-** round bottom, Measuring cylinder, Glass rod.

Principle- Chlorobutanol is synthesized by combining acetone and chloroform in the presence of potassium hydroxide. This is a base-driven reaction called nucleophile addition.



Procedure;-

1. About 11 ml of chloroform and 1 gm of solid potassium hydroxide are taken in a round bottom flask shake until the potassium hydroxide dissolves.
2. To this 14 ml of acetone was added and shaken for 15 minutes.
3. Then set aside for half an hour and crystal of chlorbutanol was separated out.

Calculation:-

Theoretical yield:-.....g

Practical yield:-.....g

Formula:- % yield=Practical yield/Theoretical yield×100

Result:- The Chlorobutanol are synthesized & percent practical yield was found to be%.