

Organic Practical

Chemistry

The standard sequence for preparing and purifying an organic product.

A typical liquid organic preparation.

1

Reflux

Prolonged heating without losing volatile material.

2

Distil out the product

Collecting over the correct boiling range.

3

Separate in a funnel

Wash with sodium carbonate to remove acid; release pressure often.

4

Dry

Anhydrous sodium sulfate or magnesium sulfate until it swirls freely.

5

Redistil

Collect the pure fraction.

6

Identify

Boiling point, IR, mass spectrum.

PERCENTAGE YIELD

$(\text{actual} \div \text{theoretical}) \times 100$

Losses at every transfer, in the separating funnel and on distillation

Vent the separating funnel frequently when washing with carbonate: CO_2 builds pressure and can force the stopper out.