

Distillation

Chemistry

Simple against fractional, and when each is appropriate.

Simple distillation

- One vaporisation-condensation cycle
- Boiling points well separated
- Thermometer bulb level with the side arm
- Used to collect a product as it forms

Fractional distillation

- Column gives many cycles
- Close boiling points
- Larger surface area for repeated condensation
- Slower, better separation

THE DIFFERENCE THAT MATTERS

Reflux is the opposite arrangement: the condenser returns vapour to the flask, allowing prolonged heating without loss.

Anti-bumping granules prevent superheating and violent boiling. Add them before heating, never to hot liquid.