

TECHNICAL DATA

Determination of the molar mass of a liquid

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Principle

The molar mass of a liquid is to be determined by evaporating a liquid at constant temperature and pressure, and measuring the volume of vapour formed using a calibrated gas syringe.

Benefits

- For both demonstration and student experiments
- Simple procedure - fast results
- Glass jacket system easily expandable

Tasks

1. Determine the molar masses of diethyl ether and methanol.
2. Discuss the results in terms of the real and ideal behaviour of vapours.

Learning objectives

- Ideal and ordinary gases
- Equations of state for ideal gases
- Gas volumetry
- Determination of molar masses according to the vapour density method (Victor Meyer)

Necessary accessories:

This experiment requires a precision balance

Precision Balance, Sartorius ENTRIS® II, 620 g : 1 mg (49311-99)

Scope of delivery

Set gas laws with glass jacket, 230 V	43003-88	1
Lab thermometer,-10..+150C	38058-00	2
Weather monitor, 6 lines LCD	87997-10	1
Cannula 0.6x60 mm, Luer, 20 pcs	02599-10	1
Boiling beads, 200 g	36937-20	1
Power regulator	32288-93	1
Methanol 500 ml	30142-50	1
Diethyl ether 250 ml	30007-25	1
Water, distilled 5 l	31246-81	1

Necessary accessories

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