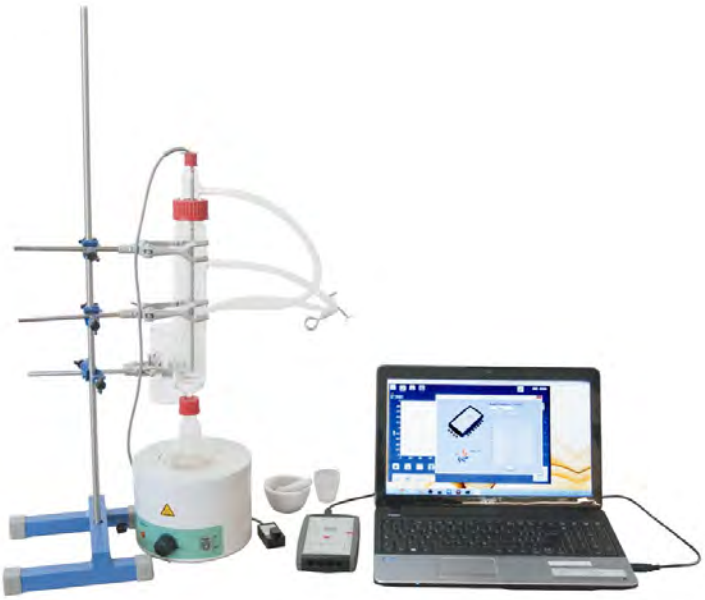
BOILING-POINT ELEVATION IN A SOLUTION
Mod. F-BP/EV

DESCRIPTION

The boiling point of a solution is always higher than that of pure solvent. A special apparatus enables to determine how the difference of temperature (boiling-point elevation) depends on the concentration of solute.



TRAINING PROGRAM

- In-depth concepts related to:
  - Raoult's law
  - Henry's law
  - ebullioscopic constant
  - chemical potential
  - Gibbs-Helmholtz equation
  - concentration ratio
  - degree of dissociation
- Measuring boiling-point elevation in water versus the concentration of salt, urea and of hydroquinone
- Determining the relationship existing between boiling-point elevation and number of particles
- Determining the molar mass of solute from the ratio between boiling-point elevation and concentration

TECHNICAL SPECIFICATIONS

- A round bottom flask heating mantle 250 ml
- A round bottom flask with threaded neck 250 ml
- Device for the study of ebullioscopic glass raising
- 3 Schott stoppers with gasket
- Two silicone tubes ø int 8 mm, ø ext 12 mm
- 1 Mohr clamp
- 1 250 ml beaker
- 1 base with rod
- 3 terminals
- 3 universal clamps
- 1 mortar with pestle, 60 ml
- 1 press for tablets
- 1 lab balance 0 to 100 g; sensibility 0,01 g
- 5 plastic bowls
- 1 thermometer, range 0 ÷ 150°C
- Glass beads by boiling
- Glass funnel, Ø 25 mm
- Spatulas
- Digital chronometer 60 m, 1/100 s
- Urea, 500 gr
- Sodium chloride, 1000 gr
- Hydroquinone, 250 gr
- Glycerol, 500 ml

SUPPLIED WITH

THEORETICAL - EXPERIMENTAL HANDBOOK

OPTIONAL

- **EVLAB DATALOGGER mod. EVS-EXP/EV** including **SOFTWARE EVLAB WORKSPACE mod. SW-F-BP/EV**
- 1 temperature sensor **mod. EVS-BP/EV**
- **PERSONAL COMPUTER**

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