



Material:

Item-no.	Qty.	Description
DM555-1A	1	Osmometer
DM555-1E	1	Osmometer - membrane, 5 pcs. (spare)
C1000-1G	1	Beaker glass, 600 ml, low form, Borosilicate

Purpose

Visualization of the osmotic pressure.

Preparation

- the lower glass bell of the Osmometer is pulled off
- A membrane is stretched over the opening (make sure that it is well closed)
- the glass bell is filled to the brim with copper sulphate solution or colored sugar solution
- we put the capillary tube with the stopper on the glass bell -
the solution should rise about 5 to 10 cm into the capillary tube
- afterwards we fill water into the beaker

Experiment

We place the Osmometer into the beaker and observe the liquid inside the capillary tubes.

Result

The liquid is pushed up into the tube.

More water particles migrate in through the membrane than out.

The density of the water particles is smaller inside and the sugar particles cannot pass through the membrane.

Note

The osmosis is also noticeable when vegetables such as radish for example are salted. The salt solution is diluted by the water emerging from the radish. You can also make a pit in the radish and sprinkle salt in it.