

**Material:**

Item-no.	Qty.	Description
C1010-1H	1	Beaker glass, 1000 ml, tall form, Borosilicate
DM480-1D	1	Density cylinder
C7415-4Z	1	Beaker tongs, stainless steel
C6020-1C	1	Stirring rod, glass, 8x250 mm
		Alcohol

Purpose

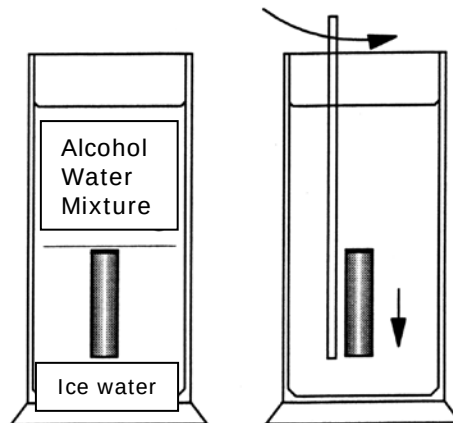
Illustration of the relationship between density and composition of the liquid

Experiment 1

Pour 500 ml of ice water into the beaker.

Place the density body with the help of the beaker tongs in the liquid; it swims.

A mixture of 10% alcohol and 90% water (in total 500 ml) is carefully poured onto the ice water. The density body floats at the boundary layer since the density is less here.



The two liquids are subsequently mixed by stirring.

The cylinder sinks to the bottom because the density of the mixture is lower than the density of the ice water.

Experiment 2

Add a little bit of salt and mix it by stirring.

The density of the mixture is increasing.

With a certain amount of dissolved salt the body begins to rise again.

Experiment 3

The diffusion of salt in water can be shown in a long-term experiment.

The beaker is filled with water and a few ml of alcohol are added.

Once you insert the density body it will sink to the bottom.

Now add a few grams (possibly larger crystals) of salt and place the beaker in a quiet place.

The slow dissolution of the crystals increases the density;
after a few days the density body will rise.