

Thermometer

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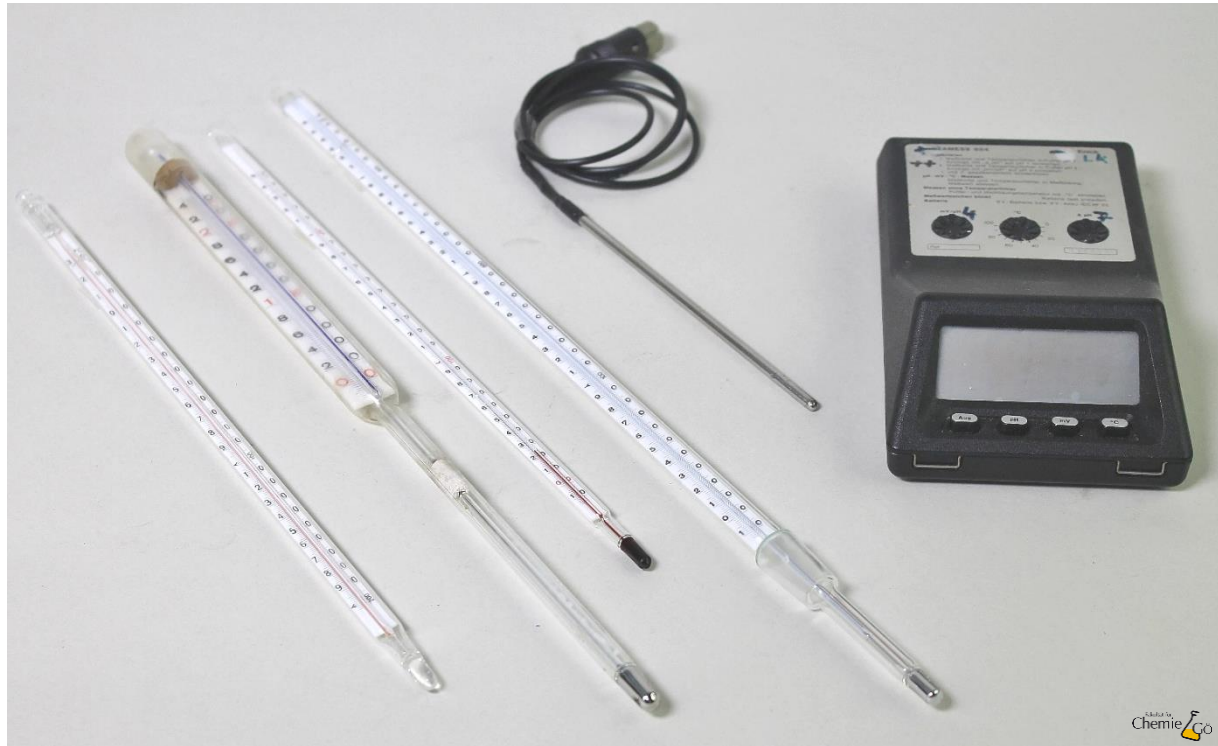
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Thermometer

There are various versions: analog and digital as well as high- and low-temperature thermometers.

Analog thermometers are filled with metal alloys or special liquids (e.g. alcohols).





Thermometers are expensive precision instruments that should always be treated with care!

Thermometers are not glass rods and should not be used to stir solutions.

The choice of thermometer depends on the expected temperature range and the sample. The wrong choice could lead to damage.



An analog thermometer is secured by a support clamp so that it is immersed in the solution without touching the bottom.

Analog thermometers have rather small measuring ranges, e.g.:

-200°C to +30°C

-100°C to 200°C

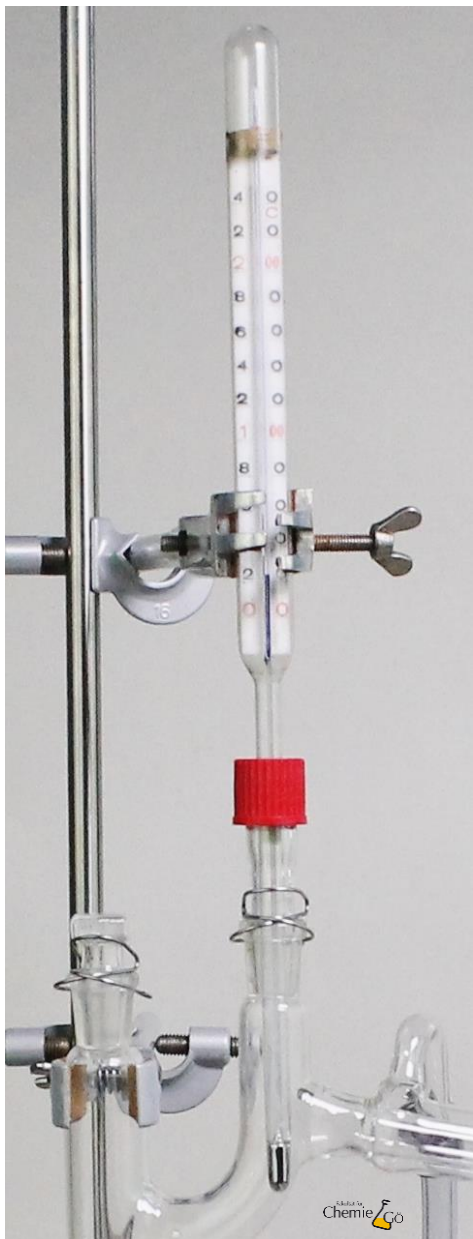
-50°C to 300°C



Digital thermometers typically have larger measuring ranges (e.g. -200°C to $+400^{\circ}\text{C}$).



As the sensors are made of metal, they are labile towards acids or bases.



Analog thermometers are commonly used in airtight glass apparatuses.

With the help of a „quick-fit“ they are connected to the apparatus.



In evacuated apparatuses ground joint thermometers should be used for the sake of tightness.