Distiller

Destillationsbrücke

Georg-August-Universität Göttingen



Distiller

The distiller is used to condense the product of a distillation. It consists of a Claisen flask, a Liebig condenser and a vacuum inlet.





The Claisen flask serves as a connection between the sample vessel and the Liebig cooler.

As shown here, the Claisen flask is secured at the ground glass joints with clamps.



If the temperature needs to be checked during distillation, a thermometer is connected to the Claisen flask.

The temperature sensor of the thermometer needs to be located under the entrance of the Liebig condenser.



The thermometer can be attached to the distiller via a quick-fit or ground joint. Both options can also be used during vacuum distillations. The Liebig condenser is needed to cool the gas for condensation. The cooling liquid (usually water) ist connected to the condenser according to the countercurrent exchange mechanism.





Round-bottomed flask Distillation under normal pressure

Distillation spider Vacuum distillation

The vacuum adapter is located at the end of the Liebig condenser.

In vacuum distillation, a vacuum pump is connected to the vacuum adapter by means of a vacuum hose.

A round-bottomed flask or a destillation spider with flasks can be used to collect the distillate. By using a distillation spider, different fractions can be collected without having to ventilate the apparatus during a vacuum distillation.



Round-bottomed flask

Distillation spider

The vacuum adapter is located at the end of the Liebig condenser.

For distillation under normal pressure, a round-bottomed flask can be connected to the ground joint to collect the distillate.

In vacuum distillation, a vacuum pump is connected to the vacuum adapter by means of a vacuum hose.

By using a distillation spider, different fractions can be collected without having to ventilate the apparatus.