

Hettich centrifuges in environmental analysis Determination of chlorophyll content as an indicator of water purity



Hettich centrifuges in environmental analysis

Water samples are generally centrifuged to determine chlorophyll a or phaeophytin content. The concentration of chlorophyll a permits a statement on water quality.

Procedure*):

The plant mass present in a water sample is first enriched through filtration. It is then homogenised and extracted. The substance under test enters the solvent (e.g. acetone). The extract thus derived is therefore clarified prior to analysis.*)

Laboratory centrifuges are used for this clarification process. They have the advantage over filtration that there is no waste and less labour is required. For large numbers of samples the space requirement is lower and a higher number of samples can be processed in the time available.

Centrifugation parameters

Speed (RPM): 3,500 min⁻¹ to 4,500 min⁻¹

Running time: 10 to 20 minutes
Volume: 10 to 30 ml
Temperature: 10 °C to 15 °C

Ordering information

| Centrifuge | Cat. No. |
|------------------------------------|----------|
| Refrigerated model UNIVERSAL 320 R | 1406 |

| Selection of accessories | Cat. No. |
|--|----------|
| 4-place swing-out rotor | 1494 |
| carrier for tubes up to a volume of 100 ml | 1495 |
| lid with bio-containment for carrier 1495 | 1492 |
| adapter for conical 30 ml tubes with screw cap | 1365 |

Other tubes require different adapters. We will be happy to advise you!



Föhrenstr. 12 D-78532 Tuttlingen Germany www.hettichlab.com info@hettichlab.com

service@hettichlab.com

Phone +49 (0)7461/705 -0 Fax +49 (0)7461/705 -1122

National Sales: -12 00
International Sales: -12 01
National Service: -12 02
International Service: -12 03



¹⁾ Procedure used in the Chlorophyll a ring study. Final Report of the Umweltbundesamt [Federal Environment Agency] / FG II 3.3 and II 3.5, November 2002. Berlin.