



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

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

## Procedure<sup>\*)</sup>:

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.<sup>\*)</sup>

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 <sup>-1</sup> to 4,500 min <sup>-1</sup>
Running time:	10 to 20 minutes
Volume:	10 to 30 ml
Temperature:	10 °C to 15 °C

<sup>\*)</sup> 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.

## 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!**