behr
Labor-Technik

behrotest® Equipment for the Determination of

Crude Fibre

Crude Fibre

Crude fibre:

Fat-free organic substances in feedingstuffs which are insoluble in acid and alkaline media.

Crude fibre is a measure of the quantity of indigestible cellulose, pentosans, lignin, and other components of this type in present foods.

It is the residue of plant materials remaining after solvent extraction followed by digestion with dilute acid and alkali. These components have little food value but provide the bulk necessary for proper peristaltic action in the intestinal tract.

Determination of Crude Fibre with behr: AOAC and AACC Compliant

The determination of the crude fibre content of food and animal feed is mandatory worldwide. Standard methods – i.e. AACC Method 32-10.01, Crude Fiber in Flours, Feeds, and Feedstuffs or AOAC Official Method 962.09 (ISO 5498:2000, AAFCO code 004.00), Fiber (Crude) in Animal Feed and Pet Food and, of course ISO6865:2000 (AAFCO code 004.06) – describe the procedure.

A sample – de-fatted where necessary – is treated successively with boiling solutions of sulphuric acid and potassium hydroxide of specified concentrations. The residue is separated by filtration on a sintered-glass filter washed, dried, weighed and ashed within a range of 475 … 500 °C.

The loss of weight resulting from ashing corresponds to the crude fibre present in the sample.

behrotest® Equipment for the Determination of Crude Fibre: Basic Line

behrotest® apparatus for crude fibre separation

Crude fibre separation apparatus with 4 or 6 sample positions.

Complete with:

- 600 ml beaker
- Water-cooled condenser with cool water distribution
- Condenser stand with drip tray
- Heating positions individually infinitely adjustable
- Main power switch with pilot light

Fully assembled complete device with all the necessary accessories.

behrotest® apparatus for crude fibre separation

Make	Item description	Item no.
EXR 4	with 4 sample positions	B00218446
EXR 6	with 6 sample positions	B00218448

EXR 4

behrotest® filtration unit for crude fibre separation

Filtration unit for crude fibre separation with 4 or 6 sample positions.

Complete with:

- Filter crucible
- Filtration advancers
- Seals
- Connection fittings
- Drainage pipe with connecting nozzle for vacuum or water suction pump

e.g. to determine the crude fibre content according to EN ISO6865

Filtration unit for crude fibre separation

Make	Item description	Item no.
SC 4	with 4 positions	B00513779
SC 6	with 6 positions	B00513780

SC 4

MVP 46 - complete extraction unit for SC 4 and SC 6

Complete with:

- Diaphragm vacuum pump
- 2 ltr. collection bottle
- Tubes

Make	Item description	Item no.
MVP 46	Complete extraction unit	B00515390

MVP 46

behrotest® Equipment for the Determination of Crude Fibre: Comfort Line

The behrotest® Comfort Line equipment for the determination of crude fibre offer

- Rapid analysis
- boiling, rinsing and filtration in one unit
- no loss of sample during determination
- processing of multiple or single samples
- reliable results and
- high reproducibility

They are ideally suited for

- total crude fibre determination (part of the Weender animal feed analysis as performed in Europe)
- neutral detergent fibre and acid detergent fibre determination (NDF and ADF according to Van Soest)
- acid detergent lignin determination (ADL according to Van Soest)
- different fractions of fibre (cellulose, hemicellulose and pectin)

Semi-automatic Models

behrotest® CF 2+2 Semi-automatic Crude Fibre Extraction Unit

Max. 2+2 sample places.

Easy operation: The analyst is guided through the procedure by messages on the display.

behr ABP (“acknowledge before proceeding”) method for optimum analytical safety.

Possible manual operation of air and suction pumps.

Practical tray for transfer of crucibles prevents any possible sample loss, as the same crucibles can be processed by the DG 2+2 cold extraction unit.

Technical Data

Power consumption	1,000 VA
Dimensions (w x h x d) in cm	59 x 67 x 56
Weight in kg	43

Make	Item no.
CF 2+2	B00659292

CF 2+2

behrotest® CF 6 Semi-automatic Crude Fibre Extraction Unit

Max. 6 sample places

Easy operation: The analyst is guided through the procedure by messages on the display.

behr ABP (“acknowledge before proceeding”) method for optimum analytical safety.

Possible manual operation of air and suction pumps.

Practical tray for transfer of crucibles prevents any possible sample loss, as the same crucibles can be processed by the DG 6 cold extraction unit.

Technical Data

Power consumption	1,400 VA
Dimensions (w x h x d) in cm	75 x 67 x 56
Weight in kg	51

Make	Item no.
CF 6	B00659293

CF 6

behrotest® CF 6 Semi-automatic

Cold Extraction

behrotest® DG 2+2 and DG 6

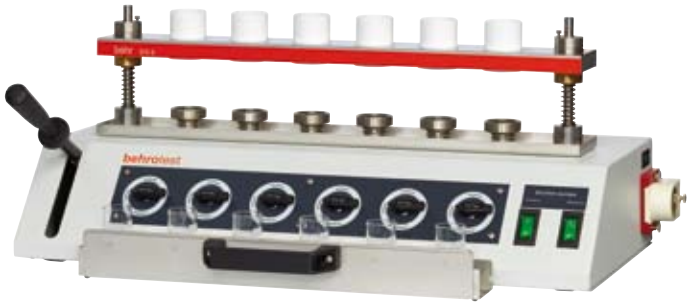
Cold Extraction Units for De-fattening

Necessary condition for a reliable crude fibre determination is a low fat content (< 10 %) of the sample. Samples exceeding this value require a preliminary fat extraction with acetone and hexane or petroleum.

The behrotest® DG 2+2 and DG 6 perform a rapid fat extraction directly in the same glass crucibles used in the CF 2+2 and CF 6. The user can start crude fibre extraction immediately after completing fat extraction.

Practical tray for transfer of crucibles prevents any possible sample loss, as the same crucibles can be processed by the CF extraction units.

DG 2+2



DG 6

Technical Data

	DG 2+2	DG 6
Power consumption	200 VA	200 VA
Dimensions (w x h x d) in cm	64 x 30 x 60	88 x 30 x 60
Weight in kg	18	23

Make	Item no.
DG 2+2	B00659296
DG 6	B00659297

This may also interest you

Extraction units for crude lipid

Determination of the crude protein according to Kjeldahl:

- Infrared digestion devices with manual operation and also programmable
- Block digestion unit, also with fully-automatic lift
- Steam distillation units for (almost) any requirement
- Titration devices

Made in Germany

268104

ISO 9001 BUREAU VERITAS Certification

behr Labor-Technik GmbH • Spangerstraße 8 • 40599 Düsseldorf/Germany
Tel.: (+49) (0) 211 – 7 48 47 17 • Fax: (+49) (0) 211 – 7 48 47 48
eMail: info@behr-labor.com • Internet: www.behr-labor.com

behr Labor-Technik

B00659408 EN - V3_1_001