

behrotest® Equipment for the

## Leaching behaviour test



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Quality made in Germany 

# Leaching

Leaching is a separating procedure and is known in environmental analysis as the process resolving or removing adsorbant substances from adsorbants. Hazardous materials are removed in this process and then determined under prescribed conditions and analysis procedures

We offer you percolation apparatus for the joint examination of the leaching behavior of solids according to

DIN 19528, as well as elution units for chemical and ecotoxicological testing of soil and soil-like materials in accordance with DIN EN ISO 21268-3.

Whether soil samples or solids, the elution equipment from behr is variable in use thanks to the various quality glass columns that can be used. No matter whether they have to be conical or not. behr offers suitable solutions for various analysis procedures.



# Solid materials

## Compact equipment for elution of solids

The compact elution equipment is used to percolate water through all water-permeable solids and to investigate the release of both inorganic and organic substances in accordance with DIN 19528.

### Complete equipment, consisting of:

- percolation column (GS 101: 100 x 500 mm with GL 100 and GSU 60: 60 x 430 mm with GL60) with prefilters on a stable stand
- Supply bottle with closure and lance
- 2 different pump hoses for a flow rate of 0.25-12 ml/min. and 0.66-33 ml/min. Other pump hoses on request.
- Eluate line made of PTFE
- Collection vessel made of glass, closure with venting cannula
- incl. laboratory hose pump with 2 or 4 channels



KEB 101

Type	Product description	Art. No.
KEB 101	Complete equipment, elution of solids for 1 sample with glass column GS 101	B00218539
KEB 601	Complete equipment, elution of solids for 1 sample with glass column GSU 60	B00652703
KEB 104	Complete equipment, elution of solids for 4 samples with glass column GS 101	B00745330

### Accessories

Type	Product description	Art. No.
SRR	Hose package with 4 pump hoses made of tygon, flow rate 0.25 - 12 ml/ min	B00218535
SVV	Hose package with 4 pump hoses made of tygon, flow rate 0.66 - 33 ml/ min	B00218536
LGF 2000	behrotest® Laboratory bottle, ISO thread, 2000 ml with graduation	B00225419
PLP 381	behrotest® laboratory hose pump 0,00025 .. 380 ml/min, without pump head	B00734903
PPH 5062	behrotest® pump head, 2-channel 0.00025 .. 48 ml/min, 6 squeeze rollers	B00491218
PPH 5064_10	behrotest® pump head, 4-channel 0.0025 .. 32 ml/min, 10 squeeze rollers	B00658048
QW	behrotest® Glass wool 100 g	B00027716
QS	Quartz sand, annealed, grain size 1-2 mm, bottle of 1000g	B00218522



KEB 104

# Elution of Soil samples

We offer the behrotest® column elution in accordance with the LUA recommendation (leaflet 20) for analysis of various soil samples.

## Complete equipment KEB 950, consisting of:

- percolation column (GS 950: 60 x 320 mm) with prefilters on a stable stand
- Supply bottle with closure and lance
- 2 different pump hoses for a flow rate of 0.25-12 ml/min. and 0.66-33 ml/min. Other pump hoses on request.
- Eluate line made of PTFE
- Collection vessel made of glass, closure with venting cannula
- incl. laboratory hose pump with 2 channels



KEB 950

## Complete equipment SEB 32 R, consisting of:

- with structure stand
- Adjustable 4-channel hose pump with fixed speed
- Supply container, 20 l
- 4 elution columns, inner diameter 6 cm, 32 cm long, with 2 screws (GL 45, with Teflon inserts) for easy filling of columns
- 4 collection bottles for the column eluate, 2 l, with screw (GL 45) and vent
- Supply tube made of TYGON and PVC, with non-return valve in the column
- Teflon lines between the columns and collection containers
- Flowrate 0.00025 to 380 ml/min
- Speed range 2 to 100 min<sup>-1</sup>
- Simultaneous adjustment with 4 channels



SEB 32 R

Type	Product description	Art. No.
KEB 950	Complete equipment, elution of solids for 1 sample with glass column GS 950	B00218538
SEB 32 R	behrotest® column elution unit LUA leaflet 20, for soil samples in disturbed storage adjustable hose pump	B00218541

## Accessories

Type	Product description	Art. No.
LGF 2000	behrotest® Laboratory bottle, ISO thread, 2000 ml with graduation	B00225419
PLP 381	behrotest® laboratory hose pump 0.00025 .. 380 ml/min, without pump head	B00734903
PPH 5062	behrotest® pump head, 2-channel 0.00025 .. 48 ml/min, 6 squeeze rollers	B00491218
PPH5064	behrotest® pump head, 4-channel 0.0025 .. 48 ml/min, 6 squeeze rollers	B00455177
	Inlet hose, PVC 6 mm inside -ø x 10 mm outside -ø	B00224979
	Connection hose, PVC 2 mm inside -ø x 4 mm outside -ø	B00224986
	Assembled pump tubing, PVC 2 x 4 mm/ Tygon with 3 stoppers, 0.57 mm inner ø	B00232922
	Drain hose, PTFE 2 mm inner ø x 3 mm outer ø	B00224994
GL45-0	GL 45 screw connection at the top, with PTFE rotating part and 1/8" screw connection to 3 mm hose connection	B00218527
GL45-U	GL 45 screw connection below, with PTFE rotating part and connection for PVC hose	B00218528
QW	behrotest® Glass wool 100 g	B00027716
QS	Quartz sand, annealed, grain size 1-2 mm, bottle of 1000g	B00218522



LGF 2000

PLP 381 mit  
PPH 5064

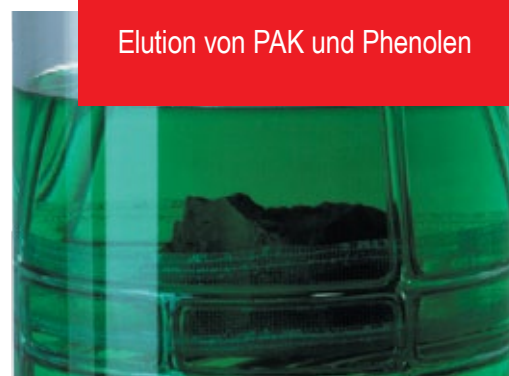
## Prepared road construction waste For elution in the trough method

The trough method is a special variant of the eluate test according to DIN EN 1744-3. For example, LAGA (Working Group of the Federal States for Waste) prescribes analytical examinations on the solidified sample object in the trough test in its technical rules for the requirements for recycling mineral residues/wastes. The aim of the examination is the determination of elutriation of PAH and phenols in prepared road construction waste.

### Application areas of the trough test are very general

- The elution of solidified samples with a weight of up to approx. 2.5 kg
  - The analysis of unbound samples up to a grain size of max. 33 mm.
- The examination material is in a sieve insert and is leached in a trough.

Unlike elution method in the case of the trough procedure, no mechanical load is placed on the examination material as a magnetic stirrer ensures movement of the liquid.



### Compliant, user friendly and high performing: Elution in accordance with the trough procedure with behrotest® TRO 30

The behrotest® device TRO 30 for elution in the trough test was developed in collaboration with the Working Group elution for mineral substances.

### Pecifically, the equipment has the following characteristics:

- The trough with lid is made of borosilicate glass 3.3 and has a content of 30l. The elution remove is done by means of a spindle stopcock.
- A stable frame made of powder-coated steel plate for a firm stand and precision centering of the trough above the magnetic stirrer.
- The magnetic stirrer is generously sized for the stirring quantity of 30l. Its speed is infinitely adjustable.
- A special glass rack with filter insert made of fluoroplastic ensures the thorough and even rinsing of the examination object with de-ionized water.

Concept and material of the behrotest® TRO 30 rule out the ingress of undesired external substances into the eluate and ensure reliable and exact analysis results.

Type	Product description	Art. No.
TRO 30 PP	Equipment with magnetic stirrer for the examination of PAH and phenols in prepared road construction waste	B00218513
TRO 30 RWP	Equipment with agitator for the examination of PAH and phenols in prepared road construction waste	B00218515

### Accessories

Type	Product description	Art. No.
GE 30	Elution vessel, 30 l	B00218505
IMR 1	Inductive magnetic stirrer with 230 V~ mains unit and car adapter	B00218351
MS 30	Magnetic stirring bar, egg-shaped	B00218506
SVV	Hose package with 4 pump hoses made of tygon, flow rate 0.66 - 33 ml/ min	B00218536
	Trough holder rail for the elution vessel	B00218512
	Insertable frame, PP grey	B00230898
QFK 001	behrotest® sieve insert 2000 µm, fluoroplastic	B00218509
TD 30	Trough lid, PP	B00218507
AL 15	Drain tap with PTFE spindle and GL 32 screw connection	B00218338

### Technical Data

	TRO 30
<b>Dimensions (w x h x d)</b>	
- Magnetic stirrer	approx. 240 x 380 x 110 mm
- Entire apparatus	approx. 300 x 460 x 600 mm
<b>Nominal voltage</b>	12 V=, 2,5 A
	power supply 230 V~, 50 Hz
<b>Sample quantities</b>	max. 2,5 kg
<b>Grain size, mm</b>	2 - 33



TRO 30 RWP



TRO 30



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Subject to technical changes and errors.



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