

# Determination of Cyanide in Water, Soil and Foodstuffs:

Equipment for Liberation and Separation of Cyanide  
in the Sample Material



[www.behr-labor.com](http://www.behr-labor.com)

# Equipment for Cyanide Distillation



KCM 1-N

500 ml

1000 ml

The system consequently operates under a mild vacuum, which contributes to the safety in the performance of the analysis.

Excellent recovery rates, even with difficult sample matrices, in water and soil analyses. Simultaneous heating and stirring with the Kompakt distillation units with magnetic stirrers for the cyanide determination

Including stand, heating module, magnetic stirrer, flow meter, mountings, hoses, glassware and diaphragm vacuum pump.

Art. No.	Type	Product description
B00637658	KCM 1-N	Compact system with magnetic stirrer, for liberation and separation operations in the determination of total cyanide, 500 ml flask, incl. diaphragm vacuum pump.
B00747517	KCM 1-NB	Compact system with magnetic stirrer for liberation and separation operations in the determination of total cyanide in soil samples (40 ml absorption vessel), 500 ml flask, incl. diaphragm vacuum pump.

Including stand, heating module, magnetic stirrer, flow meter, mountings, hoses, glassware and diaphragm vacuum pump.

Art. No.	Type	Product description
B00693417	KCM 1-N/1000	Compact system with magnetic stirrer, for liberation and separation operations in the determination of total cyanide, 1000 ml flask, incl. diaphragm vacuum pump.
B00747518	KCM 1-NB/1000	Compact system with magnetic stirrer for liberation and separation operations in the determination of total cyanide in soil samples (40 ml absorption vessel), 1000 ml flask, incl. diaphragm vacuum pump.

## Technical Data

	KCM 1-N/ KCM 1-NB	KCM 1-N/1000/ KCM 1-NB/1000
Approx. dimensions (H x W x D in cm)	71,5 x 23 x 33	76 x 30 x 75
Weight	8,2 kg	10 kg
Electrical line voltage	230 VAC, 50/60 Hz	230 VAC, 50/60 Hz
Power rating	220 W	350 W

## Equipment for KCM 1-N and KCM 1-NB

B00218481	CE 2	behrotest® pH electrode for cyanide air stripping (easily liberatable cyanides in systems with 1 or 2 samples)
B00654340	MVP 90	behrotest® Diaphragm vacuum pump for the compact systems

### Glassware

B00218479	RAK 500	behrotest® Round-bottomed, 500 ml, 3 neck flask for use in the Kompakt systems
B00231846	MGL 3/500R	behrotest® Air inlet tube
B00231847	TT 50/R	behrotest® Filler funnel with stopcock
B00218185	GW 250	behrotest® Gas bubbler flask , 250 ml, without frit
B00217963	ASH/CY	behrotest® Absorption vessel with stopcock, incl. NS10 connector & hose nozzle
B00645183	RFK 2 D	behrotest® Reflux condenser

### For Soil Samples

B00218486	ASH	behrotest® Absorption unit consisting with stopcock of 40 ml absorption vessel
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## Equipment for KCM 1-N/1000 and KCM 1-NB/1000

B00693420	CE 3	behrotest® pH electrode for cyanide air stripping (easily liberatable cyanides in systems with 1 or 2 samples)
B00654340	MVP 90	behrotest® Diaphragm vacuum pump for the compact systems

### Glassware

B00218477	RAK 1000	behrotest® Round-bottomed, 1000 ml, 3 neck flask for use in the compact systems
B00693421	MGL 3/1000R	behrotest® Air inlet tube
B00693422	TT 100/R	behrotest® Filler funnel with stopcock
B00218185	GW 250	behrotest® Gas bubbler flask , 250 ml, without frit
B00217963	ASH/CY	behrotest® Absorption vessel with stopcock, incl. NS10 connector & hose nozzle
B00645183	RFK 2 D	behrotest® Reflux condenser

### For Soil Samples

B00218486	ASH	behrotest® Absorption unit consisting with stopcock of 40 ml absorption vessel
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500 ml



ASH/CY

1000 ml



ASH

# ACCESSORIES

# Equipment for Cyanide Distillation

## Programmable, energy controlled Infra-red Cyanide Distillation Unit CN 4 IR



CN 4-IR

Modern and efficient unit with four sample places for the distillation of total cyanide.

The infra-red system with energy control and electronic programming of time and energy is especially efficient due to the high quality Quarzglas radiators in use.

The integrated magnetic stirrer makes the CN 4 IR appropriate for cyanide determination in water according to international standards.

Accessories available for the distillation of total cyanide in soils according to ISO 11262:2011 - Soil quality. Determination of total cyanide.

Art. No.	Type	Product description
B00662962	CN 4-IR	Rapid infra-red heating system for the determination of total cyanide in up to 4 sample places. with integrated magnetic stirrer and diaphragm vacuum pump, with 500 ml reaction vessels.
B00704613	CN 4-IRB	Same as CN 4-IR above, except with 40 ml absorption vessels for determination of cyanide in soil samples.

# 500 ml

## Professional sample preparation for cyanide determination in aqueous and soil samples with six sample positions: Simultaneous heating and stirring guarantee a high recovery rate and exact analysis results



CN 6

Efficient unit with six sample places for the distillation of total cyanide. Precision heating block with highly accurate temperature control.

The integrated magnetic stirrer makes the CN 6 appropriate for cyanide determination in water according to international standards.

Accessories available for the distillation of total cyanide in soils according to ISO 11262:2011 - Soil quality. Determination of total cyanide.

Art. No.	Type	Product description
B00218104	CN 6	System for performing liberation and separation steps of total cyanide determination in up to 6 samples, with integrated magnetic stirrer and diaphragm vacuum pump, with 500 ml reaction vessels.
B00218257	CN 6-B	Same as CN 6 above, except with 40 ml absorption vessels for determination of cyanide in soil samples.

## Technical Data

Approx. dimensions (H x W x D in cm)	70 x 100 x 43
Weight of complete system	Approx. 48 kg
Line voltage for heating block	230 VAC, 50/60 Hz
Power rating of heating block	2000 W

500 ml

**Accessories for CN 4-IR/CN 4-IRB and CN 6/CN 6-B**

B00218151	CE 1	behrotest® pH electrode for cyanide air stripping (easily liberatable cyanides in systems with 4 or 6 samples)
B00235167	MVP 700	behrotest® Diaphragm vacuum pump suitable for use with the CN 4-IR/CN 4-IRB and CN 6/CN 6-B

**Accessories for 4 Places**

B00647849	DES 4	behrotest® Glassware stand, 4 place
B00647850	DES 4/29	behrotest® Stand for 4 absorption units

**Accessories for 6 Places**

B00218226	DES 6	behrotest® Glassware stand, 6 place
B00218227	DES 6/29	behrotest® Stand for 6 absorption units

**Glassware 500 ml**

B00218194	CY 500	behrotest® Round-bottomed sample vessel, for cyanide distillation in the CN 4-IR/ CN 4-IRB and CN 6/ CN 6-B, 500 ml
B00218211	MGL 3/500	behrotest® Air inlet tube for cyanide distillation in the CN 4-IR/ CN 4-IRB and CN 6/ CN 6-B

**Glassware**

B00218185	GW 250	behrotest® Gas bubbler flask , 250 ml, without frit
B00217963	ASH/CY	behrotest® Absorption vessel with stopcock, incl. NS10 connector & hose nozzle
B00645183	RFK 2 D	behrotest® Reflux condenser
B00218212	TT 50	behrotest® Filler funnel with stopcock for the cyanide distillation in the CN 4-IR/CN 4-IRB and CN 6/CN 6-B
B00218174	CGL 3	behrotest® NS 55 3-neck adapter for reaction vessel CY 500 or 65/750



DES 6



DES 6-29

# ACCESSORIES

# Equipment for Cyanide Distillation

## Programmable, energy controlled Infra-red Cyanide Distillation Unit CN 4 IR-750



CN 4-IR750

Modern and efficient unit with four sample places for the distillation of total cyanide.

The infra-red system with energy control and electronic programming of time and energy is especially efficient due to the high quality Quarzglas radiators in use.

The integrated magnetic stirrer makes the CN4IR appropriate for cyanide determination in water according to international standards.

Accessories available for the distillation of total cyanide in soils according to ISO 11262:2011 - Soil quality. Determination of total cyanide.

Art. No.	Type	Product description
B00691895	CN 4-IR750	Rapid infra-red heating system for the determination of total cyanide in up to 4 sample places. with integrated magnetic stirrer and diaphragm vacuum pump, with 750 ml reaction vessels.
B00704614	CN 4-IRB750	Same as CN 4-IR750 above, except with 40 ml absorption vessels for determination of cyanide in soil samples.

# 750 ml

## Professional sample preparation for cyanide determination in aqueous and soil samples with six sample positions: Simultaneous heating and stirring guarantee a high recovery rate and exact analysis results

Efficient unit with six sample places for the distillation of total cyanide.

Precision heating block with highly accurate temperature control.

The integrated magnetic stirrer makes the CN 6 appropriate for cyanide determination in water according to international standards.

Accessories available for the distillation of total cyanide in soils according to ISO 11262:2011 - Soil quality. Determination of total cyanide.

Art. No.	Type	Product description
B00691896	CN 6-750	System for performing liberation and separation steps of total cyanide determination in up to 6 samples, with integrated magnetic stirrer and diaphragm vacuum pump, with 750 ml reaction vessels.
B00704615	CN 6B-750	Same as CN 6-750 above, except with 40 ml absorption vessels for determination of cyanide in soil samples.



CN 6-750

### Technical Data

Approx. dimensions (H x W x D in cm)	70 x 100 x 43
Weight of complete system	Approx. 48 kg
Line voltage for heating block	230 VAC, 50/60 Hz
Power rating of heating block	2000 W

750 ml

**Accessories for CN 4-IR 750/ CN 4-IRB 750 and CN 6-750/ CN 6-B750**

B00218151	CE 1	behrotest® pH electrode for cyanide air stripping (easily liberatable cyanides in systems with 4 or 6 samples)
B00235167	MVP 700	behrotest® Diaphragm vacuum pump suitable for use with the CN 4-IR750/ CN 4-IRB 750 and CN 6-750/ CN 6-B750

**Accessories for 4 Places**

B00647849	DES 4	behrotest® Glassware stand, 4 place
B00647850	DES 4/29	behrotest® Stand for 4 absorption units

**Accessories for 6 Places**

B00218226	DES 6	behrotest® Glassware stand, 6 place
B00218227	DES 6/29	behrotest® Stand for 6 absorption units

**Glassware 750 ml**

B00218161	65/750	behrotest® reaction vessel, flat bottom, for cyanide distillation CN 4-IR 750/ CN 4-IRB 750 and CN 6-750/ CN 6-B750
B00218189	MGL 3/750	behrotest® Air inlet tube for cyanide distillation in the CN 4-IR750/ CN 4-IRB 750 and CN 6-750/ CN 6-B750

**Glassware**

B00218185	GW 250	behrotest® Gas bubbler flask , 250 ml, without frit
B00217963	ASH/CY	behrotest® Absorption vessel with stopcock, incl. NS10 connector & hose nozzle
B00645183	RFK 2 D	behrotest® Reflux condenser
B00218212	TT 50	behrotest® Filler funnel with stopcock for the cyanide distillation in the CN 4-IR/CN 4-IRB and CN 6/CN 6-B
B00218174	CGL 3	behrotest® NS 55 3-neck adapter for reaction vessel CY 500 or 65/750

**Dispenser**

B00217809	DOS 10	behrotest® dispenser for sodium hydroxide (Absorption vessels)
B00217809	DOS 10	behrotest® dispenser for hydrochloric acid (Filler funnel with stopcock)
B00225419	LGF 2000	Laboratory with ISO-Thread, 2000 ml with pitch, crystal clear with ring stopper, without cap



ASH/CY

TT 50

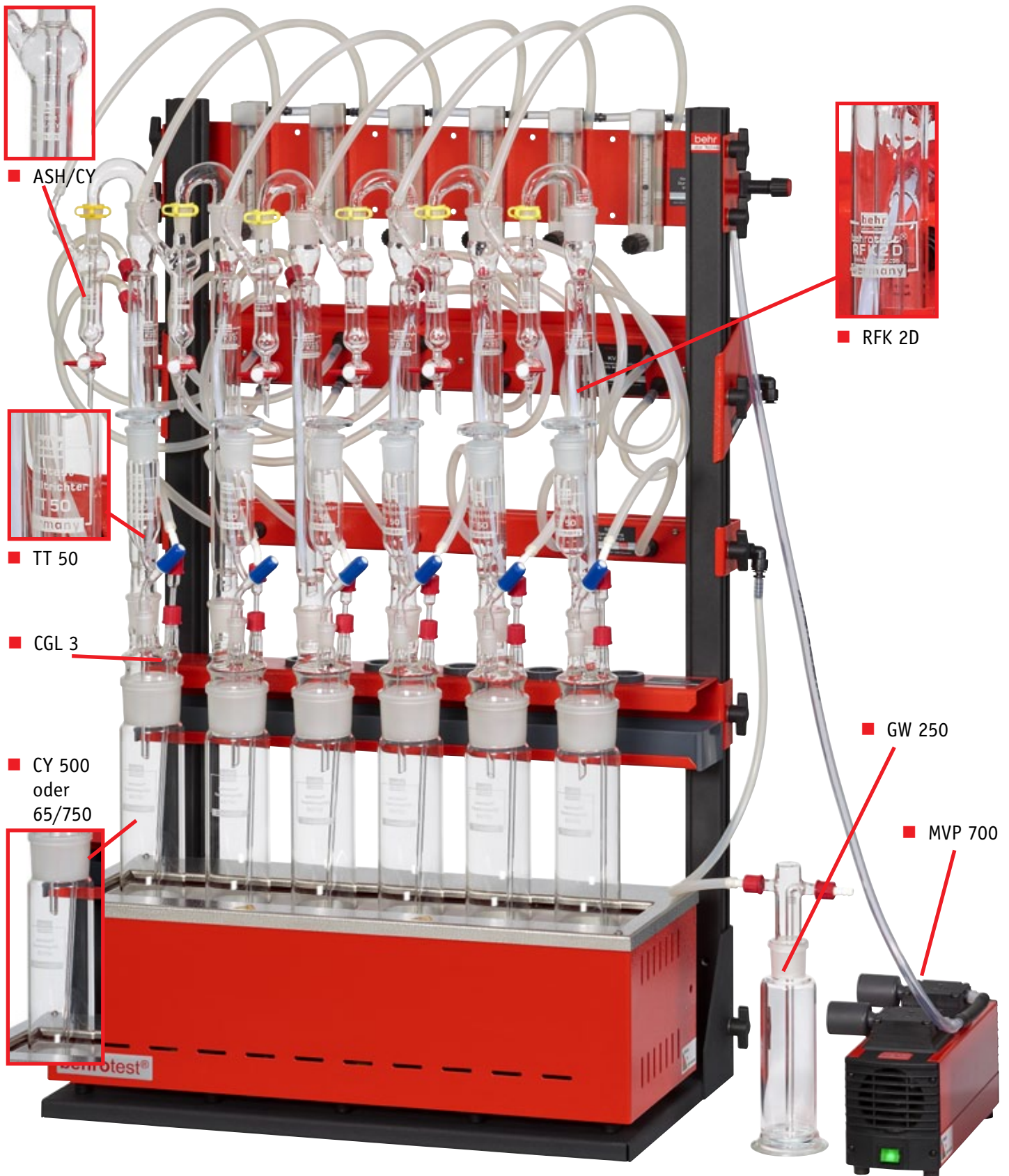


DOS 10

# ACCESSORIES

# Equipment for Cyanide Distillation

precisely aligned to your needs





# Devices for cyanide distillation

Parameter to be analyzed:  
easily releasable cyanides

As defined in all relevant norms for cyanide determination, only membrane vacuum pumps ensure the flow of gas in behr devices. Consequentially, the systems work with underpressure and therefore work more safely.

The price-effective ones: Sample preparation for up to two samples. Complete compact system for standard-compliant sample preparation for cyanide determination.

With rack, heating unit, through-flow quantity meter(s), holder(s), hoses, glass equipment and diaphragm vacuum pump.

## KLFC-MRV und KLFC-MRV2

B00757291	KLFC-MRV	Compact decomposition and separating equipment with magnetic stirrer for the determination of easily releasable cyanides
B00757292	KLFC-MRV2	Compact decomposition and separating equipment for 2 samples with magnetic stirrer for the determination of easily releasable cyanides

## Accessories

B00218481	CE 2	behrotest® pH electrode for cyanide air stripping (easily liberatable cyanides in systems with 1 or 2 samples)
B00217963	ASH/CY	behrotest® Absorption vessel with stopcock, incl. NS10 connector & hose nozzle
B00218479	RAK 500	behrotest® Reaction flask, 500 ml volume, with 3 necks, for compact systems
B00218480	GLT 2	behrotest® dropping funnel
B00218492	SMV 2914	behrotest® central connector for ASH/(CY)
B00218185	GW 250	behrotest® Gas wash bottle, 250 ml, without frit
B00654340	MVP 90	behrotest® Diaphragm vacuum pump for the compact systems



KLFC-MRV



KLFC-MRV2

# Precondition for analytical precision: Sampling and sample storage without contamination

Alterations and contaminations as a result of faulty sampling and/or sample storage inevitably affect subsequent analysis and cause faulty results. These faults cannot be corrected afterwards.

Contemporary trace analysis is especially sensitive to faulty sampling and/or sample storage. Modern measuring instruments record even the smallest contamination and alteration.

## behrotest® sampling bottles with PTFE coated inlay in the lid deliver safety for the analyst

They meet with the specifications of the EN/ISO 5667-1 standard concerning the storage of organic trace matter and light sensitive substances. The sample gets in touch with nothing but glass and PTFE. Thus there is no danger of contamination. Bottles from brown glass are available for samples that are sensitive to light.



## Sampling bottles for Cyanid-Samples, Brown Glass, Lid With PTFE Coated Inlay

Sampling bottles from partly opaque brown glass for samples that need light protection (e.g. cyanide samples). PTFE coated inlay in the lid, thus inert to a large extent and especially tight (also for liquids).

Pack of 10

Art. No.	Type	Volume	Ø Thread mm
B00218524	RB 250 GT	250 ml	55
B00218525	RB 500 GT	500 ml	55
B00218526	RB 1000 GT	1000 ml	68



RB 1000 GT

## Use of the PTFE sleeve

behr-'s little helpers have quite a big effect!

Isn't it nice that things are easy sometimes? The little helpers from behr support you in your daily lab routine. Be astonished at just how universal in use they are.

Fully in line with the behr KISS principle.



### behrotest® PTFE-sleeves

Art. No.	Type	Product description
B00653911	CY-SET 1	PTFE-sleeves SET for one position Cyanide Apparatus
B00693424	CY-SET 4	PTFE-sleeves SET for four position Cyanide Apparatus
B00693425	CY-SET 6	PTFE-sleeves SET for six position Cyanide Apparatus

# This may also interest you



- Distillation apparatus for the determination of Phenol on 5 sample positions
- Digestion systems for the heavy metall determination



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