NORMAL-PHASE SPE

Polar or non-polar analytes in organic sample solution

ANALYTES	STATIONARY PHASE	ELUTION
Polar to medium polar, neutral	**BEKOlut® SI** **BEKOlut® Amino** **BEKOlut® Cyano** **BEKOlut® Florisil** **BEKOlut® Alox**	Organic solvents
Non-polar e.g. PAH	**BEKOlut® SCL:** For SPE of PAHs from vegetable oil and fat	Organic solvents
Hydrocarbon Oil Index, HOI (C10 to C40)	**BEKOlut® H53 glass columns:** Florisil Glass columns acc. to DIN EN ISO 9377-2	Ask for the specific application
Pesticides; contaminants from foodstuffs	**BEKOlut® „ready-to-use“ QuEChERS Kits**	Acetonitrile

Special phase SPE

BEKOlut® NAN (400 mg Na_2SO_4 / 1400 mg SI-$AgNO_3$ / 400 mg Na_2SO_4)

BEKOlut® Carbon S2 (acrylamide from water, alternative to BAKERBOND CARBON)

BEKOlut® SCX / SI – for extraction of PCBs

DUAL phase-Layer, e.g. LEOX plus/C18e, the all-round phase for pesticide extraction from water or Carbon / NH2 for adsorptive clean-up of plant tissue matrices

Many more available upon request

PHASE SELECTION ACCORDING TO RETENTION MECHANISM

NORMAL PHASE SPE WITH POLAR SORBENTS

SI

Our silica columns are based on spherical, high-purity silica with high specific surface area and optimized particle size, ensuring optimum flow rates and at the same time reproducible recovery.

Typical appl.: Fractionation of non-polar and polar compounds from lipophilic matrices, e.g. pesticides from foodstuffs, dexamethasone from ointment base, chloramphenicol from muscle homogenate

- **Basis material:** spherical silica
- **Pore size:** 55 Angstrom
- **Particle size:** 40-63 µm
- **Funct. Groups:** non-modified, pure silica
- **Phase mechanism:** strongly polar

ALOX A/N/B

Our high-purity Alox SPE columns are available as acidic, neutral or basic variants of aluminium oxide. The particle size distribution is in the range of 63 to 200 µm, the specific surface area is approx. 140 m^2/g.

BEKOlut® Alox A 90, acidic - pH 3,5 - 4,5
BEKOlut® Alox N 90, neutral - pH 6,8 - 7,8
BEKOlut® Alox B 90, basic - pH 8,5 - 10,5

Typical appl.: Removal of interfering polar compounds with the adsorptive clean-up of organic extracts

- **Phase mechanism:** strongly polar

Florisil

BEKOlut® Florisil cartridges contain synthetic, high-purity magnesium silicate ($MgO:SiO_2$, 15:85), e.g. for an adsorptive clean-up of pesticides from soil and foodstuffs

Typical appl.: Steroids, alkaloids, PCBs, PAHs, HOI

- **Phase mechanism:** strongly polar

All polar sorbents are available upon request also as:

- 96-well-plates
- LRC Columns (Large-Reservoir-Capacity)
- Glass columns

ORDER INFORMATION

Sorbent weight	Volume	Unit / Pck.	SI Order no.	Florisil Order no.	Alox A Order no.	Alox N Order no.	Alox B Order no.
100 mg	1 ml	100	B01-400-A010	on application	on application	on application	on application
200 mg	3 ml	50	B03-400-A020	on application	on application	on application	on application
500 mg	3 ml	50	B03-400-A050	B03-500-A050	B03-ALA-A050	B03-ALN-A050	B03-ALB-A050
500 mg	6 ml	30	B06-400-A050	B06-500-A050	B06-ALA-A050	B06-ALN-A050	B06-ALB-A050
1 g	6 ml	30	B06-400-A100	B06-500-A100	B06-ALA-A100	B06-ALN-A100	B06-ALB-A100
2 g	15 ml	20	B15-400-A200	B15-500-A200	B15-ALA-A200	B15-ALN-A200	B15-ALB-A200

Also available as 6 mL, 15 mL and 25 mL glass cartridges, as LRC columns and 96-well-plates

NORMAL PHASE SPE WITH MEDIUM POLAR SORBENTS

AMINO (NH2)

The amino phase offers a different selectivity in normal phase SPE and is an alternative to silica.

Typical appl.: Lipids from serum, ethinylestradiol from urine (after extraction with organic solvent)

- **Basis material:** spherical silica
- **Pore size:** 100 Angstrom
- **Particle size:** 40-63 µm
- **Functional group:** Aminopropyl
- **Phase mechanism:** polar

CYANO

For polar analytes that give too high retention on BEKOlut® SI, changing to BEKOlut® Cyano might be an option. BEKOlut® CN phase closes the selectivity gap within the other normal phase sorbents of the BEKOlut® range, silica and amino.

Typical appl.: stilbenes from water (after extraction with organic solvent)

- **Basis material:** spherical silica
- **Pore size:** 100 Angstrom
- **Particle size:** 40-63 µm
- **Functional group:** Cyanopropyl
- **Endcapping:** no
- **Carbon content:** > 6%
- **Phase mechanism:** polar

ORDER INFORMATION

Sorbent weight	Volume	Unit / Pck.	NH_2 Order number	CN Order number
100 mg	1 ml	100	B01-800-A010	B01-900-A010
200 mg	3 ml	50	B03-800-A020	B03-900-A020
500 mg	3 ml	50	B03-800-A050	B03-900-A050
500 mg	6 ml	30	B06-800-A050	B06-900-A050
1 g	6 ml	30	B06-800-A100	B06-900-A100
2 g	15 ml	20	B15-800-A200	B15-900-A200

Also available as 6 mL, 15 mL and 25 mL glass cartridges, as LRC columns and 96-well-plates