

# Kromasil SFC

Designed for green technology



# First choice in SFC separations for reliable and reproducible results

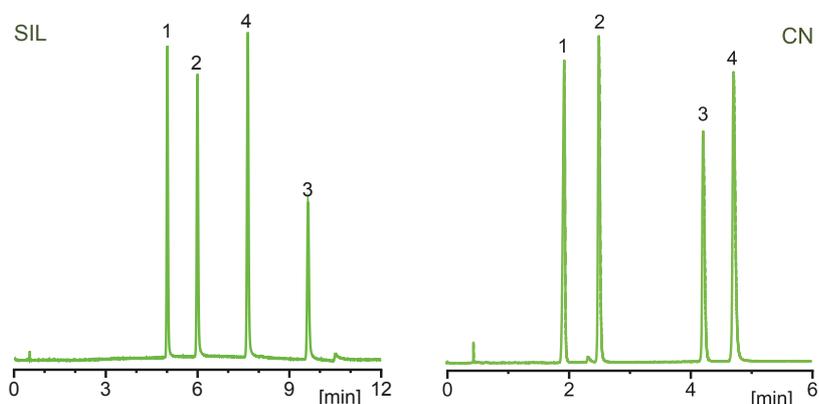
AkzoNobel, has been delivering Kromasil materials and columns for SFC for over 25 years. The new Kromasil SFC columns are based on the trusted, high performance, state-of-the-art spherical Kromasil silica particles, giving peace of mind to those working in the laboratory.

## Kromasil SFC column choices

Designed for fast separations and based on 2.5 µm particle size technology, the new Kromasil SFC columns are tailor-made for research, discovery and for routine analysis. The new columns are delivered in cyano, diol, silica, and 2-ethylpyridine chemistries for the laboratory scientist to separate and analyse a wide range of substances, from non-polar to strongly polar compounds.

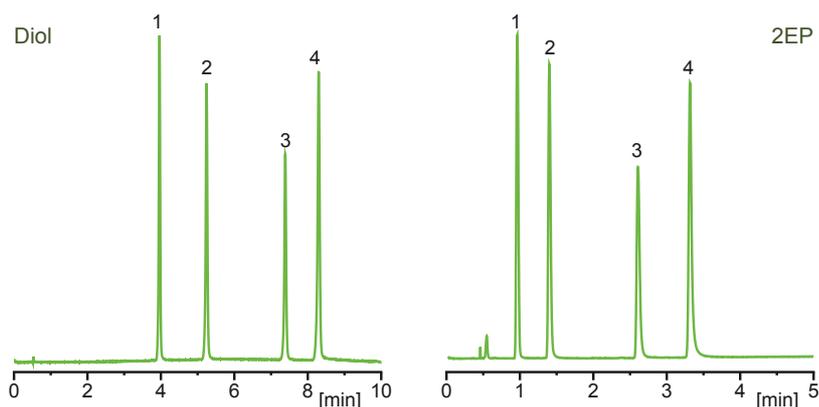


## The stationary phase quartet



Separation of  $\beta$ -blockers

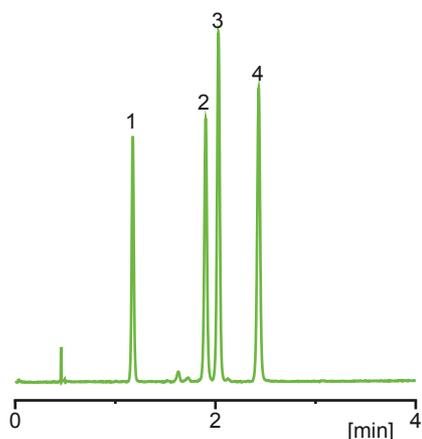
*By using this standard set of Kromasil SFC columns, the user can efficiently screen the material that works best for a given sample.*



Conditions  
Stationary phase: Kromasil SFC, 2.5 µm phase chemistry as in figure  
Column size: 3.0 x 150 mm  
Eluent: CO<sub>2</sub> / methanol + 20 mM ammonia  
Gradient: 0 min: 5%,  
10 min: 30% methanol  
Flow rate: 2 ml/min  
Substances: 1 = alprenolol  
2 = propranolol  
3 = acebutolol  
4 = pindolol  
Temperature: 40°C  
Outlet pressure: 120 bar  
Detection: ES-MS and UV @ 220 nm

## Fast separations

Medium and high-throughput laboratories working with green technology and seeking to improve turnaround time, are now able to take advantage of the separation power of the new Kromasil SFC 2.5  $\mu\text{m}$  family of columns.



### Separation of steroids

*With the chromatographic power of Kromasil SFC cyano phase users can easily achieve baseline resolution within 2.5 minutes of a generic linear gradient.*

#### Conditions

Column: Kromasil SFC, 2.5  $\mu\text{m}$ , CN, 3.0 x 150 mm

Eluent:  $\text{CO}_2$  / methanol

Gradient: 0 min: 5%, 10 min: 30% methanol

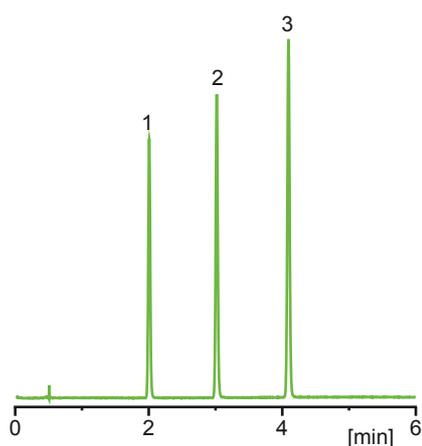
Flow rate: 2 ml/min

Substances: 1 = deoxycorticosterone, 2 = corticosterone, 3 = cortisone, 4 = hydrocortisone

Temperature: 40°C

Outlet pressure: 120 bar

Detection: ES-MS and UV @ 220 nm



### Separation of anticonvulsants

*Due to the outstanding properties of Kromasil silica, analysts can now achieve baseline resolution for anticonvulsants using a generic gradient, resulting in sharp and Gaussian peaks.*

#### Conditions

Column: Kromasil SFC, 2.5  $\mu\text{m}$ , SIL, 3.0 x 150 mm

Eluent:  $\text{CO}_2$  / methanol

Gradient: 0 min: 5%, 10 min: 30% methanol

Flow rate: 2 ml/min

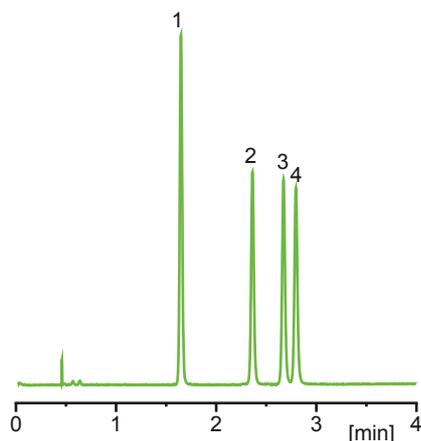
Temperature: 40°C

Outlet pressure: 120 bar

Detection: ES-MS and UV @ 220 nm

Substances: 1 = phenytoin, 2 = carbamazepine, 3 = primidone

## Alternative selectivity



Separation of anti-inflammatory drugs

*With its endcapping and aromatic properties, Kromasil SFC with 2-ethylpyridine offers a unique separation power that makes it stand out from the rest.*

### Conditions

Column: Kromasil SFC, 2.5  $\mu$ m, 2EP, 3.0 x 150 mm

Eluent: CO<sub>2</sub> / methanol

Gradient: 0 min: 5%, 10 min: 30% methanol

Flow rate: 2 ml/min

Substances: 1 = ibuprofen, 2 = fenoprofen, 3 = flurbiprofen, 4 = ketoprofen

Temperature: 40°C

Outlet pressure: 120 bar

Detection: ES-MS and UV @ 220 nm

## Availability

With more than 25 years of stationary phase manufacturing and packing expertise, AkzoNobel continues to deliver performance products to customers in the pharmaceutical, food and beverage, clinical and environmental industries.

The Kromasil SFC columns are available in 2.5  $\mu$ m particle size with the following surface chemistries:

- silica (SIL)
- cyano (CN)
- diol (Diol)
- 2-ethylpyridine (2EP)

See table to the right for actual part numbers.

Material	Column size [I.D. x length]	
	3.0 x 150 mm	4.6 x 150 mm
Kromasil SFC-2.5-SIL	FH2SIC15	FH2SIA15
Kromasil SFC-2.5-CN	FH2CNC15	FH2CNA15
Kromasil SFC-2.5-Diol	FH2DIC15	FH2DIA15
Kromasil SFC-2.5-2EP	FH2EPC15	FH2EPA15

The moment you adopt our Kromasil High Performance Concept, you join thousands of chromatographers who share a common goal: to achieve better separations when analyzing or isolating pharmaceuticals or other substances.

Not only will you benefit from our patented silica technology, but you gain a strong partner with a reliable track record in the field of silica products. For the past 70 years, we have pioneered new types of silica. Our long experience in the field of silica chemistry is the secret behind the development of Kromasil, and the success of our Separation Products group. Kromasil is available in bulk and in high-pressure slurry-packed columns. The development, production and marketing of Kromasil are ISO 9001 certified.

Kromasil is a brand of AkzoNobel, a leading global paint and coatings company and a major producer of specialty chemicals with headquarters in Amsterdam, the Netherlands. With 48 000 people in more than 80 countries around the world, we are committed to sustainability and delivering leading products and technologies to meet the growing demands of our fast-changing planet, making life more liveable and our cities more human.



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Applications' results and chromatograms in this folder are a courtesy of AstraZeneca, Mölndal, Sweden.