Kromasil®

Kromasil ClassicShell

Expanding opportunities

AkzoNobel

More choices
in your analytical tool box

Kromasil ClassicShell family of columns is an expansion of the Kromasil analytical columns portfolio to provide scientists with more options for the analysis of laboratory samples.

Kromasil ClassicShell columns

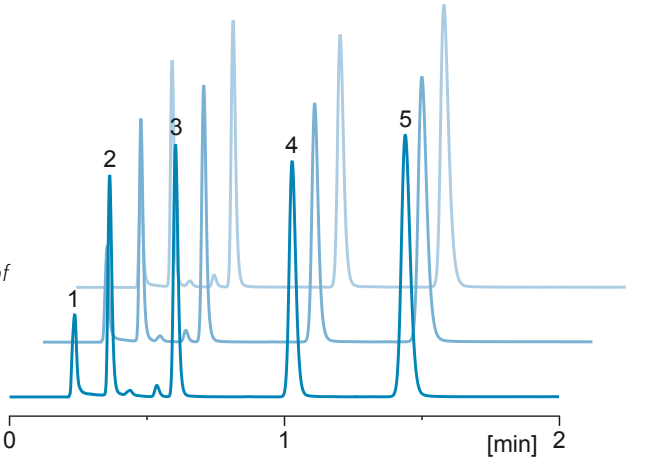
The Kromasil ClassicShell columns are based on solid core particles and intended for the analysis of sample mixtures in various areas of research as well as quality control in pharmaceutical, environmental, food and beverages and industrial laboratories.

These new columns are packed with 2.5 µm particles and, similarly to the already adopted Kromasil Classic 1.8 and 2.5 µm particle size columns, Kromasil ClassicShell products are intended for fast separations to support effective and efficient laboratory turnaround.

Reproducible results

QC test with neutral substances.

Test on three columns with different batches of stationary phase.



Conditions

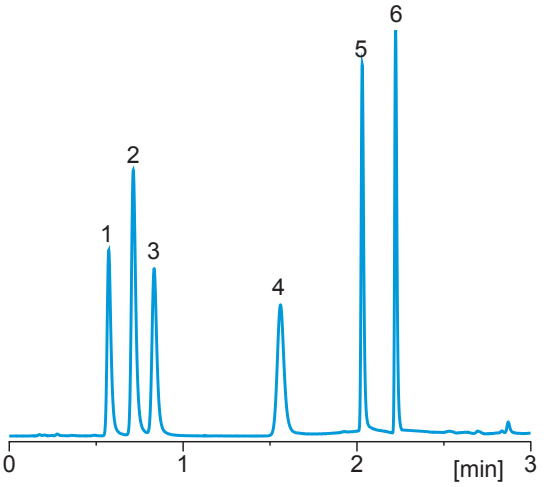
Column:	Kromasil ClassicShell-2.5-C18 2.1 x 50 mm	Temperature:	25°C
Eluent:	acetonitrile / water (70/30)	Detection:	UV @ 254 nm
Flow rate:	0.42 ml/min		

Substances: 1 = sodium nitrate, 2 = acetophenone, 3 = toluene, 4 = benzene, 5 = butylbenzen

Applications

Kromasil ClassicShell columns provide an excellent alternative for the analysis of candidate drugs as well as established pharmaceuticals under reversed phase chromatography.

Sulfa drugs



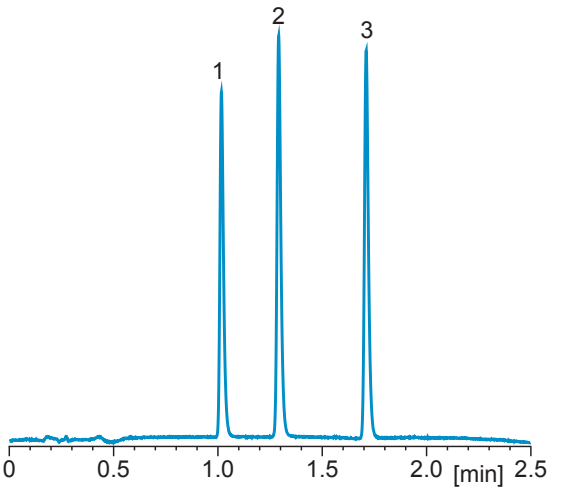
Conditions

Column:	Kromasil ClassicShell-2.5-C18 2.1 x 50 mm	Temperature:	25°C
Eluent:	acetonitrile / water / 0.1% formic acid	Flow rate:	0.7 ml/min
Gradient:	0 min: 10%, 2 min: 90% acetonitrile	Detection:	UV @ 254 nm
Substances:	1 = sulfadiazine, 2 = sulfathiazole, 3 = sulfamerazine, 4 = sulfamethoxypyridazine, 5 = sulfamethoxazole, 6 = sulfaquinoxaline		

Analysis of xanthine class compounds

Pharmaceutical drug discovery and development, food quality control and environmental monitoring require efficient sample analysis.

Kromasil ClassicShell columns offer researchers and analysts the possibility of fast runs with complete resolution, as the results illustrated here.



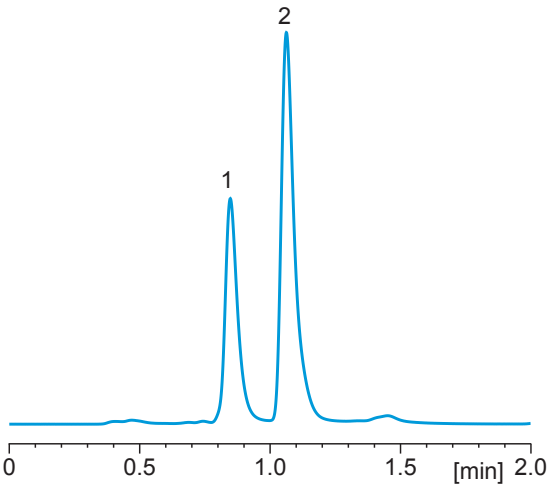
Conditions

Column:	Kromasil ClassicShell-2.5-C18 2.1 x 50 mm	Temperature:	ambient
Eluent:	acetonitrile / water / 0.1% formic acid	Flow rate:	0.5 ml/min
Gradient:	0 min: 3%, 4 min: 30% acetonitrile	Detection:	UV @ 254 nm
Substances:	1 = theobromine, 2 = theophylline, 3 = caffeine		

Separation of capsaicinoids

As the natural products industry continues to grow, the analysis of active ingredients to establish product quality and assure safety is becoming more important.

Here is an example of a fast analysis for the separation of capsaicin and dihydrocapsaicin in slightly over a minute.



Conditions

Column:	Kromasil ClassicShell-2.5-C18 2.1 x 50 mm	Temperature:	25°C
Eluent:	acetonitrile / water (60/40)	Flow rate:	0.3 ml/min
Substances:	1 = capsaicin, 2 = dihydrocapsaicin	Detection:	UV @ 235 nm

Part numbers

Kromasil ClassicShell is based on 2.5 µm solid-core particles, and is available with C8 and C18 derivatizations, in 2.1 and 4.6 mm I.D. HPLC columns.

Part numbers are shown in the table below.

	Column size (I.D. x length)		
Material	**2.1 x 50 mm**	**2.1 x 100 mm**	**4.6 x 100 mm**
ClassicShell-2.5-C8	NH2CMD05	NH2CMD10	NH2CMA10
ClassicShell-2.5-C18	NH2CLD05	NH2CLD10	NH2CLA10

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, the largest global paint and coatings company and a major producer of specialty chemicals with headquarters in Amsterdam, the Netherlands. With 46 000 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 world.

www.kromasil.com

PUBBclsh_1601
© Akzo Nobel Pulp and Performance Chemicals AB, 2016
Check www.kromasil.com/PUBBclsh for the latest version

Kromasil® is a registered trademark of AkzoNobel in a number of territories in the world.

Kromasil®