

Kromasil®

Moving faster

UHPLC / HPLC columns



2.5



# Columns for laboratory flexibility and exceptional performance

With our 25 years of experience in the silica-based field, AkzoNobel presents to you one of the strongest and most successful chromatographic products in the market to date, now in 2.5  $\mu\text{m}$  particle size. You can use Kromasil columns with 2.5  $\mu\text{m}$  particles in both HPLC and UHPLC systems.

This flexibility affords you the opportunity to develop and adapt methods for fast turnaround under HPLC conditions or to develop robust UHPLC methods. These Kromasil columns with 2.5  $\mu\text{m}$  particles are based on very narrow specification ranges, resulting in chromatographic columns with excellent resolution, and the well known Kromasil column-to-column reproducibility.

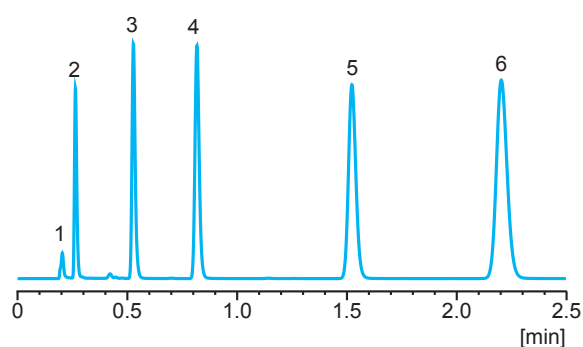


## Addressing sustainability

As these new Kromasil columns contain the same stationary phase as other larger particle size Kromasil columns, your existing Kromasil HPLC methods can now be easily scaled to 2.5  $\mu\text{m}$  particle columns. This straightforward, fast scale-down approach supports the latest laboratory trends worldwide whether your organizations strive to move faster to market, manage the laboratory more effectively, or achieve sustainability goals from a solvent consumption perspective.

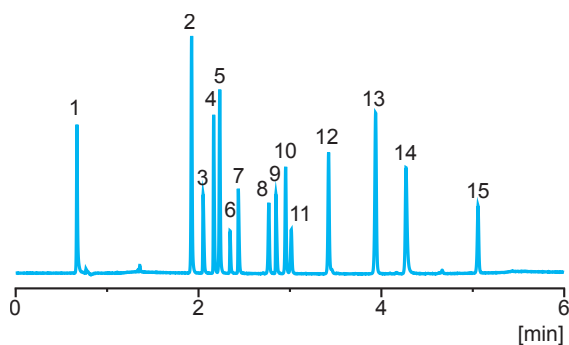


Column: Kromasil 100-2.5-C18, 4.6 x 50 mm  
Sample: 1 = sodium nitrite, 2 = benzamide,  
3 = methyl benzoate, 4 = toluene,  
5 = propyl benzene, 6 = butyl benzene  
Mobile phase: acetonitrile/water (70/30)  
Flow rate: 2.0 ml/min  
Temperature: 20°C  
Detection: UV @ 254 nm



# Applications

## Mixture of 15 pharmaceutical compounds



Column: Kromasil 100-2.5-C18, 4.6 x 100 mm

Sample: 1 = pyridine, 2 = acetaminophen,  
3 = pindolol, 4 = acebutolol,  
5 = sulfathiazole,  
6 = chlorpheniramine,  
7 = triprolidine, 8 = nortriptyline,  
9 = benzyl alcohol, 10 = prednisolone,  
11 = phenol, 12 = 4-nitrobenzoic acid,  
13 = 2-hydroxy-5-methylbenzoic acid,  
14 = diflunisal, 15 = hexanophenon

Mobile phase A: 0.1% formic acid in water

Mobile phase B: 0.1% formic acid in acetonitrile

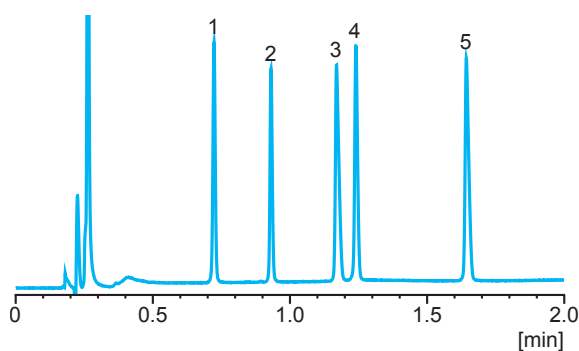
Gradient: 0 min: 2%, 0.2 min: 2%,  
4.7 min: 98%, 5.7 min: 98%,  
5.7 min: 2% acetonitrile

Flow rate: 1.5 ml/min

Temperature: 20°C

Detection: UV @ 254 nm

## β-blockers



Column: Kromasil 100-2.5-C18, 4.6 x 50 mm

Sample: 1 = sotalol,  
2 = nadolol,  
3 = timolol,  
4 = metoprolol,  
5 = alprenolol

Mobile phase A: 0.1% TFA in acetonitrile

Mobile phase B: 0.1% TFA in water

Gradient: 0 min: 5%, 2.7 min: 70% acetonitrile

Flow rate: 3.0 ml/min

Temperature: 50°C

Detection: UV @ 230 nm

The strong Kromasil brand, which spans across all particle sizes, allows an easier transfer of methods developed on 2.5 µm particles to other departments, such as quality control. They can also be a good start for the scale up and purification of small, medium and large quantities of compounds.

You can feel secure using this new 2.5 µm platform from Kromasil, a brand used and trusted by scientists worldwide. The new product line is designed for users with flexibility in mind, who may be required to run under UHPLC or HPLC conditions.

# Scalability

From the company that began by supplying silica-based material for the purification of insulin, with consistent quality in state-of-the-art facilities, Kromasil is now proud to offer its customers a complete range of particle sizes with excellent selectivity, column-to-column reproducibility, and peak shape.

Easy method transfer from larger particle sizes to 2.5  $\mu\text{m}$  maintaining the same selectivity.

Common conditions:

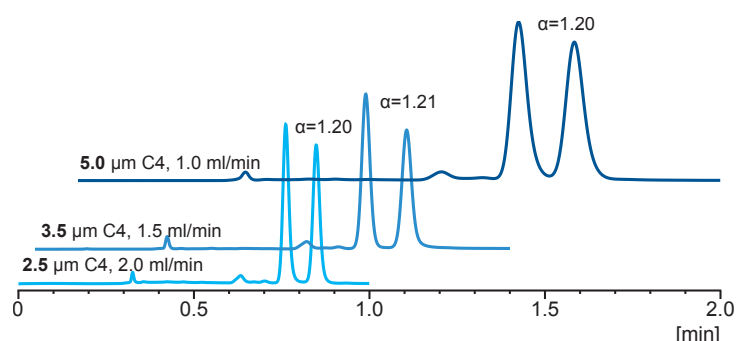
Column size: 4.6 x 50 mm

Mobile phase: acetonitrile

Temperature: 20°C

Detection: UV @ 215 nm

Substances: vitamin D & E



## Availability

Kromasil 2.5  $\mu\text{m}$  is based on the 100 Å product line, and is available with C4, C8 and C18 derivatizations, in 2.1 and 4.6 mm I.D. columns. Order numbers are shown in the table to the right.

Material	Column size (I.D. x length)			
	2.1 x 50 mm	2.1 x 100 mm	4.6 x 50 mm	4.6 x 100 mm
100-2.5-C4	MH2CSD05	MH2CSD10	MH2CSA05	MH2CSA10
100-2.5-C8	MH2CMD05	MH2CMD10	MH2CMA05	MH2CMA10
100-2.5-C18	MH2CLD05	MH2CLD10	MH2CLA05	MH2CLA10

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 55 000 people in more than 80 countries around the world, we are committed to sustainability, excellence and delivering Tomorrow's Answers Today™.

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