

Kromasil®

Beyond expectations

UHPLC columns



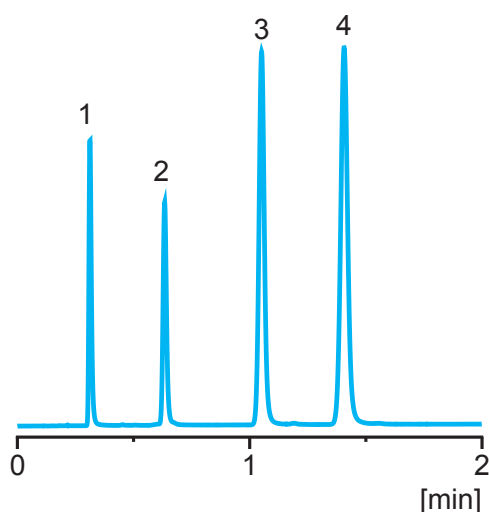
1.8



AkzoNobel

Kromasil UHPLC columns with 1.8 μm particles are the latest technology advancement from AkzoNobel that enable your laboratory to achieve unmatched resolution, decreased turnaround time and minimized laboratory costs.

Kromasil now affords your laboratory with a unique opportunity as these new UHPLC columns provide the scalability and reliability solution you have been searching for. With the solid Kromasil brand, you can now use the same quality products as your counterparts across your organization, including production. Best of all, you can now transfer UHPLC methods to HPLC and your colleagues will be able to scale them up to semi-prep for small quantity purification and subsequent manufacturing of pharmaceuticals and other industrial applications, when required. You can achieve this seamlessly with the same Kromasil quality stationary phase, with reproducibility second to none, now in smaller particle sizes and corresponding column configurations.



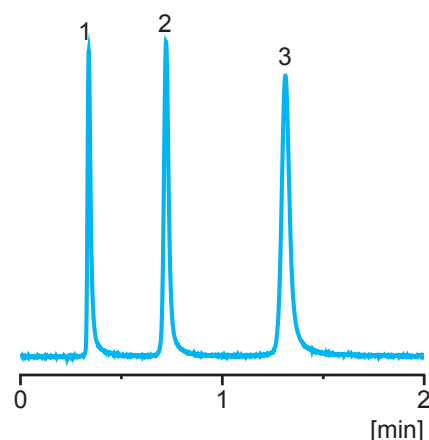
QC-test

Column: Kromasil 100-1.8-C18, 2.1 x 50 mm
Sample: 1 = dimethyl phthalate
2 = toluene
3: = biphenyl
4 = phenanthrene
Mobile phase: acetonitrile/water (65/35)
Flow rate: 0.6 ml/min
Temperature: 35 °C
Detection: UV @ 254 nm

Applications

Antibiotics

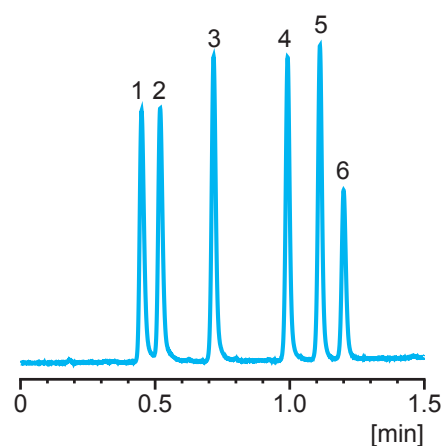
Column: Kromasil 100-1.8-C18 2.1 x 50 mm
Sample:
1 = ciprofloxacin
2 = levofloxacin
3 = moxifloxacin



Mobile phase: acetonitrile / potassium phosphate, 20 mM, pH 2.5 / triethylamine (20/80/0.2)
Flow rate: 0.6 ml/min
Temperature: 35 °C
Detection: UV @ 280 nm

Anti-inflammatory drugs

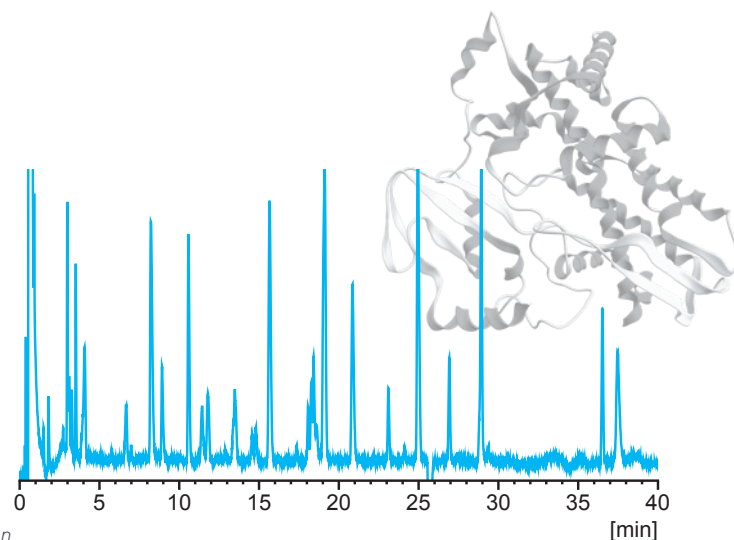
Column: Kromasil 100-1.8-C18 2.1 x 50 mm
Sample:
1 = piroxicam
2 = ketorolac
3 = ketoprofen
4 = diflunisal
5 = diclofenac
6 = ibuprofen



Mobile phase A: acetonitrile / water / TFA (5/95/0.1)
Mobile phase B: acetonitrile / water / TFA (95/5/0.1)
Gradient: 0 min: 50%, 2 min: 95% acetonitrile
Flow rate: 0.5 ml/min
Temperature: 45 °C
Detection: UV @ 254 nm

Tryptic digest of Cytochrome C

Column: Kromasil 100-1.8-C18 2.1 x 50 mm
Mobile phase A: acetonitrile / water / TFA (5/95/0.1)
Mobile phase B: acetonitrile / water / TFA (50/50/0.1)
Gradient: 0 min: 5%, 60 min: 50% acetonitrile
Flow rate: 0.3 ml/min
Temperature: 35 °C
Detection: UV @ 210 nm, with baseline subtraction



Maintaining selectivity

Columns: Kromasil 100-dp-C4 4.6 x 50 mm for dp from 2.5 to 5 µm
Kromasil 100-1.8-C4 2.1 x 50 mm

Substances: Vitamin E & D

Mobile phase: acetonitrile

Flow rate: 5.0 µm: 1.0 ml/min

3.5 µm: 1.5 ml/min

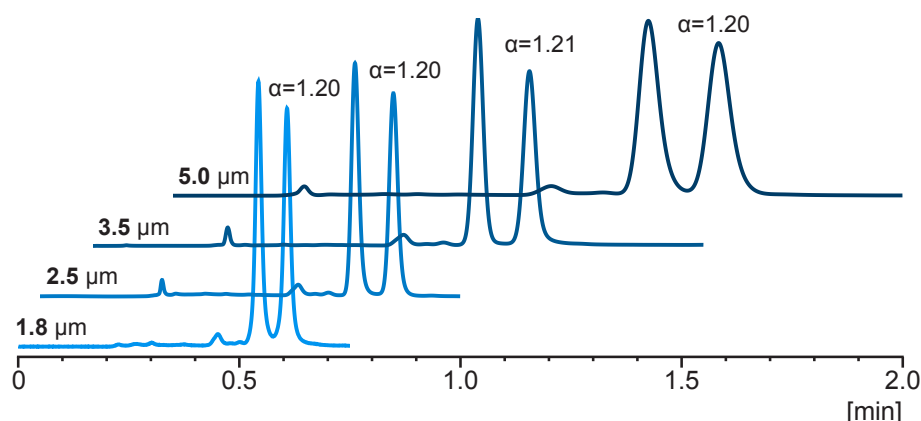
2.5 µm: 2.0 ml/min

1.8 µm: 0.6 ml/min

Temperature: 20 °C

Detection: UV @ 215 nm

Same selectivity in the fraction of the time.



Part numbers

Kromasil 1.8 µm is based on the 100 Å product line, and is available with C4, C8 and C18 derivatizations, in 2.1 mm I.D. UHPLC columns. Part 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
100-1.8-C4	MF1CSD05	MF1CSD10
100-1.8-C8	MF1CMD05	MF1CMD10
100-1.8-C18	MF1CLD05	MF1CLD10

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 50 000 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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