

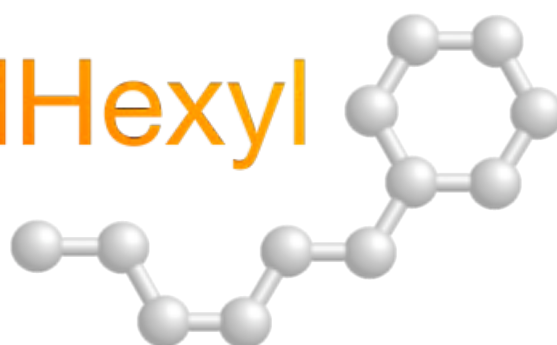
Kromasil Eternity

Designed for long life

Presenting

Eternity PhenylHexyl

For your HPLC and UHPLC



" – The long-lasting phase when alternative selectivity is required"

Eternity PhenylHexyl is our latest product for separation and purification of compounds for reversed phase HPLC and UHPLC. The product is based on a patent pending grafting technology, the Eternity platform, which was recently introduced as the Eternity C18 phase. Starting from the Eternity platform it is functionalized with a monofunctional PhenylHexyl group followed by a proprietary end-capping process.

The Eternity PhenylHexyl phase provides you with an alternative selectivity compared to a traditional alkyl chain phase or a polar embedded phase, especially when the analytes of interest contain an aromatic ring. Including excellent peak shapes for compounds under both low and high pH conditions (stable between pH 2 to pH 12) the Eternity PhenylHexyl offers minimum bleed for LC/MS applications.

This fully wettable phase offers greater flexibility in developing orthogonal methods for challenging separations. It is an excellent choice to try when a C18 phase fails to provide an adequate separation.

This folder gives an overview of how you benefit. To learn more, visit www.kromasil.com or contact us directly!

Product assortment

	2.5 μm	5 μm
2.1 \times 50 mm	Eternity-2.5-PhenylHexyl 2.1 \times 50 mm	Eternity-5-PhenylHexyl 2.1 \times 50 mm
2.1 \times 100 mm	Eternity-2.5-PhenylHexyl 2.1 \times 100 mm	–
2.1 \times 150 mm	–	Eternity-5-PhenylHexyl 2.1 \times 150 mm
4.6 \times 50 mm	Eternity-2.5-PhenylHexyl 4.6 \times 50 mm	Eternity-5-PhenylHexyl 4.6 \times 50 mm
4.6 \times 100 mm	Eternity-2.5-PhenylHexyl 4.6 \times 100 mm	Eternity-5-PhenylHexyl 4.6 \times 100 mm
4.6 \times 150 mm	–	Eternity-5-PhenylHexyl 4.6 \times 150 mm
4.6 \times 250 mm	–	Eternity-5-PhenylHexyl 4.6 \times 250 mm
10 \times 100 mm	–	Eternity-5-PhenylHexyl 10 \times 100 mm
10 \times 150 mm	–	Eternity-5-PhenylHexyl 10 \times 150 mm
10 \times 250 mm	–	Eternity-5-PhenylHexyl 10 \times 250 mm
21.2 \times 100 mm	–	Eternity-5-PhenylHexyl 21.2 \times 100 mm
21.2 \times 150 mm	–	Eternity-5-PhenylHexyl 21.2 \times 150 mm
21.2 \times 250 mm	–	Eternity-5-PhenylHexyl 21.2 \times 250 mm
30 \times 100 mm	–	Eternity-5-PhenylHexyl 30 \times 100 mm
30 \times 150 mm	–	Eternity-5-PhenylHexyl 30 \times 150 mm
30 \times 250 mm	–	Eternity-5-PhenylHexyl 30 \times 250 mm

*Other column dimensions available upon request.
Also available in columns for UHPLC use.
Guard columns are available for each column dimension*

Analytical scale

- 2.5 μm particle size
- UHPLC and HPLC
- Easy to scale up to 5 μm

Semi preparative scale

- 5 μm particle size
- HPLC
- Easy to scale down to 2.5 μm

Product characteristics

Ligand:	6-phenylhexyl
Pore size ¹ :	100 Å
Surface area ¹ :	330 m ² /g
Carbon load:	12%
End-capping:	Proprietary
pH range:	2 -12
USP:	L11

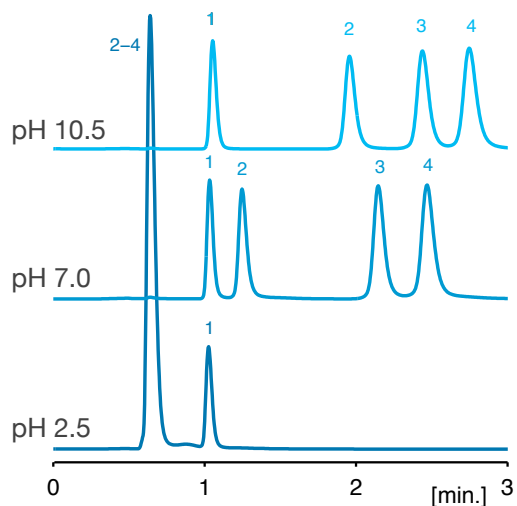
¹: bare silica data



pH variation – the perfect tool for method development

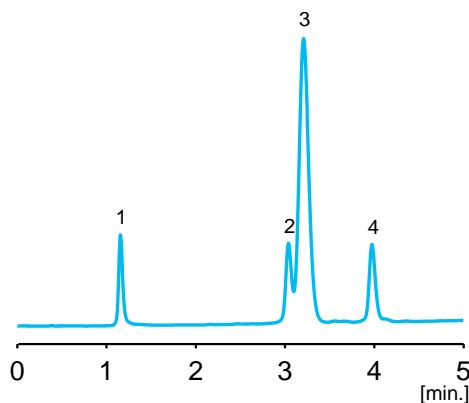
Chromatographic conditions

Column: Kromasil Eternity-2.5-PhenylHexyl 2.1 × 50 mm
Sample: Antidepressants: 1 = toluene, 2 = nortriptyline, 3 = imipramine, 4 = amitriptyline
Mobile Phase: methanol/potassium phosphate buffer, 20 mM, pH 2.5, 7.0 and 10.5 respectively (80/20)
Flow rate: 0.35 ml/min
Temperature: 25°C
Detection: UV @ 215 nm

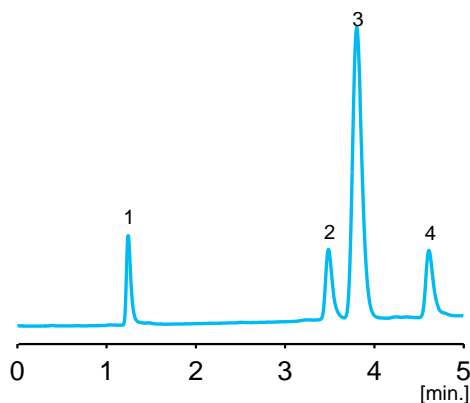


Alternative selectivity

Kromasil Eternity-2.5-C18



Kromasil Eternity-2.5-PhenylHexyl

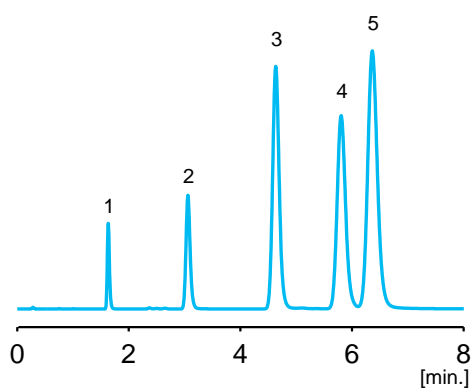


Common chromatographic conditions

Column size: 2.1 × 50 mm
Sample: Vitamins: 1 = p-aminobenzoic acid, 2 = biotin, 3 = vitamin B₁₂, 4 = vitamin B₂
Mobile Phase: methanol/potassium phosphate buffer, 20 mM, pH 2.5
gradient: methanol: 0 min 20%, 5 min 37%.

Flow rate: 0.35 ml/min
Temperature: 25°C
Detection: UV @ 210 nm

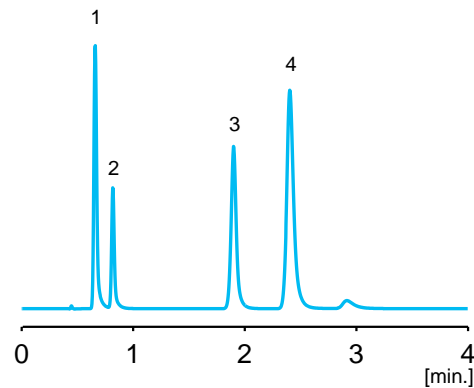
Separation of aromatics



Chromatographic conditions

Column: Kromasil Eternity-2.5-PhenylHexyl 4.6 × 50 mm
Sample: 1 = benzene, 2 = naphthalene, 3 = biphenyl, 4 = phenanthrene, 5 = anthracene
Mobile Phase: acetonitrile/water (50/50)
Flow rate: 1.2 ml/min
Temperature: 30°C
Detection: UV @ 254 nm

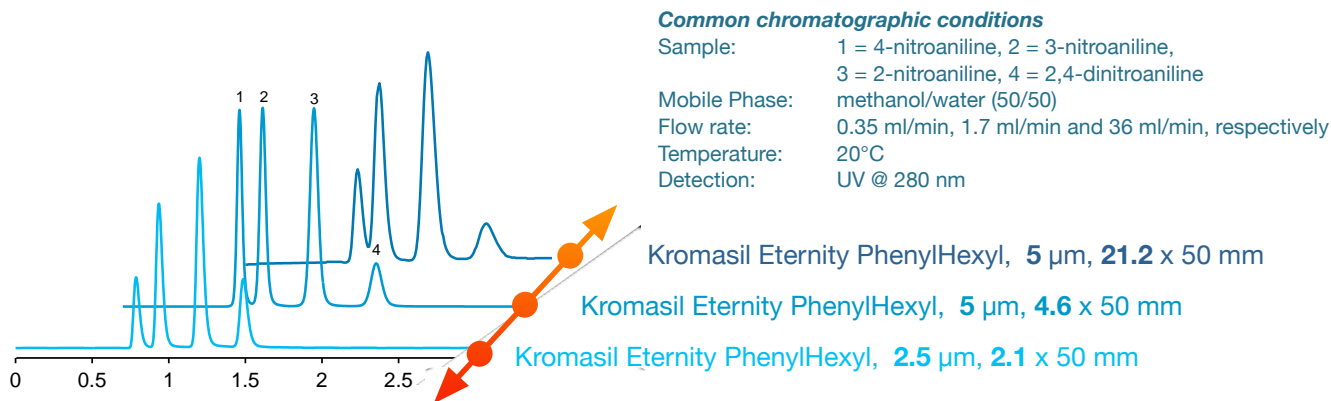
Separation of nucleobases



Chromatographic conditions

Column: Kromasil Eternity-2.5-PhenylHexyl 4.6 × 50 mm
Sample: 1 = cytosine, 2 = uracil, 3 = thymine, 4 = adenine
Mobile Phase: potassium phosphate buffer, 25 mM, pH 7.85
Flow rate: 1.2 ml/min
Temperature: 30°C
Detection: UV @ 254 nm

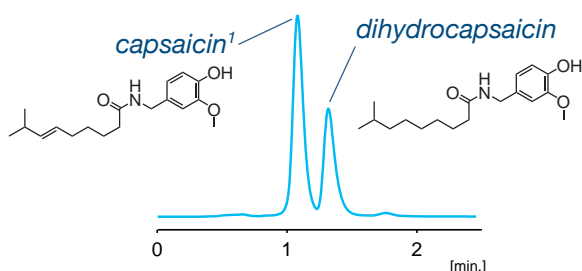
Scale up or scale down



Preparative HPLC

Separation of capsaicin from dihydrocapsaicin

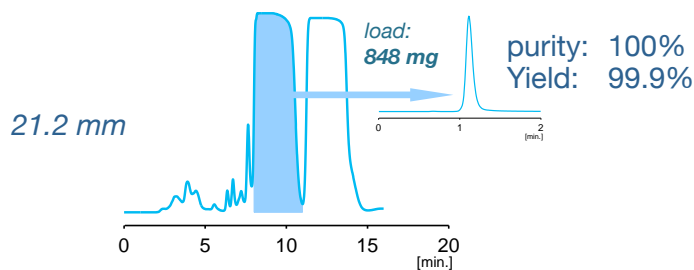
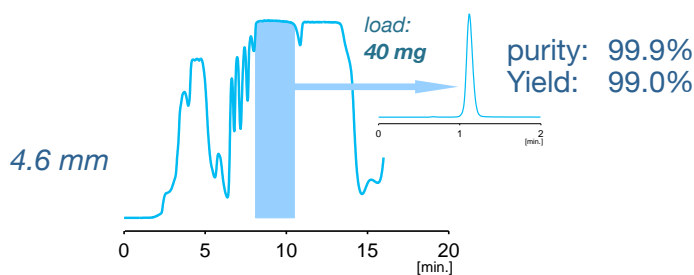
Analytical injection



Common chromatographic conditions

Columns: *Analytical and fraction analysis:*
 Kromasil Eternity-2.5-PhenylHexyl 2.1 x 50 mm
Prep injections:
 Kromasil Eternity-5-PhenylHexyl 4.6 x 250 mm
 Kromasil Eternity-5-PhenylHexyl 21.2 x 250 mm
 Mobile Phase: methanol/water (70/30)
 Flow rates: 0.4 ml/min, 1 ml/min and 21.2 ml/min, respectively
 Temperature: 20°C
 Detection: UV @ 230 nm

Column id Prep injection Fraction analysis



1: Capsaicin is the active component in chili peppers and has analgesic properties.

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 60 years, Eka Chemicals has 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, or in high-pressure slurry-packed columns. The development, production and marketing of Kromasil are ISO 9001 certified.

Eka Chemicals is a global company with 2 900 people in 18 countries. It is a business unit within AkzoNobel, one of the world's largest chemical groups, with more than 60 000 employees in 80 countries.

Kromasil®

www.kromasil.com