

Chiral

Bonded phases DMB and TBB

High performance spherical silica for analytical to process scale liquid chromatography. The chiral monomers are polymerized with a multifunctional hydrosilane, yielding a network polymer. This incorporates the bifunctional C2-symmetric chiral selector and is covalently bonded onto the silica.

Product Characteristics

Chiral monomers:

DMB: O,O'-bis (3,5-dimethylbenzoyl)-
-N,N'-diallyl-L-tartar diamide

TBB: O,O'-bis (4-tert-butylbenzoyl)-
-N,N'-diallyl-L-tartar diamide

Particle sizes:

5 µm

Particle size distribution:

(Coulter Multisizer)

dp [µm]	dp_{90}/dp_{10}
10, 16	< 1.70
5	< 1.50

Spec surface area:

330 m²/g (multi-point BET)

Pore volume:

0.9 ml/g (*N*₂-adsorption)

Pore size:

110 Å (*N*₂-adsorption)

Pore size distribution:

80% ± 25 Å (*N*₂-adsorption)

97% of the BET-surface is accessible for toluene

Coverage:

(elemental analysis)

DMB: 15.0% C, 0.6% N, 0.2* µmol/m²

TBB: 15.5% C, 0.6% N, 0.2* µmol/m²

Packed density:

0.66 g/ml

Chemical purity:

Typical figures (AAS or ICP):

Na: < 20 ppm

Al: < 10 ppm

Fe: < 10 ppm

Chemical stability:

Allows the use of most solvents and buffers. TFA buffers can, under certain conditions, cause some hydrolysis of the phases.

Mechanical stability:

Allows repeated packing at up to 700 bar (10 000 psi)

Product Codes

For ordering please use our code system:

Kromasil Chiral 5-Y

—Chiral indicates Chiral product family

—5 indicates particle size: 5 µm

—Y indicates phase: DMB or TBB

(for example: Kromasil Chiral 5-DMB)

Delivery

Kromasil bulk is delivered in polyethylene bottles or in polyethylene bags packed in plastic drums.

Kromasil, patented by Eka Chemicals AB, is manufactured in multi-kilogram batches with high reproducibility.

The development, production and marketing of Kromasil are ISO 9001 certified.

*: as tartaric acid derivative