# Kromasil<sup>®</sup> Chiral DMB & 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, 10 μm, 16 μm

## Particle size distribution:

(Coulter Multisizer) dp<sub>90</sub>/dp<sub>10</sub>: < 1.50 (5 μm) < 1.70 (10, 16 μm)

**Spec surface area:** 330 m<sup>2</sup>/g (multi-point BET)

Pore volume: 0.9 ml/g (N<sub>2</sub>-adsorption)

**Pore size:** 110 Å (N<sub>2</sub>-adsorption)

#### Pore size distribution:

80%  $\pm$  25 Å (N\_2-adsorption) 97% of the BET-surface is accessible for toluene.

# Carbon content: DMB: 15.0%

TBB: 15.5%

Nitrogen content: 0.6%

**Ligand coverage:** 0.2 mmol/g (as tartaric acid derivative)

Packed density: 0.66 g/ml

## Chemical purity:

Typical figures (AAS or ICP):

- Na: < 20 ppm
- Al: < 10 ppm Fe: < 10 ppm
- -e: < 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 100-X-Y — 100 indicates 100 Å pore size

- X indicates particle size: 5 up to 16  $\mu$ m
- Y indicates phase: DMB or TBB
- (for example Kromasil 100-5-TBB)

# DELIVERY

Kromasil 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.

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