Kromasil® 100 Å
SIL, C4, C8, C18, NH2, Phenyl

High performance spherical silica for analytical to process scale liquid chromatography. RP Kromasil 100 Å is manufactured using monofunctional silanes, and is fully end-capped. This gives high reproducibility and chemical stability.

PRODUCT CHARACTERISTICS

Particle sizes:**
3.5 µm, 5 µm, 7 µm, 10 µm, 13 µm, 16 µm

Particle size distribution:
(Coulter Multisizer)
\[\text{dp}_{90}/\text{dp}_{10}: \begin{array}{l} < 1.70 \ (10, 13, 16 \, \mu\text{m}) \\ < 1.60 \ (7 \, \mu\text{m}) \\ < 1.55 \ (5 \, \mu\text{m}) \\ < 1.45 \ (3.5 \, \mu\text{m}) \end{array}\]

Spec surface area:
320 m²/g (multi-point BET)

Pore volume:
0.9 ml/g (N₂-adsorption)

Pore size:
11.0 Å (N₂-adsorption)

Pore size distribution:
80% ± 25 Å (N₂-adsorption)
97% of the BET-surface is accessible for toluene

Chemical purity:
Typical figures (AAS or ICP):
Na: < 10 ppm
Al: < 5 ppm
Fe: < 5 ppm

Coverage:
(elemental analysis)
C₄: 8% C, 3.8 µmol/m²
C₈: 12% C, 3.7 µmol/m²
C₁₈: 20% C, 3.5 µmol/m²
NH₂: 1.7% N, 4.5 µmol/m²
Phenyl: 14% C, 3.7 µmol/m²

Chemical stability:***
Kromasil derivatized phases are stable between pH 1.5 and 10 and as high as 12 under certain conditions.

Mechanical stability:
Allows repeated packing at up to 700 bar (10,000 psi)

Packed density:
SIL: 0.50 g/ml
C₄: 0.57 g/ml
C₈: 0.60 g/ml
C₁₈: 0.66 g/ml
NH₂: 0.53 g/ml
Phenyl: 0.59 g/ml

PRODUCT CODES

For ordering please use our code system:
Kromasil 100-X-Y
— 100 indicates 100 Å pore size
— X indicates particle size: 3.5 up to 16 µm
— Y indicates phase: SIL, C₄, C₈, C₁₈, NH₂ or Phenyl
(for example Kromasil 100-5-C18)

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.

*) Kromasil NH₂ is derivatized using a trifunctional silane, and is not end-capped.

**) Kromasil Phenyl is available in 5 µm, 10 µm and 16 µm particle size.

***) Applies to derivatized phases except NH₂.

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