

Kromasil 300 Å

SIL, C4, diC4, C8 and C18

High performance spherical silica for analytical to process scale liquid chromatography. Functionalized Kromasil 300 Å is manufactured using mono or difunctional silanes, and is fully end-capped. This gives high reproducibility and chemical stability.

Product characteristics

Particle sizes

Phase	Particle size [μm]		
	5	10	16
SIL	•	•	•
C4	•	•	•
diC4		•	•
C8	•	•	•
C18	•	•	•

Particle size distribution

(Coulter Multisizer)

dp [μm]	dp ₉₀ /dp ₁₀
10,16	≤ 1.70
5	≤ 1.55

Spec surface area

110 m²/g (multi-point BET)

Pore volume

0.9 ml/g (Mercury intrusion porosimetry)

Pore size

300 Å (Mercury intrusion porosimetry)

Pore size distribution

80% ± 100 Å (Mercury intrusion porosimetry)

Coverage

(elemental analysis)

C4	2.9% C	3.9 $\mu\text{mol}/\text{m}^2$
diC4	3.0% C	3.0 $\mu\text{mol}/\text{m}^2$
C8	4.7% C	3.8 $\mu\text{mol}/\text{m}^2$
C18	8.7% C	3.7 $\mu\text{mol}/\text{m}^2$

Chemical purity

Typical figures (AAS or ICP):

Na:	< 10 ppm
Al:	< 5 ppm
Fe:	< 5 ppm

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 500 bar (7 250 psi).

Packed density

SIL:	0.47 g/ml
C4:	0.48 g/ml
diC4:	0.48 g/ml
C8:	0.50 g/ml
C18:	0.52 g/ml

Delivery

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

Kromasil, patented by Nouryon, is manufactured in multi-kilogram batches with high reproducibility.

The management system for the development, production and marketing of Kromasil is ISO 9001 certified.

The Kromasil production site is ISO 14 001 certified.