

Product Information

SIPERNAT® 820 A

Characteristic physico-chemical data¹⁾

Properties and Test Methods	Units	Value
Specific surface area (N₂) Areameter following ISO 5794-1, Annex D	m ² /g	85
Mean particle size Multisizer, 100µm capillary following ASTM C 690	µm	5
Particle size, d₅₀ Laser diffraction following ISO 13320-1	µm	7.5
Tamped density (material after storage) following ISO 787-11	g/l	300
Loss on drying 2 h at 105°C following ISO 3262-1	%	6
Loss on ignition ²⁾ 2 h at 1000°C following ISO 3262-1	%	8
pH value 5% in water following ISO 787-9		10.1
DBP absorption ²⁾ following DIN 53601	g/100g	200
SiO₂ content ³⁾ following ISO 3262-19	%	82
Al content as Al₂O₃ ³⁾ following ISO 3262-18	%	9.5
Na content as Na₂O ³⁾ following ISO 3262-18	%	8
Fe content as Fe₂O₃ ³⁾ following ISO 5794-1, Annex C	%	0.03
Sulfate content as SO₃ ¹⁾ Degussa method	%	0.4
Sieve residue 45µm spray following ISO 3262-19	%	0.05
Luminance factor Y following DIN 53163		97
Package size bag (net)	kg	25

SIPERNAT® Specialty Silica represent a specific product range of precipitated silicas, aluminium and calcium silicates.

Careful adjustment of parameters such as surface area, particle size, purity, oil absorption capacity or hydrophobicity results in products with different properties.

SIPERNAT® 820 A is a very fine particle aluminium silicate with an aluminium content of approx. 9.5% in the form of Al₂O₃ and approx. 8% sodium in the form of Na₂O.

SIPERNAT® 820 A has a medium oil absorption (DBP) and a high whiteness level.

Registrations

CAS-RN of Product	1344-00-9
EINECS (Europe)	215-684-8
ENCS (Japan)	1-508 (Sodium silicate) 1-26 (Aluminium silicate)
ECL (South Korea)	KE-30974
TSCA (USA) AICS (Australia) PICCS (Philippines) DSL (Canada) IECS (China)	registered

1) based on original substance

2) based on dry substance

3) based on ignited substance

*) The given data are typical values.

Storage properties: To ensure that the product and its applications properties remain fixed, Specialty Silicas should be stored in closed, dry locations and protected from volatile substances. Although proper storage will provide for a long useful product life without any expiry date, it is frequently difficult to accomplish. We therefore recommend to retest moisture uptake of hydrophilic grades after one year and of hydrophobic grades after two years.



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