HDK® N20

PYROGENIC SILICA

Product description

Synthetic, hydrophilic amorphous silica, produced via flame hydrolysis.

Special features

White colloidal powder of high purity.

Application

HDK® N20 is applied as a thickening and thixotropic agent in many organic systems, e.g. in unsaturated polyesters, coatings, printing inks, adhesives, cosmetics and others. It is used as a reinforcing filler in elastomers, mainly silicone-elastomers. HDK® N20 acts as a free flow additive in the production of technical powders, in food and feed and in pharmaceutical products.

Processing

A good dispersion of HDK® N20 is a must to assure optimum performance.

More detailed information about the application and processing of HDK® N20 is available in our HDK-brochures and on the WACKER web site (http://www.wacker.com/hdk).

Storage

The 'Best use before end' date of each batch is shown on the shipping label and the certificate of analysis.

HDK® N20 should be stored in the original packaging in dry storage areas.

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Packaging

HDK® N20 is offered in following packaging:

- paper bags on pallet:
  10 kg bags

- Big bags:
  150 kg (big bags on pallets)

- Silotruck:
  depending on size of truck, approx. 3.5 to 5 tons

Details about packaging and handling: (http://www.wacker.com/hdk).

Safety notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via the WACKER web site (http://www.wacker.com/hdk).

During transportation and processing HDK® N20 may cause electrostatic charges.
Like other amorphous silicas HDK® N20 does not show either carcinogenic (IARC classification, Volume 68, 1997) or mutagenic properties.

Product data

Typical general characteristics	Inspection Method	Value
SiO_2 content (based on the substance heated at 1000 °C for 2 h)	DIN EN ISO 3262-19	> 99,8 %
Loss of weight at 1000 °C / 2h (based on the substance dried at 105 °C for 2 h)	DIN EN ISO 3262-19	< 2 %
Density at 20 °C (SiO_2)	DIN 51757	approx. 2,2 g/cm³
Refraction index at 20 °C		1,46
Silanol group density		2 SiOH/nm^2
INCI name		Silica

Physical-chemical properties		
BET surface	DIN ISO 9277/ DIN 66132	170 - 230 m^2/g
pH-Value (in 4 % aqueous dispersion)	DIN EN ISO 787-9	3,8 - 4,3
Tamped density	DIN EN ISO 787-11	approx. 40 g/l
Loss on drying , ex works (2h at 105 °C)	DIN EN ISO 787-2	< 1,5 %
Sieve residue , acc. to Mocker > 40 µm	DIN EN ISO 787-18	< 0,04 %

For technical, quality, or product safety questions, please contact:

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