HDK® H20

Pyrogenic Silica

Synthetic, hydrophobic, amorphous silica, produced via flame hydrolysis.

INCI Silica Dimethyl Silylate

Properties

White colloidal powder of high purity.

Special features

- Hydrophobic

Technical data

Specification

Property	Condition	Value	Method
Loss on drying[1]	-	< 0.6 %	DIN EN ISO 787-2
Sieve residue[2]	-	< 0.05 %	DIN EN ISO 787-18
Tamped density	-	approx. 40 g/l	DIN EN ISO 787-11
BET surface[3]	-	170 - 230 m^2/g	DIN ISO 9277 DIN 66132
Carbon content	-	1.0 - 1.8 %	DIN ISO 10694
Surface modification	-	-	Dimethylsiloxy

[1]ex works (2 h at 105 °C)
[2]acc. to Mocker > 40µm
[3]of the hydrophilic silica

General Characteristics

Property	Condition	Value	Method
BET surface[1]	-	approx. 170 m^2/g	DIN ISO 9277 DIN 66132
Density[2]	20 °C	approx. 2.2 g/cm^3	DIN 51757
INCI name	-	Silica Dimethyl Silylate	-
Residual silanol content[3]	-	50 %	-
SiO_2 content[4]	-	> 99.8 %	DIN EN ISO 3262-19

[1]of the hydrophobic silica
[2]SiO2
[3]relative silanol content in relation to the hydrophilic silica, which shows approx. 2 SiOH/nm^2
[4]based on the substance heated at 1000 °C for 2 h

These figures are only intended as a guide and should not be used in preparing specifications.

All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product's fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties' rights.

Applications

- Toners
- Offset Printing
- Sealants

Application details

HDK® H20 is applied as a thickening and thixotropic agent in coatings, printing inks, adhesives, cosmetics and others.
HDK® H20 is used as a reinforcing filler in elastomers, mainly silicone-elastomers.
HDK® H20 acts as a free flow additive in the production of powder coatings.

HDK® H20 is not suitable for pharmaceuticals, food and feed.
A good dispersion of HDK® H20 is a must to assure optimum performance.

More detailed information about the application and processing of HDK® H20 is available in our HDK-brochures and on the WACKER web site.

Packaging and storage

Packaging

HDK® H20 is offered in following packaging:

- pallet with paper bags: 10 kg bags
- Big bags: 160 kg (big bag on pallet)

Storage

The 'Best use before end' date of each batch is shown on the shipping label and the certificate of analysis. HDK® H20 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.

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. During transportation and processing HDK® H20 may cause electrostatic charges. Like other amorphous silicas HDK® H20 does not show either carcinogenic (IARC classification, Volume 68, 1997) or mutagenic properties. 1 space line

QR Code HDK® H20

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

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