HDK® H13L

Pyrogenic Silica

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

Properties

White colloidal powder of high purity.

Technical data

Specification

Property	Condition	Value	Method
BET surface[1]	-	110 - 140 m^2/g	DIN ISO 9277 DIN 66132
Tamped density	-	50 - 85 g/l	DIN EN ISO 787-11
pH[2]	-	3.8 - 4.8	DIN EN ISO 787-9
Sieve residue[3]	-	< 0.05 %	DIN EN ISO 787-18
Loss on drying[4]	-	< 0.6 %	DIN EN ISO 787-2
Carbon content	-	0.6 - 2.2 %	DIN ISO 10694
Surface modification	-	-	Dimethylsiloxy

[1]of the hydrophilic silica
[2]4 % dispersion (1 : 1 mixture of water-methanol)
[3]acc. to Mocker > 40 µm
[4]ex works (2 h at 105 °C)

General Characteristics

Property	Condition	Value	Method
BET surface[1]	-	approx. 110 m^2/g	DIN ISO 9277 DIN 66132
Density[2]	20 °C	approx. 2.2 g/cm^3	DIN 51757
Residual silanol content [3]	-	approx. 50.0 %	-
SiO_2 content[4]	-	> 99.8 %	DIN EN ISO 3262-19

[1]of the hydrophobic silica
[2]SiO_2
[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.

Applications

- Adhesives
- Anti-Corrosive Coatings
- Can Coatings
- Coil Coatings

- Do It Yourself
- Flexographic Printing
- Flooring Installation
- Gravure Printing
- Industrial Coatings
- Industrial Wood Coatings
- Marine & Protective Coatings
- Offset Printing
- Printing Inks
- Pulp, Paper & Printing Processes
- Rheology Control
- Screen Printing
- Wood-to-Wood Bonding

Application details

HDK® H13L is applied as a thickening, thixotropic and antisedimentation agent in coatings, printing inks, adhesives and others. It is mainly used in polar systems. Due to its strong hydrophobicity HDK® H13L is well suited for solventfree systems, for high solids and for waterborne coatings.

HDK® H13L is not recommended for use in low-viscosity (water-based) clear coats, especially in the automotive topcoat area.

HDK® H13L is not suitable for pharmaceuticals, food and feed.
A good dispersion of HDK® H13L is a must to assure optimum performance.

More detailed information about the application and processing of HDK® H13L is available in our HDK-brochures and on the WACKER web site.

Packaging and storage

Packaging

HDK® H13L is offered in following packaging:
- pallet with paper bags: 10 kg bags
- Big bags: 200 kg (big bags on pallets)

Storage

The 'Best use before end' date of each batch is shown on the shipping label and the certificate of analysis.
HDK® H13L 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® H13L may cause electrostatic charges. Like other amorphous silicas HDK® H13L does not show either carcinogenic (IARC classification, Volume 68, 1997) or mutagenic properties.

QR Code HDK® H13L

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

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