

HDK[®] H18



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⁾ | - | 170 - 230 m ² /g | DIN ISO 9277 DIN 66132 |
| Tamped density | - | approx. 50 g/l | DIN EN ISO 787-11 |
| pH ⁽²⁾ | - | 4.0 - 6.8 | DIN EN ISO 787-9 |
| Sieve residue ⁽³⁾ | - | < 0.3 % | DIN EN ISO 787-18 |
| Loss on drying ⁽⁴⁾ | - | < 0.6 % | DIN EN ISO 787-2 |
| Carbon content | - | 4.0 - 5.2 % | DIN ISO 10694 |
| Surface modification | - | - | Polydimethylsiloxo |

¹of the hydrophilic silica

²in 4 % dispersion (1 : 1 mixture of water-methanol)

³acc. to Mocker > 40 µm

⁴ex works (2 h at 105 °C)

General Characteristics

| Property | Condition | Value | Method |
|---|-----------|-------------------------------|------------------------|
| BET surface ⁽¹⁾ | - | approx. 120 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 | - |
| SiO ₂ content ⁽³⁾ | - | > 99.8 % | DIN EN ISO 3262-19 |

¹of the hydrophobic silica

²SiO₂

³based 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

- Adhesives
- Anti-Corrosive Coatings
- Antifriction Agents & Lubricants
- Do It Yourself
- Flooring Installation

- Hair Care
- Industrial Coatings
- Make-up
- Marine & Protective Coatings
- Rheology Control
- Sealants
- Skin Care
- Structural Bonding of Wind Turbines
- Wind Energy

Application details

HDK® H18 is applied as a thickening and thixotropic agent in composites, coatings, adhesives and sealants, especially in vinyl ester, epoxy and polyurethane systems.

HDK® H18 is not suitable for pharmaceuticals, food and feed.
A good dispersion of HDK® H18 is a must to assure optimum performance.

More detailed information about the application and processing of HDK® H18 is available in our HDK-brochures and on the WACKER web site

Packaging and storage

Packaging

HDK® H18 is offered in following packaging:

- pallet with paper bags: 10 kg bags
- Big bags: 180 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® H18 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® H18 may cause electrostatic charges. Like other amorphous silicas HDK® H18 does not show either carcinogenic (IARC classification, Volume 68, 1997) or mutagenic properties.

QR Code HDK® H18



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

Wacker Chemie AG, Hanns-Seidel-Platz 4, 81737 Munich, Germany
productinformation@wacker.com, www.wacker.com

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