

HDK[®] H17



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⁾	-	130 - 170 m ² /g	DIN ISO 9277 DIN 66132
pH ⁽²⁾	-	4.0 - 7.0	DIN EN ISO 787-9
Sieve residue ⁽³⁾	-	< 0.1 %	DIN EN ISO 787-18
Loss on drying ⁽⁴⁾	-	< 0.6 %	DIN EN ISO 787-2
Surface modification	-	-	Polydimethylsiloxy

¹area of hydrophilic silica

²4 % 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. 90 m ² /g	DIN ISO 9277 DIN 66132
Tamped density	-	approx. 50 g/l	DIN EN ISO 787-11
Carbon content	-	3.5 - 4.5 %	DIN ISO 10694
Density ⁽²⁾	-	approx. 2.2 g/cm ³	DIN 51757
Residual silanol content ⁽³⁾	-	25 %	-
SiO ₂ -Content ⁽⁴⁾	-	> 99.8 %	DIN EN ISO 3262-19

¹of the hydrophobic silica

²SiO₂

³relative silanol content in relation to the hydrophilic silica, which shows approx. 2 SiOH/nm²

⁴based 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

- Anti-Corrosive Coatings
- Composites
- Industrial Coatings
- Marine & Protective Coatings
- Pulp, Paper & Printing Processes
- Rheology Control
- Structural Bonding of Wind Turbines
- Wind Energy

Application details

HDK[®] H17 is applied as a thickening and thixotropic agent in composites, coatings, adhesives and sealants, especially in vinylester, epoxy and polyurethane systems.

HDK[®] H17 is not suitable for pharmaceuticals, food and feed.

A good dispersion of HDK[®] H17 is a must to assure optimum performance.

More detailed information about the application and processing of HDK[®] H17 is available in our HDK-brochures and on the WACKER web site

Processing

HDK[®] H17

A good dispersion of HDK[®] H17 is a must to assure optimum performance.

Packaging and storage

Packaging

HDK® H17 is offered in following packaging:

- pallet with paper bags: 10 kg bags
- Big bags: 180 kg (big bag on pallet)
- Big bags: 200 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® H17 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® H17 may cause electrostatic charges. Like other amorphous silicas HDK® H17 does not show either carcinogenic (IARC classification, Volume 68, 1997) or mutagenic properties.

QR Code HDK® H17



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

The data presented in this medium are in accordance with the present state of our knowledge but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this medium should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The information provided by us does not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the product for a particular purpose.