

HDK® V15



Pyrogenic Silica

Synthetic, hydrophilic, amorphous silica, produced via flame hydrolysis. Standard product for industrial applications.

Properties

White colloidal powder of high purity.

Technical data

Specification

Property	Condition	Value	Method
BET surface	-	130 - 170 m²/g	DIN ISO 9277 DIN 66132
Tamped density	-	approx. 50 g/l	DIN EN ISO 787-11
pH ⁽¹⁾	-	3.8 - 4.5	DIN EN ISO 787-9
Sieve residue ⁽²⁾	-	< 0.03 %	DIN EN ISO 787-18
Loss on drying ⁽³⁾	-	< 1.0 %	DIN EN ISO 787-2

¹in 4% aqueous dispersion

 2 acc. to Mocker > 40 μ m 3 ex works (2 h at 105 $^{\circ}$ C)

General Characteristics

Property	Condition	Value	Method
Density ⁽¹⁾	20 °C	approx. 2.2 g/cm ³	DIN 51757
Loss of weight ⁽²⁾	-	< 2 %	DIN EN ISO 3262-19
Refraction index	-	1.46	-
SiO ₂ content ⁽³⁾	-	> 99.8 %	DIN EN ISO 3262-19
Silanol group density	-	2 SiOH/nm²	-

1SiO₂

 $^2 at \, 1000 \,\, ^{\circ} \text{C}$ / 2h (based on the substance dried at 105 $^{\circ} \text{C}$ for 2 h)

 $^{3}\text{based}$ on the substance heated at 1000 $^{\circ}\text{C}$ 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
- Inkjet Paper
- Sealants

Application details

HDK® V15 is applied as a thickening and thixotropic agent in silicone sealants. HDK® V15 is used as a reinforcing filler in elastomers, mainly silicone elastomers.

HDK® V15 is not suitable for pharmaceuticals, food and feed.

A good dispersion of HDK® V15 is a must to assure optimum performance.

More detailed information about the application and processing of HDK® V15 is available in our HDK-brochures and on the WACKER web site.

Packaging and storage

Packaging

HDK® V15 is offered in following packaging:

- pallet with paper bags: 10 kg bags
- Big bags: 150 kg (big bags on pallets)
- Silotruck: depending on size of truck, approx. 3.5 to 5 tons

Storage

The 'Best use before end' date of each batch is shown on the shipping label and the certificate of analysis. HDK® V15 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. Due to the high surface area HDK® adsorbs volatiles and should be protected from humidity and volatiles. If single bags are taken away from an original pallet, the remaining bags of this pallet must again be protected against humidity and volatiles.

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® V15 may cause electrostatic charges. Like other amorphous silicas HDK® V15 does not show either carcinogenic (IARC classification, Volume 68, 1997) or mutagenic properties.

QR Code HDK® V15



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

Wacker Chemie AG, Gisela-Stein-Strasse 1, 81671 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.