

HDK[®] H15

Pyrogenic Silica - Fumed Silica

Characteristics

Synthetic, hydrophobic amorphous silica, produced via flame hydrolysis

Special characteristics

White colloidal powder of high purity

Application

HDK[®] H15 is applied as a thickening and thixotropic agent in coatings, printing inks, adhesives, cosmetics and others. It is used as a reinforcing filler in elastomers, mainly silicone-elastomers. HDK[®] H15 acts as a free flow additive in the production of technical powders.

Processing

A good dispersion of HDK[®] H15 is a must to assure optimum performance.

More detailed information about the application and processing of HDK[®] H15 is available in our HDK-brochures and on the WACKER web site (<http://www.wacker.com/hdk>)

Storage

HDK[®] H15 has a shelf life of at least 24 months when stored in unbroken original packaging in dry storage areas. The 'Best use before end' date of each batch appears on the product label.

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.

Product data

Typical General Properties	Test procedure	Unit	Value
SiO ₂ -content ¹⁾	DIN EN ISO 3262-19	%	>99.8
density of SiO ₂		g/l	2200
silanol group density		SiOH/nm ²	1
electric resistivity (density 40 g/l)		[Ω cm]	>10 ¹³
BET-surface area of the hydrophobic silica	DIN ISO 9277/ DIN 66132	m ² /g	ca. 120

Physical-chemical properties	Test procedure	Unit	Value
BET-surface area of the hydrophilic silica	DIN ISO 9277/ DIN 66132	m ² /g	130 - 170
Carbon content		%	ca. 0.8
pH, in 4 % dispersion ²⁾	DIN EN ISO 787-9		3.8 – 4.8
tamped density	DIN EN ISO 787-11	g/l	ca. 40
loss on drying ³⁾ (2 h at 105°C)	DIN EN ISO 787-2	%	< 0.6
sieve residue, acc. to Mocker > 40 μm	DIN EN ISO 787-18	%	< 0.05
Surface modification		-OSi(CH ₃) ₂ -	

- 1) based on the substance heated at 1000 °C for 2 h
- 2) 1:1 mixture of water-methanol
- 3) ex works

Packaging

HDK® H15 is offered in following packaging:

- * paper bags on pallet:
10 kg bags, (180 kg per pallet)
- * Big bags:
170 kg (big bags on pallets)

Details about packaging and handling:
(<http://www.wacker.com/hdk>).

Safety information

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 (<http://www.wacker.com/hdk>).

During transportation and processing HDK® H15 may cause electrostatic charges.

Like other amorphous silicas HDK® H15 does not show either carcinogenic (IARC classification, Volume 68, 1997) or mutagenic properties.

The data presented in this leaflet 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 leaflet 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 recommendations do 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 products for a particular purpose.

The management system has been certified according to DIN EN ISO 9001 and DIN EN ISO 14001

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Version 3.4 from 30-01-06

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

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