

HDK[®] H1000/4



Synthetic, hydrophobic, amorphous silica.

HDK[®] H1000/4 is a highly efficient free flow additive for electrophotographic toners.

Properties

- medium surface area (BET); medium sized silica particles
- highly hydrophobic silica by bonded $-O-Si(CH_3)_3$ units
- negative tribo chargeability
- structure modified product
- defined agglomerate particle size distribution

Technical data

General Characteristics

Property	Condition	Value	Method
BET surface ⁽¹⁾	-	approx. 90 m ² /g	DIN ISO 9277 DIN 66132
Tamped density	-	approx. 220 g/l	DIN EN ISO 787-11
pH ⁽²⁾	-	approx. 8.0	DIN EN ISO 787-9
Loss on drying ⁽³⁾	-	approx. 0.5 %	DIN EN ISO 787-2
Agglomerate particle size d50 (mean) ⁽⁴⁾	-	< 20 µm	-
Carbon content	-	approx. 1.8 wt. %	DIN ISO 10694
Density ⁽⁵⁾	20 °C	approx. 2.2 g/cm ³	DIN 51757
Surface modification	-	-	Trimethylsiloxy
Tribo Charge ⁽⁶⁾	-	approx. - 250 µCol/g	-

¹surface area hydrophobic silica

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

³ex works (2h at 105°C)

⁴Laser diffraction

⁵SiO₂

⁶blow off vs ferrite; Wacker method

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.

Application details

- monocomponent magnetic toners
- monocomponent nonmagnetic toners
- dual component toners
- crushed type and polymerization toners
- application: 0.5 to 3.0 wt%

HDK[®] H1000/4 is not suitable for pharmaceuticals, food and feed.

Milling and classifying guarantee a narrow particle size distribution (agglomerates) which contributes to an efficient toner blending.

Packaging and storage

Packaging

HDK® H1000/4 is offered in the following packaging:

- pallet with paper bags: 15 kg bags

Storage

The “Best use before end” date of each batch is shown on the shipping label and the certificate of analysis.

HDK® H1000/4 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® H1000/4 may cause electrostatic charges.

Like other amorphous silicas HDK® H1000/4 does not show either carcinogenic (IARC classification, Volume 68, 1997) or mutagenic properties.

QR Code HDK® H1000/4



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

Wacker Chemie AG, Hanns-Seidel-Platz 4, 81737 Munich, Germany
info@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.