

HDK® N20 NUTRITION



Pyrogenic Silica

Synthetic, hydrophilic amorphous silica, produced via flame hydrolysis.

Properties

White colloidal powder of high purity.

Technical data

Specification

Property	Condition	Value	Method
BET surface	-	175 - 225 m²/g	DIN ISO 9277 DIN 66132
Tamped density	-	approx. 40 g/l	DIN EN ISO 787-11
pH ⁽¹⁾	-	3.8 - 4.3	DIN EN ISO 787-9
Sieve residue ⁽²⁾	-	< 0.03 %	DIN EN ISO 787-18
Loss on drying ⁽³⁾	-	< 1.5 %	DIN EN ISO 787-2
Content Arsenic (As)(4)	-	< 1 ppm	PV20424
Content Lead (Pb)(5)	-	< 3 ppm	PV20424
Content Mercury (Hg) ⁽⁶⁾	-	< 1 ppm	PV20424
Content Silicone dioxide ⁽⁷⁾	-	> 99 %	PV20433

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

General Characteristics

Property	Condition	Value	Method
Content SiO ₂ ⁽¹⁾	-	> 99.8 %	DIN EN ISO 3262-19
Density ⁽²⁾	20 °C	approx. 2.2 g/cm³	-
Loss of weight ⁽³⁾	-	< 2.0 %	DIN EN ISO 3262-19
Silanol group density	-	2 SiOH/nm ²	-

 $^{^{\}rm 1} based$ 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

²acc. to Mocker > 40 μm

³ex works (2 h at 105 °C)

⁴internal test procedure, based on CR231/2012

⁵internal test procedure, based on CR231/2012

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⁷internal test procedure, based on CR231/2012

²SiO₂

 $^{^{3}1000~^{\}circ}\text{C}$ / 2h (based on the substance dried at 105 $^{\circ}\text{C}$ for 2 h)

• Antifoams & Flowing Agents

Application details

HDK® N20 NUTRITION is intended for use in food and feed.

It improves the flow of powders and is a thickener for liquids. HDK® N20 NUTRITION meets the specifications for E551 according to the regulation (EU) 231/2012 and for INS 551 according to the current FCC and JECFA monographs. If applied as anti caking additive gentle mixing results best effects with sticky products.

More detailed information about the application and processing of HDK® N20 NUTRITIONis available in our HDK-brochures and on the WACKER web site

Packaging and storage

Packaging

HDK® N20 NUTRITION is offered in following packaging:

- pallet with paper bags: 10 kg bags
- Big bags: 150 kg (big bags on pallets)

The smallest package size leaving our plant are the pallets, protected against humidity by a heat shrinkable foil.

Storage

The 'Best use before end' date of each batch is shown on the shipping label and the certificate of analysis. HDK® N20 NUTRITION 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® N20 NUTRITION may cause electrostatic charges.

Like other amorphous silicas HDK® N20 NUTRITION does not show either carcinogenic (IARC classification, Volume 68, 1997) or mutagenic properties.

OR Code HDK® N20 NUTRITION



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

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