

LUDOX® AS-30

Colloidal Silica

Product Description

LUDOX® AS-30 Colloidal Silica contains synthetic amorphous silica of nominal 12 nanometer particle size. The aqueous colloidal dispersion contains 30% silica and is stabilized with ammonium hydroxide.

Product Characteristics

The following specification parameters will be stated in our Certificate of Analysis and are equivalent for the product made by Grace in USA and in Germany.

Property	UOM	Value	Test Method
Specific Gravity (15.6°C / 60°F)		1.197 - 1.215	L6550.310.02.EC / GRACE Q 766
Silicon Dioxide (SiO ₂)	% m/m	29.0 - 31.0	L6550.083.01.EC / GRACE Q 758
Ratio SiO ₂ /NH ₃		88 - 128	L6550.043.01.EC / GRACE Q 759
pH (25°C/77°F)		9.1 - 9.7	L6550.280.01.EC / GRACE Q 760
% Transmission	%	62.min.	L6550.523.01.EC / GRACE Q 765
Viscosity (25°C/77°F)	mPa.s	30 max.	L6550.545.01.EC / GRACE Q 767
Specific Surface Area	m ² /g	198 - 258	L6550.005.02.EC / GRACE Q 763
Sulfates as SO ₄	% m/m	0.02 max.	L6550.277.01.EC / GRACE Q 764
Chloride as NaCl	% m/m	0.01 max.	L6550.203.01.EC / GRACE Q 761

Typical Properties and Recommended Applications

The following typical properties data are given for informational purposes only and are not to be interpreted as product or in-process specifications.

Property	Unit	Value
Density	g/cm ³ / lb/gal	1.2 / 10.0
Boiling Point (760 mm Hg)	°C / °F	100 / 212
Melting Point	°C / °F	0 / 32
Vapor Pressure (25°C/77°F)	mm Hg	24
Vapor Pressure (38°C/100.4°F)	mm Hg	48
Stabilizing Counter Ion		Ammonium
Particle Charge		negative

LUDOX® AS-30 Colloidal Silica

LUDOX® AS-30 Colloidal Silica is preferred in catalyst, coatings and high temperature refractory fiber and other applications in which the presence of sodium is detrimental. Key features are:

- Low sodium level
- High binding strength and excellent stability in most applications

Packaging Information

The standard packaging for LUDOX® AS-30 Colloidal Silica for Manufacturing Location Germany is:

255 kg/PE drum	4 drums/pallet	1020 kg/pallet	pallet dimension: 1140 x 1140 mm
1200 kg/IBC	1 IBC/pallet	1200 kg/pallet	pallet dimension: 1000 x 1200 mm

The standard packaging for LUDOX® AS-30 Colloidal Silica for Manufacturing Location US is:

550 lbs (249.43 kg)/PE drum	4 drums/pallet	2200 lbs (997.72 kg)/pallet
2646 lbs (1200 kg)/IBC	1 IBC/pallet	2646 lbs (1200 kg)/pallet

Handling & Storage Recommendations

- Store at temperatures above 2°C/35°F and below 43°C/110°F to avoid irreversible gel formation or silica precipitation. Bulk storage tanks or drum storage areas should be located in temperature-controlled buildings. Outdoor storage can be used if suitably insulated, heated and protected from the weather. Outside storage should be in a shaded location or a sunscreen should be erected over the tanks or drums.
- Keep the container tightly closed after use. All equipment should be cleaned and sanitized regularly to avoid bacterial contamination.
- Product should be used within 24 months of manufacture.
- Additional information can be found in the Safety Data Sheet (SDS).

Health & Safety Information

LUDOX® AS-30 Colloidal Silica is a synthetic amorphous silica dispersed in a stable form in water. Additional information can be found in our Safety Data Sheet (SDS). Please refer also to national laws and regulations.

ISO Certification

- ISO 9001
- ISO 14001
- ISO 50001

Other Information

The information contained herein is based on our testing and experience and is offered for the user's consideration, investigation and verification. Since operating and use conditions vary and since we do not control such conditions, we must DISCLAIM ANY WARRANTY, EXPRESSED OR IMPLIED, with regard to results to be obtained from the use of this product. Test methods are available on request.

Contact

For detailed Information, please refer to the Grace website: www.grace.com.

www.grace.com

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