

TAVERSIL™

100

Specialty precipitated Silica for Paints, Inks & Adhesive & Paper Applications

Tata Chemical's specialty grade silica can be used in coating applications with improved rheology control & high performance properties such as matting effect, improved surface finish, abrasion resistant.

It can be used in epoxy resins and adhesive application as thickening agent & rheology modifiers, also help improving abrasion resistance and mechanical strength of end applications.

Silica works as an excellent reinforcement filler for paper pulp, coating additive for surface smoothness which imparts stability of printing inks on papers.

TECHNICAL DATA SHEET

Product
Precipitated Silica
Package Size : 20 kg HDPE bags
CAS Number
7631-86-9
Country of origin
INDIA

Product Specifications*

Particle Properties	Unit(s)	Value	Analysis Method
Physical Appearance		Free flowing white Powder	Visual
Specific Surface Area	m ² /g	180 ± 10	ASTM D5604
Bulk Density	g/l	110 ± 30	ASTM C1240
pH value (5 % in water)		6.5 ± 0.8	ISO 787-9
SiO ₂ Content	%	> 97	ISO 3262-19
DOA Absorption Value	ml/100 g SiO ₂	270 ± 50	ASTM D6854
Heat Loss (2 hrs at 105 °C)	%	4.5 - 7	ISO 787/2
Sieve Residue on 325 mesh	%	< 1.5	ISO 3262-19
Soluble Salts (as Na ₂ SO ₄)	%	< 2.5	Internal method
Iron	ppm	< 400	Internal method

*Storage & transport: To be protected from damp & sunlight. Additional particle property measurement data can be supplied on request.

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Specialty precipitated Silica for Detergents & Ceramics Applications

Tata Chemical's specialty grade silica can be used as scrubs surfaces by means of mechanical abrasion. Silica based detergents imparts excellent washing properties to clothes, dishes, or in general powdered cleaners. Its large surface area helps carry active ingredients and fragrances in to the system and improves release of actives during washing.

It is used as a good carrier for ceramics colours; helps improve rheological properties of tile adhesives.

TECHNICAL DATA SHEET

Product
Precipitated Silica
Package Size : 20 kg HDPE bags
CAS Number
7631-86-9
Country of origin
INDIA

Product Specifications*

Particle Properties	Unit(s)	Value	Analysis Method
Physical Appearance		Free flowing white Powder	Visual
Specific Surface Area	m ² /g	180 ± 10	ASTM D5604
Bulk Density	g/l	110 ± 30	ASTM C1240
pH value (5 % in water)		6.5 ± 0.8	ISO 787-9
SiO ₂ Content	%	> 97	ISO 3262-19
DOA Absorption Value	ml/100 g SiO ₂	270 ± 50	ASTM D6854
Heat Loss (2 hrs at 105 °C)	%	4.5 - 7	ISO 787/2
Sieve Residue on 325 mesh	%	< 1.5	ISO 3262-19
Soluble Salts (as Na ₂ SO ₄)	%	< 2.5	Internal method
Iron	ppm	< 400	Internal method

*Storage & transport: To be protected from damp & sunlight. Additional particle property measurement data can be supplied on request.

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150

Specialty precipitated Silica for Battery Separator Applications

Tata Chemical's specialty grade silica can be used for battery separator applications with controlled surface porosity. It is used for pore creation in PE separators. Our silica makes battery separator hydrophilic and improves electrolyte wettability with electrical resistance.

TECHNICAL DATA SHEET

Product	Precipitated Silica	Package Size : 20 kg HDPE bags
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CAS Number	7631-86-9	Country of origin	INDIA
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Product Specifications*

Particle Properties	Unit(s)	Value	Analysis Method
Physical Appearance		Free flowing white Powder	Visual
Specific Surface Area	m ² /g	180 ± 10	ASTM D5604
Bulk Density	g/l	150 ± 80	ASTM C1240
pH value (5 % in water)		6.5 ± 0.8	ISO 787-9
SiO ₂ Content	%	> 97	ISO 3262-19
DOA Absorption Value	ml/100 g SiO ₂	270 ± 50	ASTM D6854
Heat Loss (2 hrs at 105 °C)	%	4.5 - 7	ISO 787/2
Sieve residue on 63 µm	%	< 8.0	ISO 3262-19
Soluble Salts (as Na ₂ SO ₄)	%	< 2.5	Internal method
Iron	ppm	<400	Internal method
Sieve residue on 125 µm	%	0.2	ISO 3262-19

*Storage & transport: To be protected from damp & sunlight. Additional particle property measurement data can be supplied on request.

TAVERSIL™

100DS

Water dispersible functional Silica

An important advantage of silica is its well-known surface chemistry and possibilities of its surface modification with broad spectrum of functional groups. The functionalization of precipitated silica in the form of aqueous and organic media have a wide range of applications addressing technological and environmental challenges in the areas of catalysis, paints and water treatment systems.

Tata Chemicals specialty silica has been developed using an innovative process to produce high solid-loading stable aqueous silica dispersion. The silica particle carries desired functionalities on its surface that helps adsorbing heavy metals from water and other industrial effluents.

TECHNICAL DATA SHEET


Product
Silica Water Dispersion (Viscous Slurry)
Package Size : 25 kg HDPE bags

CAS Number
7631-86-9
Country of origin
INDIA

Product Specifications*

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Particle Properties	Unit(s)	Value	Analysis Method
Physical Appearance		Viscous slurry	Visual
Specific Surface Area	m ² /g	180 ± 10	ASTM D5604
Viscosity (@80-90% torque)	cP	24 - 28	Brookfield viscometer (spindle no.18, 100 rpm @ RT)
pH value (5 % in water)		1 - 7	ISO 787-9
Solid content	%	5 - 20	Internal method
Particle size (d50)	µm	10 to 20	Malvern 3000
Zeta potential	mV	-23.4 ± 3.6	Malvern zeta-sizer

*Storage & transport: To be protected from damp & sunlight. Additional particle property measurement data can be supplied on request.

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