

SPECIFICATION

Product Name: Colloidal Silicon Dioxide IP Grade
Chemical Formula: SiO ₂
CAS Number: 7631-86-9
Molecular Weight: 60.08 g/mol
Appearance: White, Light, Fine, Amorphous Powder.
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Identification	-	Pass	It Gives reaction of Silicates
pH	-	4.68	3.5 to 5.5
Arsenic	PPM	Complies	Not more than 8 ppm
Heavy Metals	PPM	Complies	Not more than 25 ppm
Chlorides	PPM	Complies	Not more than 250 ppm
Loss on Ignition	%	3.39%	Not more than 5.0%
Assay * on ignite basis	%	99.20%	99.0% to 100.5% of SiO ₂
Bulk Density (Tapped)	gm/ml	0.1190 gm/ml	As such

Physical Properties

- Solubility: Practically insoluble in water & in Mineral acids except hydrofluoric acid. It dissolves in hot solutions of alkali hydroxides.

Shelf Life & Storage

- Shelf Life: 3 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a tightly closed container. Keep in a cool, dry, and well-ventilated place. Protect from moisture and humidity (it is highly hygroscopic). Avoid exposure to contaminants and direct sunlight. Keep containers properly sealed after use to maintain quality.

Applications

- Use: Prevents clumping in powders and granules. Used as a glidant to improve powder flow in tablet and capsule manufacturing. Helps control viscosity in gels, creams, and suspensions. Absorbs moisture and improves stability of formulations. Maintains uniform dispersion in liquid and semi-solid formulations.
- Dosage: Depends on formulation type, particle size, and desired flow or thickening effect.

Packaging

- Standard Packing: 10 kg HDPE bags with inner liner or as per customer requirement.
- Labeling: Product name, batch number, net weight, manufacture date, expiry date, and manufacturer details.

* Specifications are based on the manufacturer's provided specifications.