

SPECIFICATION

Product Name: Precipitated Silicon Dioxide Food Grade
Chemical Formula: SiO ₂
CAS Number: 7631-86-9
Molecular Weight: 60.08 g/mol
Appearance: White Free Flowing Powder.
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
pH (5% w/v) Aq. Sus.	%	Complies	6.5 to 7.5
L.O.D At 110°C for 2 hrs.	%	Complies	Max. 5.0%
Moisture Content (at 105° C for 2 hrs)	%	Complies	Max. 5.0%
Bulk Density Before Tapping Bulk Density After Tapping	gm/ml	Complies	0.08 - 0.10
Loss on ignition (At 1000°C for 2 hrs on anhydrous basis)	%	Complies	Max. 6.0%
SiO ₂ on Anhydrous Basis	%	Complies	Min. 98.0%
Iron Content	PPM	Complies	Max. 200 PPM
Other Soluble Salt	%	Complies	Max. 1.0%

Residue on 325 Mesh (Wet Sieving)	%	Complies	Max. 2.0%
Water Absorption	%	Complies	Min. 260%

Physical Properties

- Solubility: Practically insoluble in water, insoluble in organic solvents. Soluble in strong alkalis. Slightly soluble in hydrofluoric acid.

Shelf Life & Storage

- Shelf Life: 5 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a cool, dry, and well-ventilated area. Keep containers tightly closed to avoid moisture absorption. Protect from humidity and water exposure (can affect flow properties). Keep away from strong alkalis and hydrofluoric acid.

Applications

- Use: Prevents clumping in powders like spices, salt, milk powder, and seasoning blends. Improves flowability of powdered and granulated food products. Used to absorb and carry flavors, fragrances, and liquid ingredients in dry form. Helps improve texture in certain food formulations. Used in beverages like beer and juices for filtration and clarity. Used in tablets and capsules as a glidant to improve manufacturing process.
- Dosage: depends on particle size, moisture content, and formulation type.

Packaging

- Standard Packing: 20 kg woven PP bags with inner liner, 1 kgs and 100 grams, 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.