

SPECIFICATION

Product Name: Silicon Dioxide Technical 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)
Moisture Content (loss at 105° + -2° c)	%	5.5	Max. 6%
Bulk Density (Tapped method)	Gm/lit	94 - 106	80 to 130
PH (5% slurry)	%	7.1	6.5 to 7.5
Water Absorption	%	260	Min. 240
Loss on ignition at 1000° C (Anhydrous Basis)	%	5.2	Max. 10.0
Sieve Residue, 325 Mesh (Wet Sieving)	%	1.6	Max. 2.0
Iron Content	PPM	150	Max. 200
SiO ₂ on anhydrous Basis	%	98.70	Min. 98.50

Physical Properties

- Solubility: Practically insoluble in water, insoluble in organic solvents. Soluble in strong alkalis.

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 prevent moisture uptake. Protect from humidity and water exposure. Avoid contact with strong alkalis and hydrofluoric acid.

Applications

- Use: Prevents clumping in fertilizers, pesticides, and micronutrient mixtures. Helps absorb and uniformly distribute liquid pesticides, herbicides, and nutrients in dry formulations. Enhances flowability during manufacturing, packaging, and field application. Fine silica can act as a **desiccant**, damaging the outer layer of insects and helping in pest control.
- Dosage: Depends on particle size, surface area, and moisture content.

Packaging

- Standard Packing: 25 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.