



FS-100

Silicon Dioxide (Fumed Silica)

CAS Number: 7631-86-9

Formula: SiO_2

DESCRIPTION

FS-100 is a hydrophilic fumed silica produced by flame hydrolysis of chlorosilanes in a hydrogen-oxygen flame at high temperature. The resulting silica particles form a high-purity amorphous structure with a controlled surface area and excellent dispersibility.

FS-100 is widely used as a rheology modifier, thickening agent, and reinforcing additive in coatings, resins, adhesives, sealants, plastics, and construction materials. It enables higher filler loading while maintaining low viscosity and improved stability in liquid systems.

KEY FEATURES

- High purity amorphous silica
- Excellent dispersion characteristics
- Improves rheology and thickening control
- Enhances mechanical strength and reinforcement
- Allows higher filler loading with minimal viscosity increase
- Good stability in a wide range of chemical systems

APPLICATIONS

- Coatings and paints
- Adhesives and sealants
- Polymer and resin systems
- Construction materials and composites
- Surface treatment and polishing formulations
- Personal care and specialty chemical formulations

TYPICAL SPECIFICATIONS

Parameter	Specification
Specific Surface Area (BET)	100 ± 20 m ² /g
pH (4% suspension)	3.9 – 4.5
Drying Loss (105°C, 2 h)	≤ 1.0 %
Loss on Ignition	≤ 1.5 %
Tamped Density	45 – 60 g/L
Sieve Residue	≤ 250 mg/kg
Silica Content	≥ 99.8 %

**LIMITED WARRANTY INFORMATION.
PLEASE READ CAREFULLY.**

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This document is subject to revision without notice as new data becomes available.

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PACKAGING

- 10 kg multi-layer kraft paper bags
- 150 kg polypropylene bags

STORAGE & HANDLING

Store in a cool, dry, and well-ventilated area. Protect from moisture and contamination. Avoid contact with volatile substances. Keep packaging tightly sealed when not in use. Recommended shelf life is two years from the date of production when stored correctly.

SAFETY

Avoid inhalation of dust and prolonged contact with eyes or skin. Use appropriate personal protective equipment during handling. Refer to the Safety Data Sheet (SDS) for detailed safety, handling, and regulatory information.