HFS-170H
Hydrophobic Fumed Silica
(Surface Treated Silicone Dioxide)

CAS Number: 68909-20-6
Formula: SiO_2

DESCRIPTION

HFS-170H is a hydrophobic fumed silica produced by chemical post-treatment of hydrophilic fumed silica with hexamethyldisilazane (HMDS). The surface treatment provides strong hydrophobic properties while maintaining excellent rheological control and reinforcement performance.
It is widely used in silicone rubber systems including RTV silicone rubber, HTV silicone rubber, and liquid silicone rubber. The material also performs well in adhesives, sealants, coatings, inks, cosmetics, defoamers, and elastomer systems requiring thickening and thixotropic control.

KEY FEATURES

- Hydrophobic surface treatment
- Excellent thickening and thixotropic properties
- Strong reinforcement performance in silicone rubber systems
- Good dispersion in organic formulations
- Improves stability and viscosity control
- Suitable for high-performance elastomer and coating systems

APPLICATIONS

- Silicone antifoam / defoamer formulations (high efficiency)
- RTV silicone rubber
- HTV silicone rubber
- Liquid silicone rubber
- Adhesives and sealants
- Coatings and inks
- Defoamer formulations
- Cosmetic and specialty chemical formulations

TYPICAL SPECIFICATIONS

Parameter	Typical Value
Specific Surface Area (BET)	170 ± 30 m²/g
pH (4% suspension, water:methanol 1:1)	6.0 – 9.0
Loss on Drying (105°C, 2 h)	≤ 0.7 %
Loss on Ignition	≤ 4.0 %
Tamped Density	40 – 60 g/L
Carbon Content	1.5 – 2.5 %
Silica Content	≥ 99.8 %

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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

- Supplied in multi-layer kraft paper bags or polypropylene bags.
- Typical packaging sizes include 10 kg bags or 150 kg bags depending on customer requirements.

STORAGE & HANDLING

Store in a cool, dry, and well-ventilated environment. Keep packaging tightly sealed to prevent contamination and moisture absorption. Avoid contact with volatile substances. Recommended shelf life is up to two years from the production date when stored under suitable conditions.

SAFETY

Read the Safety Data Sheet (SDS) carefully before use. Avoid inhalation of dust and prolonged contact with eyes or skin. Use appropriate personal protective equipment during handling.