

Silico® MF2020-100000 Silicone Fluid

SAFETY DATA SHEET (SDS)

SECTION 1: Identification of the Substance and the Company

Product Identifier

Trade Name: Silico® MF2020-100000 Silicone Fluid

Chemical Name: Polydimethylsiloxane (PDMS)

CAS No.: 63148-62-9

Recommended Use

- Ultra-high viscosity industrial silicone fluid
- Mechanical damping and vibration control medium
- High-load lubrication and sealing applications
- Dielectric insulation and thermal management fluid

Uses Advised Against

- Not intended for food contact, pharmaceutical, or medical applications unless specifically approved.

Supplier Information:

Company: Silico® Silicone / Daiyue Industrial Area, Taian, Shandong, China

Email: info@silicorex.com

Emergency Contact: +86-0538-5071566

Website: www.silicorex.com

SECTION 2: Hazard Identification

Classification According to GHS / CLP

This product is not classified as hazardous according to Regulation (EC) No. 1272/2008 (CLP), GHS, or OSHA HCS.

Label Elements

- Hazard Pictograms: None
- Signal Word: None
- Hazard Statements: Not applicable

Other Hazards

- Spilled material may create slip hazards due to very high viscosity and surface lubricity.
- No PBT or vPvB properties identified.

SECTION 3: Composition / Information on Ingredients

Component	Polydimethylsiloxane
CAS No.	63148-62-9
Concentration	≥ 99%

No hazardous impurities or additives present above regulatory disclosure limits.

SECTION 4: First-Aid Measures

General Information

No special measures required under normal industrial exposure.

Inhalation

Move to fresh air. Seek medical attention if symptoms persist.

Skin Contact

Wash thoroughly with soap and water. Remove contaminated clothing.

Eye Contact

Rinse cautiously with clean water for several minutes. Consult a physician if irritation develops.

Ingestion

Rinse mouth. Do not induce vomiting. Obtain medical advice if discomfort occurs.

SECTION 5: Fire-Fighting Measures

Suitable Extinguishing Media

Foam, carbon dioxide (CO₂), dry chemical powder, water mist.

Unsuitable Media

High-pressure water jet.

Specific Hazards

Thermal decomposition may generate silicon oxides, carbon oxides, and formaldehyde traces.

Protective Equipment for Firefighters

Self-contained breathing apparatus and full protective clothing.

SECTION 6: Accidental Release Measures

Personal Precautions

Wear suitable protective gloves and eye protection.

Environmental Precautions

Avoid release into drains, waterways, or soil.

Containment and Cleanup

Absorb with inert material (sand, earth, absorbent pads). Collect into properly labeled containers for disposal.

SECTION 7: Handling and Storage

Handling

- Avoid prolonged contact with skin and eyes
- Maintain good industrial hygiene
- Prevent formation of slippery surfaces

Storage

- Store in original, tightly sealed containers
- Keep in a cool, dry, well-ventilated area
- Recommended storage temperature: $\leq 40\text{ }^{\circ}\text{C}$

SECTION 8: Exposure Controls / Personal Protection

Exposure Limits

No occupational exposure limits established for PDMS.

Engineering Controls

General ventilation is sufficient.

Personal Protective Equipment (PPE)

- Chemical-resistant gloves
- Safety goggles or face shield
- Protective work clothing

SECTION 9: Physical and Chemical Properties

Property	Typical Value
Appearance	Clear, colorless, ultra-viscous liquid
Odor	Odorless
Viscosity (25 °C)	~100,000 cSt
Density (25 °C)	~0.975 g/cm ³
Flash Point	> 300 °C
Pour Point	Approx. -50 °C
Solubility	Insoluble in water

Vapor Pressure	Negligible
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Values are typical and not intended as specifications.

SECTION 10: Stability and Reactivity

Reactivity

No dangerous reactions under normal conditions.

Chemical Stability

Stable under recommended storage and handling conditions.

Conditions to Avoid

Excessive heat, open flames.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Silicon oxides, carbon oxides.

SECTION 11: Toxicological Information

Acute Toxicity

Based on available data, PDMS exhibits very low acute toxicity.

Skin and Eye Effects

Not classified as irritating.

Sensitization

Not expected to cause sensitization.

Chronic Toxicity

Not classified as carcinogenic, mutagenic, or toxic to reproduction.

SECTION 12: Ecological Information

Ecotoxicity

Low aquatic toxicity based on PDMS reference data.

Persistence and Degradability

Not readily biodegradable; degrades slowly via abiotic mechanisms.

Bioaccumulation

Not expected to bioaccumulate.

Mobility in Soil

Insoluble in water; strongly adsorbs to soil particles.

SECTION 13: Disposal Considerations

Dispose of contents and containers in accordance with local, regional, and national regulations.

SECTION 14: Transport Information

UN Number: Not regulated

Transport Hazard Class: Not classified

Packing Group: Not applicable

This product is not dangerous goods under ADR, IMDG, or IATA.

SECTION 15: Regulatory Information

This product complies with major global chemical inventory requirements. Final regulatory obligations remain the responsibility of the importer.

SECTION 16: Other Information

This Safety Data Sheet is prepared based on current knowledge and is intended for professional and industrial users.