

Silico® MF2020-50 cSt Silicone Fluid

SAFETY DATA SHEET (SDS)

SECTION 1: Identification of the Substance/Mixture and of the Company

Product Identifier

Product Name: Silico® MF2020-50 Silicone Fluid

Chemical Name: Polydimethylsiloxane (PDMS)

CAS Number: 63148-62-9

Molecular Formula: (C₂ H₆ OSi)_n

Recommended Use

Silico® MF2020-50 is a low viscosity PDMS silicone oil designed for industrial and technical applications, including:

- Precision lubrication and light mechanical systems
- Release agents and surface treatment formulations
- Dielectric and insulating fluids
- Additive for coatings, defoamers, and personal care intermediates

Uses Advised Against

Not intended for pharmaceutical, medical implant, or food-contact 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 (GHS / CLP / OSHA HCS)

This substance is not classified as hazardous according to Regulation (EC) No. 1272/2008 (CLP), Globally Harmonized System (GHS), or OSHA Hazard Communication Standard.

Label Elements

- Signal Word: None
- Hazard Pictograms: None required
- Hazard Statements: None required

Other Hazards

Spilled material may present a significant slip hazard due to its lubricating properties.

Not identified as PBT or vPvB at reportable levels.

SECTION 3: Composition / Information on Ingredients

Component	Polydimethylsiloxane
CAS No.	9006-65-9 / 63148-62-9
Concentration	≥ 99%

No hazardous impurities are present above applicable disclosure limits.

SECTION 4: First-Aid Measures

General Advice

If symptoms develop or persist, obtain medical attention. Provide this SDS to healthcare personnel.

Inhalation

Move affected individual to fresh air. Seek medical attention if respiratory discomfort continues.

Skin Contact

Wash thoroughly with soap and water. Remove contaminated clothing. Seek medical advice if irritation develops.

Eye Contact

Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing and consult medical personnel if irritation persists.

Ingestion

Rinse mouth with water. Do not induce vomiting unless directed by medical personnel.

SECTION 5: Fire-Fighting Measures

- Suitable Extinguishing Media
- Dry chemical powder
- Carbon dioxide (CO₂)
- Alcohol-resistant foam
- Water spray (fog)

Unsuitable Media

High-pressure direct water stream.

Hazardous Combustion Products

Carbon oxides (CO_x), silicon oxides (SiO_x), and trace formaldehyde may form under combustion conditions.

Special Protective Equipment

Self-contained breathing apparatus (SCBA) and full protective gear are recommended.

SECTION 6: Accidental Release Measures

Personal Precautions

Use appropriate personal protective equipment. Avoid contact with eyes and skin. Prevent slipping.

Environmental Precautions

Prevent discharge into drains, waterways, or soil.

Cleanup Procedure

Contain spill and absorb with inert material (sand, earth, vermiculite). Transfer to suitable labeled containers for disposal in accordance with local regulations.

SECTION 7: Handling and Storage

Handling Guidelines

Use good industrial hygiene practices. Avoid aerosol formation. Ensure adequate ventilation in processing areas.

Storage Conditions

Store in tightly closed original containers in a cool, dry, well-ventilated location.

Recommended storage temperature: below 40 °C.

Keep away from strong oxidizing agents.

SECTION 8: Exposure Controls / Personal Protection

Occupational Exposure Limits

No specific exposure limits established for PDMS silicone fluids.

Engineering Controls

General industrial ventilation is sufficient for normal operations.

Personal Protective Equipment (PPE)

- Eye Protection: Safety glasses or goggles
- Hand Protection: Chemical-resistant gloves
- Protective Clothing: Standard industrial workwear
- Respiratory Protection: Not normally required; use appropriate protection if mist is generated

SECTION 9: Physical and Chemical Properties

Property	Typical Value
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Appearance	Clear, colorless liquid
Odor	Odorless
Viscosity (25 °C)	~50 cSt
Density (25 °C)	~0.96–0.97 g/cm³
Flash Point	> 300 °C
Pour Point	Approx. -50 °C
Water Solubility	Insoluble
Surface Tension	~20–21 mN/m
Vapor Pressure	Negligible

Values are typical and not to be considered product specifications.

SECTION 10: Stability and Reactivity

Chemical Stability

Stable under recommended storage and handling conditions.

Reactivity

No hazardous reactions expected during normal use.

Conditions to Avoid

Excessive heat, open flames, strong oxidizers.

Hazardous Decomposition Products

Silicon oxides and carbon oxides may form under thermal decomposition.

SECTION 11: Toxicological Information

- Based on available data for polydimethylsiloxane:
- Low acute oral and dermal toxicity
- Not classified as skin or eye irritant under normal conditions
- Not classified as carcinogenic, mutagenic, or toxic to reproduction
- Excessive exposure to heated vapors may cause mild respiratory irritation.

SECTION 12: Ecological Information

Ecotoxicity

Low aquatic toxicity expected.

Persistence and Degradability

Not readily biodegradable; primarily degrades via abiotic processes.

Bioaccumulative Potential

Low potential due to high molecular weight.

Mobility in Soil

Insoluble in water; tends to adsorb to soil particles.

SECTION 13: Disposal Considerations

Dispose of contents and container in accordance with local, regional, and national regulations. Avoid uncontrolled environmental release.

SECTION 14: Transport Information

Not regulated as dangerous goods under:

- ADR (Road)
- IMDG (Sea)
- IATA (Air)

UN Number: Not applicable

Hazard Class: Not applicable

Packing Group: Not applicable

SECTION 15: Regulatory Information

This product complies with major global chemical inventory requirements, including TSCA (USA) and applicable REACH regulations (EU). Users should verify compliance with local regulatory authorities.

SECTION 16: Other Information

This Safety Data Sheet provides safety-related information for Silico® MF2020-50 Silicone Fluid (50 cSt PDMS silicone oil) used in industrial applications.

The information is believed to be accurate but does not constitute a product warranty or specification.