

# 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: (C<sub>2</sub> H<sub>6</sub> OSi)<sub>n</sub>

#### 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](mailto:info@silicorex.com)

Emergency Contact: +86-0538-5071566

Website: [www.silicorex.com](http://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 (CO<sub>2</sub>)
- Alcohol-resistant foam
- Water spray (fog)

### Unsuitable Media

High-pressure direct water stream.

### **Hazardous Combustion Products**

Carbon oxides (COx), silicon oxides (SiOx), 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/cm <sup>3</sup>
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.

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