

Silico® MF2020-5 cSt Silicone Fluid

SAFETY DATA SHEET (SDS)

SECTION 1: Identification of the Substance and Company

Product Name: Silico® MF2020-5 Silicone Fluid

Chemical Name: Polydimethylsiloxane

CAS Number: 63148-62-9

Synonyms: Dimethyl Silicone Oil, Linear PDMS Silicone Fluid

Viscosity Grade: 5 cSt @ 25°C

Recommended Use:

Silico® MF2020-5 is an ultra-low viscosity PDMS silicone oil designed for industrial applications including:

- Precision lubrication
- Mold release and surface treatment
- Carrier fluid for defoamers and specialty formulations
- Low friction coatings
- Dielectric and heat transfer media in electronics

Restrictions on Use:

Not intended for food, pharmaceutical, cosmetic, or medical implant applications without appropriate regulatory approvals.

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 29 CFR 1910.1200):

Not classified as hazardous.

Label Elements:

- Hazard pictograms: None required
- Signal word: None
- Hazard statements: Not applicable

Other Hazards:

Due to its low viscosity and high lubricity, spilled material may create significant slip hazards on smooth surfaces.

This product does not meet criteria for PBT or vPvB classification.

SECTION 3: Composition / Information on Ingredients

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

No hazardous components present above regulatory disclosure limits.

SECTION 4: First Aid Measures

General Advice:

If symptoms persist, seek medical attention and provide this Safety Data Sheet.

Inhalation:

Move to fresh air. No specific treatment generally required.

Skin Contact:

Wash thoroughly with soap and water. Remove contaminated clothing.

Eye Contact:

Rinse cautiously with water for several minutes. Seek medical attention if irritation continues.

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 spray.

Specific Hazards:

Combustion may generate silicon oxides, carbon oxides, and trace formaldehyde under extreme thermal conditions.

Protective Equipment:

Use self-contained breathing apparatus (SCBA) and protective clothing.

SECTION 6: Accidental Release Measures

Personal Precautions:

Wear appropriate protective gloves and eye protection.

Environmental Precautions:

Prevent product from entering drains, surface water, or soil.

Methods for Containment and Cleaning:

Absorb with inert materials such as sand or earth. Collect into properly labeled containers for disposal.

SECTION 7: Handling and Storage

Handling:

Handle in accordance with good industrial hygiene and safety practices. Avoid mist formation.

Storage:

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

Recommended storage temperature: below 40°C.

Keep away from strong oxidizing agents.

SECTION 8: Exposure Controls / Personal Protection

Occupational Exposure Limits:

No exposure limits established for polydimethylsiloxane silicone oils.

Engineering Controls:

General industrial ventilation is sufficient.

Personal Protective Equipment (PPE):

- Eye Protection: Safety glasses with side shields
- Hand Protection: Nitrile or chemical-resistant gloves
- Skin Protection: Protective clothing
- Respiratory Protection: Not required under normal industrial use

SECTION 9: Physical and Chemical Properties

Property	Typical Value
Appearance	Clear, transparent liquid
Odor	Odorless
Viscosity (25°C)	5 cSt
Density (25°C)	~0.91–0.92 g/cm ³
Refractive Index (25°C)	~1.396–1.398
Flash Point	>120°C
Pour Point	Below –90°C
Surface Tension	Low
Solubility	Insoluble in water
Vapor Pressure	Negligible

These values are typical and not to be considered product specifications.

SECTION 10: Stability and Reactivity

Reactivity: Stable under normal conditions.

Chemical Stability: Stable when stored as recommended.

Conditions to Avoid: Excessive heat, open flames.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon oxides and silicon oxides upon thermal decomposition.

SECTION 11: Toxicological Information

Based on available data for low viscosity PDMS silicone fluids:

- Acute Toxicity: Low
- Skin Irritation: Not expected
- Eye Irritation: Minimal mechanical irritation possible
- Sensitization: Not classified
- Carcinogenicity: Not classified

No known chronic health hazards under normal industrial exposure.

SECTION 12: Ecological Information

- Ecotoxicity: Low aquatic toxicity anticipated
- Persistence: Not readily biodegradable
- Bioaccumulation: Not expected
- Mobility: Insoluble; adsorbs to soil particles
- Avoid environmental release.

SECTION 13: Disposal Considerations

Dispose of product and packaging in accordance with applicable environmental and waste disposal regulations.

SECTION 14: Transport Information

Not regulated as dangerous goods under:

- ADR
- IMDG
- IATA
- DOT

No UN number assigned.

SECTION 15: Regulatory Information

This product complies with applicable chemical inventory requirements such as TSCA (USA) and relevant international regulations.

Users are responsible for ensuring compliance with local regulations.

SECTION 16: Other Information

This Safety Data Sheet applies specifically to:

Silico® MF2020-5 Silicone Fluid – 5 cSt Low Viscosity PDMS Silicone Oil

Information is believed to be accurate at the time of preparation and is provided for industrial and professional use only.