

Silico® 350 cSt Medical-Grade Silicone Oil (PDMS)

SAFETY DATA SHEET (SDS)

SECTION 1: Identification

Product Name: Silico® 350 cSt Medical-Grade Silicone Oil

Chemical Name: Polydimethylsiloxane (PDMS)

CAS Number: 63148-62-9

Recommended Uses:

Medical device lubrication

Biocompatible coating fluid

Pharmaceutical processing aid

Ophthalmic and viscoelastic applications

Medical-grade damping and transfer fluid

Restrictions on Use:

Not for injection or implantable use unless specifically validated and certified.

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

GHS Classification:

Not classified as hazardous under GHS, OSHA, or EU CLP regulations.

Label Elements:

- Hazard Pictogram: None required
- Signal Word: None
- Hazard Statements: Not applicable

Other Hazards:

Spilled material may cause slip hazard due to high lubricity.

SECTION 3: Composition / Information on Ingredients

Component	Polydimethylsiloxane (PDMS)
CAS Number	63148-62-9
Concentration	≥ 99%

No hazardous additives or impurities above regulatory thresholds.

SECTION 4: First Aid Measures

Inhalation:

Move to fresh air. Seek medical attention if discomfort occurs.

Skin Contact:

Wash thoroughly with soap and water.

Eye Contact:

Rinse cautiously with water for several minutes. Seek medical advice if irritation persists.

Ingestion:

Rinse mouth. Do not induce vomiting. Obtain medical attention if symptoms develop.

SECTION 5: Fire-Fighting Measures

Suitable Extinguishing Media:

Foam, dry chemical, carbon dioxide (CO₂).

Specific Hazards:

Thermal decomposition may produce carbon oxides and silicon oxides.

Protective Equipment:

Self-contained breathing apparatus and protective clothing recommended.

SECTION 6: Accidental Release Measures

Personal Precautions:

Wear appropriate protective equipment. Avoid walking on spill.

Environmental Precautions:

Prevent discharge into drains or waterways.

Methods for Cleanup:

Absorb with inert material (sand, earth). Collect in suitable containers for disposal.

SECTION 7: Handling and Storage

Handling:

Avoid contact with eyes. Use good industrial hygiene practices.

Storage:

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

Recommended storage temperature: 5–35°C.

SECTION 8: Exposure Controls / Personal Protection

Exposure Limits:

No established occupational exposure limits for high molecular weight PDMS fluids.

Engineering Controls:

General ventilation recommended.

Personal Protective Equipment:

- Safety glasses
- Chemical-resistant gloves
- Protective clothing as needed
- Respiratory protection not normally required under typical conditions

SECTION 9: Physical and Chemical Properties

Property	Typical Value
Appearance	Clear, colorless liquid
Odor	Odorless
Viscosity (25°C)	350 cSt
Density (25°C)	Approx. 0.97 g/cm ³
Refractive Index (25°C)	1.402–1.406
Flash Point	>260°C (Closed Cup)
Solubility in Water	Insoluble
Vapor Pressure	Negligible
Surface Tension	~21 mN/m

Values are typical data for medical-grade PDMS silicone oil and not specification limits.

SECTION 10: Stability and Reactivity

Chemical Stability:

Stable under normal storage and handling conditions.

Conditions to Avoid:

Excessive heat, open flames.

Incompatible Materials:

Strong oxidizing agents.

Hazardous Decomposition Products:

Carbon oxides, silicon oxides under combustion conditions.

SECTION 11: Toxicological Information

Medical-grade 350 cSt silicone oil (PDMS) is generally regarded as:

- Low acute toxicity
- Non-sensitizing
- Minimally irritating
- Biocompatible when properly processed

ISO 10993 biocompatibility data may be available upon request for medical regulatory evaluation.

SECTION 12: Ecological Information

Ecotoxicity:

Low expected aquatic toxicity.

Persistence and Degradability:

Not readily biodegradable.

Bioaccumulation Potential:

Low due to high molecular weight.

Mobility in Soil:

Insoluble in water; adheres to soil and sediment.

SECTION 13: Disposal Considerations

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

Incineration in approved facilities is recommended.

SECTION 14: Transport Information

Not regulated as dangerous goods under:

- ADR
- IMDG
- IATA
- DOT

SECTION 15: Regulatory Information

Complies with major chemical inventory listings.

For medical applications, additional documentation (USP Class VI, ISO 10993, endotoxin testing) may be required depending on regulatory jurisdiction.

SECTION 16: Other Information

This Safety Data Sheet describes the safety requirements for Silico® 350 cSt Medical-Grade PDMS Silicone Oil, a high-purity, biocompatible silicone fluid designed for medical device lubrication, pharmaceutical processing, and precision medical applications.

The information provided is based on current knowledge and industry standards for medical-grade polydimethylsiloxane (CAS 63148-62-9).