

SAFETY DATA SHEET (SDS)

Food Grade Polydimethylsiloxane (PDMS)
Brand: Silico®

SECTION 1: Identification of the Substance and of the Company

1.1 Product Identification

Item	Description
Product Name	350 cSt Silicone Fluid
Chemical Type	Food Grade silicone fluid
Synonyms	Silicone Fluid 350 cSt, Dimethyl Silicone Fluid
CAS No.	63148-62-9 (Polydimethylsiloxane)
Molecular Formula	$(\text{CH}_3)_3\text{Si-O}[\text{Si}(\text{CH}_3)_2\text{-O}]_n\text{-Si}(\text{CH}_3)_3$
Kinematic Viscosity	350 cSt at 25 °C

1.2 Relevant Identified Uses

Food-grade defoaming systems for beverage, fermentation, and food processing lines
Mold release agents for bakery, confectionery, and molded food products
Lubrication of food processing equipment, conveyors, valves, seals, and gaskets
Anti-sticking and slip applications on metal, plastic, and rubber food contact surfaces
Packaging and bottling lines requiring clean, non-carbonizing lubrication

Uses advised against:

Uses other than those specified by the manufacturer.

1.3 Supplier Information

Company: Shandong Silico Silicone Materials Co., Ltd.
Address: Daiyue Industrial Area, Taian, Shandong, China
Tel: +86-0538-5071566
Email: info@silicorex.com

2.1 Classification of the Substance or Mixture

According to Regulation (EC) No. 1272/2008 (CLP), this product is **not classified as hazardous**.

2.2 Label Elements

Signal Word: Not required

Hazard Statements: Not required

Precautionary Statements:

Avoid uncontrolled release to the environment
Use appropriate personal protective equipment

2.3 Other Hazards

Spilled material may create a **slip hazard**. This substance does not meet the criteria for PBT or vPvB.

SECTION 3: Composition / Information on Ingredients

Component	CAS No.	EC No.	Concentration
Polydimethylsiloxane (PDMS)	63148-62-9	—	≥ 99%

SECTION 4: First Aid Measures

4.1 Description of First Aid Measures

- Inhalation:** Move to fresh air. Seek medical advice if symptoms persist.
- Skin Contact:** Wash thoroughly with soap and water.
- Eye Contact:** Rinse cautiously with water for several minutes.
- Ingestion:** Rinse mouth. Do not induce vomiting. Consult a physician if necessary.

4.2 Most Important Symptoms

No significant acute or delayed symptoms are known.

4.3 Indication of Immediate Medical Attention

No special treatment required.

SECTION 5: Firefighting Measures

5.1 Suitable Extinguishing Media

Water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

5.2 Special Hazards

Thermal decomposition may produce carbon oxides and silicon oxides.

5.3 Advice for Firefighters

Wear self-contained breathing apparatus and full protective equipment.

SECTION 6: Accidental Release Measures

6.1 Personal Precautions

Avoid contact with skin and eyes. Ensure adequate ventilation.

6.2 Environmental Precautions

Prevent entry into drains, soil, and surface waters.

6.3 Methods for Cleanup

Absorb with inert material (sand, earth, or absorbent pads) and collect for disposal according to local regulations.

SECTION 7: Handling and Storage

7.1 Handling

Handle in accordance with good industrial hygiene practices. Avoid unnecessary contact.

7.2 Storage

Store in tightly closed original containers in a cool, dry, and well-ventilated area. Protect from extreme heat.

SECTION 8: Exposure Controls / Personal Protection

8.1 Control Parameters

No occupational exposure limits established.

8.2 Exposure Controls

Engineering Controls: General ventilation

Eye Protection: Safety glasses

Hand Protection: Chemical-resistant gloves

Respiratory Protection: Not normally required

SECTION 9: Physical and Chemical Properties

Property	Typical Value
Appearance	Clear, colorless liquid
Odor	Odorless
Kinematic Viscosity	350 cSt (25 °C)
Boiling Point	> 300 °C (decomposes)
Flash Point	> 300 °C
Density	~0.97 g/cm ³ (25 °C)
Refractive Index	~1.403 (25 °C)
Vapor Pressure	Negligible
Water Solubility	Insoluble

SECTION 10: Stability and Reactivity

Chemical Stability: Stable under recommended storage conditions

Conditions to Avoid: Excessive heat, open flames

Incompatible Materials: Strong oxidizing agents

Hazardous Decomposition Products: Carbon oxides, silicon oxides

SECTION 11: Toxicological Information

Based on available data for PDMS fluids:

Oral LD50 (rat): > 2,000 mg/kg

Dermal LD50 (rabbit): > 2,000 mg/kg

Skin/Eye Irritation: Not irritating

No known chronic toxicity under normal conditions of use.

SECTION 12: Ecological Information

Low acute aquatic toxicity
Not readily biodegradable
Avoid uncontrolled environmental release

SECTION 13: Disposal Considerations

Dispose of contents and containers in accordance with applicable local and national regulations. Do not discharge into drains.

SECTION 14: Transport Information

Not regulated as dangerous goods under ADR, IMDG, or IATA.

SECTION 15: Regulatory Information

This product is not classified as hazardous under EU CLP Regulation.
Suitable for **incidental food contact applications** when used in accordance with applicable regulations.

SECTION 16: Other Information

This Safety Data Sheet is based on industry-standard safety data for food grade PDMS and Silico SDS formatting practices.
The information is provided in good faith but does not constitute a warranty. Users are responsible for determining suitability for their specific applications and compliance with applicable regulations.