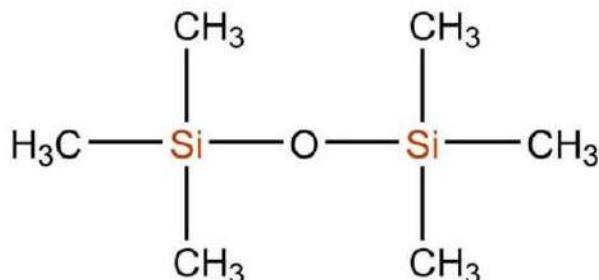


# TECHNICAL DATA SHEET (TDS)

Food Grade Polydimethylsiloxane (PDMS) 350 cSt

Brand: Silico®

## Chemical Structure



## 1. Product Description

Silico® Food Grade Polydimethylsiloxane (PDMS) 350 cSt is a high-purity, linear silicone fluid specifically designed for food processing and incidental food contact applications.

It exhibits excellent thermal stability, chemical inertness, low surface tension, and lubricity, making it suitable for use as a defoamer, release agent, and lubricant in regulated food industry environments.

This product is colorless, odorless, non-toxic, and physiologically inert, and does not impart taste or odor to food contact surfaces when used as intended.

## 2. Chemical Identification

Item	Description
Chemical Name	Polydimethylsiloxane (PDMS)
CAS Number	63148-62-9
Chemical Structure	$(\text{CH}_3)_3\text{Si}-\text{O}-[\text{Si}(\text{CH}_3)_2-\text{O}]_n-\text{Si}(\text{CH}_3)_3$
Product Type	Food Grade Silicone Fluid

Viscosity Grade	350 cSt
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### 3. Typical Physical Properties

Typical values, not intended as specifications

Property	Typical Value	Test Method
Appearance	Clear, colorless liquid	Visual
Odor	Odorless	—
Kinematic Viscosity (25 °C)	350 cSt	ASTM D445
Density (25 °C)	~0.97 g/cm³	ASTM D4052
Refractive Index (25 °C)	~1.403	ASTM D1218
Surface Tension	~21 mN/m	ASTM D971
Flash Point	> 300 °C	ASTM D92
Pour Point	Approx. -50 °C	ASTM D97
Vapor Pressure	Negligible	—
Water Solubility	Insoluble	—

### 4. Performance Characteristics

Excellent thermal and oxidative stability

Chemically inert to most metals, plastics, and elastomers

Low surface tension for uniform spreading and effective release

Good lubricity and film-forming properties

Non-carbonizing at elevated temperatures

Neutral sensory profile (odorless and tasteless)

### 5. Typical Applications

Silico® Food Grade PDMS 350 cSt is widely used in:

Food-grade defoaming systems for beverage, fermentation, and food processing

Mold release agents for bakery, confectionery, and molded food products

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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 lubrication

For incidental food contact only. Not intended for direct food consumption.

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## 6. Regulatory & Compliance Information

Suitable for incidental food contact applications

Complies with applicable FDA 21 CFR food contact regulations (application-dependent)

Suitable for NSF H1 classification when used according to guidelines

Not classified as hazardous under EU CLP Regulation (EC) No. 1272/2008

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## 7. Handling and Storage

Handle in accordance with good industrial hygiene practices

Avoid unnecessary contact with skin and eyes

Store in tightly closed original containers

Keep in a cool, dry, and well-ventilated area

Protect from excessive heat and direct sunlight

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## 8. Packaging

Available packaging options include:

20 kg / 25 kg pails

180 kg / 200 kg drums

Bulk supply available upon request

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## 9. Shelf Life

Minimum 5 years from date of manufacture when stored in unopened original containers under recommended storage conditions.

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## 10. Disclaimer

The information contained in this Technical Data Sheet is based on current knowledge and experience. All values are typical and should not be used as specifications. Silico® makes no warranty, express or implied, regarding the suitability of this product for any specific application. Users are responsible for evaluating product suitability and ensuring compliance with applicable regulations.

## 11. Disclaimer

All information in the leaflet is based on our present knowledge and experience. We reserve the right to make any changes according to technological progress or further developments. Performance of the product described herein should be verified by testing.

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Please send all technical questions concerning quality and product safety to: [info@silicorex.com](mailto:info@silicorex.com).