Technical Data Sheet

www.silfluo.com

Methyl Fluorosilicone Fluid LF-MF11

Description:

Chemical Name: Methyl fluorosilicone fluid; Methyl-terminated fluorosilicone fluid; Trimethyl terminated fluorosilicone or copolymer of fluorosiloxane and siloxane;

Methyl Fluorosilicone Oil is a fluorine-modified polysiloxane fluid featuring a siloxane backbone with methyl and fluoroalkyl side groups.

It combines the inherent advantages of silicone oils—such as wide service temperature range and excellent flexibility—with significantly improved resistance to fuels, oils, and aggressive chemicals.

This product is designed for applications requiring reliable lubrication, sealing, damping, or surface performance under harsh chemical and thermal environments.

Typical Technical Properties:

Test Item	**Standard**		
	LF-MF11A	LF-MF11B	LF-MF11C
Appearance	Colorless to yellowish transparent liquid		
Viscosity (25°C, mPa.s)	100-100000		
Volatile (%/ 200°C, 4h)	<5		
PH Value	6.0~7.5		
Flash Point (°C)	>240		
Refractive Index (25°C)	1.378±0.01	1.384±0.01	1.388±0.01
Density (25°C, g/cm^3)	1.25±0.03	1.13±0.03	1.09±0.03

Various viscosities can be customized.

Features:

- Excellent resistance to fuels, mineral oils, and lubricants;
- Improved solvent and chemical resistance compared to standard methyl silicone oils;
- Wide operating temperature range;
- Low surface tension with hydrophobic and oleophobic behavior;
- Good dielectric stability;
- Low volatility and long service life;
- Compatible with fluorosilicone elastomers (FVMQ);

Applications:

1. High-Performance Lubricant Base Oil: Used as a base fluid for formulating oil-resistant and chemically

resistant fluorosilicone greases; Lubrication of bearings, valves, and pumps in the aerospace and automotive industries, particularly those exposed to fuels or solvents; Vacuum pump oil, especially in environments containing corrosive chemical gases.

2. Specialty Defoaming Agent: Defoaming for solvent-based systems (e.g., paints, coatings, and inks); it retains defoaming activity due to its insolubility in many organic solvents; Defoaming applications in petroleum extraction and processing.
3. Mold Release Agent: Used in rubber, plastic, and metal die-casting industries, particularly suitable when the molded material is sensitive to standard silicone or requires subsequent painting/coating operations.
4. Surface Treatment Agent / Additive: Used in textile finishing to impart hydrophobic, oleophobic, and stain-resistant properties to fabrics; Acts as a leveling agent for coatings and inks, providing anti-cratering and anti-fouling effects.

Package &Storage:

In 25kg and 200kg drum.

Keep in cool, dry and ventilated place. Keep away from sunlight and fire sources. Keep in unopened containers, shelf life is 12 months from the date of production.

Storage beyond the shelf life does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.