



## Silfluo LF-OHP

Hydroxyl-Terminated Polydimethylsiloxane(OH Polymer)

### Description:

Silfluo LF-OHP is a series of hydroxyl-terminated polydimethylsiloxane polymers (CAS 70131-67-8), also known in the industry as OH Polymer or 107 Base, available in viscosity grades from 750 to 80,000 mPa·s. Silanol (Si–OH) end groups on both chain termini react with alkoxy, acetoxy, oxime, or amine crosslinkers at room temperature under ambient moisture, forming the cured siloxane elastomer network of RTV silicone rubber systems. The PDMS backbone imparts electrical insulation, UV and ozone resistance, and thermal stability across a service temperature range of –60°C to 200°C to the cured elastomer.

Viscosity is the primary selection parameter, determining the molecular weight of the base polymer, the mechanical properties of the cured elastomer (higher MW — higher elongation and tear strength), and the processing viscosity of the formulated compound.

### Typical Technical Properties:

Silfluo Code:	LF-OHP Series
Chemical Name:	Hydroxyl-Terminated Polydimethylsiloxane
Synonyms	OH Polymer; Silanol-Terminated PDMS; Hydroxy Silicone Oil; RTV Base Polymer; Silanol-Terminated Polydimethylsiloxane (OH-PDMS) ydroxyl-Terminated Silicone Polymer, RTV Base Matrix
CAS No. :	70131-67-8
Molecular Formula:	HO[(CH <sub>3</sub> ) <sub>2</sub> SiO] <sub>n</sub> H
Appearance:	Colorless, transparent, viscous liquid
Specific Gravity (25°C, g /cm <sup>3</sup> )	0.97
Chemical Structure:	$\begin{array}{c} \text{CH}_3 \quad \text{CH}_3 \quad \text{CH}_3 \\   \quad   \quad   \\ \text{HO}-\text{Si}-\text{O}-[\text{Si}-\text{O}]_m-\text{Si}-\text{OH} \\   \quad   \quad   \\ \text{CH}_3 \quad \text{CH}_3 \quad \text{CH}_3 \end{array}$

Items	Viscosity (25°C)/( mPa·s)	Turbidity/NTU ≤	Volatile Compounds (150°C, 3h) /% ≤	Vulcanizing Time in surface/h ≤
OHP750	750±75	3.0	1.0	1.0
OHP850	850±85	3.0	1.0	1.0
OHP1000	1000±100	3.0	1.0	1.0
OHP1500	1500±150	3.0	1.0	1.0
OHP2000	2000±200	3.0	1.0	1.0
OHP5000	5000±500	3.0	1.0	1.0
OHP10000	10000±1000	3.0	1.0	1.0
OHP20000	20000±2000	3.0	1.0	1.0
OHP50000	50000±4000	3.0	1.0	1.0
OHP80000	80000±6000	3.0	1.0	1.0

# Technical Data Sheet



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The viscosity and hydroxyl content can be customized.

## Applications:

### 1. Construction and Glazing Sealants

Used as primary base polymer for formulating acetoxy-cure, neutral alkoxy-cure, and oxime-cure RTV-1 silicone sealants for glass, aluminum, concrete, and masonry joints in construction and curtain wall glazing. Recommended grades: OHP1500 – OHP5000 for standard extrusion-grade sealants.

### 2. Electronic Potting and Encapsulation

Used to manufacture two-part RTV potting compounds and encapsulants for semiconductors, PCBs, LED drivers, and transformers, providing dielectric insulation, thermal stability, and moisture protection. Recommended grades: OHP5000 – OHP20000 for self-leveling to paste-grade potting compounds.

### 3. Automotive and Industrial Gaskets and Adhesives

Used in formed-in-place (FIP) gasket compounds, industrial adhesives, and assembly sealants for automotive and mechanical applications requiring thermal cycling resistance and chemical stability. Recommended grades: OHP2000 – OHP10000.

### 4. Mold-Making Rubber

Used as base matrix for two-part condensation-cure mold-making silicone rubbers for prototyping, casting, and artistic replication applications requiring tear resistance and dimensional fidelity. Recommended grades: OHP20000 – OHP80000 for high-elongation, tear-resistant mold rubber formulations.

### 5. Textile and Plastic Modification

Used as reactive modifier in textile finishing and plastic compounding to improve fabric softness, water repellency, and resin melt flow. Recommended grades: OHP750 – OHP2000 for compatibility with textile emulsion and plastic compounding processes.

## Package &Storage:

In 190kg/drum. 950kg/IBC.

Keep in cool, dry and ventilated place. Keep away from sunlight and fire sources. Keep in unopened containers, shelf life is 36 months from the date of production. It is shipped as non-hazardous substance.

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.