



Silfluo LF-H101TS

Terminal & Side-H Silicone Oil

Description:

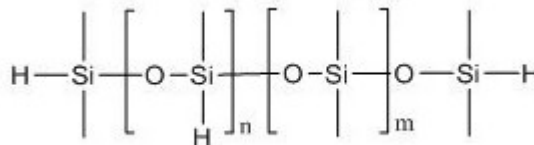
The Silfluo LF-H101TS Series represents the most comprehensive reactive structure in our hydrogen silicone portfolio: a hydride-terminated methylhydrosiloxane-dimethylsiloxane copolymer. By strategically combining both terminal (end-cap) and pendant (side-chain) silicon-hydrogen (Si-H) bonds within the same polymer matrix, this advanced fluid delivers unparalleled dual-reactivity.

During the hydrosilylation process, the terminal groups facilitate rapid chain extension to build flexibility, while the side-chain groups simultaneously create dense, multi-directional crosslinking nodes. This synergistic structure significantly increases the overall crosslinking density, accelerates curing speed, and dramatically improves the mechanical toughness of the final elastomer, making it the ultimate crosslinker for high-performance addition-cure systems.

Typical Technical Properties:

| Silfluo Code: | LF-H101TS-5 | LF-H101TS-100 |
|------------------------------|----------------------------------------------------------------------|---------------|
| Chemical Name: | Hydride-Terminated Methylhydrosiloxane-Dimethylsiloxane Copolymer | |
| Synonyms: | Terminal & Side-H Silicone Oil; Telechelic and Pendant Hydride Fluid | |
| Appearance | Colorless transparent liquid | |
| CAS NO.: | 69013-23-6 | |
| Molecular Formula: | $H(CH_3)_2SiO[(CH_3)HSiO]_n[(CH_3)_2SiO]_mSi(CH_3)_2H$ | |
| Viscosity (25°C, mpa.s) | 4-8 | 90-120 |
| Hydrogen Content, wt% | 1% | 0.28% |
| Density (25°C): | 0.96 | |
| Refractive Index(25°C, nD25) | 1.402 | |
| Volatiles(%): | - | ≤1.5 |

Chemical Structure:



Various viscosity and hydrogen can be customized.

Applications:

Leveraging its unique dual-reactive sites, the LF-H101TS is specifically engineered for rapid-cure and high-strength applications:

1. Premium LSR Crosslinker: Acts as a high-efficiency crosslinking agent for addition-type Liquid Silicone Rubber (LSR). It dramatically increases crosslinking density, resulting in enhanced tensile strength,

Nanjing Silfluo New Material Co., Ltd.

1 / 2

Web: www.silfluosilicone.com Email: inquiry@silfluo.com

The offered information of this docs is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are fully satisfactory for end use. Suggestions of use shall not be taken as inducements to infringe any patent. Please confirm with us prior to any problems.

Technical Data Sheet



www.silfluosilicone.com

improved rebound resilience, and faster curing cycles.

2. **Silicone Release Coatings:** A critical component in thermal and solvent-free silicone release liners for paper and film, ensuring rapid anchorage to the substrate and ultra-fast curing at lower processing temperatures.

3. **Pressure Sensitive Adhesives (PSA):** Utilized as an essential crosslinker in high-performance silicone PSAs to precisely balance cohesive strength, peel adhesion, and tackiness.

4. **Silicone Foams:** Facilitates uniform gas evolution and rapid cell structure stabilization during the manufacturing of high-density silicone sponge and foam products.

5. **Advanced Copolymer Synthesis:** Serves as a highly complex, multi-functional intermediate for synthesizing specialized silicone-modified organic copolymers requiring dual-grafting sites.

Package &Storage:

In 50kg, 200kg drum and 1000kg IBC.

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. 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.