



Silfluo LS-OP121

Methylphenyl Silane Oligomer (Low-VOC Optical & Thermal Modifier)

Description:

Silfluo LS-OP121 is an oligomeric methylphenyldimethoxysilane hydrolysate, a pre-condensed methylphenylsiloxane oligomer.

The product consists of partially condensed methylphenylsiloxane units with residual methoxy groups, formed by controlled hydrolysis and condensation of methylphenyldimethoxysilane monomer (LS-M13). The oligomeric structure reduces vapor pressure and methanol emission relative to the monomeric silane; residual methoxy groups remain available for further condensation during cure.

The phenyl groups raise refractive index and thermal stability of the oligomer and derived cured networks relative to dimethylsiloxane analogs.

Used as low-VOC reactive intermediate in high-RI optical resin synthesis, high-temperature coating formulations, and inorganic filler surface modification.

Typical Physical Properties

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| Silfluo Code: | LS-OP121 |
| Chemical Name: | Oligomeric Methylphenyldimethoxysilane hydrolysate |
| Synonyms | Methylphenyldimethoxysilane oligomer . Phenylmethylsiloxane oligomer |
| Appearance: | Colorless transparent liquid |
| Active Content: | High-purity oligomer |
| Density (25°C, g/cm ³): | 1.060 - 1.100 |
| Refractive Index (25°C): | 1.4900 - 1.5200 |
| Flash Point (Closed Cup): | > 100°C |

Applications:

1. High-RI LED encapsulant and optical resin synthesis

Used as low-VOC reactive intermediate in high-refractive-index phenyl silicone resin formulations for LED and optoelectronic packaging.

2. High-temperature industrial coatings

Used as co-monomer or reactive modifier in heavy-duty coatings for automotive exhaust, industrial equipment, and aerospace finish applications.

3. Inorganic filler surface modification

Used as low-VOC coupling agent for silica and glass fiber surface treatment to improve dispersion and interfacial adhesion in polymer composites.

Packing

Nanjing Silfluo New Material Co., Ltd.

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

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Technical Data Sheet



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In 200L drum and 1000L IBC.

Safety and Storage

Store at or below 25° C in a cool, dry, well-ventilated place away from direct sunlight, heat, and open flames. Keep containers tightly sealed.

Shelf life: 12 months minimum from manufacture date in original unopened containers stored at or below 25° C.