



Silfluo LS-M121

Diphenyl Mono-Alkoxy Silane (Optical-Grade Capping Agent)

Description:

Silfluo LS-M121 is Methyl diphenylmethoxysilane, a monofunctional diphenyl-functional methoxysilane. The molecule contains two phenyl groups, one methyl group, and one hydrolyzable methoxy group on silicon.

The monofunctional methoxy group limits condensation to single-point reactions, making it suited for chain end-capping and molecular weight control in siloxane polymer synthesis.

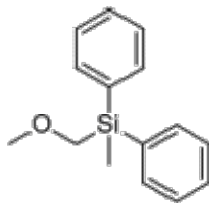
The diphenyl substitution raises refractive index and thermal stability of derived siloxane structures; the methyl group contributes chain flexibility relative to triphenylsilyl analogs.

Used as precision end-capping agent in phenyl silicone resin and fluid synthesis, and as reactive modifier in phenyl silicone rubber formulations.

Typical Physical Properties

Silfluo Code:	LS-M121
Chemical Name:	Methyl diphenylmethoxysilane
Synonyms	Diphenylmethylmethoxysilane
CAS No. :	18407-48-2
EINECS No. :	242-287-7
Molecular Formula:	C ₁₅ H ₁₈ OSi
Molecular Weight:	242.39
Appearance:	Colorless transparent liquid
Purity (by GC, %)	99min
Density (25°C, g/cm ³)	1.055-1.065
Refractive Index (n _{25.D})	1.5300-1.5330
Boiling Point:	275°C
Flash Point:	104.8°C Closed Cup

Chemical Structure:



Applications:

1. High-RI LED and optical encapsulant synthesis

Used as end-capping agent in high-refractive-index phenyl silicone resin synthesis for LED and micro-LED

Technical Data Sheet



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packaging.

2. Phenyl silicone fluid synthesis

Used as chain terminator in high-temperature heat-transfer fluids, aerospace lubricants, and radiation-resistant damping oils.

3. Phenyl silicone rubber modification

Used as reactive end-capper and modifier in phenyl-modified RTV and HTV rubber formulations.

Product	Phenyl groups	Other substituent	Refractive index	End-cap character
LS-M121	2	Methyl	1.530–1.533	Diphenylmethylsilyl
LS-M14	3	—	—	Triphenylsilyl
LS-H13	3	—	1.777	Triphenylsilyl (silanol)

Packing

In 200kg drum and 1000kg IBC.

Safety and Storage

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

Shelf life: 6 months from manufacture date in original unopened containers stored at or below 25°C.