Technical Data Sheet

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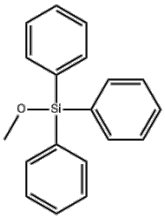
Silfluo LS-M14

Phenyl Functional Organosilane

Description:

Silfluo LS-M14 is Methoxytriphenylsilane, a monofunctional phenyl-functional methoxysilane.
The molecule contains three phenyl groups 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.
Three phenyl groups per silicon atom raise refractive index and thermal stability of derived siloxane structures, consistent with other triphenylsilyl-functional intermediates in this series.
Used as end-capping agent in phenyl silicone resin and fluid synthesis, as triphenylsilylating agent in pharmaceutical and fine chemical synthesis, and as structural modifier in high-temperature silicone systems.

Typical Technical Properties

Silfluo Code:	LS-M14
Chemical Name:	Methoxytriphenylsilane
Synonyms:	Triphenylmethoxysilane
CAS No. :	1829-41-0
EINECS No. :	217-382-1
Molecular Formula:	$C_{19}H_{18}OSi$
Molecular Weight:	290.43
Appearance:	White powder crystal
Purity (by GC, %):	98.0 min
Density (25°C, g/cm^3):	1.08
Refractive Index (nD 25°C):	No data
Boiling Point:	165°C (0.5 mmHg)
Melting Point:	57°C
Chemical Structure:	

Applications:

1. Phenyl silicone resin and fluid end-capping
Used as monofunctional end-capper for molecular weight control in phenyl silicone fluid and resin synthesis.
2. High-RI optical encapsulant synthesis
Used as phenyl-rich end-capping building block in high-refractive-index silicone resin formulations for LED and micro-LED packaging.
3. Pharmaceutical and fine chemical synthesis
Used as triphenylsilylating agent and protecting group for hydroxyl-bearing compounds in API and

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fine chemical synthesis.
4. High-temperature specialty silicones
Used as structural modifier in aerospace-grade damping fluids, heat transfer oils, and radiation-resistant potting compounds.

Packing
In 200kg drum.

Safety and Storage
Keep in a cool, dry, and well-ventilated environment, strictly avoiding direct sunlight, heat, sparks, and open flames. Classified and shipped as a hazardous substance (Flammable due to its 57°C flash point). The shelf life is 24 months from the date of manufacture when stored in tightly sealed, original unopened containers. Storage beyond the shelf life does not necessarily mean the product is unusable; however, the properties required for the intended use must be thoroughly checked for quality assurance reasons prior to application.

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