



Silfluo LS-AMS

Allyl Functional Silane (Reactive Intermediate)

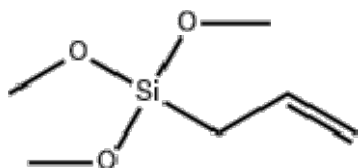
Description

Silfluo LS-AMS is a highly reactive, bifunctional organosilane chemically identified as Allyltrimethoxysilane. It features a highly active allyl group (carbon-carbon double bond) and three hydrolyzable methoxy groups packed within an ultra-low molecular weight structure. This precise dual-reactivity makes Silfluo LS-AMS a fundamental and incredibly versatile chemical intermediate in organosilicon chemistry. It is primarily utilized as a primary building block for synthesizing complex, custom-designed silane coupling agents, grafting moisture-curing capabilities onto organic polymers, and manufacturing advanced optical and electronic encapsulation resins.

Typical Physical Properties

Silfluo Code:	LS-AMS
Chemical Name:	Allyltrimethoxysilane
Synonyms	Trimethoxy-2-propenylsilane
CAS No. :	2551-83-9
EINECS No. :	219-855-8
Molecular Formula:	C ₆ H ₁₄ O ₃ Si
Molecular Weight:	162.26
Appearance:	Colorless transparent liquid
Purity (by GC, %)	97.0 min
Density (ρ _{20°C} , g/cm ³)	0.914
Refractive Index (n _{25/D})	1.405
Boiling Point:	111°C
Flash Point:	31.6 °C Closed Cup

Chemical Structure:



Features

- Dual Reactive Sites:** The terminal allyl group readily participates in free-radical polymerization and hydrosilylation, while the three methoxy groups provide robust, moisture-triggered crosslinking capabilities, allowing for profound molecular architectural design.
- Hydrosilylation Precursor:** Exhibits extreme reactivity with silicon-hydride (Si-H) functional compounds under platinum catalysis, making it the absolute ideal precursor for synthesizing a vast array of specialized, propyl-linked organosilanes and custom siloxanes.

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Technical Data Sheet



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3. Free-Radical Grafting: The reactive double bond seamlessly copolymerizes with standard organic monomers (such as acrylates, styrenes, and olefins), efficiently grafting silane crosslinking points directly onto the host polymer backbone.

Applications

Silfluo LS-AMS is explicitly engineered as a high-performance chemical building block and reactive modifier:

1. Synthesis of Specialty Silanes & Siloxanes: Serves as an essential chemical intermediate. Through precision hydrosilylation, it is extensively used to manufacture highly customized silane coupling agents, reactive silicone fluids, and sterically modified silicone resins.
2. Polymer Modification & Copolymerization: Readily copolymerizes with a variety of organic monomers via free-radical polymerization. It strategically grafts moisture-curable trimethoxysilyl groups directly onto polyolefin and acrylic polymer backbones, fundamentally improving the thermal, mechanical, and moisture-resistance stability of the final polymer.
3. Advanced Optical & Electronic Materials: Utilized as a highly active reactive diluent and crosslinker in the formulation of high-performance optical coatings, fiber optic claddings, and electronic encapsulation resins, where absolute purity and precise crosslinking density are critical for dielectric stability.

Packaging

In 25L pail, 200L drum.

Safety and Storage

Keep in a cool and dry place and avoid storage in direct sunlight. Shelf life is min.9 months.