



## Silfluo LS-M59

Nonafluorohexyl Functional Silane (Anti-Smudge Agent)

### Description

Silfluo LS-M59 is (1,1,2,2-Tetrahydroonafluorohexyl)trimethoxysilane, a short-chain fluoroalkyl-functional trimethoxysilane.

The molecule contains a C<sub>4</sub> F<sub>9</sub> perfluoroalkyl group and three hydrolyzable methoxy groups on silicon. The trimethoxysilyl group hydrolyzes and condenses with hydroxylated inorganic surfaces including glass, silica, ceramics, and metal oxides.

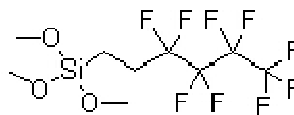
The short-chain fluoroalkyl structure provides surface energy reduction while avoiding long-chain PFOA/PFOS-regulated structures; verify regulatory compliance per local requirements and formulation composition.

Used in anti-fingerprint, anti-smudge, easy-to-clean, and low-surface-energy coating formulations. Performance equivalent to Dow B3958.

### Typical Physical Properties

Silfluo Code:	LS-M59
Chemical Name:	Nonafluorohexyltrimethoxysilane;
Synonyms	(1,1,2,2-Tetrahydroonafluorohexyl)trimethoxysilane
CAS No. :	85877-79-8
EINECS No. :	
Molecular Weight:	368.27
Appearance:	Colorless transparent liquid
Purity (by GC, %):	97.0 min
Density (ρ <sub>20°C</sub> , g/cm <sup>3</sup> ):	1.335
Refractive Index (n <sub>25.D</sub> ):	1.3380
Boiling Point:	68-69 °C (at 15 mmHg)
Flash Point:	64 °C °C closed cup

Chemical Structure:



### Applications

#### 1. Anti-fingerprint and anti-smudge coatings

Used in AF coating formulations for display glass, touch screens, optical glass, and ceramic surfaces.

#### 2. Optical lens and AR coating systems

Used in surface treatment formulations for optical lenses, camera optics, AR-coated glass, and eyewear.

# Technical Data Sheet



[www.silfluosilicone.com](http://www.silfluosilicone.com)

### 3. Architectural and automotive glass treatment

Used in surface treatment formulations for automotive windshields, architectural glass, and solar panel glass.

#### **Packaging**

In 500g, 1000g fluorinated bottle, 25kg pail and 200kg drum.

#### **Safety and Storage**

Keep in a cool and dry place and avoid storage in direct sunlight. Shelf life is min. 9 months. It is shipped as non-hazardous substance.