



Silfluo LS-E513

Fluoroalkyl Functional Silane

Description

Silfluo LS-E513 is 1H,1H,2H,2H-Perfluorooctyltriethoxysilane, a fluoroalkyl-functional triethoxysilane. The molecule contains a C6 tridecafluorooctyl carbon chain and three hydrolyzable ethoxy groups on silicon. The triethoxysilyl group hydrolyzes and condenses with hydroxylated inorganic surfaces including glass, ceramics, silica, and metal oxides.

Compared with methoxy-functional analogs, the ethoxy groups release ethanol rather than methanol during hydrolysis.

The fluoroalkyl chain reduces surface energy and contributes to water- and oil-repellent character in selected coating systems.

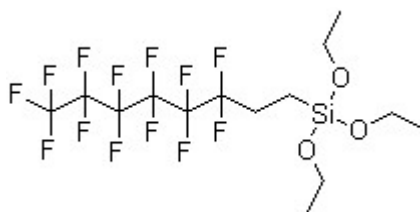
Used in anti-fingerprint, anti-smudge, easy-to-clean, anti-graffiti, and low-surface-energy coating formulations.

Performance equivalent to Evonik Dynasylan F 8261 and Shin-Etsu KBE-7103.

Typical Physical Properties

Silfluo Code:	LS-E513
Chemical Name:	1H,1H,2H,2H-Perfluorooctyltriethoxysilane
Synonyms	Triethoxy(3,3,4,4,5,5,6,7,7,8,8,8-tridecafluorooctyl)silane
CAS No. :	51851-37-7
EINECS No. :	257-473-3
Appearance:	Colorless transparent liquid
Purity (by GC, %)	98.0 min
Specific Gravity ($\rho_{20^{\circ}\text{C}}$, g/cm ³)	Approx. 1.330
Refractive Index (n _D 25°C):	Approx. 1.344

Chemical Structure:



Applications

1. Anti-fingerprint and anti-smudge coatings

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

Technical Data Sheet



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2. Automotive and architectural glass treatment

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

3. Anti-graffiti and masonry protection

Used in anti-graffiti coating formulations for concrete, natural stone, and mineral substrates.

4. Sanitary ceramics and shower glass

Used for low-surface-energy treatment of shower cabins, sanitary ceramics, and bathroom tiles.

5. Sol-gel coating systems

Used as surface energy-reducing component in alcohol- or water-based sol-gel coating formulations.

Packing

In 20kg pail, 180kg drum and 900kg IBC

Safety and Storage

Keep in a cool and dry place and avoid storage in direct sunlight. Shelf life is 12 months. It is non-hazardous substance.