Technical Data Sheet

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Silfluo LS-M531

Fluoroalkyl Methyl Dimethoxy Silane

Description

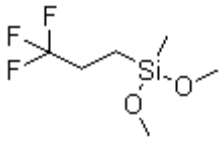
Silfluo LS-M531 is 3,3,3-Trifluoropropylmethyldimethoxysilane, a fluoroalkyl-functional dimethoxysilane. The molecule contains one trifluoropropyl group, one methyl group, and two hydrolyzable methoxy groups on silicon.

The difunctional methoxy structure limits hydrolyzable group count compared with trifunctional fluoroalkyl silanes, giving different condensation behavior and chain-termination character.

Used as monomer or intermediate for preparing fluorosilicone fluids, fluorosilicone elastomer bases, and fluoroalkyl-modified siloxane materials.

Equivalent reference: Shin-Etsu KBM-7102.

Typical Physical Properties

Silfluo Code:	LS-M531
Chemical Name:	3,3,3-Trifluoropropylmethyldimethoxysilane
Synonyms	Dimethoxymethyl(3,3,3-trifluoropropyl)silane
CAS No. :	358-67-8
EINECS No. :	206-619-4
Molecular Weight:	202.25
Appearance:	Colorless transparent liquid
Purity (by GC, %):	97.0 min
Density (ρ20°C, g/cm³)	1.089
Refractive Index (n25/D)	1.358
Boiling Point:	131 - 134 °C (at 760 mmHg)
Flash Point:	57.8°C closed cup
Chemical Structure:	

Applications

1. Fluorosilicone fluid synthesis

Used as fluoroalkyl-containing silane intermediate for preparing fluorosilicone fluids.

2. Fluorosilicone elastomer base development

Used in selected routes for fluorosilicone elastomer base (FVMQ) preparation.

3. Fluoroalkyl-modified siloxane intermediates

Used to introduce trifluoropropyl functionality into selected siloxane structures.

4. Surface-modification formulations

Used in fluoroalkyl-modified surface treatment formulations for research and development.

5. Textile and leather finishing

Used as reactive intermediate in fluorosilicone or fluoroalkyl-modified finishing formulations.

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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 hazardous substance.

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