Technical Data Sheet

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Silfluo LS-ND43

Alpha-Silane Intermediate

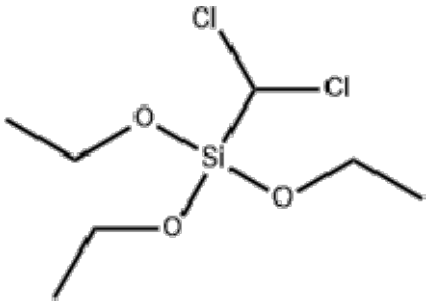
Description

Silfluo LS-ND43 is Dichloromethyltriethoxysilane, an alpha-silane intermediate.
The molecule contains one dichloromethyl group and one triethoxysilyl group.
The dichloromethyl group provides reactive C–Cl bonds for nucleophilic substitution reactions.
The triethoxysilyl group hydrolyzes and forms siloxane linkages under controlled moisture, pH, and catalyst conditions.
Reaction conversion, impurity profile, by-product formation, and downstream performance require verification under target process conditions.

Typical Physical Properties

Silfluo Code:	Silfluo LS-ND43
Chemical Name:	Dichloromethyltriethoxysilane
Synonyms	Dichloromethyltriethoxysilane; dichloromethyl triethoxy silane; alpha-dichloromethyl triethoxysilane
CAS No. :	19369-03-0
EINECS No. :	242-998-1
Molecular Formula:	$C_7H_{16}Cl_2O_3Si$
Molecular Weight:	247.19
Appearance:	Colorless transparent to slightly yellowish liquid
Density (ρ20°C, g/cm³)	1.01~1.20
Refractive Index (n25.D)	1.4660~1.4870
Purity:	95% min

Chemical Structure:



Applications

1. Alpha-functional silane synthesis
Used as a chemical intermediate in substitution and silane modification reactions for producing

alpha-functional silanes. Verify residual chloride content and product purity before downstream use.

2. Custom silane intermediate development

Applicable where both dichloromethyl and triethoxysilyl functionality are required in a single intermediate structure.

3. Modified siloxane and resin intermediates

Used in synthesis routes for modified siloxane or resin intermediates. Verify compatibility, side reactions, and material properties in the target system.

4. Surface treatment precursor

Used as a precursor in the preparation of surface treatment agents. Direct substrate application requires careful testing due to chlorinated functionality and moisture sensitivity.

5. Moisture-curable silane R&D

Used in R&D evaluation of moisture-curable silane systems. Verify cure behavior, by-product formation, and storage stability before scale-up.

Packaging

In 20kg pail, 200kg drum and 950kg IBC

Safety and Storage

Keep in a cool, dry, and well-ventilated environment, avoiding direct sunlight, heat, sparks, and open flames. The product is highly sensitive to ambient moisture and may release trace amounts of hydrogen chloride (HCl) upon severe hydrolysis. The shelf life is a minimum of 24 months from the date of manufacture when stored at or below 25°C in tightly sealed, original unopened containers.