Technical Data Sheet

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Silfluo LS-DA111

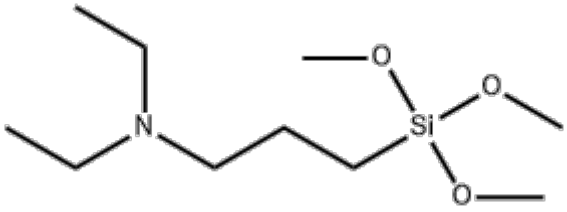
Tertiary Amino-Functional Silane

Description:

Silfluo LS-DA111 is [3-(Diethylamino)propyl]trimethoxysilane, a tertiary amino-functional silane.
The molecule contains a tertiary diethylamino group and a trimethoxysilyl group connected by a propyl chain.
The tertiary amine provides catalytic support for silanol condensation in selected moisture-curing systems.
The trimethoxysilyl group hydrolyzes and bonds to hydroxylated inorganic surfaces or participates in siloxane network formation.
Compared with primary aminosilanes, the tertiary amine structure reduces yellowing tendency in selected formulations; verify color stability in the target system.
Used as adhesion promoter, reactive silane additive, or curing support additive in RTV silicone sealants, SPUR.MS polymer systems, adhesives, coatings, and mineral-filled polymer systems.

Typical Technical Properties

Silfluo Code:	LS-DA111
Chemical Name:	[3-(Diethylamino)propyl]trimethoxysilane
Synonyms:	(N,N-Diethyl-3-aminopropyl)trimethoxysilane; Diethylaminopropyltrimethoxysilane
CAS No. :	41051-80-3
EINECS No. :	255-192-0
Molecular Formula:	$C_{10}H_{25}NO_3Si$
Molecular Weight:	235.4
Appearance:	Colorless to yellowish transparent liquid
Purity (by GC, %):	95min
Density (25°C, g/cm^3):	0.95
Refractive Index (nD 25°C):	1.4130~1.4330
Boiling Point:	120°C (20 mmHg)
Flash Point:	53°C
Chemical Structure:	



Applications:

1. Neutral-cure RTV silicone sealants

Used as autocatalytic crosslinker and adhesion promoter in one-part neutral-cure RTV silicone

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sealants. Verify deep-section cure rate, unprimed substrate adhesion, and storage stability in the target formulation.
2. SPUR and MS polymer systems
Used as reactive silane additive in silyl-terminated polyurethane and MS polymer systems. Verify cure profile, adhesion, color stability, and storage stability in the final formulation.
3. Coatings and primers
Used as surface primer and reactive additive in coating systems for metallic and inorganic substrates. Verify wet adhesion and corrosion resistance in the target system.
4. Mineral filler treatment
Used as surface modifier for inorganic fillers in composite compounding. Verify viscosity change, filler dispersion, and compatibility in the target compound.

Packing

In 190kg drum and 950kg IBC.

Safety and Storage

Store in a cool, dry, well-ventilated environment. Keep away from direct sunlight, heat, sparks, and open flames.
Flash point 53°C; classified and shipped as Class 3 flammable liquid per applicable transport regulations.
Shelf life: 12 months minimum from manufacture date in tightly sealed original unopened containers.

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