Technical Data Sheet

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Silfluo LS-E86

Alpha-Secondary Amino Functional Silane

Description:

Silfluo LS-E86 is N-(triethoxysilylmethyl)butylamine, an alpha-secondary amino functional silane.

The molecule contains a butyl-substituted secondary amine connected to silicon through a methylene bridge, and a triethoxysilyl group.

The alpha-silane structure gives different hydrolysis and condensation behavior compared with conventional gamma-functional silanes.

The secondary amine interacts with compatible resin systems and selected reactive polymers.

The triethoxysilyl group hydrolyzes and forms siloxane linkages or bonds to hydroxylated inorganic surfaces under suitable moisture, pH, and catalyst conditions.

Compared with primary aminosilanes, the secondary amine structure reduces yellowing tendency in selected clear or light-colored formulations; verify color stability in the target system.

Used as adhesion promoter, crosslinking additive, or reactive silane component in SMP, MS polymer, SPUR, RTV silicone, polyurethane, primer, coating, and adhesive systems.

Typical Technical Properties

Silfluo Code:	LS-E86
Chemical Name:	N-(3-(Triethoxysilyl)methyl)butylamine
Synonyms:	N-(n-Butyl)aminomethyltriethoxysilane
CAS No. :	
Molecular Formula:	$C_{11}H_{27}NO_3Si$
Molecular Weight:	249.31
Appearance:	Typically colorless to pale yellow liquid
Purity (by GC, %):	95min
Density (25°C, g/cm^3):	0.905~0.915
Refractive Index (nD 25°C):	1.409~1.419
Boiling Point:	
Flash Point:	
Chemical Structure:	

Applications:

1. SMP, MS polymer, and SPUR systems

Used as adhesion promoter, crosslinking additive, or reactive silane component in silane-modified polymer and silyl-terminated polyurethane systems. Verify cure profile, catalyst demand, viscosity, modulus, elongation, adhesion, and storage stability in the final formulation.

2. RTV silicone systems

Used as adhesion promoter or crosslinking additive in room-temperature-vulcanizing silicone systems. Verify skin-over time, deep-section cure, adhesion, and color stability by formulation testing.

3. Polyurethane adhesives and sealants

Used as reactive silane additive in one-part and two-part polyurethane adhesive and sealant systems. Verify adhesion, moisture sensitivity, gelation behavior, and storage stability in the target formulation.

4. Primers and coatings

Used in primer and coating systems requiring secondary amine functionality and alkoxysilane reactivity. Test wet adhesion, dry adhesion, film compatibility, and corrosion resistance in the target system.

5. Adhesives and hybrid sealants

Used in adhesive and hybrid sealant systems requiring adhesion support and moisture-curing reactivity. Verify compatibility, cure behavior, and final mechanical properties before commercial use.

Packing

In 25kg pail and 200kg drum.

Safety and Storage

Store in a cool, dry, well-ventilated environment. Keep away from direct sunlight, heat, and ignition sources. The product is highly reactive toward ambient moisture; keep in tightly sealed original containers prior to formulation.

No fixed shelf life stated. Verify product properties against specification before use if stored beyond the initially recommended period.