



Silfluo LS-E87

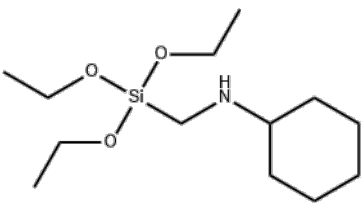
Alpha(α) Organosilane

Description:

Silfluo LS-E87 is an advanced, highly specialized secondary amino alpha-silane, chemically identified as N-[(Triethoxysilyl)methyl]cyclohexylamine. This premium molecule combines three highly sought-after structural features: an alpha-effect methylene bridge driving hyper-fast moisture reactivity, a bulky cyclohexyl-substituted secondary amine for low yellowing and controlled organic reactivity, and eco-friendly triethoxy groups that release benign ethanol upon curing. It is engineered as the ultimate end-capping agent and adhesion promoter for modern, tin-free, and environmentally compliant Silane-Modified Polymers (SMP) and advanced polyurethane systems.

Performance equivalent to industry standards: Wacker GENIOSIL XL 926.

Typical Technical Properties

Silfluo Code:	LS-E87
Chemical Name:	N-[(Triethoxysilyl)methyl]cyclohexylamine
Synonyms:	CyclohexylaminomethylTriethoxysilane
CAS No. :	26495-91-0
EINECS No. :	247-744-4
Molecular Formula:	C ₁₃ H ₂₉ NO ₃ Si
Molecular Weight:	275.46
Appearance:	Colorless transparent liquid
Purity (by GC, %):	95min
Density (25°C, g/cm ³):	0.95
Refractive Index (nD 25°C):	1.4377
Boiling Point:	236°C
Flash Point:	119°C
Chemical Structure:	

Features

1. The Alpha-Effect hyper-reactivity allows the ethoxy groups to hydrolyze and crosslink at exceptionally fast rates, enabling the formulation of rapid-curing adhesives without the need for toxic heavy-metal (organotin) catalysts.

Technical Data Sheet



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2. The bulky cyclohexyl secondary amine group provides critical steric hindrance, ensuring highly predictable, controlled reactions with isocyanate (NCO) prepolymers while fundamentally reducing the thermal and UV yellowing associated with primary amines.

Applications:

1. **Advanced SMP & SPUR End-Capping:** Serves as the premier end-capping agent for NCO-terminated polyurethane prepolymers. It seamlessly converts them into highly flexible, fast-curing, and tin-free Silane-Modified Polymers (MS Polymers) used in premium construction sealants and structural adhesives.
2. **Fast-Curing RTV Silicone Sealants:** Acts as a hyper-reactive adhesion promoter and crosslinker in Room Temperature Vulcanizing (RTV) silicones, dramatically accelerating the deep-cure rate and improving unprimed adhesion to difficult plastics and metals.
3. **High-Performance Polyurethane (PU) Systems:** Deployed as a critical moisture-scavenger and adhesion-promoting additive in one-part and two-part PU adhesives, ensuring robust interfacial bonding without premature gelation.
4. **Eco-Friendly Industrial Primers:** Formulated into low-toxicity surface primers for automotive, marine, and aerospace applications to securely anchor organic topcoats to challenging inorganic substrates like cold-rolled steel and aluminum.

Packing

In 25kg pail and 200kg drum.

Safety and Storage

Keep in a cool, dry, and well-ventilated environment, strictly avoiding direct sunlight, heat, and moisture exposure. The shelf life is 12 months from the date of manufacture when stored in original unopened containers. Storage beyond the shelf life does not necessarily mean the product is unusable; however, the properties required for the intended use must be thoroughly checked for quality assurance reasons prior to application.