



Silfluo LS-AD323

Secondary Bis-Amino Functional Silane

Description

Silfluo LS-AD323 is Bis(triethoxysilylpropyl)amine, a secondary amino-functional bis-silane.

The molecule contains one secondary amine group and two triethoxysilylpropyl groups.

The secondary amine reacts with isocyanate groups and interacts with compatible resin systems.

The triethoxysilyl groups hydrolyze and participate in siloxane network formation under suitable moisture-curing conditions.

Compared with methoxy-functional analogues such as LS-AD31, the ethoxy groups release ethanol during hydrolysis rather than methanol; assess VOC, flammability, and workplace exposure per formulation and local requirements.

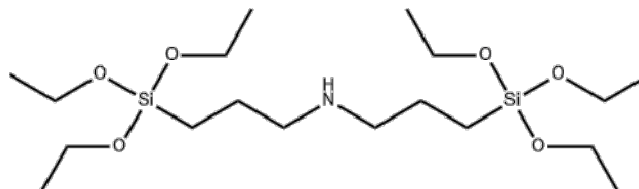
Used as adhesion promoter, coupling agent, surface treatment additive, or end-capping agent in polyurethane, SPUR, SMP, MS polymer, adhesive, sealant, coating, composite, and mineral-filled polymer systems.

Performance equivalent to Evonik Dynasylan 1122 and Momentive Silquest A-1172.

Typical Physical Properties

Silfluo Code:	LS-AD323
Chemical Name:	Bis(triethoxysilylpropyl)amine
Synonyms	3-(triethoxysilyl)-N-[3-(triethoxysilyl)propyl]propan-1-amine
CAS No. :	13497-18-2
EINECS No. :	236-818-1
Molecular Weight:	425.71
Appearance:	Colorless or light yellow transparent liquid
Purity (by GC, %):	95.0 min
Density ($\rho_{20^{\circ}\text{C}}$, g.cm ³)	0.9630 ~ 0.9830
Refractive Index (n _{25.D})	1.4240 ~ 1.4340
Boiling Point:	160°C(0.6mmHg)
Flash Point:	> 140 °C Closed Cup

Chemical Structure:





Applications

1. SPUR, SMP, and MS polymer systems

Used as end-capping agent or reactive silane component for NCO-terminated polyurethane prepolymers and silane-modified polymer systems. Verify reaction conditions, residual NCO level, viscosity, and storage stability during formulation.

2. Glass fiber and composite sizing

Used as sizing or finishing component for glass fibers, glass fabrics, and mineral reinforcements. Verify interfacial adhesion, wet strength retention, and composite properties in the target resin system.

3. Mineral-filled polymers and HFFR cable compounds

Used as surface modifier for ATH, MDH, silica, and other inorganic fillers. Verify dispersion, viscosity, mechanical properties, and electrical properties in the target compound.

4. Adhesives and sealants

Used as adhesion promoter or reactive additive in polyurethane, epoxy, silicone, MS polymer, and hybrid adhesive or sealant systems. Verify adhesion to metals, glass, mineral surfaces, concrete, and plastics by substrate-specific testing.

5. Coatings and primers

Used in coating and primer systems requiring alkoxy silane functionality and secondary amine functionality. Verify compatibility, wet adhesion, corrosion resistance, and film properties in the target formulation.

6. Foundry resins and mineral binders

Used in phenolic, furan, melamine, and other binder systems for foundry sand, mineral fiber insulation, and abrasive applications. Verify sand strength, humidity resistance, gas evolution, and processing behavior under customer process conditions.

Packaging

In 25L pail, 200L drum and 1000L IBC

Safety and Storage

Keep in a cool, dry, and well-ventilated environment, strictly avoiding direct sunlight, heat, and moisture exposure. The shelf life is 24 months from the date of manufacture when stored in original unopened containers. Classified and shipped as a hazardous substance; handle with appropriate industrial safety protocols. 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.