



Silfluo LS-O146

Oligomeric Diamino Functional Silane

Description

Silfluo LS-O146 is a premium, eco-friendly, aqueous diaminofunctional silane hydrolysate (oligomer). Unlike traditional monomeric aminosilanes, this advanced molecule is completely pre-hydrolyzed and water-borne. This unique structural state means it does not release any hazardous volatile organic compounds (VOC-free), such as toxic methanol or ethanol, during crosslinking or curing. Engineered specifically for seamless integration into modern water-borne (WB) polymer systems, it acts as a highly effective, environmentally compliant adhesion promoter and surface modifier while delivering exceptional mechanical performance in high-end reactive resins.

Performance equivalent to industry standards: Evonik Dynasylan 1146.

Typical Physical Properties

Product No.	Silfluo LS-O146
Chemical Name:	Aqueous diaminofunctional silane hydrolysate
CAS NO.	Mixture
Formula:	Aqueous Polymeric Mixture
Appearance:	Colorless transparent liquid to light yellowish
Density($\rho_{20^{\circ}\text{C}}$, g/cm ³):	1.06
Viscosity(mPa·s):	approx. 35
VOC Content:	VOC-Free

Features

- 1. Zero VOC Emissions:** Contains absolutely no volatile alcohols and releases zero toxic byproducts upon curing, making it the ultimate choice for formulators targeting stringent green-building standards and eco-friendly certifications.
- 2. Superior Water-Borne Compatibility:** Highly miscible and fundamentally stable in aqueous environments, allowing for direct, hassle-free addition to water-based paints, coatings, and adhesives without the need for co-solvents.

Applications

- 1. Water-Borne (WB) Coating Systems:** Serves as the premier, VOC-free adhesion promoter for water-borne acrylics, polyurethane dispersions (PUDs), and WB epoxy systems utilized in eco-friendly industrial paints and architectural coatings.
- 2. Advanced Sealants & Adhesives:** Significantly enhances the cohesive and unprimed adhesion strength of Silane-Modified Polymers (SMP/MS), two-component polyurethanes (2K PU), and water-based adhesives to difficult inorganic substrates, glass, and rigid plastics.

Technical Data Sheet



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3. Glass Fiber & Mineral Filler Sizing: Deployed as a highly effective, environmentally compliant surface treatment and sizing agent for glass fibers and inorganic mineral fillers (such as ATH and MDH), fundamentally improving the mechanical tensile strength and moisture resistance of advanced composite materials.

Packaging

In 20kg pail, 190kg drum and 950kg IBC

Safety and Storage

Storage Conditions: Keep tightly closed in a cool, well-ventilated area. Protect from freezing and direct sunlight. Store at or below 35°C in the original, unopened containers.

Handling: Although aqueous and VOC-free, handle with standard chemical safety precautions (eye and skin protection). Keep away from extreme heat and open flames.

Shelf Life: Minimum 12 months under proper storage conditions. It's shipped as non-hazardous material.