



## Silfluo LS-MA131

Alpha-Acryloxy Silane

### Description:

Silfluo LS-MA131 is Acryloyloxymethyltrimethoxysilane, an alpha-acryloxy functional silane.

The molecule contains an acryloxy group and a trimethoxysilyl group connected through a methylene bridge.

The acryloxy group participates in free-radical polymerization, including UV, EB, peroxide, and other radical-curing systems.

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

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

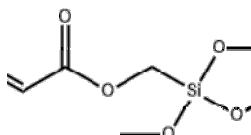
Used as coupling agent, adhesion promoter, or reactive silane additive in radical-curable systems, filled polymers, coatings, adhesives, and composites.

Cure behavior, adhesion, dielectric properties, optical properties, and moisture resistance require verification in the target formulation.

### Typical Physical Properties

Silfluo Code:	LS-MA131
Chemical Name:	Acryloyloxymethyltrimethoxysilane
Synonyms	(Trimethoxysilyl)methyl acrylate
CAS No. :	21134-38-3
EINECS No. :	700-313-9
Molecular Formula:	C <sub>7</sub> H <sub>14</sub> O <sub>5</sub> Si
Molecular Weight:	206.27
Appearance:	Colorless to light red transparent liquid
Purity (by GC, %)	97 min
Density (25°C, g/cm <sup>3</sup> )	1.040-1.060
Refractive Index (n <sub>25.D</sub> )	1.4100-1.4300
Boiling Point:	174°C
Flash Point:	50°C Closed Cup

Chemical Structure:



### Applications:

Nanjing Silfluo New Material Co., Ltd.

Web: [www.silfluosilicone.com](http://www.silfluosilicone.com) Email: [inquiry@silfluo.com](mailto:inquiry@silfluo.com)

1 / 2

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# Technical Data Sheet



[www.silfluosilicone.com](http://www.silfluosilicone.com)

## 1. Wire and cable compounds

Used as coupling additive in mineral-filled, peroxide-crosslinked EPDM and other insulating polymer systems. Verify dielectric properties, moisture resistance, mechanical properties, and aging behavior in the target cable compound.

## 2. UV . EB curable systems

Used as reactive silane additive in UV- or EB-curable coatings, adhesives, inks, composites, and resin systems. Verify cure behavior, adhesion, and storage stability in the formulation.

## 3. Unsaturated polyester, vinyl ester, and acrylic composites

Used as coupling agent in glass fiber-reinforced or mineral-filled radical-curable composites. Test wet mechanical properties, flexural properties, and optical properties in the target system.

## 4. Adhesives and coatings

Used in radical-curable adhesives, sealants, and coating systems requiring acrylate functionality and alkoxy silane reactivity. Verify adhesion to glass, mineral, metal oxide, and selected polymer substrates.

## 5. 3D printing resins and fiber-optic coatings

Used in photocurable resin systems. Confirm cure speed, yellowing resistance, optical clarity, adhesion, and mechanical properties before commercial use.

## Packing

In 25kg pail, 200kg drum and 1000kg IBC.

## Safety and Storage

Keep in a cool, strictly dark, and well-ventilated environment.

The shelf life is a minimum of 6 to 9 months from the date of manufacture when stored at or below 25°C (refrigeration preferred) in tightly sealed, original unopened containers.