



Silfluo LS-PHIPS

Phenyl Enoxy Silane

Description:

Silfluo LS-PHIPS is Phenyltriisopropenoxysilane, a phenyl-functional triisopropenoxysilane.

The molecule contains one phenyl group and three hydrolyzable isopropenoxy (enoxy) groups on silicon.

The isopropenoxy groups hydrolyze on contact with atmospheric moisture, releasing acetone as the sole byproduct; no oxime (MEKO), acetic acid, or alcohol is released.

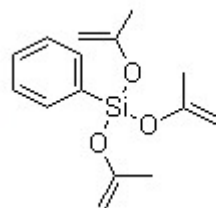
The phenyl group raises refractive index, thermal stability, and UV resistance of derived siloxane networks relative to alkyl-functional analogs.

Used as crosslinker in neutral-cure (de-acetone) RTV silicone systems, and as coupling agent and modifier in optical encapsulant and high-temperature composite formulations.

Typical Physical Properties

Silfluo Code:	LS-PHIPS
Chemical Name:	Phenyltriisopropenoxysilane
Synonyms	Silane, tris[(1-methylethenyl)oxy]phenyl-;
CAS No. :	52301-18-5
EINECS No. :	411-340-8
Molecular Formula:	C ₁₅ H ₂₀ O ₃ Si
Molecular Weight:	276.40
Appearance:	Colorless transparent liquid
Purity (by GC, %):	95 min
Density (25°C, g/cm ³):	1.055-1.065
Refractive Index (n _{25.D}):	1.4900-1.5000
Boiling Point:	298.5°C
Flash Point:	135.2°C Closed Cup

Chemical Structure:



Applications:

1. Neutral-cure (de-acetone) RTV silicone sealants

Used as primary crosslinker in MEKO-free, neutral-cure RTV silicone sealants for automotive, aerospace, and industrial high-temperature applications.

Technical Data Sheet



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2. Optical and electronic encapsulants

Used in neutral-curing protective coatings and potting compounds for PCBs and LED packaging requiring corrosion resistance and optical clarity.

3. High-temperature composite modifier

Used as coupling agent and surface modifier for mineral fillers in high-temperature thermosetting resin composite systems.

Packing

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

Safety and Storage

Store at or below 25° C in a cool, dry, well-ventilated place. Keep containers tightly sealed; moisture contact initiates hydrolysis and acetone release.

Shelf life: 12 months minimum from manufacture date in original unopened containers stored at or below 25° C.