Technical Data Sheet

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Silfluo LS-615

Siloxane

Description:

Silfluo LS-615 is 1,1,5,5-Tetramethyl-3,3-diphenyltrisiloxane, a phenyl-modified trisiloxane with terminal Si－H groups.

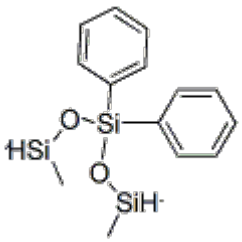
The molecule contains two diphenylsiloxy units at the center and two dimethylhydrogensiloxy end groups, giving a linear Me_2 HSi－O－Ph_2 Si－O－$SiHMe_2$ structure.

The terminal Si－H groups participate in platinum-catalyzed hydrosilylation (addition cure) with vinyl-functional siloxanes without releasing volatile byproducts.

The diphenyl central unit raises refractive index and thermal stability relative to dimethyl-only analogs.

Used as crosslinker in high-RI phenyl silicone elastomers, optical encapsulant resins, and medical-grade silicone systems.

Typical Technical Properties:

Silfluo Code:	LS-615
Chemical Name:	1,1,5,5-Tetramethyl-3,3-diphenyl-trisiloxane
Synonyms:	Tetramethyldiphenyltrisiloxane; 1,3,3,5-Tetramethyl-1,5-diphenyltrisiloxane
CAS No. :	17875-55-7
EINECS No. :	241-828-4
Molecular Formula:	$C_{16}H_{24}O_2Si_3$
Molecular Weight:	332.61706
Appearance:	Colorless transparent liquid
Purity (by GC, %):	90.0 grade; 98.0 grade
Density (25°C):	0.9936
Refractive Index (nD 25°C):	1.5330
Boiling Point:	133°C
Flash Point:	130°C
Chemical Structure:	

Applications:

1. High-RI LED and optical encapsulant systems

Used as crosslinker in high-refractive-index phenyl silicone encapsulant formulations for LED packaging and optical lens applications.

2. Phenyl liquid silicone rubber (LSR) and resins

Used as curing agent in phenyl LSR and phenyl silicone resin formulations for high-temperature and radiation-resistant applications.

3. Medical-grade silicone elastomers

Used as reactive intermediate in biocompatible silicone elastomers and medical-grade adhesive systems.

4. Electronic potting and sensor protection

Used in clear potting compounds for optical sensors, microelectronics, and photovoltaic module encapsulation.

Package &Storage:

In 20kg pail.

Keep in cool, dry and ventilated place. Keep away from sunlight and fire sources. Keep away from acid and alkali. Keep in unopened containers, shelf life is 6 months from the date of production.

Storage beyond the shelf life does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.