



## Silfluo LS-673

Heptamethyltrisiloxane (Reactive Si-H Intermediate)

### Description

Silfluo LS-673 is 1,1,1,3,5,5,5-Heptamethyltrisiloxane, a linear trisiloxane with a single central Si-H group. The molecule contains one methylhydrogensiloxy unit flanked by two trimethylsiloxy end groups, giving a  $\text{Me}_3\text{Si}-\text{O}-\text{SiHMe}-\text{O}-\text{SiMe}_3$  structure.

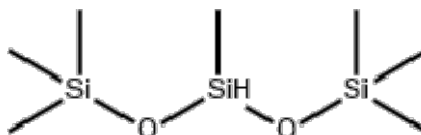
The central Si-H group undergoes platinum-catalyzed hydrosilylation with terminal olefins, including allyl-polyethers, to yield polyether-modified trisiloxane surfactants and other Si-H addition products.

Used as reactive intermediate for trisiloxane superspreader and surfactant synthesis, polyurethane foam stabilizer precursor, personal care silicone intermediate, and industrial wetting agent synthesis.

### Typical Physical Properties

|   |                                      |
|---|--------------------------------------|
| Silfluo Code:   | LS-673                               |
| Chemical Name:  | 1,1,1,3,5,5,5-Heptamethyltrisiloxane |
| Synonyms  | Bis(trimethylsiloxy)methylsilane     |
| CAS No. :   | 1873-88-7                            |
| EINECS No. :  | 217-496-1                            |
| Molecular Weight:   | 222.51                               |
| Appearance:   | Colorless transparent liquid         |
| Density ( $\rho_{20^\circ\text{C}}$ , g/cm <sup>3</sup> ) | 0.819                                |
| Refractive Index (n <sub>25.D</sub> )                     | 1.382                                |
| Purity:   | 99% min                              |

Chemical Structure:



### Applications

1. Trisiloxane superspreader and agrochemical adjuvant synthesis

Used as reactive intermediate for platinum-catalyzed addition with allyl-polyethers to produce polyether-modified trisiloxane superspreaders and agrochemical adjuvants.

2. Polyurethane foam stabilizer synthesis

Used as Si-H precursor for synthesizing silicone-polyether copolymer surfactants for rigid and flexible PU foam stabilization.

3. Personal care and cosmetic silicone intermediates

# Technical Data Sheet



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

Used as precursor for alkyl-modified silicones and specialty sensory fluids in personal care formulations.

#### 4. Industrial wetting agents and leveling agents

Used in synthesis of wetting agents, leveling agents, and defoamers for waterborne coatings, automotive finishes, and printing inks.

#### **Packaging**

In 20kg pail, 160kg drum and 800kg IBC

#### **Safety and Storage**

Store at or below 25°C away from heat and open flames. Keep containers tightly sealed; protect from moisture, acids, and bases.

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