



## Silfluo LS-CHTS

Cycloalkyl Silane (External Electron Donor)

### Description:

Silfluo LS-CHTS is Cyclohexyltrimethoxysilane, a trifunctional cycloalkyl-functional trimethoxysilane.

The molecule contains one cyclohexyl group and three hydrolyzable methoxy groups on silicon.

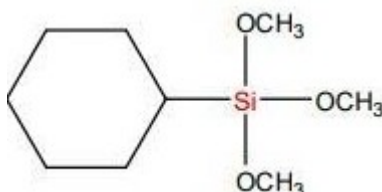
The bulky cyclohexyl group provides steric coordination with active sites in  $MgCl_2$ -supported Ziegler-Natta catalyst systems, functioning as an external electron donor (selectivity control agent).

Used primarily as external electron donor in Ziegler-Natta propylene polymerization catalyst systems for isotactic polypropylene production.

### Typical Physical Properties

Silfluo Code:	LS-CHTS
Chemical Name:	Cyclohexyltrimethoxysilane
Synonyms	Trimethoxycyclohexylsilane
CAS No. :	17865-54-2
EINECS No. :	605-828-1
Molecular Formula:	$C_9H_{20}O_3Si$
Molecular Weight:	204.34
Appearance:	Colorless transparent liquid
Purity (by GC, %):	98%
Density (25°C, g/cm <sup>3</sup> ):	1.010 - 1.030
Refractive Index (n <sub>25.D</sub> ):	1.4270-1.4370
Boiling Point:	217°C
Flash Point:	84°C Closed Cup

Chemical Structure:



### Applications:

1. Polypropylene (PP) polymerization — external electron donor

Used as external electron donor in  $MgCl_2$ -supported Ziegler-Natta catalyst systems for isotactic polypropylene production.

2. Ziegler-Natta catalyst formulation

Used in catalyst preparation and performance tuning for custom Ziegler-Natta systems in propylene

# Technical Data Sheet



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

polymerization processes.

## **Packing**

Available in 20kg pails, 180kg drums.

## **Safety and Storage**

Store under nitrogen in a cool, dry, well-ventilated place away from direct sunlight, heat, and ignition sources. Keep containers hermetically sealed.

Reacts with atmospheric moisture; hydrolysis releases methanol and forms silicone gel. Maintain dry, inert atmosphere during all handling and transfer operations.

Avoid contact with strong acids, alkalis, and oxidizing agents.

Shelf life: 12 months minimum from manufacture date in original unopened containers under nitrogen protection.