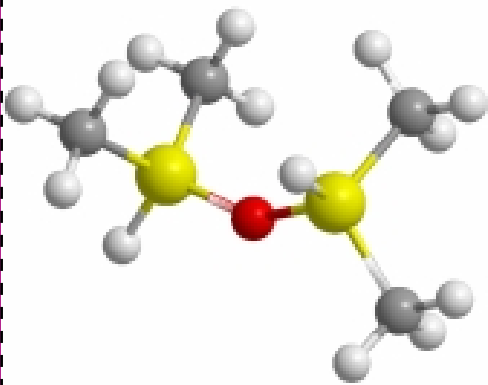


ALOHA™ CVD/ALD Materials



TMDSO

1,1,3,3-Tetramethyldisiloxane

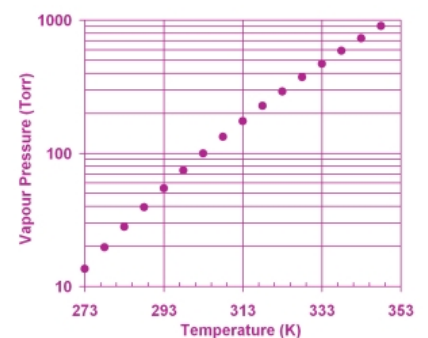
$(\text{CH}_3)_2\text{HSi-O-SiH}(\text{CH}_3)_2$

CAS n° 3277-26-7 or 30110-74-8

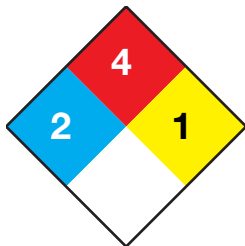
- TMDSO or 1,1,3,3-tetramethyldisiloxane is used in for Plasma Enhanced Chemical Vapor Deposition (PECVD) of glass on a variety of substrates at low temperature.
- Industrial grade of TDMSO is also employed in reductive halogenation of aldehydes and epoxides.
- High purity TMDSO is obtained by ultra-purification of industrial grade product, which is obtained by the condensation of dimethylchlorosilane with water.
- Air Liquide's ultrahigh purity TMDSO is produced from controlled source of raw material and processed to yield extremely low moisture and particles in order to ensure high performance, repeatable processing.
- The quality of ALOHA's precursors is guaranteed using state of the arts analytical techniques developed by BALAZS™, Air Liquide's analytical service company to the semiconductor industry.

Physical Chemical Properties

Physical Property	
Molecular Weight	134.32 g.mol ⁻¹
Physical State	Liquid
Boiling Point	71°C
Density	0.757 g.cm ⁻³ at 20°C
Flash point	-20°C



Hazard Rating



HMIS

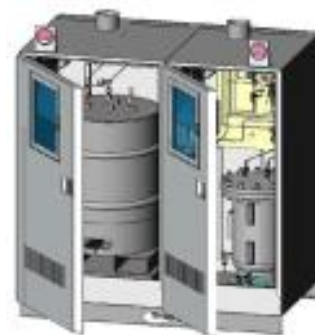
Health: 2
Flammability: 4
Reactivity: 1

Properties and Handling

- TMDSO is intrinsically stable and does not thermally decompose under inert atmosphere. It is not soluble in water but soluble in most organic solvents.
- TMDSO can be distributed in UHP stainless steel distribution systems, such as the Air Liquide CANDI system.

Packaging & Dispensing System

- TMDSO is typically delivered using a liquid dispensing system such as **C**ontinuous **A**dvanced Precursor **D**ispenser (CANDI) on most OEM Platform. CANDI has distinctive, patent pending features, such as "last drop usage" function that does not require an internal liquid level sensing mechanism.
- TMDSO is available in SEMI F66-1101 and F 96-0704 compliant canisters of 5 Gallons and 2 Gallons (18.9L and 7.6L) equipped with manually or pneumatically actuated valves. For bulk delivery, 55 Gallons canisters are also available along with Air Liquide's Bulk Refill system.



Transport Information

- Proper shipping name:
ADR : Flammable Liquid, N.O.S. (Tetramethyldisiloxane)
- DOT : Flammable Liquid, N.O.S. (Tetramethyldisiloxane)
- UN Number: 1993
- EINECS Number : 221-906-4
- ADR Class/division: 3
- DOT Class: 3
- Package group: II (F-Highly Flammable)
- Label ADR/DOT: FLAMMABLE

