

# Material Safety Data Sheet

## Tetramethylsilane, 99.9+% ,NMR Grade

ACC# 96108

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Tetramethylsilane, 99.9+% ,NMR Grade**Catalog Numbers:** AC138470000, AC138470250, AC138471000**Synonyms:** TMS**Company Identification:**

Acros Organics N.V.  
One Reagent Lane  
Fair Lawn, NJ 07410

**For information in North America, call:** 800-ACROS-01**For emergencies in the US, call CHEMTREC:** 800-424-9300

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
75-76-3	Tetramethylsilane	>99.0	200-899-1

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: clear, colorless liquid. Flash Point: -27 deg C.

**Danger! Extremely flammable liquid.** May ignite spontaneously in air at slightly elevated temperatures due to a low boiling point and flash point. May cause eye and skin irritation. May cause respiratory and digestive tract irritation. May cause central nervous system depression. Moisture sensitive. The toxicological properties of this material have not been fully investigated.  
**Target Organs:** Central nervous system.

**Potential Health Effects**

**Eye:** May cause eye irritation. May cause chemical conjunctivitis and corneal damage.

**Skin:** May cause skin irritation. May cause cyanosis of the extremities.

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated. Ingestion of large amounts may cause CNS depression.

**Inhalation:** May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated. Aspiration may lead to pulmonary edema. Vapors may cause dizziness or suffocation. May cause burning sensation in the chest.

**Chronic:** None Effects may be delayed.

### Section 4 - First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and

lower eyelids. Get medical aid.

**Skin:** Get medical aid. Flush skin with plenty of soap and water.

**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:** Containers can build up pressure if exposed to heat and/or fire. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water. Flammable liquid and vapor. Will be easily ignited by heat, sparks or flame.

**Extinguishing Media:** For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Water may be ineffective. Water may spread fire. If water is the only media available, use in flooding amounts. Do NOT get water inside containers. For large fires, use water spray, fog or alcohol-resistant foam. Do NOT use straight streams of water. Cool containers with flooding quantities of water until well after fire is out.

**Flash Point:** -27 deg C ( -16.60 deg F)

**Autoignition Temperature:** 450 deg C ( 842.00 deg F)

**Explosion Limits, Lower:**Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 1; Flammability: 4; Instability: 0

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. Do not get water inside containers. A vapor suppressing foam may be used to reduce vapors.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Use only in a well-ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Take precautionary measures against static discharges. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not allow contact with water. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Keep from contact with moist air and steam.

**Storage:** Keep away from sources of ignition. Store in a tightly closed container. Flammables-area.

Storage under a nitrogen blanket has been recommended. Store protected from moisture.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Tetramethylsilane	none listed	none listed	none listed

**OSHA Vacated PELs:** Tetramethylsilane: No OSHA Vacated PELs are listed for this chemical.

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** clear, colorless

**Odor:** None reported.

**pH:** Not available.

**Vapor Pressure:** 560 mmHg @ 20 C

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 26.0 - 28.0 deg C @ 760.00mm

**Freezing/Melting Point:** -99 deg C

**Decomposition Temperature:** Not available.

**Solubility:** insoluble

**Specific Gravity/Density:** .6480g/cm<sup>3</sup>

**Molecular Formula:** C<sub>4</sub>H<sub>12</sub>Si

**Molecular Weight:** 88.22

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures. May ignite spontaneously in air by slightly elevating the temperature or lowering the pressure.

**Conditions to Avoid:** Incompatible materials, ignition sources, excess heat, exposure to moist air or water.

**Incompatibilities with Other Materials:** Moisture.

**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide, silicon dioxide.

**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

**RTECS#:**

CAS# 75-76-3 unlisted.

**LD50/LC50:**

Not available.

**Carcinogenicity:**

CAS# 75-76-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No data available.**Teratogenicity:** No data available.**Reproductive Effects:** No data available.**Neurotoxicity:** No data available.**Mutagenicity:** No data available.**Other Studies:** No data available.

## Section 12 - Ecological Information

No information available.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.**RCRA U-Series:** None listed.

## Section 14 - Transport Information

	US DOT	Canada TDG
<b>Shipping Name:</b>	TETRAMETHYLSILANE	TETRAMETHYLSILANE
<b>Hazard Class:</b>	3	3
<b>UN Number:</b>	UN2749	UN2749
<b>Packing Group:</b>	I	I
<b>Additional Info:</b>		FLASHPOINT -27 C

## Section 15 - Regulatory Information

**US FEDERAL****TSCA**

CAS# 75-76-3 is listed on the TSCA inventory.

**Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

**Section 12b**

None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

**CERCLA Hazardous Substances and corresponding RQs**

None of the chemicals in this material have an RQ.

**SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

**SARA Codes**

CAS # 75-76-3: flammable.

**Section 313** No chemicals are reportable under Section 313.

**Clean Air Act:**

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

**Clean Water Act:**

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**

None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**

CAS# 75-76-3 can be found on the following state right to know lists: New Jersey.

**California Prop 65**

California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations**

**European Labeling in Accordance with EC Directives**

**Hazard Symbols:**

F+

**Risk Phrases:**

R 12 Extremely flammable.

**Safety Phrases:**

S 16 Keep away from sources of ignition - No smoking.

S 24/25 Avoid contact with skin and eyes.

S 7/9 Keep container tightly closed and in a well-ventilated place.

**WGK (Water Danger/Protection)**

CAS# 75-76-3: No information available.

**Canada - DSL/NDSL**

CAS# 75-76-3 is listed on Canada's DSL List.

**Canada - WHMIS**

This product does not have a WHMIS classification.

**Canadian Ingredient Disclosure List**

Section 16 - Additional Information

**MSDS Creation Date:** 4/20/1998

**Revision #3 Date: 10/05/2004**

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.*