

# Material Safety Data Sheet

## Azidotrimethylsilane, 97%

ACC# 56063

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Azidotrimethylsilane, 97%

**Catalog Numbers:** AC167930000, AC167930100, AC167930250, AC167930500, NC9000655, NC9075334, XXAC16793-1KG

**Synonyms:** Trimethylsilyl azide; Silane, azidotrimethyl-; Silylazide, trimethyl-

**Company Identification:**

Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410

**For information, call:** 201-796-7100

**Emergency Number:** 201-796-7100

**For CHEMTREC assistance, call:** 800-424-9300

**For International CHEMTREC assistance, call:** 703-527-3887

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
4648-54-8	Azidotrimethylsilane	97	225-078-5

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: clear, colorless liquid. Flash Point: 23 deg C.

**Warning! Flammable liquid and vapor.** Harmful if swallowed, inhaled, or absorbed through the skin. May cause eye, skin, and respiratory tract irritation. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. May cause central nervous system depression. Moisture sensitive.

**Target Organs:** Central nervous system.

#### Potential Health Effects

**Eye:** May cause eye irritation.

**Skin:** May cause skin irritation. Harmful if absorbed through the skin.

**Ingestion:** Harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Ingestion of large amounts may cause CNS depression.

**Inhalation:** May cause respiratory tract irritation. May cause headache, dizziness, blurred vision, decreased blood pressure, and slowed pulse. Harmful if inhaled.

**Chronic:** Effects may be delayed.

### Section 4 - First Aid Measures

**Eyes:** Immediately 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 water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

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

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

**Notes to Physician:** Treat symptomatically and supportively. Individuals who are using medication to control their blood pressure should not work with or come in contact with this product. This substance can release hydrazoic acid which is known to cause a drop in blood pressure.

### Section 5 - Fire Fighting Measures

**General Information:** 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. Will burn if involved in a fire. 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. Containers may explode in the heat of a fire. Flammable liquid and vapor. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

**Extinguishing Media:** Use water spray to cool fire-exposed containers. Use water spray, dry chemical, carbon dioxide, or chemical foam.

**Flash Point:** 23 deg C ( 73.40 deg F)

**Autoignition Temperature:** 300 deg C ( 572.00 deg F)

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

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 2; Flammability: 3; Instability: 1

## 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. 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:** 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. Keep container tightly closed. Keep away from heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood. 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. Refrigerator/flammables. 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
Azidotrimethylsilane	none listed	6 mg/m3 TWA (listed under Silica, amorphous).3000 mg/m3 IDLH (listed under Silica, amorphous).	none listed

**OSHA Vacated PELs:** Azidotrimethylsilane: 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:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** clear, colorless

**Odor:** None reported.

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** 3.97

**Evaporation Rate:**Not available.

**Viscosity:** Not available.

**Boiling Point:** 52.0 - 53.0 deg C @ 175 mmHg

**Freezing/Melting Point:**Not available.

**Decomposition Temperature:**Not available.

**Solubility:** decomposes

**Specific Gravity/Density:**0.8680 g/cm3

**Molecular Formula:**C3H9N3Si

**Molecular Weight:**115.21

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable at room temperature in closed containers under normal storage and handling conditions. Moisture sensitive.

**Conditions to Avoid:** Ignition sources, moisture, excess heat.

**Incompatibilities with Other Materials:** Moisture, strong oxidizing agents, strong acids.

**Hazardous Decomposition Products:** Nitrogen oxides, carbon monoxide, carbon dioxide, oxides of silicon.

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

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 4648-54-8 unlisted.

**LD50/LC50:**

Not available.

**Carcinogenicity:**

CAS# 4648-54-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information available.

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

## Section 12 - Ecological Information

**Ecotoxicity:** No data available. No information available.  
**Environmental:** Toxic effects on ecosystem due to the formation of hydrozoic acid.  
**Physical:** No information available.  
**Other:** 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>	TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.	TOXIC LIQUID FLAMMABLE ORGANIC (AZIDOTRIMETHYLSILANE)
<b>Hazard Class:</b>	6.1	6.1(3)
<b>UN Number:</b>	UN2929	UN2929
<b>Packing Group:</b>	II	II

## Section 15 - Regulatory Information

### US FEDERAL

**TSCA**  
CAS# 4648-54-8 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.

**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 depleters.  
This material does not contain any Class 2 Ozone depleters.

**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# 4648-54-8 can be found on the following state right to know lists: California, (listed as Silica, amorphous), New Jersey, (listed as Silica, amorphous), Pennsylvania, (listed as Silica, amorphous), Minnesota, (listed as Silica, amorphous), Massachusetts, (listed as Silica, amorphous).

### 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:

T N

##### Risk Phrases:

R 10 Flammable.  
R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.  
R 50/53 Very toxic to aquatic organisms, may cause long-term

adverse effects in the aquatic environment.

**Safety Phrases:**

- S 16 Keep away from sources of ignition - No smoking.
- S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- S 38 In case of insufficient ventilation, wear suitable respiratory equipment.
- S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- S 60 This material and its container must be disposed of as hazardous waste.
- S 28A After contact with skin, wash immediately with plenty of water.
- S 61 Avoid release to the environment. Refer to special instructions / safety data sheets.

**WGK (Water Danger/Protection)**

CAS# 4648-54-8: No information available.

**Canada - DSL/NDSL**

CAS# 4648-54-8 is listed on Canada's NDSL List.

**Canada - WHMIS**

This product has a WHMIS classification of D2B, B2.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

CAS# 4648-54-8 (listed as Silica, amorphous) is listed on the Canadian Ingredient Disclosure List.

<b>Section 16 - Additional Information</b>
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**MSDS Creation Date:** 9/02/1997

**Revision #7 Date:** 3/30/2005

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