

MATERIAL SAFETY DATA SHEET

Manufacturer: Strem Chemicals, Inc
7 Mulliken Way
Newburyport, MA 01950-4098 U.S.A.
www.strem.com

Strem Customer Service (978) 499-1600
CHEMTREC (Emergency Only) (800) 424-9300
Poison Center (800) 562-8236

Section 1: Product Identification

Chemical Name: Tris(dimethylamino)silane, 99+%, 14-8750, contained in 50 ml Swagelok® cylinder (96-1070) for CVD/ALD
Product Number: 98-4035
CAS Registry Number: 15112-89-7
Formula: $[(CH_3)_2N]_3SiH$
EINECS Number: 239-165-0
Chemical Family: organosilicon compounds
Synonym: none

Section 2: Composition and Information on Ingredients

| Ingredient | CAS Number | Percent | ACGIH (TWA) | OSHA (PEL) |
|----------------|------------|---------|-------------|------------|
| Title Compound | 15112-89-7 | 100% | no data | no data |

Section 3: Hazards Identification

Emergency Overview: Causes burns to skin, eyes and mucous membranes. Harmful if swallowed, inhaled or absorbed through the skin.

Primary Routes of Exposure: Ingestion, inhalation, skin, eyes

Eye Contact: Causes burns to the eyes.

Skin Contact: Causes burns to the skin. May cause redness, itching and pain. Harmful through skin absorption.

Inhalation: Harmful through inhalation. Inhalation of vapors causes irritation, inflammation of the respiratory tract, edema and chemical pneumonitis.

Ingestion: Harmful if swallowed. May cause nausea, vomiting and gastrointestinal tract burns.

Acute Health Affects: Harmful through inhalation, ingestion and skin absorption. Causes burns to skin, eyes and mucous membranes. Ingestion may cause nausea, vomiting and gastrointestinal burns.

Chronic Health Affects: No information available on long-term chronic effects.

NTP: No

IARC: No

OSHA: No

SECTION 4: First Aid Measures

Eye Exposure: Immediately flush the eyes with copious amounts of water for at least 10-15 minutes. A victim may need assistance in keeping their eye lids open. Get immediate medical attention.

Skin Exposure: Wash the affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

Inhalation: Remove the victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases seek immediate medical assistance.

Ingestion: Seek medical attention immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

MATERIAL SAFETY DATA SHEET

Manufacturer: Strem Chemicals, Inc
7 Mulliken Way
Newburyport, MA 01950-4098 U.S.A.
www.strem.com

Strem Customer Service (978) 499-1600
CHEMTREC (Emergency Only) (800) 424-9300
Poison Center (800) 562-8236

SECTION 5: Fire Fighting Measures

Flash Point: 77°F
Autoignition Temperature: no data
Explosion Limits: no data
Extinguishing Medium: carbon dioxide, foam or dry powder
Special Fire Fighting Procedures: If this product is involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.
Hazardous Combustion and Decomposition Products: Burning material may emit toxic and corrosive fumes.
Unusual Fire or Explosion Hazards: Flammable. No unusual fire or explosion hazards.

SECTION 6: Accidental Release Measures

Spill and Leak Procedures: Small spills can be mixed with vermiculite, sodium carbonate or other suitable non-combustible adsorbent and swept up.

SECTION 7: Handling and Storage

Handling and Storage: Store the material in a cool, dry place in a tightly sealed container, under an inert atmosphere of nitrogen or argon.

SECTION 8: Exposure Controls and Personal Protection

Eye Protection: Always wear approved safety glasses when handling a chemical substance in the laboratory.
Skin Protection: Wear protective clothing and gloves. Consult with glove manufacturer to determine the proper type of glove.
Ventilation: Handle the material in an efficient fume hood.
Respirator: If ventilation is not available a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29 CFR 1910.134.
Ventilation: Handle the material in an efficient fume hood.
Additional Protection: No additional protection required.

SECTION 9: Physical and Chemical Properties

Color and Form: colorless to light yellow liq.
Molecular Weight: 161.32
Melting Point: no data
Boiling Point: 145-148°C(4°/16 mm)
Vapor Pressure: 16mm (4°C)
Specific Gravity: 0.84
Odor: none
Solubility in Water: insoluble

SECTION 10: Stability and Reactivity

Stability: air sensitive, moisture sensitive
Hazardous Polymerization: no hazardous polymerization
Conditions to Avoid: contact with heat and ignition sources
Incompatibility: strong oxidizing agents, strong acids and halogens
Decomposition Products: Carbon dioxide, carbon monoxide, silicon dioxide, organic fumes

MATERIAL SAFETY DATA SHEET

Manufacturer: Strem Chemicals, Inc
7 Mulliken Way
Newburyport, MA 01950-4098 U.S.A.
www.strem.com

Strem Customer Service (978) 499-1600
CHEMTREC (Emergency Only) (800) 424-9300
Poison Center (800) 562-8236

SECTION 11: Toxicological Information

RTCS Data: Administration onto the skin(rabbit); Standard Draize Test: 10mg(mild). Administration into the eyes(rabbit); Standard Draize Test: 5mg(severe). Oral(rat); LD50: 594mg/kg. Inhalation(rat); LC50: 38ppm/6H. Administration onto the skin(rabbit); LD50: 477mg/kg.

Carcinogenic Effects: no data

Mutagenic Effects: no data

Tetratogenic Effects: no data

SECTION 12: Ecological Information

Ecological Information: No information available.

SECTION 13: Disposal Considerations

Disposal: Dispose of this material according to local, state and federal regulations.

SECTION 14: Transportation

Shipping Name (CFR): Water-reactive liquid, Corrosive, N.O.S.

Hazard Class (CFR): 4.3

Additional Hazard Class (CFR): 8

Packaging Group (CFR): II

UN ID Number (CFR): UN# 3129

Shipping Name (IATA): Water-reactive liquid, Corrosive, N.O.S.

Hazard Class (IATA): 4.3

Additional Hazard Class (IATA): 8

Packaging Group (IATA): II

UN ID Number (IATA): UN# 3129

SECTION 15: Regulatory Information

TSCA: Listed in the TSCA inventory

SARA (Title 313): Not reportable under SARA Title 313.

Second Ingredient: none

Third Ingredient: none

SECTION 16: Other Information

Disclaimer: The information herein is believed to be accurate and reliable as of the date compiled. However, Strem Chemicals, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information contained in this document or any use of the product based on this information.

Preparation Date: 2/15/2013

Revision Date: 5/06/2014

Strem Chemicals, Inc.
7 Mulliken Way
Newburyport, MA 01950-4098 USA
Tel: (978) 499 1600
Fax: (978) 465 3104
Toll free (in USA & Canada)
Tel: (800) 647 8736
Fax: (800) 517 8736
info@strem.com

Strem Chemicals, Inc.
15, rue de l'Atome, Z.I.
67800 BISCHHEIM (France)
Tel: (33) 03 88 62 52 60
Fax: (33) 03 88 62 26 81
info.europe@strem.com

Strem Chemicals, Inc.
Postfach 1215
77672 KEHL (Germany)
Telefon: 0 78 51/ 7 58 79
info.europe@strem.com

Strem Chemicals UK, Ltd.
Newton Hall
Town Street
Newton
Cambridge, England CB22 7ZE
Tel: 0845 643 7263
Fax: 0845 643 7362
enquiries@strem.co.uk