

**SIGMA-ALDRICH****Material Safety Data Sheet**

Version 3.1  
 Revision Date 01/15/2010  
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**1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : Methyltrichlorosilane

Product Number : M85301  
 Brand : Aldrich

Company : Sigma-Aldrich  
 3050 Spruce Street  
 SAINT LOUIS MO 63103  
 USA

Telephone : +18003255832  
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**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms : Trichloro(methyl)silane

Formula :  $\text{CH}_3\text{Cl}_3\text{Si}$   
 Molecular Weight : 149.48 g/mol

| CAS-No.                      | EC-No.    | Index-No.    | Concentration |
|------------------------------|-----------|--------------|---------------|
| <b>Methyltrichlorosilane</b> |           |              |               |
| 75-79-6                      | 200-902-6 | 014-004-00-5 | -             |

**3. HAZARDS IDENTIFICATION****Emergency Overview****OSHA Hazards**

Flammable liquid, Toxic by inhalation., Harmful by skin absorption., Corrosive, Water Reactive

**HMIS Classification**

Health hazard: 3  
 Flammability: 3  
 Physical hazards: 2

**NFPA Rating**

Health hazard: 4  
 Fire: 3  
 Reactivity Hazard: 2

**Potential Health Effects**

**Inhalation** Toxic if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

**Skin** Harmful if absorbed through skin. Causes skin burns.

**Eyes**  
**Ingestion**

Causes eye burns.  
May be harmful if swallowed. Causes burns.

#### 4. FIRST AID MEASURES

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Continue rinsing eyes during transport to hospital. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### 5. FIRE-FIGHTING MEASURES

**Flammable properties**

Flash point 8 °C (46 °F) - closed cup

Ignition temperature > 404 °C (> 759 °F)

**Suitable extinguishing media**

Carbon dioxide (CO<sub>2</sub>) Dry powder

**Extinguishing media which shall not be used for safety reasons**

Water

**Special protective equipment for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Methods for cleaning up**

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Do not flush with water.

#### 7. HANDLING AND STORAGE

**Handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

**Storage**

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place.

Never allow product to get in contact with water during storage.

Handle and store under inert gas.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves.

#### Eye protection

Tightly fitting safety goggles. Faceshield (8-inch minimum).

#### Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

|      |        |
|------|--------|
| Form | liquid |
|------|--------|

### Safety data

|                         |  |
|-------------------------|--|
| pH                      | no data available                        |
| Melting point           | no data available                        |
| Boiling point           | 66 °C (151 °F) - lit.                    |
| Flash point             | 8 °C (46 °F) - closed cup                |
| Ignition temperature    | > 404 °C (> 759 °F)                      |
| Lower explosion limit   | 7.2 %(V)                                 |
| Upper explosion limit   | 11.9 %(V)                                |
| Density                 | 1.273 g/cm <sup>3</sup> at 25 °C (77 °F) |
| Water solubility        | no data available                        |
| Relative vapour density | 5.16<br>- (Air = 1.0)                    |

## 10. STABILITY AND REACTIVITY

### Storage stability

Stable under recommended storage conditions.

### Conditions to avoid

Do not allow water to enter container because of violent reaction.  
Heat, flames and sparks. Exposure to moisture.

**Materials to avoid**

Strong acids, Strong bases, Strong oxidizing agents, Reacts violently with water.

**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas, silicon oxides

**Hazardous reactions**

Vapours may form explosive mixture with air.

Reacts violently with water.

**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

LD50 Oral - rat - 2,057 mg/kg

Remarks: Lungs, Thorax, or Respiration:Dyspnea. Diarrhoea Gastrointestinal:Other changes.

LD50 Dermal - rabbit - 1,067 mg/kg

Remarks: Behavioral:Altered sleep time (including change in righting reflex). Liver:Other changes. Nutritional and Gross Metabolic:Weight loss or decreased weight gain.

**Irritation and corrosion**

Skin - rabbit - Severe skin irritation

Eyes - rabbit - Severe eye irritation - 24 h

**Sensitisation**

no data available

**Chronic exposure**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Signs and Symptoms of Exposure**

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

**Potential Health Effects**

|                   |  |
|-------------------|--|
| <b>Inhalation</b> | Toxic if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. |
| <b>Skin</b>       | Harmful if absorbed through skin. Causes skin burns.   |
| <b>Eyes</b>       | Causes eye burns.  |
| <b>Ingestion</b>  | May be harmful if swallowed. Causes burns.   |

**Additional Information**

RTECS: VV4550000

**12. ECOLOGICAL INFORMATION**

**Elimination information (persistence and degradability)**

no data available

**Ecotoxicity effects**

no data available

**Further information on ecology**

no data available

**13. DISPOSAL CONSIDERATIONS****Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

**14. TRANSPORT INFORMATION****DOT (US)**

UN-Number: 1250 Class: 3 (8) Packing group: I  
Proper shipping name: Methyltrichlorosilane  
Marine pollutant: No  
Poison Inhalation Hazard: No

**IMDG**

UN-Number: 1250 Class: 3 (8) Packing group: I EMS-No: F-E, S-C  
Not permitted for transport  
Marine pollutant: No

**IATA**

UN-Number: 1250 Class: 3 (8) Packing group: I  
Proper shipping name: Methyltrichlorosilane  
IATA Passenger: Not permitted for transport  
IATA Cargo: Not permitted for transport

**15. REGULATORY INFORMATION****OSHA Hazards**

Flammable liquid, Toxic by inhalation., Harmful by skin absorption., Corrosive, Water Reactive

**DSL Status**

All components of this product are on the Canadian DSL list.

**SARA 302 Components**

Methyltrichlorosilane

CAS-No.  
75-79-6

Revision Date  
2007-07-01

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Fire Hazard, Acute Health Hazard

**Massachusetts Right To Know Components**

CAS-No.

Revision Date

Methyltrichlorosilane

75-79-6

2007-07-01

**Pennsylvania Right To Know Components**

Methyltrichlorosilane

CAS-No.  
75-79-6

Revision Date  
2007-07-01

**New Jersey Right To Know Components**

Methyltrichlorosilane

CAS-No.  
75-79-6

Revision Date  
2007-07-01

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**16. OTHER INFORMATION**

**Further information**

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