SIGMA-ALDRICH

Material Safety Data Sheet

Version 3.1 Revision Date 01/15/2010 Print Date 07/19/2010

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 Fax : +18003255052 Emergency Phone # : (314) 776-6555

2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Trichloro(methyl)silane

Formula : CH₃Cl₃Si Molecular Weight : 149.48 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
Methyltrichlorosilane			
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.

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Eyes Causes eye burns.

Ingestion 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 (CO2) 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/cm3 at 25 °C (77 °F)

Water solubility no data available

Relative vapour 5.16 density - (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

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 Causes eye burns.

Ingestion 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

Marine politicant.

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. Revision Date 75-79-6 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		
·	CAS-No.	Revision Date
Methyltrichlorosilane	75-79-6	2007-07-01
New Jersey Right To Know Components		
	CAS-No.	Revision Date
Methyltrichlorosilane	75-79-6	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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