# **Material Safety Data Sheet**

Version 4.0 Revision Date 03/13/2010 Print Date 09/16/2011

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Tetramethylsilane

Product Number : T24007 Brand : Sigma-Aldrich

Company : Sigma-Aldrich

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USA

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#### 2. HAZARDS IDENTIFICATION

# **Emergency Overview**

#### **OSHA Hazards**

Flammable liquid

### GHS Label elements, including precautionary statements

Pictogram

Signal word Danger

Hazard statement(s)

H224 Extremely flammable liquid and vapour.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

**HMIS Classification** 

Health hazard: 0 Flammability: 4 Physical hazards: 0

**NFPA Rating** 

Health hazard: 0 Fire: 4 Reactivity Hazard: 0

**Potential Health Effects** 

**Inhalation**May be harmful if inhaled. May cause respiratory tract irritation. **Skin**May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation. **Ingestion** May be harmful if swallowed.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS-No.	EC-No.	Index-No.	Concentration
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Tetramethylsilane				
75-76-3	200-899-1	-	-	

#### 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

Flush eyes with water as a precaution.

#### 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

#### Suitable extinguishing media

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### **Further information**

Use water spray to cool unopened containers.

# 6. ACCIDENTAL RELEASE MEASURES

# **Personal precautions**

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 and materials for containment and 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).

# 7. HANDLING AND STORAGE

# Precautions for safe handling

Avoid inhalation of vapour or mist.

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

#### Conditions for safe 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.

Recommended storage temperature: 2 - 8 °C

Handle and open container with care.

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#### 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 AXBEK (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

For prolonged or repeated contact use protective gloves.

# Eye protection

Face shield and safety glasses

#### 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

Colour colourless

#### Safety data

pH no data available

Melting point -99 °C (-146 °F) - lit.

Boiling point 26 - 28 °C (79 - 82 °F) - lit. Flash point -27 °C (-17 °F) - closed cup

Ignition temperature 450 °C (842 °F)

Lower explosion limit no data available

Upper explosion limit no data available

Density 0.648 g/cm3 at 25 °C (77 °F)

Water solubility no data available

#### 10. STABILITY AND REACTIVITY

#### **Chemical stability**

Stable under recommended storage conditions.

# Possibility of hazardous reactions

Vapours may form explosive mixture with air.

### Conditions to avoid

Avoid moisture.

Heat, flames and sparks.

### Materials to avoid

Strong acids, Strong bases, Strong oxidizing agents

# Hazardous decomposition products

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

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#### 11. TOXICOLOGICAL INFORMATION

#### **Acute toxicity**

no data available

#### Skin corrosion/irritation

no data available

#### Serious eye damage/eye irritation

no data available

#### Respiratory or skin sensitization

no data available

#### Germ cell mutagenicity

no data available

# Carcinogenicity

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.

### Reproductive toxicity

no data available

# Specific target organ toxicity - single exposure (GHS)

no data available

#### Specific target organ toxicity - repeated exposure (GHS)

no data available

# **Aspiration hazard**

no data available

#### Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

#### Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### **Additional Information**

### 12. ECOLOGICAL INFORMATION

### **Toxicity**

no data available

# Persistence and degradability

no data available

# Bioaccumulative potential

no data available

### Mobility in soil

no data available

### PBT and vPvB assessment

no data available

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#### Other adverse effects

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: 2749 Class: 3 Packing group: I

Proper shipping name: Tetramethylsilane

Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG** 

UN-Number: 2749 Class: 3 Packing group: I EMS-No: F-E, S-D

Proper shipping name: TETRAMETHYLSILANE

Marine pollutant: No

**IATA** 

UN-Number: 2749 Class: 3 Packing group: I

Proper shipping name: Tetramethylsilane IATA Passenger: Not permitted for transport

### 15. REGULATORY INFORMATION

### **OSHA Hazards**

Flammable liquid

#### **DSL Status**

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

#### **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

# **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

#### **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

### Pennsylvania Right To Know Components

Tetramethylsilane CAS-No. Revision Date 75-76-3 2007-03-01

**New Jersey Right To Know Components** 

Tetramethylsilane CAS-No. Revision Date 75-76-3 2007-03-01

#### 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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