# SIGMA-ALDRICH

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 3.1 Revision Date 09.01.2009

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GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name : Trimethyl phosphite

Product Number : 240907 Brand : Aldrich

Company : Sigma-Aldrich Brasil Ltda.

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BRAZIL

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Emergency Phone #

#### 2. HAZARDS IDENTIFICATION

### Risk advice to man and the environment

Flammable. Harmful if swallowed. Irritating to eyes, respiratory system and skin.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Methyl phosphite

Formula : C<sub>3</sub>H<sub>9</sub>O<sub>3</sub>P Molecular Weight : 124,08 g/mol

CAS-No.	EC-No.	Index-No.	Classification	Concentration
Trimethyl phosphite				
121-45-9	204-471-5	-	Xn, R10 - R22 - R36/37/38	-

#### 4. FIRST AID MEASURES

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### 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

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.

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### 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**

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

# **Environmental precautions**

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). Keep in suitable, closed containers for disposal.

### 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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# Personal protective equipment

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose 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

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves.

### Eye protection

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 -78 °C

Boiling point 111 - 112 °C

Flash point 28 °C - closed cup
Ignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available
Vapour pressure 23 hPa at 20 °C
Density 1,052 g/mL at 25 °C
Water solubility no data available

Relative vapour 4,28

density - (Air = 1.0)

### 10. STABILITY AND REACTIVITY

### Storage stability

Stable under recommended storage conditions.

### Conditions to avoid

Thermal decomposition of this product in combination with trimethylol propane, trimethylol propane derived products or their corresponding alkane analogs may result in the production of bicyclic phosphates or phosphites. Bicyclic phosphates and phosphites are products that display acute neurotoxic properties such as characteristic convulsive seizures Do not allow water to enter container.

Heat, flames and sparks.

#### Materials to avoid

Oxidizing agents, Strong bases

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Oxides of phosphorus

### 11. TOXICOLOGICAL INFORMATION

### **Acute toxicity**

LD50 Oral - rat - 1.600 mg/kg

LD50 Dermal - rabbit - 2.600 mg/kg

### Irritation and corrosion

no data available

### 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

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probable, possible or confirmed human carcinogen by IARC.

Developmental Toxicity - rat - Oral

Specific Developmental Abnormalities: Central nervous system. Specific Developmental Abnormalities: Craniofacial (including nose and tongue). Specific Developmental Abnormalities: Musculoskeletal system.

Developmental Toxicity - rat - Oral

Specific Developmental Abnormalities: Urogenital system. Specific Developmental Abnormalities: Homeostasis

# Signs and Symptoms of Exposure

Cough, Shortness of breath, Headache, Nausea, Vomiting, Aspiration or inhalation may cause chemical pneumonitis., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### **Potential Health Effects**

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

**Eyes** Causes eye irritation. **Ingestion** Harmful if swallowed.

Target Organs Nerves., Eyes, Liver, Lungs, Reproductive system.,

# Additional Information RTECS: TH1400000

# 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. This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. 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

### ADR/RID

UN-Number: 2329 Class: 3 Packing group: III

Proper shipping name: TRIMETHYL PHOSPHITE

**IMDG** 

UN-Number: 2329 Class: 3 Packing group: III EMS-No: F-E, S-D

Proper shipping name: TRIMETHYL PHOSPHITE

Marine pollutant: No

**IATA** 

UN-Number: 2329 Class: 3 Packing group: III

Proper shipping name: Trimethyl phosphite

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### 15. REGULATORY INFORMATION

### Labelling according to EC Directives

Hazard symbols

Xn Harmful

R-phrase(s)

R10 Flammable.

R22 Harmful if swallowed.

R36/37/38 Irritating to eyes, respiratory system and skin.

S-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical

advice.

### **16. OTHER INFORMATION**

### **Further information**

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