



TCI EUROPE N.V.

# SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

Revision number: 1

Revision date: 10/03/2018

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name: Trimethyl Phosphate  
Product code: P0271

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Reagents.

### 1.3 Details of the supplier of the safety data sheet

#### Supplier:

TCI EUROPE N.V.  
Boerenveldseweg 6  
Haven 1063  
B-2070 Zwijndrecht  
Telephone: +32(0)3 735 07 00  
E-mail: sales-eu@tcichemicals.com

1.4 Emergency telephone number: +32(0)70 245 245

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Acute toxicity (Oral)	Category 4
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 2

### 2.2 Label elements

#### Pictograms or hazard symbols



#### Signal word

Danger

#### Hazard statements

H302-Harmful if swallowed.  
H340-May cause genetic defects.  
H351-Suspected of causing cancer.

#### Precautionary statements

P201-Obtain special instructions before use.  
P270-Do not eat, drink or smoke when using this product.  
P264-Wash hands and face thoroughly after handling.  
P280-Wear protective gloves, protective clothing, face protection.  
P308+P313-IF exposed or concerned: Get medical advice or attention.  
P405-Store locked up.

### 2.3 Other hazards

#### Results of PBT and vPvB assessment

PBT: Not applicable  
vPvB: Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Components: Trimethyl Phosphate  
Percent: >98.0%(GC)  
CAS RN: 512-56-1  
EC-No: 208-144-8  
Synonyms: Phosphoric Acid Trimethyl Ester  
Chemical Formula: C<sub>3</sub>H<sub>9</sub>O<sub>4</sub>P

#### SECTION 4: First aid measures

##### 4.1 Description of first aid measures

<b>Inhalation:</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention.
<b>Skin contact:</b>	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Get medical advice/attention.
<b>Eye contact:</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Get medical advice/attention.
<b>Ingestion:</b>	Get medical advice/attention. Rinse mouth.
<b>Protection of first-aiders:</b>	A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

##### 4.2 Most important symptoms and effects, both acute and delayed

No data available

##### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

#### SECTION 5: Firefighting measures

##### 5.1 Extinguishing media

**Suitable extinguishing media:** Dry chemical, foam, water in large amounts, carbon dioxide.

##### 5.2 Special hazards arising from the substance or mixture

Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume. Carbon dioxide, Carbon monoxide, Phosphorus oxides

##### 5.3 Advice for firefighters

Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so. When extinguishing fire, be sure to wear personal protective equipment

#### SECTION 6: Accidental release measures

##### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc

##### 6.2 Environmental precautions

Prevent product from entering drains

##### 6.3 Methods and materials for containment and cleaning up

Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

##### 6.4 Reference to other sections

For disposal see section 13.

#### SECTION 7: Handling and storage

##### 7.1 Precautions for safe handling

Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated. Avoid all contact!

##### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a cool and dark place. Store locked up. Store away from incompatible materials such as oxidizing agents.

##### 7.3 Specific end use(s)

No further relevant information available.

#### SECTION 8: Exposure controls/personal protection

##### 8.1 Control parameters

No data available

##### 8.2 Exposure controls

Install a closed system or local exhaust. Also install safety shower and eye bath.

###### **Respiratory protection:**

Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.

###### **Hand protection:**

Impervious gloves.

###### **Eye protection:**

Safety goggles. A face-shield, if the situation requires.

###### **Skin and body protection:**

Impervious protective clothing. Protective boots, if the situation requires.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state (20°C):	Liquid
Form:	Clear
Colour:	Colorless - Almost colorless
Odour:	Slight Aromatic
pH:	No data available
Melting point/freezing point:	-46°C
Boiling point/range:	197°C
Flash point:	107°C
Evaporation rate(Butyl Acetate=1):	No data available
Flammability(solid, gas):	No data available
Flammability or explosive limits:	
Lower:	No data available
Upper:	No data available
Vapour pressure:	0.11kPa/20°C
Vapour density:	No data available
Relative density:	1.22
Solubility(ies):	
[Water]	Miscible
[Other solvents]	
Soluble:	Ether, Alcohols, Many organic solvents
Partition coefficient: n-octanol/water:	-0.65
Autoignition temperature:	No data available
Decomposition temperature:	No data available
Dynamic Viscosity:	No data available
Kinematic viscosity:	No data available

9.2 Other safety information No data available

## SECTION 10: Stability and reactivity

10.1 Reactivity	No data available
10.2 Chemical stability	Stable under proper conditions.
10.3 Possibility of hazardous reactions	No special reactivity has been reported.
10.4 Conditions to avoid	No data available
10.5 Incompatible materials	Oxidizing agents, Strong bases
10.6 Hazardous decomposition products	Carbon dioxide, Carbon monoxide, Phosphorus oxides

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute Toxicity:	orl-mus LD50:1470 mg/kg orl-rat LD50:840 mg/kg orl-rbt LD50:1275 mg/kg skn-rbt LD50:2830 uL/kg
Skin corrosion/irritation:	No data available
Serious eye damage/irritation:	No data available
Respiratory or skin sensitization:	No data available
Germ cell mutagenicity:	cyt-hmn-lym 100 mmol/L/5H mmo-sat 125 ug/plate (-S9) mmo-sat 320 mmol/L (+S9)
Carcinogenicity:	orl-mus TDLo:154 g/kg/2Y-C orl-rat TDLo:31 g/kg/2Y-C
IARC =	No data available
NTP =	No data available
Reproductive toxicity:	ipr-mus TDLo:1 g/kg (1D male) orl-rat TDLo:1 g/kg (5D male) orl-mus TDLo:2500 mg/kg (5D male)
STOT-single exposure:	No data available
STOT-repeated exposure:	No data available
Aspiration hazard:	No data available
RTECS Number:	TC8225000

## SECTION 12: Ecological information

<b>12.1 Toxicity</b>	
<b>Fish:</b>	48h LC50:>1000 ppm (Oryzias latipes)
<b>Crustacea:</b>	No data available
<b>Algae:</b>	No data available
<b>12.2 Persistence and degradability</b>	0% (by BOD) , 0% (by TOC) , 0% (by GC)
<b>12.3 Bioaccumulative potential</b>	0.2 - 0.4 (conc. 2 ppm) , <1.4 (conc. 0.2 ppm)
<b>12.4 Mobility in soil</b>	
<b>Log Pow:</b>	-0.65
<b>Soil adsorption (Koc):</b>	3.2 - 12
<b>Henry's Law (PaM<sup>3</sup>/mol):</b>	7.3 x 10 <sup>-4</sup>
<b>12.5 Results of PBT and vPvB assessment</b>	
<b>PBT:</b>	Not applicable
<b>vPvB:</b>	Not applicable
<b>12.6 Other adverse effects</b>	No data available

## SECTION 13: Disposal considerations

### **13.1 Waste treatment methods**

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

## SECTION 14: Transport information

<b>14.1 UN number</b>	Not listed
<b>14.2 UN proper shipping name</b>	
<b>ADR/RID</b>	Not listed
<b>IMDG/IMO</b>	Not listed
<b>ICAO/IATA</b>	Not listed
<b>14.3 Transport hazard class(es)</b>	
<b>ADR/RID</b>	Does not correspond to the classification standard of the United Nations
<b>IMDG/IMO</b>	Does not correspond to the classification standard of the United Nations
<b>ICAO/IATA</b>	Does not correspond to the classification standard of the United Nations
<b>14.4 Packaging group</b>	
<b>ADR/RID</b>	-
<b>IMDG/IMO</b>	-
<b>ICAO/IATA</b>	-
<b>14.5 Environmental hazards</b>	
<b>Marine pollutant</b>	-
<b>14.6 Special precautions for user</b>	No data available

## SECTION 15: Regulatory information

### **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

<b>Water Hazard Classes (WGK) :</b>	Class 1 - Low hazard to waters
<b>Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No.1907/2006</b>	Not listed

<b>15.2 Chemical safety assessment</b>	A chemical safety assessment has not been carried out.
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**SECTION 16: Other information**

**Prepared by:** TCI EUROPE N.V.  
**Issue date:** 10/03/2018

This SDS was prepared sincerely on the basis of the information we could obtain, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

**End of Safety Data Sheet**