# SAFETY DATA SHEET

Version 4.8 Revision Date 03/03/2015 Print Date 01/14/2016

### 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 **Product identifiers** 

> Product name Trimethylolpropane trimethacrylate

**Product Number** 246840 **Brand** Aldrich

CAS-No. 3290-92-4

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

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

> Company Sigma-Aldrich

> > 3050 Spruce Street SAINT LOUIS MO 63103

USA

Telephone +1 800-325-5832 Fax +1 800-325-5052

1.4 **Emergency telephone number** 

> Emergency Phone # : (314) 776-6555

#### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute aquatic toxicity (Category 2), H401 Chronic aquatic toxicity (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word none

Hazard statement(s)

H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P273 Avoid release to the environment.

P391 Collect spillage.

P501 Dispose of contents/ container to an approved waste disposal plant.

#### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 **Substances** 

> TMPTMA Synonyms

Aldrich - 246840 Page 1 of 8 Formula : C<sub>18</sub>H<sub>26</sub>O<sub>6</sub>

Molecular weight : 338.40 g/mol
CAS-No. : 3290-92-4
EC-No. : 221-950-4

### **Hazardous components**

Component	Classification	Concentration
TRIMETHYLOLPROPANE TRIMETHACRYLATE		
	Aquatic Acute 2; Aquatic	<= 100 %
	Chronic 2; H411	

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 4. FIRST AID MEASURES

#### 4.1 Description of 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

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

### 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Carbon oxides

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

No data available

### **6. ACCIDENTAL RELEASE MEASURES**

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

Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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

Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

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### 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

For precautions see section 2.2.

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

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.

Product is sensitive to light and moisture.

Storage class (TRGS 510): Non Combustible Liquids

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
TRIMETHYLOLPRO PANE TRIMETHACRYLAT E	3290-92-4	TWA	1.000000 mg/m3	USA. Workplace Environmental Exposure Levels (WEEL)
	Remarks	Skin		

#### 8.2 Exposure controls

### Appropriate engineering controls

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

#### Personal protective equipment

### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Body Protection**

impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### **Respiratory protection**

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a) Appearance Form: clear, viscous liquid

Colour: yellow

b) Odourc) Odour Thresholddata availableNo data available

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d) pH No data available

e) Melting point/freezing Melting point/range: -41.59 - -29.49 °C (-42.86 - -21.08 °F) - OECD Test

point Guideline 102

f) Initial boiling point and

boiling range

No data available

g) Flash point > 130 °C (> 266 °F)h) Evaporation rate No data available

i) Flammability (solid, gas) No data available

j) Upper/lower flammability or explosive limits No data available

k) Vapour pressure 0.00003 hPa (0.00002 mmHg) at 20 °C (68 °F) - OECD Test Guideline 104

I) Vapour density No data available

m) Relative density 1.06 g/mL at 25 °C (77 °F) - lit.

n) Water solubility 0.0201 g/l at 20 °C (68 °F) - OECD Test Guideline 105 - slightly soluble

o) Partition coefficient: n- lo octanol/water a

log Pow: 2.749 at 25 °C (77 °F) - OECD Test Guideline 117log Pow: 4.193

at 25 °C (77 °F) - OECD Test Guideline 117

p) Auto-ignition

temperature

Decomposition temperature

No data available

360 °C (680 °F)

r) Viscosity No data available
 s) Explosive properties No data available
 t) Oxidizing properties No data available

9.2 Other safety information

Surface tension 53 mN/m at 0.9513 at 20 °C (68 °F)

#### 10. STABILITY AND REACTIVITY

#### 10.1 Reactivity

No data available

#### 10.2 Chemical stability

Stable under recommended storage conditions.

Contains the following stabiliser(s):

Mequinol (<0.1 %)

#### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Strong acids and oxidizing agents

# 10.6 Hazardous decomposition products

Other decomposition products - No data available

In the event of fire: see section 5

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### 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### **Acute toxicity**

LD50 Oral - Rat - female - > 2,000 mg/kg

Inhalation: No data available

LD50 Dermal - Rat - male and female - > 2,000 mg/kg

(OECD Test Guideline 402)

No data available

#### Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h (OECD Test Guideline 404)

### Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation - 24 h (OECD Test Guideline 405)

### Respiratory or skin sensitisation

Maximisation Test (GPMT) - Guinea pig Result: Does not cause skin sensitisation.

(OECD Test Guideline 406)

### Germ cell mutagenicity

Ames test S. typhimurium Result: negative

Mutagenicity (micronucleus test)

Mouse - male and female

Result: negative

# 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

No data available

### Specific target organ toxicity - single exposure

No data available

#### Specific target organ toxicity - repeated exposure

No data available

# **Aspiration hazard**

No data available

### **Additional Information**

Repeated dose toxicity - Rat - male and female - Oral - No observed adverse effect level - > 900 mg/kg RTECS: TY6675000

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Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence (Meguinol)

#### 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxicity to fish flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 2 mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to daphnia and

other aquatic invertebrates

Immobilization EC50 - Daphnia magna (Water flea) - > 9.22 mg/l - 48 h

(OECD Test Guideline 202)

Toxicity to algae Growth inhibition NOEC - Pseudokirchneriella subcapitata (green algae) - 0.177

mg/l - 72 h

(OECD Test Guideline 201)

Toxicity to bacteria Respiration inhibition EC50 - Sludge Treatment - > 1,000 mg/l - 3 h

(OECD Test Guideline 209)

### 12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d

Result: 53 % - Not readily biodegradable.

(OECD Test Guideline 301B)

#### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

### 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

### Contaminated packaging

Dispose of as unused product.

### 14. TRANSPORT INFORMATION

### DOT (US)

Not dangerous goods

### **IMDG**

UN number: 3082 Class: 9 Packing group: III EMS-No: F-A, S-F Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(TRIMETHYLOLPROPANE TRIMETHACRYLATE)

Marine pollutant:yes

**IATA** 

UN number: 3082 Class: 9 Packing group: III

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (TRIMETHYLOLPROPANE

TRIMETHACRYLATE)

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#### **Further information**

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

#### 15. REGULATORY INFORMATION

#### **SARA 302 Components**

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

### **SARA 313 Components**

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

No SARA Hazards

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

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

### **Pennsylvania Right To Know Components**

CAS-No. Revision Date TRIMETHYLOLPROPANE TRIMETHACRYLATE 3290-92-4

**New Jersey Right To Know Components** 

CAS-No. Revision Date TRIMETHYLOLPROPANE TRIMETHACRYLATE 3290-92-4

### 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**

#### Full text of H-Statements referred to under sections 2 and 3.

Aquatic Acute Acute aquatic toxicity
Aquatic Chronic Chronic aquatic toxicity
H401 Toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

### **HMIS Rating**

Health hazard: 0
Chronic Health Hazard: Flammability: 0
Physical Hazard 0

### **NFPA Rating**

Health hazard: 0
Fire Hazard: 0
Reactivity Hazard: 0

#### **Further information**

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Preparation Information Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

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