

## Material Safety Data Sheet

Version 4.0

Revision Date 07/25/2010

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Triethyl phosphonoacetate

Product Number : T61301

Brand : Aldrich

Company : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA

Telephone : +1 800-325-5832

Fax : +1 800-325-5052

Emergency Phone # : (314) 776-6555

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2. HAZARDS IDENTIFICATION

## Emergency Overview

## OSHA Hazards

No known OSHA hazards

## GHS Label elements, including precautionary statements

Pictogram none

Signal word none

Hazard statement(s)  
H401 Toxic to aquatic life.

Precautionary  
statement(s) none

## HMIS Classification

Health hazard: 0

Flammability: 1

Physical hazards: 0

## NFPA Rating

Health hazard: 0

Fire: 1

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.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Triethyl carboxymethylphosphonate  
Diethyl ethoxycarbonylmethylphosphonate

Formula : C<sub>8</sub>H<sub>17</sub>O<sub>5</sub>P

Molecular Weight : 224.19 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
<b>Triethyl phosphonoacetate</b>			
867-13-0	212-757-6	-	-

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#### 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**

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.

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#### 5. FIRE-FIGHTING MEASURES

##### **Suitable extinguishing media**

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

##### **Special protective equipment for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary.

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#### 6. ACCIDENTAL RELEASE MEASURES

##### **Personal precautions**

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

##### **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.

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

Keep in suitable, closed containers for disposal.

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#### 7. HANDLING AND STORAGE

##### **Precautions for safe handling**

Normal measures for preventive fire protection.

##### **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.

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#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

##### **Personal protective equipment**

##### **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).

##### **Hand 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.

**Eye protection**

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

**Skin and 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.

**Hygiene measures**

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

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**9. PHYSICAL AND CHEMICAL PROPERTIES****Appearance**

Form	clear, liquid
Colour	colourless

**Safety data**

pH	no data available
Melting point	no data available
Boiling point	142 - 145 °C (288 - 293 °F) at 12 hPa (9 mmHg) - lit.
Flash point	105 °C (221 °F) - closed cup
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Density	1.13 g/cm <sup>3</sup> at 25 °C (77 °F)
Water solubility	no data available

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**10. STABILITY AND REACTIVITY****Chemical stability**

Stable under recommended storage conditions.

**Conditions to avoid**

no data available

**Materials to avoid**

Strong oxidizing agents

**Hazardous decomposition products**

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

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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 (Globally Harmonized System)**

no data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.
<b>Eyes</b>	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**

RTECS: AG9800000

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## 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

**Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Toxic to aquatic life.

no data available

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## 13. DISPOSAL CONSIDERATIONS

**Product**

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

**Contaminated packaging**

Dispose of as unused product.

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## 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. (Triethyl phosphonoacetate)  
Marine pollutant: Marine pollutant

**IATA**

UN-Number: 3082 Class: 9 Packing group: III  
Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Triethyl phosphonoacetate)

**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.

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**15. REGULATORY INFORMATION****OSHA Hazards**

No known OSHA hazards

**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**

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
Triethyl phosphonoacetate	867-13-0	

**New Jersey Right To Know Components**

	CAS-No.	Revision Date
Triethyl phosphonoacetate	867-13-0	

**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.

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**16. OTHER INFORMATION****Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.