

Material Safety Data Sheet

Version 3.0
Revision Date 08/24/2008
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1. PRODUCT AND COMPANY IDENTIFICATION

Product name : 1,2,4-Tributylphosphorotrithioate

Product Number : PS562
Brand : Supelco

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

Telephone : +18003255832
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Emergency Phone # : (314) 776-6555

2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS-No.	EC-No.	Index-No.	Concentration
S,S,S-Tributylphosphorotrithioate			
78-48-8	201-120-8	-	-

3. HAZARDS IDENTIFICATION**Emergency Overview****OSHA Hazards**

Toxic by ingestion, Highly toxic by skin absorption

HMIS Classification

Health Hazard: 2
Flammability: 0
Physical hazards: 0

NFPA Rating

Health Hazard: 2
Fire: 0
Reactivity Hazard: 0

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Skin May cause skin irritation. May be fatal if absorbed through skin.
Eyes May cause eye irritation.
Ingestion Toxic if swallowed.

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. Take victim immediately to hospital. 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

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

5. FIRE-FIGHTING MEASURES**Flammable properties**

Flash point no data available

Ignition temperature no data available

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.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions**

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods for cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE**Handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage

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

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 particle respirator type N99 (US) or type P2 (EN 143) 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).

Handle with gloves.

Safety glasses

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Appearance

Form solid

pH no data available

Melting point	no data available
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Melting point	no data available
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Boiling point	no data available
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Flash point no data available

Ignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Water solubility	no data available
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Storage stability

Stable under recommended storage conditions.

Acute toxicity

LD50 Oral - rat - 150 mg/kg

LD50 Dermal - rabbit - 97 mg/kg

no data available

no data available

Chronic exposure

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 - rat - Oral

Maternal Effects: Ovaries, fallopian tubes. Maternal Effects: Uterus, cervix, vagina.

Potential Health Effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	May cause skin irritation. May be fatal if absorbed through skin.
Eyes	May cause eye irritation.
Ingestion	Toxic if swallowed.

Additional Information

RTECS: TG5425000

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

Bioaccumulation	Oncorhynchus mykiss (rainbow trout) - 60 d Bioconcentration factor (BCF): 1,084
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Ecotoxicity effects

Toxicity to fish	LC50 - Oncorhynchus mykiss (rainbow trout) - 0.31 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates.	EC50 - Daphnia magna (Water flea) - 0.007 mg/l - 48 h

Further information on ecology

no data available

13. DISPOSAL CONSIDERATIONS

Product

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN-Number: 2811 Class: 6.1 Packing group: II
Proper shipping name: Toxic solids, organic, n.o.s. (S,S,S-Tributylphosphorotrithioate)
Marine pollutant: No
Poison Inhalation Hazard: No

IMDG

UN-Number: 2811 Class: 6.1 Packing group: II EMS-No: F-A, S-A
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (S,S,S-Tributylphosphorotrithioate)
Marine pollutant: Marine pollutant

IATA

UN-Number: 2811 Class: 6.1

Packing group: II

Proper shipping name: Toxic solid, organic n.o.s. (S,S,S-Tributylphosphorotrithioate)

15. REGULATORY INFORMATION**OSHA Hazards**

Toxic by ingestion, Highly toxic by skin absorption

DSL Status

This product contains the following components listed on the Canadian NDSL list. All other components are on the Canadian DSL list.

S,S,S-Tributylphosphorotrithioate

CAS-No.
78-48-8**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

S,S,S-Tributylphosphorotrithioate

CAS-No.
78-48-8Revision Date
1995-01-01**SARA 311/312 Hazards**

Acute Health Hazard

Massachusetts Right To Know Components

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

Pennsylvania Right To Know Components

S,S,S-Tributylphosphorotrithioate

CAS-No.
78-48-8Revision Date
1995-01-01**New Jersey Right To Know Components**

S,S,S-Tributylphosphorotrithioate

CAS-No.
78-48-8Revision Date
1995-01-01**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

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.