

Section 1. Product and Company Identification

Product Name Tributoxyethyl Phosphate
CAS Number 78-51-3

Parchem - fine & specialty chemicals

415 Huguenot Street

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EMERGENCY RESPONSE NUMBER
CHEMTEL

Toll Free US & Canada: 1 (800) 255-3924

All other Origins: 1 (813) 248-0585

Collect Calls Accepted

Section 2. Hazards Identification

Classification of the substance or mixture

OSHA Haz Com: CFR 1910.1200: Eye Damage/Irritation [Category 2B]

GHS Label Elements

Pictograms:



Signal word: WARNING

Hazard and precautionary statements

Hazard Statements

Causes eye irritation

Precautionary Statements

Prevention

Wash hands and face thoroughly after handling

Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Storage

None

Disposal

None

Hazards not otherwise classified

[HNOC] Causes mild skin irritation. May be harmful if swallowed.



Signs and Symptoms of Exposure: Eye contact may result in redness or pain. Skin contact may result in redness, pain or dry skin. Overexposure may result in serious illness or death.

Primary Routes of Entry: Inhalation, Eye contact, Ingestion, Skin contact.

Medical Conditions Generally Aggravated by Exposure: Skin contact may aggravate existing skin disease.

Eye Contact: May cause redness and slight irritation.

Skin Contact: May cause redness and slight irritation.

Ingestion: Low acute oral toxicity. May cause nausea, diarrhea, and abdominal cramps.

Inhalation: May cause upper respiratory tract irritation.

NFPA Rating

Health: 1

Flammability: 1

Reactivity: 1

HMIS Hazard Rating

Health: 1

Flammability: 1

Reactivity: 1

HMIS Limitation Statement: The HMIS hazard ratings numbers are meant to give a quick indication of the relative hazards associated with the product. All of the information contained in the SDS should be consulted to assist with the safe handling of this material.

Section 3. Composition / Information on Ingredients

Common Name Tributoxyethyl Phosphate
Synonym(s) Tris(2-butoxyethyl) phosphate
Formula C₁₈H₃₉O₇P
CAS Number 78-51-3

COMPONENT	CAS NUMBER	CONCENTRATION
Tributoxyethyl Phosphate	78-51-3	TABLE

Section 4. First Aid Measures

Hazards not otherwise classified

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Section 5. Firefighting Measures

Suitable Extinguishing Media: Water Spray, Dry Chemical, CO₂, Foam.

Special Firefighting Procedures: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Closed containers may explode from heat of a fire.

Hazardous Combustion Products: Oxides of phosphorus and oxides of carbon.

Unusual Fire and Explosion Hazards: Product with burn under fire conditions.

Section 6. Accidental Release Measures

Steps to be taken in case material is Spilled: Wear appropriate personal protective equipment. Absorb with an inert absorbent. Sweep up and place in an appropriate closed container. Clean up residue material by washing area with water.

Environmental Disposal Information: Do not flush down the drain

Waste Disposal: In accordance with local, state, and federal regulations

Section 7. Handling and Storage

Empty Containers: Not available

Precautions to be taken in handling: Avoid breathing vapors and mist. Use non sparking tools and grounded equipment and containers when transferring.



Storage: Store in a cool, dry, ventilated area. Keep containers tightly closed when not in use. Do not store near extreme heat, open flame, or sources of ignition.

Section 8. Exposure Controls / Personal Protection

Exposure Controls: Not available

Respiratory Protection: NIOSH approved equipment used if respirators required.

Ventilation: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Hand protection: Wear gloves

Eye Protection: Wear goggles

Skin and Body Protection: Wear impervious clothing. Wear long sleeves and pants.

Other Precautions: Wash with soap and water before eating, drinking or using toilet facilities. Launder contaminated clothing before reuse.

Decontamination Facilities: Ensure that eyewash station and safety shower is proximal to the work-station location.

Section 9. Physical and Chemical Properties

Physical Form: Oily liquid

Appearance & Odor: Clear- Slightly yellow

Specific Gravity: Not available.

Partition Coefficient: 3.65

Relative density: 1.02

Density: 1.026 g/cm³ (20°C)

Softening Point, R&B: Not available.

Solubility in Water: 1.1 g/L (25°C)

Flash Point, TAG CC F: 224°C

Percent Volatiles (by weight): < 0.2

Evaporation Rate (Water ~ 1): Not available.

Vapor Pressure: < 0.1 mmHg at 150°C (302°F)

Refractive Index: 1.437 (20°C)

Vapor Density: 13.8

Boiling Point - Initial: 210 - 220°C (410 - 428°F)

Auto ignition Temperature: 322°C (612°F)

Flammable Limits, %(V): Not available.

Freezing point: < -70°C (-94°F)

Section 10. Stability and Reactivity

Stability: This product is stable under normal conditions.

Incompatibility (Materials to Avoid): Strong oxidizing agents.

Conditions to Avoid: Avoid excessive heat and light.

Hazardous Polymerization: Hazardous polymerization will not occur.



Section 11. Toxicological Information

This material is not listed as a carcinogen or potential carcinogen by NTP, IARC, ACGIH or OSHA.

Acute dermal toxicity: LD50-lethal does 50% of test species, > 2000 mg/kg, Rabbit.

Acute inhalation toxicity: LC50-lethal concentration 50% of test species, >6.4 mg/l/4hr, rat

Acute oral toxicity: LD50-lethal does 50% of test species, > 2000 mg/kg, Rat

Section 12. Ecological Information

LC50-lethal concentration 50% of test species, 24 mg/l/ 96hr, rainbow trout.

EC50-effective concentration 50% of test species, 75 mg/l/48 hr, Daphnia magna.

Persistence and degradability: 0% (by BOD), 1% (by TOC), 0% (by GC)

Bioaccumulative potential (BCF): 0.6 - 4.1 (cone. 0.2 mg/L), < 5.8 (cone. 0.02 mg/L)

Section 13. Disposal Considerations

Waste Treatment Methods: Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

Section 14. Transport Information

DOT Shipping Name: Not regulated.

Air - ICAO (international Civil Aviation Organization): Not regulated.

Sea - IMDG (International Maritime Dangerous Goods): Not regulated.

Section 15. Regulatory Information

All components of this material are on the TSCA Inventory.

All components of this material are on the Canadian DSL.

New Jersey Right to Know Components

Tris(2-butoxyethyl) phosphate, CAS No. 78-51-3, 2-butoxyethanol CAS No. 111-76-2

Pennsylvania Right to Know Components

Tris(2-butoxyethyl) phosphate, CAS No. 78-51-3, 2-butoxyethanol CAS No. 111-76-2

SARA 313: Not Listed

SARA 302: Not Listed



Section 16. Other Information

Disclaimer: 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.

REVISION DATE: 5/5/2017

