

# SAFETY DATA SHEET

According to the Hazard Communication Standard (29 CFR 1910.1200)

Version 3.0 Issue date: 11/03/2019

Revision date: 11/03/2019

## 1 Identification

<b>Product name</b>	<b>Triethyl phosphite</b>
<b>Synonyms, Trade names</b>	No information available.
<b>Identified uses</b>	Plasticizers, stabilizers, lubricants, and grease additives. Color inhibitor for resins. Chemical intermediate for vinyl phosphate insecticides, for phosphonate insecticides; sugarcane ripener. Used to produce optical brightener.
<b>Uses advised against</b>	Any other purpose.
<b>Supplier</b>	Camida Limited New Quay Clonmel Co. Tipperary E91 YV66 Ireland Tel: +353 52 6125455
<b>Contact person</b>	info@camida.com
<b>Emergency telephone</b>	00 44 (0) 1865 407333 (Carechem24)

## 2 Hazard(s) identification

### GHS Classification

Classification according to Hazard Communication Standard (29 CFR 1910.1200)	
Physical and Chemical hazards	Flam. Liq 3- H226
Human health	Not classified
Environment	Not classified

### Label Elements

#### Pictogram(s)



#### Signal word

Warning

#### Hazard statements

H226 Flammable liquid and vapour.

#### Precautionary statements

##### Prevention

P210 Keep away from heat/ sparks/open flames/hot surfaces. — No smoking.  
P233 Keep container tightly closed.  
P241 Use explosion-proof electrical/ventilating/lighting//equipment.  
P280 Wear protective gloves/ protective clothing/eye protection/face protection.

##### Response

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
P370 + P378 In case of fire: Use for extinction.

#### Contains

Not applicable

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**OSHA regulatory status** This product is hazardous under the OSHA hazard communication standard.

**Hazards Not Otherwise Classified (HNOC)** None known.

## 3 Composition/information on ingredients

### Substance

Name	Product identifier	GHS classification	%
triethyl phosphite	CAS-No.: 122-52-1 EC No.: 204-552-5	Flam. Liq 3- H226	100%

**Composition comments** The data shown are in accordance with the latest EC Directives.

## 4 First aid measures

### Description of first aid measures

**General information** General first aid, rest, warmth and fresh air.

**Inhalation** Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Ingestion** Never give anything by mouth to an unconscious person. Get medical aid.

**Skin contact** Remove contaminated clothing immediately and wash skin with soap and water. Seek medical attention if irritation persists.

**Eye contact** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

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

**General information** The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

**Inhalation** No specific symptoms noted.

**Ingestion** No specific symptoms noted.

**Skin contact** No specific symptoms noted.

**Eye contact** No specific symptoms noted.

**Routes of exposure** No information available.

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

**Notes to the physician** Immediately call a POISON CENTER or doctor/physician.

## 5 Fire-fighting measures

**Extinguishing media** Dry chemical, foam or carbon dioxide.

**Unsuitable extinguishing media** Combustion may lead to the release of toxic gases/vapours or fumes of carbon monoxide and carbon dioxide.

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<b>Unusual fire &amp; explosion hazards</b>	Vapour may travel considerable distance to source of ignition and flash back. Flammable liquid and vapour.
<b>Special fire fighting procedures</b>	Avoid breathing fire vapours. Keep up-wind to avoid fumes. Fight advanced or massive fires from safe distance or protected location. Do not scatter spilled material with more water than needed to fight the fire
<b>Protective equipment for firefighters</b>	Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to MSHA/NIOSH standards will provide a basic level of protection for chemical incidents. (See also NFPA 1971/NFPA 1851.) Fire fighters should wear full protective equipment, including a NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

## 6 Accidental release measures

<b>Personal precautions</b>	For personal protection, see section 8. Eliminate all sources of ignition. Ensure adequate ventilation. Do not smoke, use open fire or other sources of ignition.
<b>For emergency responders</b>	Follow safe handling advice and personal protective equipment recommendations for normal use of product.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Avoid discharge into the environment. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.
<b>Spill clean up methods</b>	Remove all sources of ignition and absorb spilled material with inert material, then place into a suitable closed container for disposal as chemical waste. Ventilate and evacuate the area. Keep in suitable, closed containers for disposal.

## 7 Handling and storage

<b>Handling</b>	Use with adequate ventilation and avoid inhalation. Avoid contact with eyes, skin or clothing. Ground and bond containers when transferring material. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas.
<b>Usage description</b> <b>Storage precautions</b>	Use only according to directions. To protect product quality, store in sealed container out of direct sunlight. Keep away from heat, sparks and flames and other sources of ignition. Store in a tightly closed container in a cool, dry and well ventilated place away from incompatible substances such as acids or strong oxidising agents.
<b>Specific end use(s)</b>	Not available.

## 8 Exposure controls/Personal protection

### Protective equipment



### Ingredient comments

The National Institute for Occupational Safety and Health (NIOSH). No exposure limits noted for ingredient(s).

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<b>Process conditions</b>	Provide eyewash station. Use only according to directions.
<b>Engineering measures</b>	Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.
<b>Respiratory equipment</b>	Wear a self contained respiratory mask if working conditions require. NIOSH/MSHA - approved respirator.
<b>Hand protection</b>	Wear approved protective gloves. Use equipment for skin protection tested and approved under appropriate government standards such as NIOSH (US).
<b>Eye protection</b>	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
<b>Hygiene measures</b>	Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas.

## 9 Physical and chemical properties

### Information on basic physical and chemical properties

<b>Appearance</b>	Liquid
<b>Color</b>	Colourless
<b>Odor</b>	Characteristic, obnoxious, phosphite odour.
<b>Odor threshold - lower</b>	No information available.
<b>Odor threshold - upper</b>	No information available.
<b>pH-Value, Conc. Solution</b>	No information available.
<b>pH-Value, Diluted solution</b>	No information available.
<b>Melting point</b>	-35.46 °C.
<b>Initial boiling point and boiling range</b>	No information available.
<b>Flash point</b>	54.00 °C
<b>Evaporation rate</b>	No information available.
<b>Flammability state</b>	No information available.
<b>Flammability limit - lower(%)</b>	No information available.
<b>Flammability limit - upper(%)</b>	No information available.
<b>Vapor pressure</b>	0.87 mm Hg 20.00 °C
<b>Vapor density (air=1)</b>	No information available.
<b>Relative density</b>	0.969g/cm <sup>3</sup> @ 20.00 °C
<b>Bulk density</b>	No information available.
<b>Solubility</b>	(Solubility in / Miscibility with water at 25 °C) 14800 mg/l.
<b>Decomposition temperature</b>	No information available.
<b>Partition coefficient; n-Octanol/Water</b>	log Pow 0.74

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<b>Auto ignition temperature (°C)</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	Above 54 °C explosive vapour/air mixtures may be formed.
<b>Oxidizing properties</b>	No information available.
<b>Molecular weight</b>	No information available.
<b>Volatile organic compound</b>	No information available.
<b>Other information</b>	Ignition temperature: 250 °C. Surface tension: 24.26 g/s <sup>2</sup> at 20 °C.

### Section 10: Stability and reactivity

<b>Reactivity</b>	Stable under recommended transport or storage conditions.
<b>Stability</b>	Stable under normal temperatures and pressures.
<b>Hazardous polymerization</b>	No information available.
<b>Polymerization description</b>	No information available.
<b>Conditions to avoid</b>	Protect from air, light and moisture. Avoid heat, sparks, open flames and other ignition sources.
<b>Materials to avoid</b>	Strong oxidising agents, acids.
<b>Hazardous decomposition products</b>	The thermal decomposition may release/form: Carbon monoxide (CO), carbon dioxide (CO <sub>2</sub> ). Phosphorous oxides.

### 11 Toxicological information

<b>Toxicological information</b>	Not available.
<b>Acute toxicity (Oral LD50)</b>	3720.00mg/kg Mouse
<b>Acute toxicity (Dermal LD50)</b>	2800.00mg/kg Rabbit
<b>Acute toxicity (Inhalation LC50)</b>	LC50 (6 h): 11063 mg/m <sup>3</sup> (rat), 6203 mg/m <sup>3</sup> (mouse).
<b>Skin corrosion/irritation</b>	No information available.
<b>Respiratory sensitization</b>	No information available.
<b>Skin sensitization</b>	No information available.
<b>Reproductive toxicity:</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity:</b>	
<b>Carcinogenicity</b>	No information available.
<b>NTP - Carcinogenicity</b>	The product and its components are not listed.
<b>OSHA - Carcinogenicity</b>	The product and its components are not listed.
<b>IARC - Carcinogenicity</b>	The product and its components are not listed.
<b>Inhalation</b>	No specific symptoms noted.
<b>Ingestion</b>	No specific symptoms noted.
<b>Skin contact</b>	No specific symptoms noted.
<b>Eye contact</b>	No specific symptoms noted.
<b>Routes of exposure</b>	No information available.
<b>Specific target organ toxicity - Single exposure:</b>	

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**STOT - Single exposure** No information available.  
**Specific target organ toxicity - Repeated exposure:**  
**STOT - Repeated exposure** No information available.

## 12 Ecological information

**Acute toxicity - Fish** LC50 96 Hours 1631.00 ppm Freshwater Fish  
**Acute toxicity - Aquatic invertebrates** LC50 48 Hours 764.00 ppm Daphnia magna.  
**Acute toxicity - Aquatic plants** EC50 (96 h): 210.153 mg/L (Green Algae).  
**Acute toxicity - Microorganisms** No information available.  
**Chronic toxicity - Fish** No information available.  
**Chronic toxicity - Aquatic invertebrates** No information available.  
**Chronic toxicity - Aquatic plants** No information available.  
**Chronic toxicity - Microorganisms** No information available.  
**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.  
**Eco toxilogical information** No ecological toxicity available on the overall finished product.  
**Degradability** Half-life for triethyl phosphite in water is 15 days which is estimated to be not persistent in the environment.  
**Bioaccumulative potential** Bioconcentration Factor (BCF) of triethyl phosphite is 3.162 L/kg at 25°C.  
**Mobility** Adsorption coefficient (Koc) value of triethyl phosphite is 1337 at 25 deg C.  
**Results of PBT and vPvB assessment** This product is not identified as a PBT/vPvB substance.  
**Other adverse effects** No data available.

## 13 Disposal considerations

**Waste management** When handling waste, consideration should be made to the safety precautions applying to handling of the product.  
**Disposal methods** Contact a licensed professional waste disposal service. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Contaminated packing must be emptied of all residues and, following appropriate cleaning, may be sent to a recycling plant. Uncleaned packaging must be disposed of in the same manner.

## 14 Transport information

### UN number

**UN no. (DOT/TDG)** UN2323  
**UN no. (IMDG)** UN2323  
**UN no. (IATA)** UN2323

### Proper shipping name

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**DOT/TDG proper shipping name** TRIETHYL PHOSPHITE  
**IMDG proper shipping name** TRIETHYL PHOSPHITE  
**IATA proper shipping name** TRIETHYL PHOSPHITE

## Transport hazard class(es)

**DOT/TDG class** 3  
**IMDG class** 3  
**IATA class** 3

## Transport labels



## Packing group(s)

**DOT packing group** III  
**IMDG packing group** III  
**IATA packing group** III

## Special precautions for user

**EMS** F-E, S-D

## Environmentally hazardous substance/Marine pollutant

**DOT/TDG** No  
**IMDG** No  
**IATA** No

## Transport in bulk according to annex II of MARPOL73/78 and the IBC code

## 15 Regulatory information

**Approved code of practice** GHS Classification in accordance with 29 CFR 1910 (OSHA HCS).

## US federal regulations

### SARA section 302 extremely hazardous substances tier II threshold planning quantities

The following ingredients are listed: None listed.

### CERCLA/Superfund, hazardous substances/reportable quantities (EPA)

The following ingredients are listed: None listed.

### SARA extremely hazardous substances EPCRA reportable quantities

The following ingredients are listed: None listed.

### SARA 313 emission reporting

The following ingredients are listed: None listed.

### CAA accidental release prevention

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The following ingredients are listed: None listed.

### **OSHA highly hazardous chemicals**

The following ingredients are listed: None listed.

### **Clean Water Act (CWA)**

The following ingredients are listed: None listed.

### **SARA Section 311/312 (40 CFR 370) Hazard Categories:**

No HMIS information available

## **US state regulations**

### **California proposition 65 carcinogens and reproductive toxins**

The following ingredients are listed: None listed.

### **California air toxics "Hot Spots" (A-I)**

The following ingredients are listed: None listed.

### **California air toxics "Hot Spots" (A-II)**

The following ingredients are listed: None listed.

### **Massachusetts "Right To Know" list**

The following ingredients are listed: None listed.

### **Rhode Island "Right To Know" list**

The following ingredients are listed: None listed.

### **Minnesota "Right To Know" list**

The following ingredients are listed: None listed.

### **New Jersey "Right To Know" list**

The following ingredients are listed: triethyl phosphite

### **Pennsylvania "Right To Know" list**

The following ingredients are listed: None listed.



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## 16 Other Information

### HMIS Classification and NFPA Rating

**HMIS Rating**

**Health:** 0

**Flammability:** 2

**Physical Hazards:** 0

**NFPA Rating**

**Health:** 0

**Flammability:** 2

**Physical Hazards:** 0

**General information**

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

**Revision comments**

This is a third issue. 3.0.

**Revision date**

11 March 2019

**Revision**

3.0

**Disclaimer**

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