

TRIETHYL PHOSPHITE CAS No 122-52-1

MATERIAL SAFETY DATA SHEET SDS/MSDS

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1	Product identifiers Product name	:	Triethyl Phosphite
	CAS-No.	:	122-52-1
1.2	1.2 Relevant identified uses of the substance or mixture and uses advised against		
	Identified uses	:	Laboratory chemicals, Industrial & for professional use only.
1.3	3 Details of the supplier of the safety data sheet		
	Company	:	Central Drug House (P) Ltd 7/28 Vardaan House New Delhi -110002 INDIA
	Telephone Email	:	+91 11 49404040 care@cdhfinechemical.com
1.4	Emergency telephone nur	nbe	

: +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

SECTION 2: Hazards identification

Emergency Phone #

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 Flammable liquids (Category 3), H226

Acute toxicity, Oral (Category 4), H302 Skin sensitisation (Category 1), H317 Chronic aquatic toxicity (Category 3), H412

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

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word



•	-
Hazard statement(s)	
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.
Precautionary statement(s)	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 P301 + P312 + P330	Wear protective gloves. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P370 + P378	In case of fire: Use dry powder or dry sand to extinguish.
Supplemental Hazard Statements	none

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances Synonyms : P(OEt)3 P(EtO)3 Formula : CeH15O2

Formula	:	$C_6H_{15}O_3P$
Molecular weight	:	166.16 g/mol
CAS-No.	:	122-52-1
EC-No.	:	204-552-5

Hazardous ingredients according to Regulation (EC) No 1272/2008 Component Classification

Concentration

Triethyl phosphite			
CAS-No.	122-52-1	Flam. Liq. 3; Acute Tox. 4;	<= 100 %
EC-No.	204-552-5	Skin Sens. 1; Aquatic Chronic	
		3; H226, H302, H317, H412	

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

SECTION 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

Do NOT induce vomiting. 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

SECTION 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. Oxides of phosphorus
- 5.3 Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.
- 5.4 **Further information** Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures 6.1 Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

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

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

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. Store in cool place. Storage class (TRGS 510): Flammable liquids

7.3 Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1 **Control parameters**

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

Face shield and safety glasses 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

Complete suit protecting against chemicals, Flame retardant antistatic protective 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

Where risk assessment shows air-purifying respirators are appropriate use (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee 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).

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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a)	Appearance	Form: clear, liquid Colour: colourless
b)	Odour	unpleasant
c)	Odour Threshold	No data available
d)	рН	No data available
e)	Melting point/freezing point	No data available
f)	Initial boiling point and boiling range	156 °C - lit.
g)	Flash point	54 °C - closed cup
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower	No data available
	flammability or explosive limits	
k)	Vapour pressure	No data available
I)	Vapour density	No data available
m)	Relative density	0.969 g/cm3 at 25 °C
n)	Water solubility	No data available
o)	Partition coefficient: n- octanol/water	No data available
p)	Auto-ignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	No data available
	ner safety information data available	

SECTION 10: Stability and reactivity

10.1 Reactivity

9.2

No data available

- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3** Possibility of hazardous reactions No data available

10.4 Conditions to avoid Heat, flames and sparks.

- **10.5** Incompatible materials Strong oxidizing agents, Strong bases
- Hazardous decomposition products
 Hazardous decomposition products formed under fire conditions. Carbon oxides, Oxides of phosphorus
 Other decomposition products No data available
 In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 1,840 mg/kg(Triethyl phosphite) Remarks: Behavioral:Ataxia. Lungs, Thorax, or Respiration:Respiratory stimulation. LD50 Dermal - Rabbit - 2,800 mg/kg(Triethyl phosphite)

Skin corrosion/irritation

Skin - Rabbit(Triethyl phosphite) Result: Mild skin irritation (OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit(Triethyl phosphite) Result: Mild eye irritation

(OECD Test Guideline 405)

Respiratory or skin sensitisation

- Guinea pig(Triethyl phosphite) Result: May cause sensitisation by skin contact.

Germ cell mutagenicity

No data available(Triethyl phosphite)

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.

Reproductive toxicity

No data available(Triethyl phosphite)

Specific target organ toxicity - single exposure

No data available(Triethyl phosphite)

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available(Triethyl phosphite)

Additional Information

RTECS: TH1130000 Aspiration or inhalation may cause chemical pneumonitis.(Triethyl phosphite)

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to daphnia and EC50 - Daphnia magna (Water flea) - 94.1 mg/l - 24 h(Triethyl phosphite) other aquatic invertebrates

12.2 Persistence and degradability No data available

12.3 Bioaccumulative potential No data available

12.4 Mobility in soil

No data available(Triethyl phosphite)

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Harmful to aquatic life with long lasting effects. No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

14.1	UN number ADR/RID: 2323	IMDG: 2323	IATA: 2323
14.2	UN proper shipping name ADR/RID: TRIETHYL PHOSP IMDG: TRIETHYL PHOSP IATA: Triethyl phosphite		
14.3	Transport hazard class(es) ADR/RID: 3	IMDG: 3	IATA: 3
14.4	Packaging group ADR/RID: III	IMDG: III	IATA: III
14.5	Environmental hazards ADR/RID: no	IMDG Marine pollutant: no	IATA: no
14.6	Special precautions for user No data available		

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment For this product a chemical safety assessment was not carried out

SECTION 16: Other information

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

- H302 Harmful if swallowed.
- H317 May cause an allergic skin reaction.
- H412 Harmful to aquatic life with long lasting effects.

Further information

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. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.