

14078 Meridian Parkway, Riverside, CA. 92518

SAFETY DATA SHEET

Version: v1

Revision Date: 2024-06-25

Print Date: 2024-06-27

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

1.1 Product identifiers

Product name : Tris(2-chloroethyl) Phosphate

Product Number : T162660
Brand : aladdin
CAS-No. : 115-96-8

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances.

1.3 Company

Company : ALADDIN SCIENTIFIC CORPORATION

Address : 14078 Meridian Parkway,

Riverside, CA. 92518

Telephone : +1 (833) 552-7181 Fax : no data available

1.4 Emergency telephone number

CHEMTREC®, Inside the USA : 1-800-424-9300

CHEMTREC®. Outside the USA :

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

CFR 1910.1200:Acute Toxicity - Oral [Category 4] Eye Damage/Irritation [Category 2B] Germ Cell Mutagenicity [Category 1B] Carcinogenicity [Category 2] Toxic to Reproduction [Category 1B] Specific Target Organ Toxicity (Single Exposure) [Category 1] Specific Target Organ Toxicity (Single Exposure) [Category 3] Specific Target Organ Toxicity (Repeated Exposure) [Category 1] Specific Target Organ Toxicity (Repeated Exposure) [Category 2] Aquatic Hazard (Acute) [Category 3] Aquatic Hazard (Long-Term) [Category 3]

2.2 GHS Label elements, including precautionary statements

Pictogram







Signal word

Hazard statement(s)

H302

Harmful if swallowed



14078 Meridian Parkway, Riverside, CA. 92518

H320	Causes eye irritation	
H336	May cause drowsiness or dizziness	
H340	May cause genetic defects	
H351	Suspected of causing cancer	
H360	May damage fertility or the unborn child	
H371	May cause damage to organs	
H372	Causes damage to organs through prolonged or repeated exposure	
H373	Causes damage to organs through prolonged or repeated exposure	
H402	Harmful to aquatic life	
Precautionary statement(s)		
P201	Obtain special instructions before use.	
P202	Do not handle until all safety precautions have been read and understood.	
P260	Do not breathe dust/fume/gas/mist/vapors/spray.	
P264	Wash hands [and] thoroughly after handling.	
P270	Do not eat, drink or smoke when using this product.	
P271	Use only outdoors or in a well-ventilated area.	
P273	Avoid release to the environment.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	
P405	Store locked up.	
P403+P233	Store in a well-ventilated place. Keep container tightly closed.	
P501	Dispose of contents/container to an approved waste disposal plant.	

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : Phosphoric Acid Tris(2-chloroethyl) Ester

Formula : C6H12Cl3O4P

 Molecular weight
 : 285.48

 CAS No.
 : 115-96-8

 EC-NO.
 : 204-118-5

Component	Classification	Concentration
Tris(2-chloroethyl) Phosphate		
	no data available	>93.0%(GC)

SECTION 4: First aid measures

4.1 Description of first aid measures



14078 Meridian Parkway, Riverside, CA. 92518

General advice

no data available

If inhaled

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.

In case of skin contact

Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Call a POISON CENTER or doctor/physician.

In case of eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Call a POISON CENTER or doctor/physician.

If swallowed

Call a POISON CENTER or doctor/physician. Rinse mouth.

4.2 Most important symptoms and effects, both acute and delayed

no data available

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

Dry chemical, foam, water spray, carbon dioxide.

Unsuitable extinguishing media

Solid streams of water

5.2 Special hazards arising from the substance or mixture

These products include: Carbon oxides Halogenated compounds Phosphates. Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume. Closed containers may explode from heat of a fire.

5.3 Advice for firefighters

Wear self-contained breathing apparatus if possible.

5.4 Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

6.2 Environmental precautions



14078 Meridian Parkway, Riverside, CA. 92518

Prevent product from entering drains.

6.3 Methods and materials for containment and cleaning up

Absorb spilled material with suitable absorbent (such as rag, dry sand, soil, sawdust). If there is a large amount of spillage, use seals to control the spillage. Adhered or collected materials shall be disposed of in a timely manner in accordance with local laws and regulations.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated. Avoid all contact! Conditions for safe storage, including any incompatibilities

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a cool, dark and well-ventilated place. Store locked up. Store away from incompatible materials such as oxidizing agents.

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment

Eye/face protection

Safety goggles. A face-shield, if the situation requires.

Skin protection

Gloves must be checked before use. Please use proper methods to remove the gloves (do not touch the outer surface of the gloves), and avoid any skin parts contacting the product. After use, please handle the contaminated gloves carefully according to relevant laws and regulations and effective laboratory rules and procedures. Please clean and blow dry the protective gloves selected for your hands must meet the specifications given in regulation (EU) 2016 / 425 and the en 374 standard derived from it.

Body Protection

Impervious gloves. Impervious protective clothing. Protective boots, if the situation requires.



14078 Meridian Parkway, Riverside, CA. 92518

Respiratory protection

Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations. Control of environmental exposure

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance form: Clear Liquid color: Colorless - Very pale yellow

b) Odour no data available
c) Odour Threshold no data available
d) pH no data available
e) Melting point/freezing point no data available
f) Initial boiling point and boiling range 146°C /0.1kPa (295°F)

g) Flash point 222°C (432°F)
h) Evaporation rate no data available
i) Flammability (solid, gas) no data available

j) Upper/lower flammability or

explosive limits no data available k) Vapour pressure no data available l) Vapour density no data available

m) Relative density 1.43

n) Water solubility Water:Insoluble;Soluble:Alcohols

o) Partition coefficient: n-octanol/water no data available
 p) Auto-ignition temperature no data available
 q) Decomposition temperature no data available

r) Viscosity: Viscosity:35.7mPa·s (25°C)

s) Explosive properties N no data available t) Oxidizing properties N no data available

9.2 Other safety information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions



14078 Meridian Parkway, Riverside, CA. 92518

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Oxidizing agents

10.6 Hazardous decomposition products

Carbon dioxide, Carbon monoxide, Hydrogen chloride, Phosphorus oxide

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

orl-rat LD50:1230 mg/kgskn-rbt LDLo:2 g/kg

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

mmo-sat 1 umol/plate (-S9) mtr-mus-fbr 0.1 mg/L/21D (-S9)

Carcinogenicity

orl-rat TDLo:45760mg/kg/104W-I

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

RTECS Number:KK2450000;IARC:Group 3 (Not classifiable as carcinogenic to humans)

SECTION 12: Ecological information

12.1 Toxicity

Fish: 96h LC50:>100 mg/L (Oryzias latipes) 48h LC50:66 mg/L (Oryzias latipes) ;Crustacea: 48h EC50:170 mg/L (Daphnia magna) ;Algae: 72h EC50:450 mg/L (Selenastrum capricornutum)



14078 Meridian Parkway, Riverside, CA. 92518

12.2 Persistence and degradability

4 % (by BOD), 0 % (by TOC), 1 % (by HPLC)

12.3 Bioaccumulative potential

0.6 - 0.8 (conc. 1 ppm), 1.2 - 5.1 (conc. 0.1 ppm)

12.4 Mobility in soil

Log Pow: 1.43 Soil adsorption (Koc): 390 Henry's Law (PaM/mol): 0.333 3

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no data available

SECTION 13:

13.1 Disposal considerations

Product

Disposal of product: Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil.Other considerations: Observe all federal, state and local regulations when disposing of the substance.

Contaminated packaging

Disposal of container: Dispose of as unused product. Do not re-use empty containers.

SECTION 14: Transport information

DOT (US)

UN number: no data available Packing group: no data available Class: no data available

Proper shipping name: no data Reportable Quantity(RQ): no data Poison Inhalation Hazard: no data

available available available

Environmental Hazards: no data available

IMDG

UN number: no data available Packing group: no data available EMS-No: no data available

Proper shipping name: no data available

IATA

UN number: no data available Packing group: no data available Class: no data available

Proper shipping name: no data available



14078 Meridian Parkway, Riverside, CA. 92518

SECTION 15: Regulatory information

Toxic Substance Control Act

This product is ON the EPA Toxic Substances Control Act (TSCA) inventory. US Federal Regulations

US Federal Regulations

SARA 313: Not Listed

SARA 302: Not Listed

State Regulations

Massachusetts Not Listed

New Jersey Not Listed

Pennsylvania Not Listed

Other Information

NFPA Rating: HMIS Classification: Health: 2 Health: 2 Flammability: 1 Flammability: 1 Instability: 0 Physical: 0

International Inventories

Canada: DSL On DSL

EC-No: 204-118-5

SECTION 16: Other information

Regulatory Affairs

Prepared By ALADDIN SCIENTIFIC CORPORATION

Email: QualityAssurance@aladdinsci.com

Creation Date13-Oct-2022Revision Date25-Jun-2024Print Date27-Jun-2024

Revision Summary SDS sections updated v1



14078 Meridian Parkway, Riverside, CA. 92518

Disclaimer

Copyright Aladdin Co. Ltd. License granted to make unlimited paper copies for internal use only. 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. Aladdin Co. Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.