

SAFETY DATA SHEET

Date Printed: 06/03/2024

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SECTION 1. IDENTIFICATION

Product Identifier: (4N) 99.99% Triethylphosphate

Product Code: TEL-PAT-04

CAS Number: 78-40-0

Relevant identified uses of the substance: Scientific research and development

Supplier details:

American Elements
10884 Weyburn Ave.
Los Angeles, CA 90024
Tel: +1 310-208-0551
Fax: +1 310-208-0351
Emergency telephone number:
+1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

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

Acute toxicity, Oral (Category 4), H302

Eye irritation (Category 2A), H319

GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

Precautionary statement(s)

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear eye protection/ face protection.

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P501 Dispose of contents/ container to an approved waste disposal plant.
Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Synonyms : Ethyl phosphate TEP

Formula : C₆H₁₅O₄P

Molecular weight : 182.15 g/mol

CAS-No. : 78-40-0

EC-No. : 201-114-5

Index-No. : 015-013-00-7

SECTION 4. FIRST AID MEASURES

Description of first aid measures

No data available

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

Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media

No data available

Special hazards arising from the substance or mixture

Carbon oxides, Oxides of phosphorus

Advice for firefighters

No data available

Further information

No data available

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For personal protection see section 8.

Environmental precautions

No data available

Methods and materials for containment and cleaning up

No data available

Reference to other sections

For disposal see section 13.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

No data available

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

Control parameters

Components with workplace control parameters

Exposure controls

Personal protective equipment

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.

Control of environmental exposure

Prevent product from entering drains.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

a) Appearance Form: clear, liquid

Colour: colourless

b) Odour odourless

c) Odour Threshold No data available

d) pH No data available

e) Melting point/freezing point

Melting point/range: -56 °C (-69 °F)

-56.4 °C (-69.5 °F)

f) Initial boiling point

and boiling range

215 °C 419 °F - lit.

g) Flash point 130 °C (266 °F) - closed cup

h) Evaporation rate No data available

i) Flammability (solid, gas)

No data available

j) Upper/lower flammability or explosive limits

Upper explosion limit: 10 %(V)

Lower explosion limit: 1.7 %(V)

k) Vapour pressure 0.1 hPa at 20 °C (68 °F)

1.33 hPa at 40 °C(104 °F)

l) Vapour density 6.29 - (Air = 1.0)

m) Relative density 1.072 g/cm³ at 25 °C (77 °F)

n) Water solubility completely miscible 500 g/l at 25 °C (77 °F) - OECD Test Guideline 105

o) Partition coefficient:
n-octanol/water
No data available
p) Auto-ignition temperature
454 °C (849 °F)
q) Decomposition temperature
No data available
r) Viscosity 1.46 mm²/s -
s) Explosive properties No data available
t) Oxidizing properties No data available
9.2 Other safety information
Relative vapour density
6.29 - (Air = 1.0)

SECTION 10. STABILITY AND REACTIVITY

Reactivity
No data available
Chemical stability
No data available
Possibility of hazardous reactions
No data available
Conditions to avoid
No data available
Incompatible materials
Strong bases, Strong oxidizing agents
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

Information on toxicological effects
Acute toxicity
LD50 Oral - Rat - 1,165 mg/kg
Remarks: Brain and Coverings:Recordings from specific areas of CNS.
Behavioral:Somnolence (general depressed activity). Behavioral:Ataxia.
Dermal: No data available
No data available
Skin corrosion/irritation
No data available
Serious eye damage/eye irritation
Eyes - Rabbit
Result: Moderate eye irritation - 24 h
(OECD Test Guideline 405)
Respiratory or skin sensitisation
No data available
Germ cell mutagenicity
No data available

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.

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 on OSHA's list of regulated carcinogens.

Reproductive toxicity

No data available

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: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - > 1,000 mg/l - 96h

Toxicity to daphnia

and other aquatic

invertebrates

EC50 - Daphnia (water flea) - 330 mg/l - 96 h

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

No data available

SECTION 14. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
IMDG
Not dangerous goods
IATA
Not dangerous goods

SECTION 15. REGULATORY INFORMATION

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards
Acute Health Hazard, Chronic Health Hazard
Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.
No components are subject to the Massachusetts Right to Know Act.
Pennsylvania Right To Know Components
Triethyl phosphate CAS-No.
78-40-0
Revision Date
Triethyl phosphate CAS-No.
78-40-0
Revision Date
New Jersey Right To Know Components
Triethyl phosphate CAS-No.
78-40-0
Revision Date

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). 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. American Elements 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. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.