

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

Catalogue Number	CS-BX-00640
Product Name	Dioxathion
CAS No.	78-34-2
Category	Pesticide Standards
Synonyms	S,S'-1,4-dioxane-2,3-diyl O,O,O',O'-tetraethyl diphosphorodithioate
Brand	Clearsynth Labs Ltd.
Identified uses	Laboratory Chemicals
Uses advised against	Not available
Company	Clearsynth Labs Ltd. Mumbai, India
Emergency Phone #	+91-22-245045900
REACH No.	Not available

SECTION 2: Hazards identification

Disclaimer: This is sample MSDS. Please email sales@clearsynth.com for more details.

2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Not available

2.2 Label Elements

Signal Word: Warning



Hazard Statement(s)

Code	Statement
H300	Not available
H311	Not available
H330	Not available
H400	Not available

H410	Not available
H310	Not available
H320	Not available
H370	Not available
H372	Not available

Precautionary Statement(s)

Code	Statement
P260	Not available
P262	Not available
P264	Wash hands thoroughly after handling.
P270	Not available
P271	Use only outdoors or in a well-ventilated area.
P273	Not available
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Not available
P301+P316	Not available
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P316	Not available
P320	Not available
P321	Specific treatment (see ... on this label).
P330	Not available
P361+P364	Not available
P391	Not available
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulation
P264+P265	Not available
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

P308+P316	Not available
P319	Get medical help if you feel unwell.
P337+P317	If eye irritation persists: Get medical help.

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Dioxathion

CAS Number : 78-34-2

Molecular Formula : C₄H₁₀O₂P₂S₂

Molecular Weight : 456.54

Parent Chemical : -

Synonyms : S,S'-1,4-dioxane-2,3-diyl O,O,O',O'-tetraethyl diphosphorodithioate

Concentration : Not available

SECTION 4: First aid measures

SECTION 4: First-aid measures

4.1 Description of first aid measures

General advice:

- Seek medical attention if symptoms occur or persist.
- Show this Safety Data Sheet to the physician in attendance.
- Remove contaminated clothing and shoes. Wash clothing before reuse.

Inhalation:

- Move person to fresh air and keep at rest.
- If breathing is difficult, seek medical attention.

Skin contact:

- Wash immediately with plenty of soap and water.
- Seek medical attention if irritation or symptoms develop.

Eye contact:

- Rinse cautiously with water for several minutes.
- Remove contact lenses if present and easy to do; continue rinsing.
- Seek medical attention if irritation persists.

Ingestion:

- Rinse mouth with water.
- Do NOT induce vomiting unless directed by medical personnel.
- Seek immediate medical attention.

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

- Treat symptomatically.

- No data available.

SECTION 5: Firefighting measures

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media:

- Water spray, alcohol-resistant foam, dry chemical, carbon dioxide (CO₂).

Unsuitable extinguishing media:

- No data available.

5.2 Special hazards arising from the substance or mixture

- May decompose under fire conditions to release toxic and/or irritating fumes.

- Hazardous combustion products: No data available.

5.3 Advice for firefighters

- Wear self-contained breathing apparatus (SCBA) and full protective gear.

- Use water spray to cool unopened containers.

- Prevent fire-fighting water from entering drains or waterways.

SECTION 6: Accidental release measures

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Evacuate unnecessary personnel.

- Avoid breathing dust/vapors/mist.

- Avoid contact with skin and eyes.

- Use appropriate personal protective equipment (see Section 8).

6.2 Environmental precautions

- Avoid release to the environment.

- Prevent entry into drains, surface water, and soil.

6.3 Methods and material for containment and cleaning up

- Contain spill.

- Collect spilled material using inert absorbent (e.g., sand, earth, vermiculite) and place in a suitable, labeled container for disposal.

- Clean contaminated area with suitable cleaning methods; avoid generating aerosols.

6.4 Reference to other sections

- See Section 8 for personal protective equipment.

- See Section 13 for disposal considerations.

SECTION-7: Handling and storage

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Use only with adequate ventilation.

- Avoid contact with skin, eyes, and clothing.
- Avoid breathing dust/vapors/mist.
- Do not eat, drink, or smoke when using this product.
- Wash hands thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

- Store in a cool, dry, well-ventilated place.
- Keep container tightly closed.
- Protect from heat and direct sunlight.
- Incompatible materials: No data available.

7.3 Specific end use(s)

- Pesticide standard / laboratory use.
- No data available.

SECTION 8: Exposure controls / personal protection

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits:

- No data available.

8.2 Exposure controls

Engineering controls:

- Use local exhaust ventilation or general ventilation to minimize exposure.

Personal protective equipment (PPE):

Eye/face protection:

- Safety glasses with side shields or chemical splash goggles.

Skin protection:

- Wear protective gloves and protective clothing suitable for chemical handling.

Respiratory protection:

- If ventilation is inadequate, use appropriate respiratory protection.

Hygiene measures:

- Wash hands after handling.
- Remove contaminated clothing and wash before reuse.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Test	Result
Appearance	No data available
IR spectrum	No data available
pH	No data available

Test	Result
Solubility	No data available

Property	Value
a) Physical State	No data available
b) Color	No data available
c) Odor	No data available
d) pH	No data available
e) Vapour Pressure	No data available
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available
j) Flash Point	No data available
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available
q) Oxidizing Properties	No data available

SECTION 10: Stability and reactivity

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

- No data available.

10.4 Conditions to avoid

- Heat, flames, ignition sources.

- Other: No data available.

10.5 Incompatible materials

- No data available.

10.6 Hazardous decomposition products

- No data available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- Acute toxicity: LC50 (rat) = 1,398 mg/m³/1h SUBACUTE ADMIN TO HUMAN VOLUNTEERS OF 0.075 MG/KG/DAY FOR 60 DAYS PRODUCED NO EFFECT ON EITHER PLASMA OR ERYTHROCYTE CHOLINESTERASE. HOWEVER, VOLUNTEERS RECEIVING 0.150 MG/KG/DAY SHOWED POSSIBLY SIGNIFICANT SLIGHT DEPRESSIONS OF PLASMA CHOLINESTERASE ACTIVITY, BUT NOT ERYTHROCYTE CHOLINESTERASE ACTIVITY.

- Skin corrosion/irritation: No data available.

- Serious eye damage/eye irritation: SYMPTOMATOLOGY: 1. NAUSEA...VOMITING, ABDOMINAL CRAMPS, DIARRHEA, EXCESSIVE SALIVATION... 2. HEADACHE, GIDDINESS, VERTIGO & WEAKNESS. 3. RHINORRHEA & SENSATION OF TIGHTNESS IN CHEST ARE COMMON IN INHALATION EXPOSURE. 4. BLURRING OR DIMNESS OF VISION, MIOSIS... TEARING, CILIARY MUSCLE SPASM, LOSS OF ACCOMMODATION & OCULAR PAIN... MYDRIASIS...SOMETIMES SEEN...PROBABLY DUE TO SYMPATHO-ADRENAL DISCHARGE. 5. LOSS OF MUSCLE COORDINATION, SLURRING OF SPEECH, FASCICULATIONS & TWITCHING OF MUSCLES (PARTICULARLY OF TONGUE & EYELIDS), & GENERALIZED PROFOUND WEAKNESS. 6. MENTAL CONFUSION, DISORIENTATION & DROWSINESS. /PARATHION/

- Respiratory or skin sensitization: No data available.

- Germ cell mutagenicity: No data available.

- Carcinogenicity: A4; Not classifiable as a human carcinogen.

- Reproductive toxicity: No data available.

- STOT-single exposure: No data available.

- STOT-repeated exposure: No data available.

- Aspiration hazard: No data available.

Likely routes of exposure

- MAY BE ABSORBED! See Inhalation.

Symptoms related to the physical, chemical and toxicological characteristics

- SYMPTOMATOLOGY: 1. NAUSEA...VOMITING, ABDOMINAL CRAMPS, DIARRHEA, EXCESSIVE SALIVATION... 2. HEADACHE, GIDDINESS, VERTIGO & WEAKNESS. 3. RHINORRHEA & SENSATION OF TIGHTNESS IN CHEST ARE COMMON IN INHALATION EXPOSURE. 4. BLURRING OR DIMNESS OF VISION, MIOSIS... TEARING, CILIARY MUSCLE SPASM, LOSS OF ACCOMMODATION & OCULAR PAIN... MYDRIASIS...SOMETIMES SEEN...PROBABLY DUE TO SYMPATHO-ADRENAL DISCHARGE. 5. LOSS OF MUSCLE COORDINATION, SLURRING OF SPEECH, FASCICULATIONS & TWITCHING OF MUSCLES (PARTICULARLY OF TONGUE & EYELIDS), & GENERALIZED PROFOUND WEAKNESS. 6. MENTAL CONFUSION, DISORIENTATION & DROWSINESS. /PARATHION/

SECTION 12: Ecological information

SECTION 12: Ecological information

12.1 Toxicity

- No data available.

12.2 Persistence and degradability

- No data available.

12.3 Bioaccumulative potential

- No data available.

12.4 Mobility in soil

- No data available.

12.5 Results of PBT and vPvB assessment

- No data available.

12.6 Endocrine disrupting properties

- No data available.

12.7 Other adverse effects

- No data available.

SECTION 13: Disposal considerations

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product:

- Dispose of contents/container in accordance with local/regional/national/international regulations.
- Do not discharge to drains or the environment.

Contaminated packaging:

- Dispose of as hazardous waste in accordance with applicable regulations.

Waste code:

- Not available.

SECTION 14: Transport information

SECTION 14: Transport information

14.1 UN number

- Not available.

14.2 UN proper shipping name

- Not available.

14.3 Transport hazard class(es)

- Not available.

14.4 Packing group

- Not available.

14.5 Environmental hazards

- Not available.

14.6 Special precautions for user

- Not available.

14.7 Transport in bulk according to IMO instruments

- Not available.

SECTION 15: Regulatory information

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- No data available.

15.2 Chemical safety assessment

- No data available.

SECTION 16: Other information

SECTION 16: Other information

Product identification:

- Product name: Dioxathion

- CAS No.: 78-34-2

- Catalog No.: CS-BX-00640

- Synonyms: S,S'-1,4-dioxane-2,3-diyl O,O,O',O'-tetraethyl diphosphorodithioate

- Category: Pesticide Standards

Supplier:

- Clearsynth Labs Ltd., Mumbai, India

- Emergency phone: +91-22-245045900

Disclaimer:

- The information provided is believed to be accurate based on available data; however, no warranty is expressed or implied. Users are responsible for determining suitability for their particular application and for compliance with applicable laws and regulations.

Revision information:

- No data available.

DISCLAIMER

This MSDS is system-generated. Please verify and confirm all data, statements, and values with the Support Team before use or distribution.