



CIS-HEPTACHLOR EPOXIDE UNLABELED

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 09/04/2014

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Supersedes: 04/05/2016

Version: 3.0

ULM-2425

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

1.1. Product identifier

Product form : Substance
Substance name : CIS-HEPTACHLOR EPOXIDE UNLABELED
EC index no : 602-063-00-5
EC no : 213-831-0
CAS No : 1024-57-3
Product code : ULM-2425
Formula : C10H5Cl7O

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.
50 Frontage Road
Andover, MA 01810
USA

USA: 1-800-322-1174 Int: 1-978-749-8000
cilsales@isotope.com www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)
International: 1-703-741-5970 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 2 (Oral) H300
Carc. 2 H351
STOT RE 2 H373
Aquatic Chronic 1 H410

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

T+; R28
N; R50/53

Full text of R-phrases: see section 16

Classification (GHS-US)

Acute Tox. 2 (Oral) H300
Carc. 2 H351
STOT RE 2 H373
Aquatic Chronic 1 H410

Adverse physicochemical, human health and environmental effects

Central nervous system, Liver, Blood.

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2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS08

GHS06

GHS09

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H300 - Fatal if swallowed
H351 - Suspected of causing cancer
H373 - May cause damage to organs (blood, brain, liver) through prolonged or repeated exposure
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP) :

P260 - Do not breathe dust, fume, gas, mist, spray, vapors
P264 - Wash Both hands thoroughly after handling
P270 - Do no eat, drink or smoke when using this product
P273 - Avoid release to the environment
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor/...
P314 - Get medical advice/attention if you feel unwell
P330 - Rinse mouth

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS08

GHS06

GHS09

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H300 - Fatal if swallowed
H351 - Suspected of causing cancer (Dermal, Inhalation, oral)
H373 - May cause damage to organs (blood, liver, brain) through prolonged or repeated exposure (Dermal, Inhalation, oral)
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS-US) :

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, spray, vapors
P264 - Wash Both hands thoroughly after handling
P270 - Do no eat, drink or smoke when using this product
P273 - Avoid release to the environment
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P308+P313 - IF exposed or concerned: Get medical advice/attention
P314 - Get medical advice and attention if you feel unwell
P321 - Specific treatment (see Hazard pictograms (CLP) on this label)
P330 - If swallowed, rinse mouth
P391 - Collect spillage
P405 - Store locked up
P501 - Dispose of contents/container to Comply with applicable regulations.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%	Classification according to Directive 67/548/EEC
CIS-HEPTACHLOR EPOXIDE UNLABELED (Main constituent)	(CAS No) 1024-57-3 (EC no) 213-831-0 (EC index no) 602-063-00-5	100	T+; R28 N; R50/53

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
CIS-HEPTACHLOR EPOXIDE UNLABELED (Main constituent)	(CAS No) 1024-57-3 (EC no) 213-831-0 (EC index no) 602-063-00-5	100	Acute Tox. 2 (Oral), H300 Carc. 2, H351 STOT RE 2, H373 Aquatic Chronic 1, H410

Full text of R-, H- and EUH-phrases: see section 16

Name	Product identifier	%	Classification (GHS-US)
CIS-HEPTACHLOR EPOXIDE UNLABELED (Main constituent)	(CAS No) 1024-57-3	100	Acute Tox. 2 (Oral), H300 Carc. 2, H351 STOT RE 2, H373 Aquatic Chronic 1, H410

Full text of H-phrases: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
- First-aid measures after inhalation : If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
- First-aid measures after skin contact : Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
- First-aid measures after eye contact : Flush eyes with water as a precaution.
- First-aid measures after ingestion : 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

- Symptoms/injuries after inhalation : May be harmful if inhaled. May cause respiratory tract irritation.
- Symptoms/injuries after skin contact : May be harmful if absorbed through skin. May cause skin irritation.
- Symptoms/injuries after eye contact : Causes eye irritation.
- Symptoms/injuries after ingestion : May be fatal if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information 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

Reactivity : Not available.

5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Not flammable or combustible.

6.1.1. For non-emergency personnel

Emergency procedures : Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.1.2. For emergency responders

No additional information available

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 material for containment and cleaning up

For containment : Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

No additional information available

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store at room temperature away from light and moisture.

7.3. Specific end use(s)

No additional information available

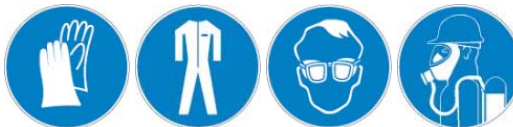
SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

- Personal protective equipment : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



- Hand protection : Wear suitable protective clothing and gloves.
- Eye protection : Wear safety glasses with side shields (or goggles) and a face shield.
- Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Respiratory protection : When appropriate, use NIOSH/CEN approved respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Solid
- Appearance : Solid.
- Molecular mass : 389.32 g/mol
- Color : No data available
- Odor : No data available
- Odor threshold : No data available
- pH : No data available
- Relative evaporation rate (butyl acetate=1) : No data available
- Melting point : 157.0 - 161.0 °C (314.6 - 321.8 °F)
- Freezing point : No data available
- Boiling point : No data available
- Flash point : No data available
- Self ignition temperature : No data available
- Decomposition temperature : No data available
- Flammability (solid, gas) : No data available
- Vapor pressure : No data available
- Relative vapor density at 20 °C : No data available
- Relative density : No data available
- Solubility : No data available
- Log Pow : 5.40
- Log Kow : No data available
- Viscosity, kinematic : No data available
- Viscosity, dynamic : No data available
- Explosive properties : No data available
- Oxidizing properties : No data available
- Explosive limits : No data available

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

Not available.

10.2. Chemical stability

Stable if stored under recommended conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Not available.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Formed under fire conditions: carbon oxides, Hydrogen chloride gas.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Fatal if swallowed.

CIS-HEPTACHLOR EPOXIDE UNLABELED (1024-57-3)	
LD50 oral rat	15 mg/kg
ATE (oral)	15.000 mg/kg body weight
	LD50 Oral Mouse 39 mg/kg
	LD50 Oral Rabbit 144 mg/kg

Skin corrosion/irritation : Not classified

No data available

Serious eye damage/irritation : Not classified

No data available

Respiratory or skin sensitization : Not available

No data available

Germ cell mutagenicity : Not available

Carcinogenicity : This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification. Limited evidence of carcinogenicity in animal studies.

Reproductive toxicity : Not available

Specific target organ toxicity (single exposure) : Not classified

No data available

Specific target organ toxicity (repeated exposure) : May cause damage to organs (blood, brain, liver) through prolonged or repeated exposure.

No data available

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms : To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

IARC group : 2B

Symptoms/injuries after inhalation : May be harmful if inhaled. May cause respiratory tract irritation.

Symptoms/injuries after skin contact : May be harmful if absorbed through skin. May cause skin irritation.

Symptoms/injuries after eye contact : Causes eye irritation.

Symptoms/injuries after ingestion : May be fatal if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

CIS-HEPTACHLOR EPOXIDE UNLABELED (1024-57-3)	
LC50 fish 1	0.02 mg/l <i>Oncorhynchus mykiss</i> (rainbow trout) -96h
EC50 Daphnia 1	0.24 mg/l <i>Daphnia magna</i> (Water flea) -48h

12.2. Persistence and degradability

No additional information available

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12.3. Bioaccumulative potential

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Bioconcentration factor (BCF REACH)	14400
Log Pow	5.40
Bioaccumulative potential	Bioaccumulative potential: Pimephales promelas (fathead minnow)- 32d.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other adverse effects : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.

SECTION 14: Transport information

In accordance with ADR / RID / ADN / IMDG / ICAO / IATA

14.1. UN number

UN-No.(DOT) : 2811
DOT NA no. UN2811

14.2. UN proper shipping name

DOT Proper Shipping Name : Toxic solids, organic, n.o.s.
Department of Transportation (DOT) Hazard Classes : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132
Hazard labels (DOT) : 6.1 - Poison inhalation hazard



DOT Symbols : G - Identifies PSN requiring a technical name
Packing group (DOT) : II - Medium Danger
DOT Special Provisions (49 CFR 172.102) : IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).
IP2 - When IBCs other than metal or rigid plastics IBCs are used, they must be offered for transportation in a closed freight container or a closed transport vehicle.
IP4 - Flexible, fiberboard or wooden IBCs must be sift-proof and water-resistant or be fitted with a sift-proof and water-resistant liner.
T3 - 2.65 178.274(d)(2) Normal..... 178.275(d)(2)
TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.
DOT Packaging Exceptions (49 CFR 173.xxx) : 153
DOT Packaging Non Bulk (49 CFR 173.xxx) : 212
DOT Packaging Bulk (49 CFR 173.xxx) : 242
DOT RQ : 1 lbs

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Marine pollutant : Yes



14.3. Additional information

Other information : No supplementary information available.

Overland transport

Packing group (ADR) : II
Class (ADR) : 6.1 - Toxic substances
Hazard identification number (Kemler No.) : 60
Classification code (ADR) : T2
Danger labels (ADR) : 6.1 - Toxic substances



Orange plates :



Tunnel restriction code : D/E
Limited quantities (ADR) : 500g
EAC : 2X
Excepted quantities (ADR) : E4

Transport by sea

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
MFAG-No : 154

Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 25 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 100 kg
Civil Aeronautics Law : Toxic and infectious substances/Toxic substances

14.4. Environmental hazards

Dangerous for the environment :



Other information : No supplementary information available.

14.5. Special precautions for user

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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SECTION 15: Regulatory information

15.1. US Federal regulations

CIS-HEPTACHLOR EPOXIDE UNLABELED (1024-57-3)

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
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15.2. International regulations

CANADA

CIS-HEPTACHLOR EPOXIDE UNLABELED (1024-57-3)

Not listed on the Canadian DSL (Domestic Substances List) inventory.

15.2.1. National regulations

No additional information available

15.3. US State regulations

CIS-HEPTACHLOR EPOXIDE UNLABELED(1024-57-3)

State or local regulations	U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Massachusetts - Right To Know List WARNING! This product contains a chemical known by the state of California to cause cancer.
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SECTION 16: Other information

Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

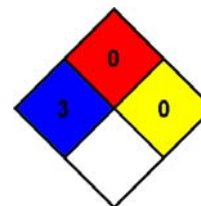
Full text of R-, H- and EUH-phrases::

Acute Tox. 2 (Oral)	Acute toxicity (oral) Category 2
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Carc. 2	Carcinogenicity Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
H300	Fatal if swallowed
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure
H410	Very toxic to aquatic life with long lasting effects
R28	Very toxic if swallowed
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
N	Dangerous for the environment
T+	Very toxic

NFPA health hazard : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

Flammability : 0 Minimal Hazard

Physical : 0 Minimal Hazard

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CIL Multi-Solvent Mixture SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product