

SAFETY DATA SHEET

Preparation Date: 03/14/2019

Revision date 03/14/19

Revision Number: G1

1. IDENTIFICATION

Product identifier

Product code: E2001
Product Name: EPICHLOROHYDRIN

Other means of identification

Synonyms: (Chloromethyl)ethylene oxide
 (DL)-alpha-Epichlorohydrin
 1-Chloor-2,3-epoxy-propaan (Dutch)
 1-Chlor-2,3-epoxy-propan (German)
 1-Chloro-2,3-epoxypropane
 2,3-Epoxypropyl chloride
 2-(Chloromethyl)oxirane
 3-Chloro-1,2-epoxypropane
 3-Chloro-1,2-propane oxide
 3-Chloro-1,2-propylene oxide
 Chloromethyloxirane
 Chloropropylene oxide
 ECH
 Epichloorhydrine (Dutch)
 Epichlorhydrine (French)
 Epichlorohydryna (Polish)
 Epicloridrina (Italian)
 Glycerol epichlorhydrin
 alpha-Epichlorohydrin
 epi-Chlorohydrin
 gamma-Chloropropylene oxide

CAS #: 106-89-8
RTECS # TX4900000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
 14422 South San Pedro St.
 Gardena, CA 90248
 (310) 516-8000

Order Online At: <https://www.spectrumchemical.com>
Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Tom Tyner (USA - West Coast)
Contact Person: Ibad Tirmiz (USA - East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Vapors)	Category 3
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Germ cell mutagenicity	Category 2
Carcinogenicity	Category 1B
Reproductive toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 1
Flammable liquids	Category 3

Label elements

Danger

Hazard statements

Toxic if swallowed, in contact with skin or if inhaled
Causes severe skin burns and eye damage
May cause an allergic skin reaction
Suspected of causing genetic defects
May cause cancer
Suspected of damaging fertility or the unborn child
Causes damage to organs through prolonged or repeated exposure
Flammable liquid and vapor



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Harmful to aquatic life with long lasting effects

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
Contaminated work clothing must not be allowed out of the workplace
Wear protective gloves/protective clothing/eye protection/face protection

Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/.../equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

In case of fire: Use CO₂, dry chemical, or foam to extinguish.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

Call a POISON CENTER or doctor/physician if you feel unwell

Wash contaminated clothing before reuse

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

If skin irritation or rash occurs: Get medical advice/attention

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Rinse mouth

Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
Epichlorohydrin	106-89-8	100

4. FIRST AID MEASURES

First aid measures

General Advice:

National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.

Skin Contact:

Toxic in contact with skin. Wash off immediately with soap and plenty of water. Remove all contaminated clothes and shoes. Continue flushing with plenty of water for at least 15 minutes. Immediate medical attention is required. Call a physician or Poison Control Centre immediately.

Eye Contact:

Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.

Inhalation:

Toxic by inhalation. Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

Ingestion:

Toxic if swallowed. Do not induce vomiting without medical advice. Never give anything by

mouth to an unconscious person. Call a physician or Poison Control Center immediately.

Most important symptoms and effects, both acute and delayed

Symptoms Toxic by inhalation, in contact with skin and if swallowed
Causes severe skin burns and eye damage
May cause an allergic skin reaction
May cause shortness of breath
May cause tingling of hands and feet
Dizziness
Lightheadedness
May cause muscle pain
Skin rash

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use water spray, mist, alcohol-resistant foam, Dry chemical or Carbon dioxide (CO₂).

Unsuitable Extinguishing Media: Do not use a solid (straight) water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Hazardous combustion products Carbon monoxide. Carbon dioxide (CO₂). Hydrogen chloride. phosgene.

Specific hazards Flammable. May be ignited by heat, sparks or flames. Vapor may travel considerable distance to source of ignition and flash back. Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks). Container explosion may occur under fire conditions or when heated. Fire may produce irritating, corrosive and/or toxic gases.

Special Protective Actions for Firefighters

Specific Methods: Water mist may be used to cool closed containers For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed spaces.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth). In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Use only non-sparking tools. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not ingest. Do not breathe vapors or spray mist. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep refrigerated. Store at 2-8 deg. C. Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Store in a segregated and approved area. Store away from incompatible materials.

Incompatible Materials:

Strong oxidizing agents
Strong acids
Alkalis
Bases
Ammonia
Amines
Magnesium
Aluminum
Halides
Zinc

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Epichlorohydrin	106-89-8	5 ppm TWA 19 mg/m ³ TWA	None	0.5 ppm TWA	None

Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Epichlorohydrin	106-89-8	0.5 ppm TWA 1.9 mg/m ³ TWA	0.1 ppm TWA	None	None

Australia and Mexico

Component	CAS No	Australia	Mexico
Epichlorohydrin	106-89-8	2 ppm TWA 7.6 mg/m ³ TWA	0.5 ppm TWA

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

- Eye protection:** Goggles and Face-shield.
- Skin and body protection:** Chemical resistant protective suit
Gloves
Boots
- Respiratory protection:** Vapor respirator. Be sure to use an approved/certified respirator or equivalent.
- Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Liquid

Appearance:

Clear.

Color:

Colorless.

Odor:

Irritating. Chloroform-like.

Taste

No information available.

Formula

C₃H₅ClO

Molecular/Formula weight (g/mole):

92.53

Flammability (solid, gas)

no data available

Flashpoint (°C/°F):

28-31°C/ 82.4-87.8°F

Flash Point Tested according to:

Closed cup

Autoignition Temperature (°C/°F):

385°C/ 725°F

Lower Explosion Limit (%):

3.8

Upper Explosion Limit (%):
21

Melting point/range(°C/°F):
-48-(-57)°C/ -54.4-(-70.6)°F

Decomposition temperature(°C/°F):
No information available

Boiling point/range(°C/°F):
115-117°C/ 239-242.6°F

Bulk density:
No information available

Density (g/cm3):
1.18

Specific gravity:
No information available

pH
No information available

Vapor pressure @ 20°C (kPa):
No information available

Evaporation rate:
No information available

Vapor density:
3.29

VOC content (g/L):
No information available

Odor threshold (ppm):
No information available

**Partition coefficient
(n-octanol/water):**
0.45

Viscosity:
No information available

Miscibility:
No information available

Solubility:
Soluble in Methanol
Soluble in diethyl ether
Partially soluble in n-octanol
Very slightly soluble in water

10. STABILITY AND REACTIVITY

Reactivity

No information available

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization may occur

Conditions to avoid: Heat, flames and sparks. Ignition sources. Incompatible materials.

Incompatible Materials:
Strong oxidizing agents
Strong acids
Alkalis
Bases
Ammonia
Amines
Magnesium
Aluminum
Halides
Zinc

Hazardous decomposition products: Carbon monoxide. Carbon dioxide. Hydrogen chloride gas. Phosgene.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Skin. Eyes. Inhalation. Ingestion.

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document
Component Information

Epichlorohydrin	
CAS No	106-89-8

LD50/oral/rat = 90 mg/kg Oral LD50 Rat
LD50/oral/mouse = 195 mg/kg Oral LD50 Mouse = 236 mg/kg Oral LD50 Mouse
LD50/dermal/rabbit = 515 mg/kg Dermal LD50Rabbit
LD50/dermal/rat = 1 gm/kg Dermal LD50 Rat
LC50/inhalation/rat = 500 ppm Inhalation LC50 Rat 4 h
LC50/inhalation/mouse = 3.25 gm/m³ LC50 Mouse 2 h
Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =
Value - Acute Tox = 90 mg/kg

LD50/oral/mouse =
Value - Acute Tox Oral = 195 mg/kg

LD50/dermal/rabbit
Value - Acute Tox = 515 mg/kg

LD50/dermal/rat
VALUE - Acute Tox Dermal = 1000 mg/kg

LC50/inhalation/rat
VALUE-Vapor = 500 ppm 4 h
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = 3.25 gm/m³
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: Toxic in contact with skin. Causes skin burns. May cause allergic skin reaction.
Eye Contact: Causes serious eye damage.
Inhalation Toxic by inhalation. May cause irritation of respiratory tract.
Ingestion Toxic if swallowed. May cause digestive (gastrointestinal) tract irritation.
Aspiration hazard No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity No information available.

Sensitization: May cause sensitization by skin contact.

Mutagenic Effects: Suspected of causing genetic defects

Carcinogenic effects: May cause cancer.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Epichlorohydrin	106-89-8	Monograph 71 [1999] Supplement 7 [1987] Monograph 11 [1976] overall evaluation upgraded from 2B to 2A with supporting evidence from other relevant data	A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans	Reasonably Anticipated To Be A Human Carcinogen	Present	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity Suspected of damaging fertility or the unborn child

Reproductive Effects: May impair fertility
Causes adverse reproductive effects

Developmental Effects: No information available

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available.

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.

Target Organs: Mucous membrane. Liver, kidney, and respiratory system. Skin.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Epichlorohydrin - 106-89-8

Fish

LC50: =35mg/L (96h, *Lepomis macrochirus*) LC50: =30.5mg/L (96h, *Brachydanio rerio*) LC50: 9.1 - 12.3mg/L (96h, *Pimephales promelas*)

Crustacea

EC50: =24mg/L (48h, *Daphnia magna*)

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility in soil No information available

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Epichlorohydrin	106-89-8	None	None	None	U041

14. TRANSPORT INFORMATION

DOT

UN-No: UN2023
Proper Shipping Name: Epichlorohydrin
Hazard Class 6.1
Subsidiary Class 3
Packing group: II
Emergency Response Guide Number 131P
Marine Pollutant Severe Marine Pollutant
DOT RQ (lbs): No information available
Special Provisions IB2, T7, TP2, TP13
Symbol(s): No information available
Description: UN2023, Epichlorohydrin, 6.1 (3), II

TDG (Canada)

UN-No: UN2023
Proper Shipping Name: Epichlorohydrin
Hazard Class 6.1
Subsidiary Risk: No information available
Packing Group: II
Marine Pollutant No Information available
Description: UN2023, Epichlorohydrin, 6.1 (3), II

ADR

UN Number UN2023
Proper Shipping Name: Epichlorohydrin
Transport hazard class(es) 6.1
Packing group II
Subsidiary Risk: No information available
Special Provisions 279
Description: UN2023, Epichlorohydrin, 6.1 (3), II

IMDG

UN-No: UN2023
Proper Shipping Name: Epichlorohydrin
Hazard Class: 6.1
Subsidiary Risk: No information available
Packing Group: II
Marine Pollutant No information available
EMS: F-E

Special Provisions 279
Description UN2023, Epichlorohydrin, 6.1 (3), II

RID

UN Number UN2023
Proper Shipping Name: Epichlorohydrin
Transport hazard class(es) 6.1
Subsidiary Risk: No information available
Packing group II
Special Provisions 279
Description: UN2023, Epichlorohydrin, 6.1 (3), II

ICAO (air)

UN-No: UN2023
Proper Shipping Name: Epichlorohydrin
Hazard Class 6.1
Subsidiary Risk: No information available
Packing Group: II
Description: UN2023, Epichlorohydrin, 6.1 (3), II
Special Provisions A113

IATA

UN Number UN2023
Proper Shipping Name: Epichlorohydrin
Transport hazard class(es) 6.1
Subsidiary Risk: No information available
Packing group II
Precautionary Statements - Response 6F
Special Provisions No information available
Description: UN2023, Epichlorohydrin, 6.1 (3), II

15. REGULATORY INFORMATION

International Inventories

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia AICS	EINECS-No.
<i>Epichlorohydrin</i>	106-89-8	PresentACTIV E	Present KE-05647	Present	Present (2)-275	Present	Present	Present 203-439-8

U.S. Regulations


Epichlorohydrin

- Massachusetts RTK:** Present
- New Jersey RTK Hazardous Substance List:** 0828
- New Jersey (EHS) List:** 0828 500 lb TPQ
- New Jersey - Discharge Prevention - List of Hazardous Substances:** Present
- New Jersey TCPA - EHS:** 20000lbTQ
- Pennsylvania RTK:** Environmental hazard
Special hazardous substance
- Pennsylvania RTK - Environmental Hazard List** Present
- Pennsylvania RTK - Special Hazardous Substances** Present
- Minnesota - Hazardous Substance List:** Present
- New York Release Reporting - List of Hazardous Substances:**
100 lb RQ
1 lb RQ
- Louisiana Reportable Quantity List for Pollutants:** Listed
- California Directors List of Hazardous Substances:** Present


FDA - Direct Food Additives 21 CFR 172.892 (<=0.3%); 21 CFR 172.892 (<=0.1%); 21 CFR 172.892 (<=0.1% followed by Propylene oxide <=25%); 21 CFR 172.892 (<=0.3% and Acetic anhydride)

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

 **WARNING:** This product contains a chemical known to the State of California to cause cancer. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

 **WARNING:** This product contains a chemical known to the State of California to cause birth defects or other reproductive harm (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Epichlorohydrin	106-89-8	carcinogen	Not Listed	male reproductive toxicity	Not Listed

CERCLA/SARA

Component	CAS No	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Epichlorohydrin	106-89-8	100 lb final RQ 45.4 kg final RQ	100 lb EPCRA RQ	None	None	0.1 % de minimis concentration

U.S. TSCA

Component	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Epichlorohydrin	106-89-8	Not Applicable	Not Applicable

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component
Epichlorohydrin
106-89-8 (100)

WHMIS 2015 Hazard Classification
Flammable liquids - Category 3: H226 Flammable liquid and vapour.; Acute toxicity - Oral - Category 3: H301 Toxic if swallowed.; Acute toxicity - Dermal - Category 3: H311 Toxic in contact with skin.; Acute toxicity - Inhalation - Category 2: H330 Fatal if inhaled.; Health Hazard Not Otherwise Classified - Category 1: Causes severe damage to the respiratory tract; Skin corrosion/irritation - Category 1: H314 Causes severe skin burns and eye damage.; Serious Eye Damage/Eye Irritation - Category 1: H318 Causes serious eye damage.; Skin sensitizers - Category 1B: H317 May cause allergic skin reaction.; Germ cell mutagenicity - Category 2: H341 Suspected of causing genetic defects.; Carcinogenicity - Category 1B: H350 May cause cancer.; Reproductive Toxicity - Category 2: H361 Suspected of damaging fertility or the unborn child.

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
Epichlorohydrin	106-89-8	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Epichlorohydrin	106-89-8	Present
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Epichlorohydrin	106-89-8	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Epichlorohydrin	106-89-8	Flammable liquids - Flam. Liq. 3: H226 Flammable liquid and vapour.; Acute toxicity - Oral - Acute Tox. 3: H301 Toxic if swallowed. (Minimum classification); Acute toxicity - Dermal - Acute Tox. 3: H311 Toxic in contact with skin. (Minimum classification); Acute toxicity - Inhalation - Acute Tox. 3: H331 Toxic if inhaled. (Minimum classification); Skin corrosion/irritation - Skin Corr. 1B: H314 Causes severe skin burns and eye damage.; Skin sensitizers - Skin Sens. 1: H317 May cause allergic skin reaction.; Carcinogenicity - Carc. 1B: H350 May cause cancer.603-026-00-6

EU - CLP (1272/2008)

R-phrase(s)

R10 - Flammable
R34 - Causes burns
R43 - May cause sensitization by skin contact
R45 - May cause cancer
R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed

S -phrase(s)

S 1 - Keep locked up.
S 7 - Keep container tightly closed.
S16 - Keep away from sources of ignition - No smoking
S23 - Do not breathe gas/fumes/vapor/spray
S36 - Wear suitable protective clothing
S46 - If swallowed, seek medical advice immediately and show this container or label

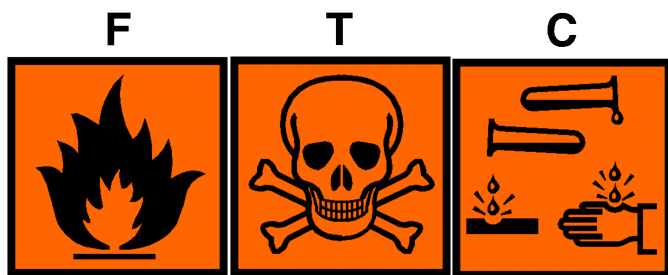
Component	CAS No	Classification	Concentration Limits:	Safety Phrases
Epichlorohydrin	106-89-8	R10 T; R23/24/25 C; R34 R43 Carc.Cat.2; R45	1%<=C T; R23/24/25 0.1%<=C<1% Xn; R20/21/22	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

T - Toxic
C - Corrosive

Flammable



16. OTHER INFORMATION

Preparation Date: 03/14/2019
Revision date 03/14/19
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet