

Safety Data Sheet

According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Printing Date: 1/23/2015

Revision: 1/23/2015

Trade Name: MERCAP-445™ - Part A

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

1.1 Product identifier MERCAP-445™ - Part A

Trade Name: MERCAP-445™ - Part A

1.2 Article No.: MERCAP-445™ - Part A

1.3 Details of the supplier of the Safety Data Sheet Manufacturer:

Elite Crete Systems
1061 Transport Drive
Valparaiso, IN 46383
Toll Free: 888.323.4445
Tel: (219) 465-7671
Fax: (219) 531-0898
www.elitecrete.com

1.4 Emergency telephone number:

CHEMTREC US DOMESTIC: (800-424-9300)
CHEMTREC INTERNATIONAL: (703-527-3887)

2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 and GHS:

GHS08 Health hazard

Muta.2: H341: Suspected of causing genetic defects.

GHS09 Environment

Aquatic Chronic: H411: Toxic to aquatic life with long lasting effects.

GHS07

Skin Irrit. 2; H315: Causes skin irritation.

Eye irrit. 2; H319: Causes serious eye irritation.

Skin Sens: H317: May cause an allergic skin reaction.

Classification according to Directive 1999/45/EC:



Xi: Irritant

R36/38: Irritating to eyes and skin



Xi: Sensitizing

R43: May cause sensitization by skin contact.

Information concerning particular hazards for human and environment:

The product has to be labeled due to the calculation procedure of the 'General Classification guideline for preparations of the EU' in the latest valid version

Emergency Considerations: Emergency responders must wear the proper personal protective equipment (and have appropriate fire-suppression equipment) suitable for the situation to which they are responding.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data

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2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008:

The product is classified and labeled according to the CLP regulation.

Hazard pictograms:



GHS09



GHS07

Signal Word: Warning

Hazard-determining components of labeling: Reaction products of Epichlorohydrin and Bisphenol A 1,6-Hexanediol Diacrylate

Hazard statements

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- H315: Causes skin irritation.
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- H319: Causes serious eye irritation
- H341: Suspected of causing genetic defects
- H411: Toxic to aquatic life with long lasting effects

Contains reaction products of Epichlorohydrin and Bisphenol A,

Precautionary statements

- P101: if medical advice is needed, have product container or label at hand
- P102: Keep out of reach of children
- P103: Read label before use
- P201: Obtain special instructions before use.
- P202: Do not handle until all safety precautions have been read and understood
- P261: Avoid breathing dust/fumes/vapors/spray /gas/mist
- P264: Wash hands thoroughly after handling
- P270: Do not eat, drink or smoke when using this product
- P271: Use only in well-ventilated area.
- P272: Contaminated work clothing should not be allowed out of the work place
- P273: Avoid release to the environment
- P280: Wear protective gloves/protective clothing/eye protection/face protection
- P281: Use personal protective equipment as required
- P305+P351+P338: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so Continue rinsing.
- P308+P313: IF exposed or concerned: get medical advice/attention.
- P332+P313: IF skin irritation occurs: Get medical advice/attention.
- P333+P313: IF skin irritation or rash occurs: get medical advice/attention.
- P321: Specific treatment (see on this label).
- P337+P313: If eye irritation persists: Get medical advice/attention.
- P362: Take off contaminated clothing and wash before use.
- P363: Wash contaminated clothing before reuse.

- P370+P378: In case of fire: Use for extinction: CO2, powder or water spray.
- P302+P352: IF ON SKIN: Wash with plenty of soap and water.
- P391: Collect spillage.
- P403+P235: Store in a well-ventilated place. Keep cool.
- P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

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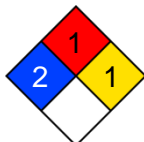
Hazard description:

Canadian WHMIS Classification: This product is categorized as a Class D Division 2B Materials causing other toxic effects, as per the Controlled Product Regulations

WHMIS-symbols:



NFPA ratings (scale 0 - 4)



Health = 2
Fire = 1
Reactivity = 1

HMIS-ratings (scale 0 - 4)

Health	2
Fire	1
Reactivity	1

Health = 2
Fire = 1
Reactivity = 1

2.3 Other hazards

No known

3 Composition/information on ingredients

3.2 Mixture.

Description: Mixture of substances listed below with nonhazardous additives.

Hazardous components:

Identification #	Description	WT. %
CAS: 25085-99-8 EINECS: Not Listed Index Number:	Reaction products of epichlorohydrin and Bisphenol A T Muta: Cat. 3, R46, Xi: R38, Xi R43, N R51/53 Muta 2, H341, Aquatic Chronic 2 H411, Skin Irrit. 2, H315, Skin Sens. 1A, H317	< 85%
CAS: 13048-33-4 EINECS: 235-921-9 Index Number; 607-109-00-8	1,6-Hexanediol Diacrylate Skin Irritant 2, H315, Skin Sens. 1, H317, Eye Irrit. 2, H319, Muta. 2; Aquatic Chronic 2; R 43; Xi 36/R 38, R43.	< 15%

Additional information: Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).

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4 First aid measures

4.1 Description of first aid measures

After inhalation:

If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention if breathing difficulty continues.

After skin contact:

Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing. Launder contaminated clothing before re-use.

After eye contact:

If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention.

After swallowing:

If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or MSDS with the victim to the health professional.

4.2 Most important symptoms and effects, both acute and delayed.

Acute: This material may cause irritation to skin and eyes. Product may cause an allergic skin reaction.

Chronic: Prolonged or repeated skin contact may cause allergic skin reaction or dermatitis.

Target Organs: **Acute:** Eye, Skin **Chronic:** Skin

Hazards: Pre-existing skin or eye problems may be aggravated by exposure to this product.

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

Treat symptoms and reduce over-exposure.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Carbon dioxide, foam, dry chemical, halon, water spray, sand, limestone powder.

5.2 Special hazards arising from the substance or mixture:

Formation of Toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters:

Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Personnel should be trained for spill response operations.

6.2 Environmental precautions:

All work practices must be aimed at eliminating environmental contamination.

6.3 Methods and material for containment and cleaning up:

Evacuate area. Contain spill if safe to do so. Prevent entry into drains, sewers, and other waterways. Soak up spilled material with an absorbent material and pick up and place in an appropriate waste container for disposal. Do not mix with other wastes. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

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Trade Name: MERCAP-445™ - Part A

7 Handling and storage

7.1 Precautions for safe handling

As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing vapors/mists generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Store between 10 and 50 0C (45 -125 0F) and avoid contact with skin and eyes. Do not store near acids or amines. Ground all transfer equipment. Good general housekeeping procedure should be followed. Do not eat drink or smoke while using the material. Emergency showers should be readily available. Material may partially freeze in cold temperatures which will result in crystals and haziness. If this occurs rewarm and homogenize. Avoid contact with skin eyes. Vapors may irritate eyes and will irritate the skin. Use only with good ventilation and PPE. Keep container closed when not in use.

7.3 Specific end use(s): No information

8 Exposure controls/personal protection

Additional information about design of technical facilities:

Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above. Use local exhaust ventilation to control airborne vapor. Ensure eyewash/safety shower stations are available near areas where this product is used.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

Currently, International exposure limits are not established for the components of this product. Please check with competent authority in each country for the most recent limits in place.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

Respiratory protection: Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

Protection of hands: Use chemical resistant gloves to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138 or appropriate Standards of Canada.



Protective gloves

Material of gloves:

The selection of suitable gloves does not only depend on the material, but also on the quality, and varies from manufacturer to manufacturer.

Penetration time of glove material:

The exact break through time has to be determined by the manufacturer of the protective gloves. DO NOT exceed the breakthrough time set by the Manufacturer.

Eye protection: Safety glasses or chemical goggles as appropriate to prevent eye contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian Standards.



Tightly sealed goggles

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Body Protection:

Use body protection appropriate to prevent contact (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	Liquid
Color:	Light yellow
Odor:	Mild epoxy odor
Odor threshold:	Not Available

pH-value:	Not Available
Change in condition	
Melting point/Melting range:	No data available
Boiling point/Boiling range:	> 392°F (200°C)
Flash point:	>200°F (>93°C)
Flammability (solid, gaseous):	No data available
Auto/Self-ignition temperature:	Not established
Decomposition temperature:	No data available
Self-igniting:	No data available
Danger of explosion:	This product is a flammable liquid above flash point shown above.
Explosion limits	
Lower:	Not established
Upper:	Not established
Vapor pressure at 25 °C:	<0.1 mmHg
Density at 20°C:	9.45 lbs. per gallon, specific gravity 1.13
Relative density:	No data available
Vapor density:	No data available
Evaporation rate:	No data available
Solubility in / Miscibility with Water:	Not Available
Specific Gravity 20oC: (Water = 1):	Not Available
Viscosity:	
Dynamic:	No data available
Kinematic:	No data available
Solvent content:	
Organic solvents:	No data available
VOC (EC)	No data available
9.2 Other information	No data available

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10 Stability and reactivity

10.1 Reactivity

10.2 Chemical stability:

Product is stable

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications

10.3 Possibility of hazardous reactions:

Reacts with oxidizing agents, reacts with amines, Exothermic polymerization.

10.4 Conditions to avoid:

no further information available.

10.5 Incompatible materials:

Oxidizing agents and amines should be avoided as these will cause exothermic polymerization. Avoid extreme heat

10.6 Hazardous decomposition products:

Carbon monoxide, carbon dioxide

11 Toxicological information

11.1 Information on toxicological effects:

Toxicity data is available for this product

Acute toxicity:

Acute Dermal	LD 50	>20,000 mg/kg	Rabbit
Acute Oral	LD 50	>5,000 mg/kg	Rat

Primary irritant effect: Contact with this product can be irritating to exposed skin and eyes and mucous membranes

Sensitization: This product is considered a skin sensitizer. Sensitization possible through inhalation, or prolonged exposure

Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for preparations as issued in the latest version: irritant

Reproductive toxicity information:

106-89-8 1-chloro-2,3-epoxypropane this chemical known to cause reproductive toxicity in males but not females.

12 Ecological information

12.1 Toxicity

Aquatic toxicity: The product contains chemicals that are harmful to the environment

12.2 Persistence and degradability:

The product is not easily, but potentially degradable:

12.3 Bio accumulative potential:

Due to the distribution coefficient n-octanol/water an accumulation in organisms is possible.

12.4 Mobility in soil:

No evidence is currently available on this product's effects on plants or animals.

Ecotoxicological effects:

Remark:

Additional ecological information: No data available

General notes: No PBT or vPvB ASSESSMENT HAS BEEN CONDUCTED. Not Applicable

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13 Disposal considerations

13.1 Waste treatment methods

Recommendations:

Waste disposal must be in accordance with appropriate Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

RCRA WASTE CODE: None Listed

EU WASTE CODE: Not Listed

14 Transport information

14.1 UN-Number

DOT: CAN: NOT REGULATED

ADN: ADR, IMDG, IATA: UN 3082

14.2 UN proper shipping name

DOT: CAN: NOT REGULATED

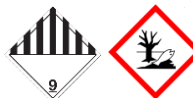
ADN: ADR, IMDG, IATA: Environmentally Hazardous Substance Liquid, N.O.S. (Bisphenol A epoxy resin)

14.3 Transport hazard class(es)

DOT: CAN:



ADN: ADR, IMDG, IATA:



14.4 Packing group

DOT: CAN: NOT REGULATED

ADN: ADR, IMDG, IATA: PG III

14.5 Environmental hazards:

Product contains environmentally hazardous substances: reaction Products of Epichlorohydrin and Bisphenol A)

Marine pollutant: YES



Special marking (ADR)

Notes: marine pollutant (IMDG code 2.9.3). For air shipments see special provision A97 (ICAO/IATA).
For surface shipments within the USA: Not regulated

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14.6 Special precautions for user

Danger code (Kemler): No data available
EMS Number: No data available

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

No data available

Transport/Additional information

ADR

Tunnel restriction code No data available

UN "Model Regulation":

No data available

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture. United States (USA)

SARA: This product is not subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act.: None

Section 355 (extremely hazardous substances): None of the ingredients are listed.

Section 313 (Toxic Release Inventory): None of the ingredients are listed.

TSCA (Toxic Substances Control Act): All ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:

None Known

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed

Canadian Ingredient Disclosure list (limit 0.1%):

None Known

Canadian Ingredient Disclosure list (limit 1%):

None of the ingredients are listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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16 Other information

Hazard statements

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- H319: Causes serious eye irritation
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- P391: Collect spillage.
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Abbreviations and acronyms:

- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation.
- IATA: International Air Transport Association.
- ACGIH: American Conference of Governmental Industrial Hygienists.
- EINECS: European Inventory of Existing Commercial Chemical Substances.
- ELINCS: European List of Notified Chemical Substances.
- CAS: Chemical Abstracts Service (division of the American Chemical Society).
- NFPA: National Fire Protection Association (USA).
- HMIS: Hazardous Materials Identification System (USA).
- LC50: Lethal concentration, 50 percent.
- LD50: Lethal dose, 50 percent.