Safety Data Sheet

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

Version: 1.3 **Revision: 11/7/2023**

Trade Name: E100-VR1™ - Clear UV Resistant Epoxy – Part A

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

1.1 Product identifier
Trade Name: E100-VR1™ Part A
1.2 Article No.: E100-VR1™ Part A

1.3 Details of the supplier of the Safety Data Sheet Manufacturer:
Elite Crete Systems
1151 Transport Drive
Valparaiso, IN 46383
Toll Free: 888.323.4445
Tel: (219) 465-7671
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: Not Classified

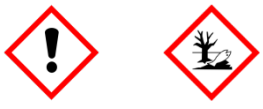
Classification according to Directive 1999/45/EC: [Xn] Harmful, [N] Dangerous to the Environment

Information concerning particular hazards for human and environment:

Product Description: This product is a water –white – pale straw-colored liquid with a mild epoxy odor. Health Hazards: Mild to moderate eye, skin and respiratory system irritant. Harmful if swallowed. May cause skin sensitization
Flammability Hazards: This product is Flammable above its flash point of 340°F (170°C)
Reactivity Hazards: None known.
Environmental Hazards: The environmental effects of this product have not been investigated; however it is not expected to cause significant adverse effects.
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

2.2 Label elements

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



GHS07 GHS09

Signal Word: Warning

Hazard-determining components of labeling: Bisphenol A based Epoxy Resin

Hazard statements
H312: Harmful in contact with skin
H317: May cause an allergic skin reaction

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Precautionary statements

P264: Wash hands thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P271: Use only in well-ventilated area.
P273: Avoid release to the environment
P280: Wear protective gloves/protective clothing/eye protection/face protection
P337+P313: If eye irritation persists: Get medical advice/attention.
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.

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 = 0

HMIS-ratings (scale 0 - 4)

Health	2
Fire	1
Reactivity	0

Health = 2
Fire = 1
Reactivity = 0

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:	**Bisphenol A based Epoxy Resin** HAZARD CLASSIFICATION: [Xn] Harmful, [Xi] Irritant RISK PHRASES: R21, R34, R43, R52/53	< 85-92%
CAS106-89-8 EINECS: 203-439-8 Index Number; 603-026-00-6	**1-CHLORO-2,3-EPOXYPROPANE** Skin Irritant 1B H314, Skin Sens. 1, H317 Muta. 2; T carc. Cat.2 R45-23/24/25 C R 34 Xi; R 10, R43. Acute tox. 3, H350, H 331	< 8-15%

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: This product is a flammable liquid above flash point shown.

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: E100-VR1™ - Clear UV Resistant Epoxy – 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:	Water – clear to slight amber
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:	>200°C
Flash point:	>392°F (>200°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:	9.50 lbs. per gallon, specific gravity 1.14
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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Trade Name: E100-VR1™ - Clear UV Resistant Epoxy – Part A

10 Stability and reactivity

10.1 Reactivity

10.2 Chemical stability: Product is stable

Thermal decomposition / conditions to be avoided: When heated to decomposition this product produces noxious gases such as CO, CO2, hydrocarbons and soot.

10.3 Possibility of hazardous reactions: No data available

10.4 Conditions to avoid: Contact with incompatible materials

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: Will not occur

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.

Sensitization: This product is considered a skin sensitizer.

Additional toxicological information:

None of the ingredients are found on the following lists: FEDERAL OSHA Z LIST, NTP, CAL/OSHA, IARC and therefore is not considered to be, nor suspected to be a cancer-causing agent by these agencies.

Reproductive toxicity information:

No information concerning the effects of this product and its components on the human reproduction system.

12 Ecological information

12.1 Toxicity

Aquatic toxicity: No evidence is currently available on this product's effects on aquatic life.

Component Data: CAS# 25085-99-8
Fathead Minnow LC50 3 mg/l 96 h
Toxicity to daphnia magna EC50 1.4 -1.7 mg/l 24 h
Bacteria: IC50 >42.6 mg/l 18 h
Biodegradation: 28 days 12% OECD
Bioaccumulation: Not readily biodegradable

12.2 Persistence and degradability: No data available

12.3 Bio accumulative potential: No data available

12.4 Mobility in soil: No evidence is currently available on this product's effects on plants or animals.

Ecotoxical effects:

Remark:

Additional ecological information: No data available

General notes: No specific data is available for this product; however, this product is expected to be readily biodegradable

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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

ADR: ADN: IMDG: IATA: UN 3082

14.2 UN proper shipping name

DOT: CAN: NOT REGULATED

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

14.3 Transport hazard class(es)

DOT: CAN:

ADR: ADN: IMDG: IATA:

14.4 Packing group

DOT: CAN: NOT REGULATED

ADR: ADN: IMDG: IATA: PG **III**

14.5 Environmental hazards:

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

Marine pollutant: YES

Special markings (ADR):

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

14.6 Special precautions for user

Danger code (Kemler): not applicable

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EMS Number:	
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not applicable
Transport/Additional information	none
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 of the ingredients is listed.

Canada

Canadian Domestic Substances List (DSL):
All ingredients are listed

Canadian Ingredient Disclosure list (limit 0.1%):
None of the ingredients are listed.

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

Relevant phrases:

H312: Harmful in contact with skin

H317: May cause an allergic skin reaction

H412: Harmful to aquatic life with long lasting effects

Precautionary statements

P264: Wash hands thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P271: Use only in well-ventilated area.
P273: Avoid release to the environment
P280: Wear protective gloves/protective clothing/eye protection/face protection
P337+P313: If eye irritation persists: Get medical advice/attention.
P370+P378: In case of fire: Use for extinction: CO_2, 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.

R21: Harmful in contact with skin

R34: Causes burns.

R43: May cause sensitization by skin contact

R52/53: Harmful to aquatic organisms may cause long-term adverse effects in the aquatic environment.

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.