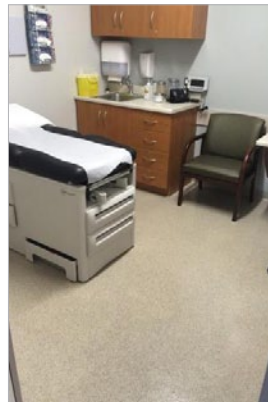


# HERMETIC™ Quartz

Flooring System



CSI Division 9: Finishes - Flooring



**elite crete systems**  
Engineered High Performance Surfaces & Flooring

**HERMETIC™ Quartz Floor** is a high build, double broadcast system using colored quartz aggregate and sealed with a protective top coat.

## TYPICAL AREAS OF USE

- Commercial kitchens
- Public restrooms
- Locker rooms
- Showrooms
- Wet or dry processing areas
- Grocery stores
- Airports
- Automobile service areas
- Medical
- Educational

## ADVANTAGES

- Ease of maintenance
- Aesthetic improvements & decorative floor finish
- Increase slip resistance in wet areas
- Hard with excellent abrasion resistance
- VOC free – CA 01350 air quality compliant
- Excellent stain & chemical resistance
- Anti-microbial, seamless & hygienic
- Fast set available for quicker turn around time
- Wide array of color combinations

## SPECIFICATION OVERVIEW

- Name: HERMETIC™ Quartz Floor
- Cured Thickness: @ 115 to 125 mils
- Surface preparation and detailed application instructions per manufacturer
- Manufacturer: Elite Crete Systems, Inc. +1-219-465-7671

## SAMPLE COLOR CHART



QB-1001



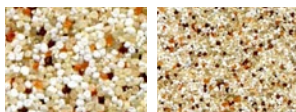
QB-1003



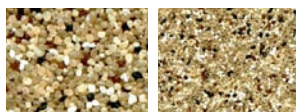
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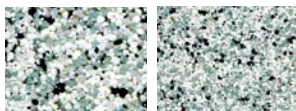
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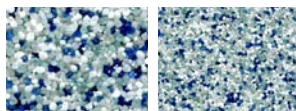
QB-1012



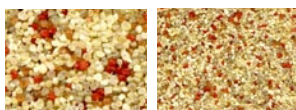
QB-1014



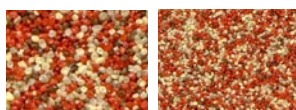
QB-1018



QB-1019



QB-1023



QB-1025

**NOTE:** The colors depicted on this technical document may not illustrate the exact color. Contact a technical support representative for a more accurate color sample. Custom colors available upon request.

## PHYSICAL PROPERTIES

(@ 73°F / 23°C, 7 day ambient cure as a coating)

PROPERTY	TEST	RESULT
VOC Content	N/A	0 g/l
Shore D Hardness	ASTM D-2240	80 to 82
Water Absorption (2hr boil)	ASTM D-570	0.04 %
Toxicity	N/A	None*
Heat Distortion Temperature	ASTM D-648	128 F / 53 C
Compressive Strength	ASTM D-695	12,500 psi
Tensile Strength	ASTM D-638	3,300 psi
Flexural Strength	ASTM D-790	4,700 psi
Abrasion Resistance **	ASTM D-4060	17 mg loss
Slant Shear	ASTM C-882	100% concrete failure
Flammability	ASTM D-635	Self-extinguishing
Flame Spread Rate (NFPA 101)	ASTM E-84	Class A
Elongation at Break	ASTM D-638	4.2 %
Chemical Resistance	Contact technical representative for chart	
Coefficient of Friction	Adjusted per requirement. Generally 0.50 to 0.80+	
COF Guidelines:		
	ADA Flat Surfaces	0.60
	ADA Inclined Surfaces	0.80
	OSHA	0.50
	NFPA	0.68

\* FDA, USDA, & CIFA Acceptable

\*\* CS-17 Wheel, 1 KG load, 1,000 cycles



# elite crete systems

### Elite Crete Systems, Inc.

1061 Transport Drive  
Valparaiso, Indiana 46383

Phone: +1.219.465.7671 Fax: +1.219.531.0898

Toll Free: 888-323-4445

Email: [info@elitecrete.com](mailto:info@elitecrete.com)

## [www.elitecrete.com](http://www.elitecrete.com)

The information herein is general information to assist our customers in determining whether our products are suitable for their specific applications. Our products are intended for sale to commercial and industrial customers. We require that customers should inspect and test our products before use to satisfy themselves as to the content and suitability for the applications they intend to use our products for. Nothing herein shall constitute any warranty expressed or implied, including any warranty of merchantability or fitness for a particular purpose, nor is replacement of our materials and in no event shall we be liable for incidental or consequential damages.

## PI.738 – Installation Procedures: HERMETIC™ Colored Quartz Floor

Revised: 1.27.16

### GETTING STARTED

Understanding the products for this finish and having experience prior to beginning a project is critical. It is recommended to consult with an Elite Crete Systems Technical Representative before beginning a project to discuss many facts that may impact the outcome.

### SURFACE PREPARATION

Although the HERMETIC™ Colored Quartz Floor can be applied to substrates other than concrete as well, these installation procedures pertain only to a concrete substrate.

The concrete must be structurally sound and any repairs in the surface must be made in advance of the floor coating. The surface must be clean, dry and free of any previous sealers or petrochemicals. In general a CSP (concrete surface profile of 3 is recommended and this is achieved by means of mechanical abrasion (grind, shotblast, etc.).

### APPLICATION PREPARATION

Carefully inspect the substrate to ensure it is ready to be coated. Look for loose drywall or debris under the drywall and remove if necessary. Mask off required areas and where the application will be terminated.

Choose a work area for mixing that will not result in contamination of the open containers of materials and protect that area from possible splash or spills. Perform a final inventory of required materials, tools, etc. Once the part A and part B components are mixed they must be applied immediately without delay.

### APPLICATION STEPS

In some cases E100-VB5™ vapor barrier epoxy and primer will be required to protect against rising water or air vapor. However, understand this is an optional application and the installer needs to determine if it is required. Contact an Elite Crete Systems Technical Representative for assistance in making this determination.

The recommended amount to mix at a time depends on the size of the project, number of applicators and experience with the products.

1. (Optional) pour one part E100-VB5™ part A with one part E100-VB5™ part B into a clean, dry mixing container and add one pint of clean potable water per combined gallon of E100-VB5™. Example: one gallon of part A and one gallon of part B would require 2 pints of water.
2. Mix the combined products with a jiffy type of similar mixing blade for two full minutes. It is critical to scrape the entire side, bottom and where the side meets the bottom to ensure the materials are adequately and thoroughly mixed. Failure to mix properly may result in areas of the finish that will not cure properly or perform as well as intended.
3. Pour the mixed E100-VB5™ on the floor in ribbons based on the required square foot of the area to be coated. Do not pour in a puddle or in one isolated area as it will be difficult to move the material over the entire intended area. Use a 3/8" new, clean, delinted, shed free roller to evenly apply the material. Ensure that all areas are coated and free of voids. The target coverage is a rate of 250 to 300 square foot per combined mixed gallon. Failure to remain within that range may result in product failure. This coat will take 5 to 7 hours before it can be recoated or proceeded to the next step. This coat must be dry before proceeding and the cure time can be effected based on factors such as air temperature, substrate temperature, humidity, etc. An optional but often recommended. If a

second coat is applied, repeat this step before proceeding to the next step.

4. Inspect the coat of E100-VB5™ for surface debris or defects such as air bubbles. If an air bubble or void is found another full coat or a patch using E100-VB5™ is required to ensure the concrete substrate is completely sealed off.

NOTE: There are multiple options of products that can be used for this finish. Those are: E100-PT4™ Standard or Fast Set, E100-PT1 Standard or Fast Set, E100-UV1™, E100-UL7™, E100-VR1™, E100-FS4™ or SPARTIC-ALL™. This installation procedure is illustrating E100-PT4™ Standard Set for the base color coat that the colored quartz will be broadcast into and E100-VR1™ for the clear top coat. If a different product is specified or used, contact a Technical Representative to discuss differences ahead of time.

5. Mix the E100-PT4™ part A and part B in a clean mixing container/pail for two full minutes using the same recommendations and tips used in previous sections of this document. Pour the mixed E100-PT4™ on the floor in ribbons. Use a 3/8", new, clean, delinted, shed free roller to evenly apply the material. The target coverage is a rate of 110 to 115 square foot per combined mixed gallon. A notched squeegee and backrolled can also be used for this step if preferred.
6. While wearing spiked shoes, walk onto the wet epoxy and begin to broadcast the colored quartz evenly. Do not toss the colored quartz towards the floor. Instead toss up into the air and allow to fall naturally. Do not walk on the colored quartz with the spiked shoes on. Once the entire floor and all of the quartz appear to be dry, allow the floor to cure out. Cure is about 8 hours for Standard Set and 4 hours for Fast Set.
7. Once cured and dry, removed excess loose colored quartz with a broom or vacuum. Use a scraper or screen and vacuum the floor again.

RECOMMENDED: Often times a second broadcast colored quartz coat is required or specified. If this is the case, repeat steps 5 through 7 before proceeding.

8. Mix the E100-VR1™ part A and part B in a clean mixing container/pail for two full minutes using the same recommendations and tips used in previous sections of this document. Pour the mixed E100-VR1™ on the floor in ribbons. Use a 3/8", new, clean, delinted, shed free roller to evenly apply the material. The target coverage is a rate of 115 to 125 square foot per combined mixed gallon. A notched squeegee can also be used for this step if preferred. Second or consecutive coats are optional.
9. OPTIONAL: One to two coats of AUS-V™ with or without AGG.

In all cases, Elite Crete Systems resinous flooring systems must be applied per the instructions of each individual product in the system. Concrete surfaces must be structurally sound, clean and with proper surface preparation methods.

Elite Crete Systems shall not be responsible or liable for adhesion failures that are the result of poor workmanship, deficient substrates, the presence of alkalinity or salts or expanding aggregates and reinforcements such as rebar, wire mesh, drains or expansion joint materials.



# Safety Data Sheet

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

Printing Date: 10/28/2014

Revision: 10/28/2014

**Trade Name: E100-PT1™ CRYSTAL CLEAR EPOXY – Part A**

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

### 1.1 Product identifier

Trade Name: E100-PT1™ Part A

### 1.2 Article No.: E100-PT1™ Part B

### 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](http://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:

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H361fd, H411.

The following Hazard Statements are applicable only according to OSHA regulations within the United States. These Statements are not applicable for the CLP regulation (1272/2008/EC) in the EU: H361.

Skin Irrit. 2 H-315: Causes skin irritation  
Eye Damage 1; H318: Causes serious eye damage.



GHS09 environment

Aquatic Chronic 2; H411: Toxic to aquatic life with long lasting effects.



GHS07 exclamation mark

Acute Tox. 2; H302: Harmful if swallowed.  
Skin Sensitization 1; H317: May cause an allergic skin reaction. STOT SE 3; H335: May cause respiratory irritation.

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

Xn; Harmful. R22-62: Harmful if swallowed. Possible risk of impaired fertility. Xi; Sensitizing. R43: May cause sensitization by skin contact

Xi; Irritant. R37: Irritating to respiratory system. R22-48: Harmful if swallowed.

N; Dangerous for the environment. R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### 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.

#### Classification system:

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

# Safety Data Sheet

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

Printing Date: 10/28/2014

Revision: 10/28/2014

**Trade Name: E100-PT1™ CRYSTAL CLEAR EPOXY – Part A**

## 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, Alkyl C-12-C-14 Glycidyl Ether

**Hazard statements**

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: 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

## 2.3 Other hazards

**Results of PBT and vPvB assessment:**

PBT: Not applicable.

vPvB: Not applicable.

**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**

# Safety Data Sheet

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

Printing Date: 10/28/2014

Revision: 10/28/2014

**Trade Name: E100-PT1™ CRYSTAL CLEAR EPOXY – Part A**

## 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:	<b>Bisphenol A based Epoxy Resin</b> HAZARD CLASSIFICATION: [Xn] Harmful, [Xi] Irritant RISK PHRASES: R21, R34, R43, R52/53	< 85-92%
CAS: 68609-97-2 EINECS: 271-846-8 Index Number;	<b>Alkyl C-12-C-14 Glycidyl Ether</b> Skin Irritant 1, Skin Sens. 1, Muta. 2; Aquatic Chronic 2; R 43; Xi 38; R 38, R43.	< 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).

## 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.

# Safety Data Sheet

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

Printing Date: 10/28/2014

Revision: 10/28/2014

**Trade Name: E100-PT1™ CRYSTAL CLEAR EPOXY – Part A**

## 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).

## 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 °C (45 -125 °F) 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.

# Safety Data Sheet

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

Printing Date: 10/28/2014

Revision: 10/28/2014

## Trade Name: E100-PT1™ CRYSTAL CLEAR EPOXY – Part A

**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

### 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:

Clear – Slight amber haze

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:

9.45 lbs. per gallon, specific gravity 1.13

Relative density:

No data available



# Safety Data Sheet

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

Printing Date: 10/28/2014

Revision: 10/28/2014

## Trade Name: E100-PT1™ CRYSTAL CLEAR EPOXY – Part A

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

## 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, CO<sub>2</sub>, 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.

# Safety Data Sheet

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

Printing Date: 10/28/2014

Revision: 10/28/2014

**Trade Name: E100-PT1™ CRYSTAL CLEAR EPOXY – Part A**

## 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

## 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:**



**ADR: ADN: IMDG: IATA**



### 14.4 Packing group

**DOT: CAN:**

NOT REGULATED

**ADN: ADR: IMDG :IATA**

PG III

## Safety Data Sheet

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

Printing Date: 10/28/2014

Revision: 10/28/2014

### Trade Name: E100-PT1™ CRYSTAL CLEAR EPOXY – Part A

#### 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 transport, see special provision A97. (ICAO/IATA). **For surface shipments within the USAL Not Regulated.**

#### 14.6 Special precautions for user

Danger code (Kemler):

NOT APPLICABLE

EMS Number:

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

NOT APPLICABLE

#### Transport/Additional information

#### ADR

Tunnel restriction code

NOT APPLICABLE

#### UN "Model Regulation":

NOT APPLICABLE

## 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.

## Safety Data Sheet

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

Printing Date: 10/28/2014

Revision: 10/28/2014

**Trade Name: E100-PT1™ CRYSTAL CLEAR EPOXY – Part A**

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Relevant phrases:**

H312: Harmful in contact with skin

H317: May cause an allergic skin reaction

H412: Harmful to aquatic life with long lasting effects

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.

# Safety Data Sheet

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

Printing Date: 10/20/2014

Revision: 10/20/2014

**Trade Name: E100-PT1™ – Crystal Clear Epoxy – Part B**

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

### 1.1 Product identifier

Trade Name: E100-PT1™ Part B

### 1.2 Article No.: E100-PT1™ Part B

### 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](http://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:

Reproductive Toxicity Category 2  
Acute Inhalation Toxicity Category 4  
Acute Oral Toxicity Category 4  
Skin Sensitization Category 1  
Skin Corrosion/Irritation Category 2  
Acute Aquatic Toxicity Category 1  
Chronic Aquatic Toxicity Category 2

#### Classification according to Directive 1999/45/EC:



C; Corrosive.



R34: Causes burns.



Xn; Harmful.



R22: harmful if swallowed.



Xi; Sensitizing.



R43: May cause sensitization by skin contact.



N; Dangerous for the environment



R50: Very toxic to aquatic organisms.

#### 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.

#### Classification System:

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

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

### 2.2 Label elements

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



# Safety Data Sheet

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

Printing Date: 10/20/2014

Revision: 10/20/2014

**Trade Name: E100-PT1™ – Crystal Clear Epoxy – Part B**

## Hazard pictograms:



GHS05    GHS07    GHS08    GHS09

**Signal Word:** Danger

## Hazard-determining components of labeling:

Contains: Benzene- 1,3-Diamethanamine, Trimethylhexamine-1,6-Diamine. May produce and allergic skin reaction.

## Hazard statements:

- H361: Suspected of damaging fertility or the unborn child.
- H302 Harmful if swallowed.
- H332: Harmful inhaled.
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H400: Vary toxic to aquatic life.
- H401: Very toxic to aquatic life with long lasting effects.

## Precautionary statements

- P260: Do not breath dust/fume/gas/mist/vapors/spray
- 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:

- D2B – Toxic material causing other toxic effects.
- E – Corrosive material

## WHMIS-symbols:



## NFPA ratings (scale 0 – 4)



Health = 3  
Fire = 1  
Reactivity = 0

## HMIS-ratings (scale 0 – 4)

Health	3
Fire	1
Reactivity	0

Health = 3  
Fire = 1  
Reactivity = 0

## 2.3 Other hazards

No known

# Safety Data Sheet

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

Printing Date: 10/20/2014

Revision: 10/20/2014

## Trade Name: E100-PT1™ – Crystal Clear Epoxy – Part B

### 3 Composition/information on ingredients

#### 3.2 Mixture.

**Description:** Mixture of substances listed below with nonhazardous additives.

**Hazardous components:**

Identification #	Description	WT. %
CAS: 98-54-4 EINECS: 202-679-0	<b>Paratertiarybutyphenol</b> HAZARD CLASSIFICATION: [C] Corrosive. [N] Dangerous to the Environment RISK PHRASES: R34, R51/53	28– 35%
CAS: 1477-55-0 EINECS: 216-032-5	<b>Benzene-1,3-dimethanamine</b> HAZARD CLASSIFICATION: [C] Corrosive RISK PHRASES: R34	20– 35%
CAS: 25620-58-0 EINECS: 247-134-8	<b>Trimethylhexamethylenediamine</b> HAZARD CLASSIFICATION: [Xn] Harmful RISK PHRASES: R37, R43	12 – 30%
CAS: 25154-52-3 EINECS: 246-672-0	<b>Nonyl Phenol</b> HAZARD CLASSIFICATION: Repr Cat 3, [Xn] Harmful, [C] Corrosive, [N] Dangerous to the Environment RISK PHRASES: R22, R62, R63, R34, R50/53	1 – 5%
CAS: 9046-10-0	<b>Alpha-(2-Aminomethyl)omega-(2-aminomethylethoxy)-poly(oxy)(methyl-1,2-ethanediyl)</b> HAZARD CLASSIFICATION: (Xn) Harmful RISK PHRASES: R36/38; Xi R43; N51/53; Aquatic Chronic 3, H412; Skin Irrit. 1C, H314, Eye Irrit. 2,H319, Skin Sens 1, H317	10-20%

**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).

### 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 if irritation develops.

##### 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 is harmful if inhaled and may cause delayed lung injury. This material may cause irritation to the respiratory tract and skin and even burns. Product may cause an allergic skin reaction.

**Chronic:** Prolonged or repeated skin contact may cause dermatitis.

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

**Hazards:** Pre-existing skin or respiratory system 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.

## Safety Data Sheet

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

Printing Date: 10/20/2014

Revision: 10/20/2014

**Trade Name: E100-PT1™ – Crystal Clear Epoxy – Part B**

### 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 flammable above flash point indicated above.

#### 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:** Contain spill if safe to do so. Prevent entry into drains, sewers, and other waterways. Soak up with a non-combustible absorbent material and place in an appropriate container for disposal. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

### 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 5° and 300C and avoid contact with skin and eyes. Do not store near acids. Ground all transfer equipment. Hold bulk storage under a nitrogen blanket. This product should not come in contact with copper or copper-bearing alloys. Containers of this product must be properly labeled. Nitrogen purging of containers is ideal and good practice.

#### 7.3 Specific end use(s): No information

# Safety Data Sheet

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

Printing Date: 10/20/2014

Revision: 10/20/2014

**Trade Name: E100-PT1™ – Crystal Clear Epoxy – Part B**

## 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.

**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.



Safety goggles

#### 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:**

Clear pale straw color

**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)

## Safety Data Sheet

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

Printing Date: 10/20/2014

Revision: 10/20/2014

### Trade Name: E100-PT1™ – Crystal Clear Epoxy – Part B

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 20 °C:	<0.1 mmHg @ 25°C
Density at 20°C:	No data available
Relative density:	8.10 pounds per gallon @ 25°C (SP 0.972)
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

## 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, CO<sub>2</sub>, NO<sub>x</sub>, amines, ammonia and others.

### 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



## Safety Data Sheet

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

Printing Date: 10/20/2014

Revision: 10/20/2014

**Trade Name: E100-PT1™ – Crystal Clear Epoxy – Part B**

### 11 Toxicological information

**11.1 Information on toxicological effects:** Toxicity data is available for this product

**Acute toxicity:**

Acute Dermal	LD 50	>2,000 mg/kg	Rabbit
Acute Oral	LD 50	1,750 mg/kg	Rat

**Primary irritant effect:** Contact with this product can be irritating to exposed skin, eyes and respiratory system.

**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. CAS# 64742-53-6 is classified in the EU as a possible cancer causing material.

**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 data available

**12.2 Persistence and degradability:** No data available

**12.3 Bioaccumulative potential:** No data available

**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:**

**Component Information:**

nonyl phenol CAS# 25154-52-3

Acute Fish Toxicity 96 hr LC50 0.13 mg/l fathead minnow (Pimephales promelas)

48 hr EC50 0.19 mg/l Daphnia Magna

Harmful to aquatic organisms. May cause long term damage to environment

### 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:** D002

**EU WASTE CODE:** To Be Established

# Safety Data Sheet

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

Printing Date: 10/20/2014

Revision: 10/20/2014

**Trade Name: E100-PT1™ – Crystal Clear Epoxy – Part B**

## 14 Transport information

### 14.1 UN-Number

DOT: CAN: ADN: IMDG: IATA: UN 2735  
ADR UN2735

### 14.2 UN proper shipping name

DOT: CAN: ADN: IMDG: IATA: Amines, Liquid, Corrosive, N.O.S. (Contains Benzene-1,3-Dimethanamine, Trimethylhexane-1,6-Diamine)  
ADR 2735 Amines, Liquid, Corrosive, N.O.S. (Contains Benzene-1,3-Dimethanamine, Trimethylhexane-1,6-Diamine)

### 14.3 Transport hazard class(es)

DOT: CAN: ADN: IMDG: IATA: 8 Corrosive substances  
CLASS:  
LABELS:



### ADR:

CLASS: 8 (C7) Corrosive substances  
LABELS:



### 14.4 Packing group

DOT: CAN: ADR: ADN: IMDG: IATA: PG II

### 14.5 Environmental hazards:

Marine pollutant: YES

Special marking (ADR)



### 14.6 Special precautions for user

Danger code (Kemler): Warning Corrosive substances  
EMS Number: 80  
F-A,S-B

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

No data available

### Transport/Additional information

#### ADR

Limited Quantities (LQ) 5L  
Excepted Quantities (EQ) Code E1  
Maximum net quantity per inner packaging 30 ml  
Maximum net quantity per outer packaging 1000ml

#### Transport category

Tunnel restriction code 3  
E

### UN "Model Regulation":

UN2735 Amines, Liquid, Corrosive, N.O.S. (Contains Benzene-1,3-Dimethanamine, Trimethylhexane-1,6-Diamine), 8, II

## Safety Data Sheet

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

Printing Date: 10/20/2014

Revision: 10/20/2014

**Trade Name: E100-PT1™ – Crystal Clear Epoxy – Part B**

### 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.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Hazard statements:**

H361: Suspected of damaging fertility or the unborn child.

H302 Harmful if swallowed.

H332: Harmful inhaled.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H400: Very toxic to aquatic life.

H401: Very toxic to aquatic life with long lasting effects.

**Precautionary statements**

P260: Do not breathe dust/fume/gas/mist/vapors/spray

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<sub>2</sub>, 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.

**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.

# Safety Data Sheet

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

Printing Date: 10/22/2014

Revision: 10/22/2014

**Trade Name: E100-VB5™ - Epoxy Vapor Barrier – Part A**

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

### 1.1 Product identifier

Trade Name: E100-VB5™ Part A

### 1.2 Article No.: E100-VB5™ 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](http://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:** 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

# Safety Data Sheet

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

Printing Date: 10/22/2014

Revision: 10/22/2014

## Trade Name: E100-VB5™ - Epoxy Vapor Barrier – Part A

### 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:	<b>Bisphenol A based Epoxy Resin</b> HAZARD CLASSIFICATION: [Xn] Harmful, [Xi] Irritant RISK PHRASES: R21, R34, R43, R52/53	< -91%
CAS: 68609-97-2 EINECS: 271-846-8 Index Number;	<b>Alkyl C-12-C-14 Glycidyl Ether</b> Skin Irritant 1, Skin Sens. 1, Muta. 2; Aquatic Chronic 2; R 43; Xi 38; R 38, R43.	< 9%

**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).



## Safety Data Sheet

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

Printing Date: 10/22/2014

Revision: 10/22/2014

**Trade Name: E100-VB5™ - Epoxy Vapor Barrier – Part A**

### 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).

# Safety Data Sheet

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

Printing Date: 10/22/2014

Revision: 10/22/2014

**Trade Name: E100-VB5™ - Epoxy Vapor Barrier – 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 °C (45 -125 °F) 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

# Safety Data Sheet

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

Printing Date: 10/22/2014

Revision: 10/22/2014

## Trade Name: E100-VB5™ - Epoxy Vapor Barrier – Part A

### 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:	9.13 lbs. per gallon, specific gravity 1.10
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

# Safety Data Sheet

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

Printing Date: 10/22/2014

Revision: 10/22/2014

**Trade Name: E100-VB5™ - Epoxy Vapor Barrier – 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, CO<sub>2</sub>, 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.

#### Ecotoxicological 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

# Safety Data Sheet

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

Printing Date: 10/22/2014

Revision: 10/22/2014

**Trade Name: E100-VB5™ - Epoxy Vapor Barrier – Part A**

## 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

**ADR: ADN: 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

**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 surface shipments in the USA: Not Regulated**

### 14.6 Special precautions for user



## Safety Data Sheet

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

Printing Date: 10/22/2014

Revision: 10/22/2014

### Trade Name: E100-VB5™ - Epoxy Vapor Barrier – Part A

<b>Danger code (Kemler):</b>	No data available
<b>EMS Number:</b>	No data available
<b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:</b>	No data available
<b>Transport/Additional information</b>	
<b>ADR</b>	
<b>Tunnel restriction code</b>	No data available
<b>UN "Model Regulation":</b>	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.

## Safety Data Sheet

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

Printing Date: 10/22/2014

Revision: 10/22/2014

**Trade Name: E100-VB5™ - Epoxy Vapor Barrier – Part A**

### 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: 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.

- 
- 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.

# Safety Data Sheet

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

Printing Date: 12/10/2014

Revision: 12/10/2014

**Trade Name: E100-VB5™ - Epoxy Vapor Barrier – Part B**

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

### 1.1 Product identifier

Trade Name: E100-VB5™ Part B

### 1.2 Article No.: E100-VB5™ Part B

### 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](http://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:

Acute Oral Toxicity Category 4  
Serious eye damage category 1

### 2.2 Label elements

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

Hazard pictograms:



GHS05



GHS07

Signal word: Danger

#### Hazard Statements:

H302: Harmful if swallowed

H318: Causes serious eye damage

#### Precautionary Statements:

Prevention: P264: Wash hands thoroughly after handling  
P270: Do not eat, drink or smoke when using this product

Response: P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310+P330: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

Disposal: P501: Disposal of contents/container to be specified in accordance with State, Federal and Local regulations.

# Safety Data Sheet

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

Printing Date: 12/10/2014

Revision: 12/10/2014

## Trade Name: E100-VB5™ - Epoxy Vapor Barrier – Part B

**Hazards no classified:** Harmful if swallowed. Severe eye irritant. Moderate respiratory irritant. Moderate skin irritant. Risk of serious damage to eyes.

### Hazard description:

#### Canadian WHMIS Classification:

non corrosive, non hazardous

### WHMIS-symbols:

None required

### 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: 100-51-6 EINECS: 202-859-9	<b>Benzyl Alcohol</b> GHS Classification: Not hazardous	30-%
CAS: priority EINECS:	<b>Manic Base Adduct</b> GHS Classification Not Hazardous	70%

**Additional information:** WHMIS Ingredient Disclosure List.

**WHMIS Trade Secret Registry Number:** 6160 Grant date 2/14/2007

## Safety Data Sheet

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

Printing Date: 12/10/2014

Revision: 12/10/2014

### Trade Name: E100-VB5™ - Epoxy Vapor Barrier – Part B

#### 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 if irritation develops.

###### 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 the respiratory tract and skin and even burns. Product may cause an allergic skin reaction.

**Chronic:** Prolonged or repeated skin contact may cause dermatitis.

**Hazards:** Pre-existing skin or respiratory system 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:

Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gas. Burning produces toxic and noxious fumes. Down wind personnel must be evacuated.

##### 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:** Contain spill if safe to do so. Prevent entry into drains, sewers, and other waterways. Soak up with a non-combustible absorbent material and place in an appropriate container for disposal. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

## Safety Data Sheet

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

Printing Date: 12/10/2014

Revision: 12/10/2014

**Trade Name: E100-VB5™ - Epoxy Vapor Barrier – Part B**

### 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:

. Do not store near acids.. keep containers tightly closed in a cool dry and well ventilated place.

#### 7.3 Specific end use(s): keep from freezing.

### 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.

**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.



Safety goggles

##### 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.

# Safety Data Sheet

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

Printing Date: 12/10/2014

Revision: 12/10/2014

**Trade Name: E100-VB5™ - Epoxy Vapor Barrier – Part B**

## 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### General Information

##### Appearance:

Form:

Liquid

Color:

Hazy to amber to brown liquid

Odor:

Slight ammonia

Odor threshold:

Not Available

pH-value:

11.2

#### Change in condition

Melting point/Melting range:

No data available

Boiling point/Boiling range:

212°F (100°C)

Flash point:

N/A

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:

N/A

#### Explosion limits

Lower:

Not established

Upper:

Not established

Vapor pressure at 20 °C:

No data available

Density at 20°C:

67.422 lb/ft<sup>3</sup> (1.08g/cm<sup>3</sup>) @ 70°F (21°C)

Relative density:

8.66 pounds per gallon @ 25°C

Vapor density:

No data available

Evaporation rate:

No data available

Solubility in / Miscibility with Water:

Not Available

Specific Gravity 20°C: (Water = 1):

Not Available

Viscosity:

400 cps (400mPa) @ 77°F

#### Solvent content:

Organic solvents:

0

VOC (EC)

0.00%

### 9.2 Other information

No data available

## Safety Data Sheet

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

Printing Date: 12/10/2014

Revision: 12/10/2014

**Trade Name: E100-VB5™ - Epoxy Vapor Barrier – Part B**

### 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, CO<sub>2</sub>, NO<sub>x</sub>, amines, ammonia and others.

#### 10.3 Possibility of hazardous reactions: No data available

#### 10.4 Conditions to avoid: no data

#### 10.5 Incompatible materials: organic acids, citric acid, acetic acid, etc

#### 10.6 Hazardous decomposition products: Nitric acid, Ammonia, Nitrogen oxides (NO<sub>x</sub>), Nitrogen oxide can react with water vapors to form corrosive nitric acid.

### 11 Toxicological information

#### 11.1 Information on toxicological effects: Toxicity data is available for this product

#### Acute toxicity:

Acute Dermal	LD 50	>2,000 mg/kg	Rabbit
Acute Oral	LD 50	>2,000 mg/kg	Rat

**Primary irritant effect:** Contact with this product can be irritating to exposed skin, eyes and respiratory system.

**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 data available

#### 12.2 Persistence and degradability: No data available

#### 12.3 Bioaccumulative potential: No data available

#### 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:

#### Component Information:

no other information available

### 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:** D002

**EU WASTE CODE:** To Be Established



# Safety Data Sheet

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

Printing Date: 12/10/2014

Revision: 12/10/2014

**Trade Name: E100-VB5™ - Epoxy Vapor Barrier – Part B**

## 14 Transport information

### 14.1 UN-Number

DOT: CAN: ADR: ADN: IMDG: IATA: NOT REGULATED

### 14.2 UN proper shipping name

ADR: DOT: CAN: ADR: ADN: IMDG: IATA: NOT REGULATED

### 14.3 Transport hazard class(es)

DOT: CAN: ADR: ADN: IMDG: IATA:

Class:

NOT REGULATED

Label:

### 14.4 Packing group

DOT: CAN: ADR: ADN: IMDG: IATA: NOT REGULATED

### 14.5 Environmental hazards:

Marine pollutant:

NOT REGULATED

### 14.6 Special precautions for user

Danger code (Kemler):  
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

Limited Quantities (LQ)  
Excepted Quantities (EQ)

No data available

Transport Category:

Tunnel restriction code:

### UN "Model Regulation":

No data available

## Safety Data Sheet

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

Printing Date: 12/10/2014

Revision: 12/10/2014

**Trade Name: E100-VB5™ - Epoxy Vapor Barrier – Part B**

### 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.

WHMIS Ingredient Disclosure List.

**WHIMS Trade Secrete Registry Number(s) 6160 Grant date 2/14/2007**

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### Hazard Statements:

H302: Harmful if swallowed

H318: Causes serious eye damage

#### Precautionary Statements:

Prevention: P264: Wash hands thoroughly after handling

P270: Do not eat, drink or smoke when using this product

Response: P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310+P330: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

Disposal: P501: Disposal of contents/container to be specified in accordance with State, Federal and

#### 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.

# Safety Data Sheet

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

Printing Date: 10/22/2014

Revision: 10/22/2014

**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  
1061 Transport Drive  
Valparaiso, IN 46383  
Toll Free: 888.323.4445  
Tel: (219) 465-7671  
Fax: (219) 531-0898  
[www.elitecrete.com](http://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: 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

# Safety Data Sheet

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

Printing Date: 10/22/2014

Revision: 10/22/2014

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

### 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:	<b>Bisphenol A based Epoxy Resin</b> 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	<b>1-CHLORO-2,3-EPOXYPROPANE</b> 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).

## Safety Data Sheet

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

Printing Date: 10/22/2014

Revision: 10/22/2014

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

### 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).

# Safety Data Sheet

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

Printing Date: 10/22/2014

Revision: 10/22/2014

**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 °C (45 -125 °F) 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

# Safety Data Sheet

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

Printing Date: 10/22/2014

Revision: 10/22/2014

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

### 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

## Safety Data Sheet

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

Printing Date: 10/22/2014

Revision: 10/22/2014

**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, CO<sub>2</sub>, 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.

##### Ecotoxicological 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



# Safety Data Sheet

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

Printing Date: 10/22/2014

Revision: 10/22/2014

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

## 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

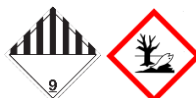
**ADR: ADN: IMDG: IATA:** Environmentally hazardous Substance Liquid, N.O.S.  
(Bisphenol A, epoxy resin)

### 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

## Safety Data Sheet

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

Printing Date: 10/22/2014

Revision: 10/22/2014

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

**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.

## Safety Data Sheet

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

Printing Date: 10/22/2014

Revision: 10/22/2014

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

### 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: 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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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.

# Safety Data Sheet

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

Printing Date: 10/21/2014

Revision: 10/21/2014

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

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

### 1.1 Product identifier

Trade Name: E100-VR1™ Part B

### 1.2 Article No.: E100-VR1™ Part B

### 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](http://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:

Reproductive Toxicity Category 2, H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

Acute Inhalation Toxicity Category 4, H322 Harmful if inhaled.

Acute Oral Toxicity Category 4, H302 Harmful if swallowed.

Skin Sensitization Category 1, H317 May cause allergic skin reaction

Skin Corrosion/Irritation Category 1B, H314 Causes severe skin burns and eye damage.

Acute Aquatic Toxicity Category 1, H400 Very Toxic to Aquatic life.

Chronic Aquatic Toxicity Category 1, H410 Very toxic to aquatic life with long lasting effects.

#### Classification according to Directive 1999/45/EC:



C; Corrosive

R34: causes Burns



Xn; harmful

Xi; Sensitizing

R43; May cause skin sensitization by skin contact.



N: Dangerous for the environment.

R50/53; Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Information concerning particular hazards for human and environment:

**Product Description:** This product is a pale straw – yellow colored liquid with mild ammonal odor.

**Health Hazards:** Harmful if swallowed; Corrosive, CNS depressant; Severe Eye Irritant, Severe Respiratory Irritant, May cause skin sensitization

**Flammability Hazards:** Not Applicable

**Reactivity Hazards:** None known.

### 2.2 Label elements

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

Hazard pictograms:



GHS05



GHS07



GHS08



GHS09

# Safety Data Sheet

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

Printing Date: 10/21/2014

Revision: 10/21/2014

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

**Signal Word:** Danger

**Hazard-determining components of labeling:**

Contains m-phenylenebis (methylamine)

4-nonylphenol, branched

3-aminomethyl-3,5,5-trimethylcyclohexylamine

**Hazard statements:**

H302+H332: harmful if swallowed or if inhaled.

H314: Causes severe skin burns and eye damage

H317: May cause allergic skin reaction.

H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child.

H410: Very toxic to aquatic life with long lasting effects.

**Precautionary statements**

P260: Do not breath dust/fume/gas/mist/vapors/spray

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:**

D2B – Toxic material causing other toxic effects.

E – Corrosive material

**WHMIS-symbols:**



**NFPA ratings (scale 0 – 4)**



Health = 3  
Fire = 1  
Reactivity = 0

**HMIS-ratings (scale 0 – 4)**

Health	3
Fire	1
Reactivity	0

Health = 3  
Fire = 1  
Reactivity = 0

### 2.3 Other hazards

No known

# Safety Data Sheet

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

Printing Date: 10/21/2014

Revision: 10/21/2014

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

## 3 Composition/information on ingredients

### 3.2 Mixture.

**Description:** Mixture of substances listed below with nonhazardous additives.

**Hazardous components:**

Identification #	Description	WT. %
CAS: 100-51-6 EINECS: 202-859-9	<b>Benzyl Alcohol</b> HAZARD CLASSIFICATION: RISK PHRASES:	30-50%
CAS: 2855-13-2 EINECS: 220-666-8	<b>Isophorondiamine</b> HAZARD CLASSIFICATION: [C] Corrosive RISK PHRASES:	15– 25%
CAS: 2579-20-6 EINECS: 219-941-5	<b>1,3,Cyclohexanedimethanamine</b> HAZARD CLASSIFICATION: [Xn] Harmful RISK PHRASES: R37, R43	12 – 30%
CAS: 98-54-4 EINECS: 202-679-0	<b>4-Tert-Butylphenol</b> HAZARD CLASSIFICATION: Repr Cat 3, [Xn] Harmful, [C] Corrosive, [N] RISK PHRASES: R22, R62, R63, R34, R50/53	5 – 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).

## 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 if irritation develops.

#### 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 is harmful if inhaled and may cause delayed lung injury. This material may cause irritation to the respiratory tract and skin and even burns. Product may cause an allergic skin reaction.

**Chronic:** Prolonged or repeated skin contact may cause dermatitis.

**Target Organs:**

**Acute:** Eye, Respiratory System, Skin

**Chronic:** Skin

**Hazards:** Pre-existing skin or respiratory system 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.

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### 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 flammable above flash point indicated above.

#### 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:** Contain spill if safe to do so. Prevent entry into drains, sewers, and other waterways. Soak up with a non-combustible absorbent material and place in an appropriate container for disposal. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

### 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 5° and 300C and avoid contact with skin and eyes. Do not store near acids. Ground all transfer equipment. Hold bulk storage under a nitrogen blanket. This product should not come in contact with copper or copper-bearing alloys. Containers of this product must be properly labeled. Nitrogen purging of containers is ideal and good practice.

#### 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:**

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### 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.

**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.



Safety goggles

#### 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:**

Clear – pale straw

**Odor:**

Slight amine

**Odor threshold:**

Not Available

**pH-value:**

11.5-12

#### Change in condition

**Melting point/Melting range:**

No data available

**Boiling point/Boiling range:**

No data available

**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 20 °C:**

<0.1 mmHg @ 25°C



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Density at 20°C:	1.04
Relative density:	8.66pounds per gallon @ 25°C
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

### 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, CO<sub>2</sub>, NO<sub>x</sub>, amines, ammonia and others.

#### 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:

##### LD/LC50 values relevant for classification:

##### 1477-55-0 m-phenylenebis(methylamine)

Oral LD50 1040 mg/kg (rat)

Inhalative LC504h 2,4 mg/l (rat)

##### 2855-13-2 3-aminomethyl-3,5 5-trimethylcyclohexylamine

Oral LD50 1030 mg/kg (rat)

**Primary irritant effect:** Contact with this product can be irritating to exposed skin, eyes and respiratory system.

**Sensitization:** This product is considered a skin sensitizer. Also can be a sensitizer thru inhalation by prolonged exposure

##### Additional toxicological information:

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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:

Harmful

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on the mouth and throat and to the danger of perforation of the esophagus and stomach.

**Sensitization:** Sensitization is possible by inhalation and/or dermal contact.

**Repeated dose toxicity:** Repeated exposures may result in skin and /or respiratory sensitivity.

## 12 Ecological information

### 12.1 Toxicity

**Aquatic 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 evidence is currently available on this product's effects on plants or animals.

**Ecotoxicological effects:**

**Remark:**

**Additional ecological information:** No data available

**General notes:**

**Component Information:**

nonyl phenol CAS# 25154-52-3

Acute Fish Toxicity 96 hr LC50 0.13 mg/l fathead minnow (*Pimephales promelas*)

48 hr EC50 0.19 mg/l *Daphnia Magna*

Harmful to aquatic organisms. May cause long term damage to environment

## 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:** D002

**EU WASTE CODE:** To Be Established

## 14 Transport information

### 14.1 UN-Number

**DOT: CAN: ADR: ADN: IMDG: UN2735**

**IATA:**

### 14.2 UN proper shipping name

**DOT: CAN: ADN: IMDG: IATA: Amines, Liquid, Corrosive, N.O.S. Contains : (ISOPHRONEDIAMINE)**

**ADR: 2735 Amines, Liquid, Corrosive, N.O.S. Contains: (ISOPHRONEDIAMINE)**

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## 14.3 Transport hazard class(es)

DOT: CAN :IMDG; IATA: ADN:

Class:

Class 8 Corrosive substances

Label:



## ADR:

Class:

Class 8 (C7) Corrosive substances

Label



## 14.4 Packing group

DOT, ADR, IMDG, IATA: TGD

PG II

## 14.5 Environmental hazards:

Marine pollutant:

YES

Special marking (ADR)



## 14.6 Special precautions for user

Danger code (Kemler):

Warning corrosive substances

EMS Number:

80

Segregation groups:

F-A,S-B

Alkalies

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

Not applicable

## Transport/Additional information

### ADR

Limited Quantities (LQ)

Excepted Quantities (EQ)

5L

Code E1

Maximum net quantity per inner packaging 30ml

Maximum net quantity per outer packaging 1000 ml

Transport Category:

3

Tunnel restriction code:

E

UN "Model Regulation":

UN2735 Amines, Liquid, Corrosive, N.O.S. (Contains (ISOPHRONEDIAMINE))

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### 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.

**Chemicals known to cause reproductive toxicity for males or females:** None of the ingredients listed

**Chemicals known to cause development toxicity:**

None of the ingredients listed

**Carcinogenic categories:**

**EPA, IARC, TLV, NIOSH-Ca, OSHA-Ca, :**

None of the ingredients 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.

**Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients listed.

**Canadian Ingredient Disclosure list (limit 1%)**

1477-55-0 m-phenylenebis(methylamine)

2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine

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

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### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### Hazard statements:

- H361: Suspected of damaging fertility or the unborn child.
- H302 Harmful if swallowed.
- H332: Harmful inhaled.
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H400: Vary toxic to aquatic life.
- H401: Very toxic to aquatic life with long lasting effects.

#### Precautionary statements

- P260: Do not breath dust/fume/gas/mist/vapors/spray
- 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<sub>2</sub>, 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.

#### 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.