

Safety Data Sheet

Section 1 – Chemical Product and Company Identification

1.1 Product identifier:

Product Name: CE-211 Part A
Product Code: CE211A
Effective Date: 12/7/2013
Revision Date: 12/13/2018

1.2 Recommended use and restrictions on use:

Product Use: Epoxy Resin
Restrictions: Not available

1.3 Name, address, and telephone number of the chemical supplier:

TriStar Plastics Corp
23655 Via Del Rio Ste E
Yorba Linda, CA 92887-4533
714-279-9660

1.4 Emergency telephone number:

24 Hr. Emergency CHEMTREC # 1-800-424-9300

Section 2 – Hazards Identification

2.1 Classification according to 29 CFR §1910.1200 (d):

Classification: Flammable liquid - Category 4
Skin corrosion/irritation - Category 2
Eye damage/irritation - Category 2A
Skin sensitization - Category 1
Germ cell mutagenicity - Category 2
Carcinogenicity - Category 2
Specific target organ toxicity - single exposure - Category 2
Specific target organ toxicity - repeat exposure - Category 1

2.2 Label elements according to 29 CFR §1910.1200 (f):**Hazard Symbols:**

Signal Words: Danger

Hazard Statements: Combustible liquid.
Causes skin irritation.

Causes serious eye irritation.
 May cause an allergic skin reaction.
 Suspected of causing genetic defects.
 Suspected of causing cancer.
 May cause damage to organs (eyes).
 Causes damage to organs through prolonged or repeated exposure (skin, respiratory tract).

Precautionary Statements:

Prevention: Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Use personal protective equipment as required.
 Wear protective gloves.
 Wear eye or face protection.
 Keep away from flames and hot surfaces. - No smoking.
 Do not breathe vapor.
 Do not eat, drink or smoke when using this product.
 Wash hands thoroughly after handling.
 Contaminated work clothing should not be allowed out of the workplace.

Response: Get medical attention if you feel unwell.
 IF exposed or if you feel unwell: Call a POISON CENTER or physician.

IF ON SKIN: Wash with plenty of soap and water.
 Take off contaminated clothing.
 Wash contaminated clothing before reuse.
 If skin irritation or rash occurs: Get medical attention.

IF IN EYES: Rinse cautiously with water for several minutes.
 Remove contact lenses, if present and easy to do. Continue rinsing.
 If eye irritation persists: Get medical attention.

Storage: Store locked up.
 Store in a well-ventilated place. Keep cool.

Disposal: Dispose of contents in accordance with all local, regional, national and international regulations.

2.3 Hazards not otherwise classified in the classification process:

None known

2.4 Ingredients (Present at $\geq 1\%$) of unknown toxicity:

None

Section 3 – Composition/Information on Ingredients

3.1.1 Hazardous ingredients(s)

Chemical Name	CAS NO.	% (by wt.)
Epoxy Resin (Diglycidyl Ether of Bis-Phenol A)	25068-38-6	50.0 – 75.0 %
Oxirane, 2-(butoxymethyl)-	2426-08-6	5.0 – 10.0 %

3.1.2 Non-hazardous ingredient(s)

Remaining components are non-hazardous and/or present at amounts below reportable limits.

3.2 Trade secrets (if applicable):

* Designates a specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4 – First Aid Measures

4.1 Description of first aid measures

Eyes: Immediately flush eyes for at least 15 minutes with running water. Hold eyelids apart to ensure rinsing of entire eye surface and lids with water. Remove contact lenses, if present and easy to do. If eye irritation persists, get medical advice/attention.

Skin: Remove contaminated clothing. Wipe off excess material from exposed area. Flush exposed area with water. Wash area with soap and water. Continue to rinse for at least 10 minutes. If skin irritation or rash occurs, get medical attention. Do not reuse clothing until clean. Contaminated leather articles including shoes cannot be cleaned and should be discarded.

Inhalation: Move victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if victim feels unwell. If victim is unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as collar, tie belt or waistband.

Ingestion: Wash mouth out with water. If victim is conscious, give small quantities of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, keep victim's head low so that vomit does not enter the lungs. Call Poison Center or get medical attention immediately.

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

No data available

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

No data available

Section 5 – Fire-Fighting Measures

5.1 Suitable extinguishing media:

Use dry chemical, CO₂, water spray (fog) or foam. Do not use water jet.

5.2 Specific hazards arising from the product:

Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

5.3 Special protective equipment and precautions for fire-fighters:

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6 – Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

No action should be taken involving any personal risk or by personnel without suitable training. Evacuate

surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.2 Methods and materials for containment and cleaning up:

Small spill: Stop leak if it is possible to do without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of waste with a licensed waste disposal contractor.

Large spill: Stop leak if it is possible to do without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Section 7 – Handling and Storage

7.1 Precautions for safe handling:

Put on appropriate personal protective equipment (see section 8 of SDS). Individuals with a history of skin sensitization should not be employed in any process in which this product is used. Do not get in eyes, on skin or on clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material. Keep container tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities:

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10 of SDS) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8 – Exposure Controls/Personal Protection

8.1 Exposure Limits:

OSHA PEL

Chemical Name

CAS NO.

OSHA (ACGIH) TLV

Epoxy Resin (Diglycidyl Ether of Bis-Phenol A)

25068-38-6

Not Established

Oxirane, 2-(butoxymethyl)-

2426-08-6

3 ppm TWA

8.2 Engineering Controls:

Ventilation:

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

8.3 Personal Protective Equipment:

Eye Protection:	Wear splash resistant safety goggles.
Skin Protection:	Wear impervious gloves and other clothing to prevent contact.
Respirators:	Organic vapor respirator if adequate ventilation is not present. (National Institute for Occupational Safety and Health (NIOSH) approved for organic vapors recommended.)
Hygienic Practices:	Wash hands before eating, smoking or using toilet facilities. Do not smoke in any chemical handling and storage areas. Food or beverages should not be consumed near where this product is stored. Remove and wash contaminated clothing before reuse. Ensure that eyewash stations and safety showers are close to the workstation location.

 Section 9 – Physical and Chemical Properties

Appearance	Liquid
Color	Black/Brown
Odor	Not Established
Odor Threshold	Not Established
pH	Not Established
Melting Point/Freezing Point	Not Established
Boiling Point	Not Established
Flash Point	163.4°F (73°C)
Evaporation Rate	Not Established
Upper/Lower flammability or explosive limits	Not Established
Vapor Pressure	~400 Pa @ 77°F (25°C)
Vapor Density	4.5 [Air = 1]
Relative Density	
Specific Gravity	1.51
Bulk Density (lbs./gal)	12.61
Solubility	Not Established
Partition Coefficient; n-octanol/water	Not Established
Auto-ignition temperature	Not Established
Viscosity	~ 50,000 cps

Note: Physical data presented above are typical values and should not be construed as a specification.

 Section 10 – Stability and Reactivity

10.1 Reactivity:	Stable under normal conditions.
10.2 Chemical Stability:	Product is stable.
10.3 Possibility of Hazardous Reactions:	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to Avoid:	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
10.5 Incompatible Materials:	Reactive or incompatible with the following materials: aliphatic amines, strong oxidizing agents, strong acids.
10.6 Hazardous Decomposition Products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

10.7 Other Hazards:

Reacts with considerable heat release with some curing agents.

Heating this substance above 300 deg. F in the presence of air may cause slow oxidative decomposition; above 500 deg. F polymerization may occur. Some combinations of resins and curing agents can produce exothermic reactions which in large masses can cause runaway polymerization and charring of the reactants. Fumes and vapors from the thermal and chemical decompositions vary widely in composition and toxicity.

Section 11 – Toxicological Information

11.1 Information on the likely routes of exposure:

Not Available

11.2 Symptoms related to the physical, chemical and toxicological characteristics:

Eye Contact: Pain or irritation, watering, redness

Inhalation: No specific data

Skin Contact: Irritation, redness

Ingestion: No specific data

11.3 Delayed and immediate effects and also chronic effects from short and long term exposure:**Short term exposure:**

Eye Contact: Causes serious eye irritation.

Inhalation: No known significant effects or critical hazards.

Skin Contact: Causes skin irritation. May cause an allergic skin reaction.

Ingestion: Irritating to mouth, throat and stomach.

Long term exposure: Not Available

Chronic effects:

General: Causes damage to organs through prolonged or repeated exposure: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity Suspected of causing genetic defects.

11.4 Numerical Measure of toxicity (Acute toxicity estimates)**Acute Toxicity Data:**

Epoxy Resin (Diglycidyl Ether of Bis-Phenol A)

LD50 Oral Rat 11,400 mg/kg

LD50 Dermal Rat 2,000 mg/kg

Oxirane, 2-(butoxymethyl)-

LD50 Oral Rat 1,660 mg/kg

LD50 Dermal Rat > 2,150 mg/kg

11.5 Carcinogenicity:

Not Available

Section 12 – Ecological Information

12.1 Ecotoxicity:	Not Available
12.2 Persistence and Degradability:	Not Available
12.3 Bioaccumulative Potential:	Not Available
12.4 Mobility in Soil:	Not Available
12.5 Other Adverse Effects:	Not Available

Section 13 – Disposal Considerations

13.1 Information on waste and methods of disposal

Dispose of contents in accordance with all local, regional, national and international regulations.

Section 14 – Transportation Information

14.1 Transportation information

Land Transportation (DOT):	Not Regulated in Non-Bulk Containers (119 gallons or less)
Sea Transportation (IMDG):	Not Regulated in Non-Bulk Containers
Air Transportation (IATA):	Not Regulated in Non-Bulk Containers

14.2 Transportation in bulk according to Annex II of Marpol 73/78 and the IBC Code:

This product is not intended to be transported in bulk containers.

14.3 Special precautions for transportation:

No data available

Section 15 – Regulatory Information

15.1 Safety, health and environmental regulations specific for the product in question.

This regulatory information is not intended to be comprehensive. Other regulations may apply to this material. To determine applicability or effects of any law or regulation with respect to the product, user should seek legal advice or consult with the appropriate government agency.

United States Federal Regulations:**US EPA CERCLA Hazardous Substances (40 CFR 302):**

Not Evaluated

SARA Section 311/312 Hazard Categories:

Not Evaluated

US EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):

Not Evaluated

US EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III

Section 313 Toxic Chemicals (40 CFR 372.65) – Supplier Notification Required:

None above de minimis concentration

State Right-To-Know Information:

For details of your regulatory requirements you should contact the appropriate agency in your state.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:

Not Evaluated

California Prop. 65: This product contains the chemicals listed below, which the State of California has found to cause cancer, birth defects or reproductive harm.

Oxirane, 2-(butoxymethyl)-	(reproduction)
Oxirane, 2,2'-[oxybis(methylene)]bis-	(reproduction)
Oxirane, 2-(phenoxymethyl)-	(cancer)
Oxirane, 2-(chloromethyl)-	(cancer; reproduction)
Ethylbenzene	(cancer)
Benzene	(cancer, reproduction)
Toluene	(reproduction)

Section 16 – Other Information

16.1 Date of preparation or last revision:

Company: TriStar Plastics
Rev Date: 12/13/2018
Rev By: GSP/BN

Reason for Change:

This revision updates SDS formatting according to OSHA Hazard Communications Standard (HCS) promulgated on March 20, 2012.

16.2 Additional information:

HMIS Ratings:

Health: 2*
Flammability: 1
Physical Hazard: 0

The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein. To determine applicability or effects of any law or regulation with respect to the product, user should seek legal advice or consult with the appropriate government agency.