1. Product and Company Identification

Product Code: 720-B
Product Name: 720 Cove Base Hardener - Part B
Trade Name: 720 Cove Base Hardener - Part B

Manufacturer Information

Company Name: Epoxy Systems, Inc.
20774 W Pennsylvania Ave.
Dunnellon, FL 34431

Phone Number: +1 (352) 489-1666
Emergency Contact: PERS (USA) (800) 633 8253
Alternate Emergency Contact: PERS (International) +1 (801) 629 0667

2. Hazards Identification

GHS Classification | Placard | Key word | GHS hazard phrase
--- | --- | --- | ---
Skin Corrosion/Irritation, Category 1A | Corrosive | Danger | Causes severe skin burns and eye damage
Serious Eye Damage/Eye Irritation, Category 1 | Corrosive | Danger | Causes serious eye damage
Acute Toxicity: Skin, Category 4 | Exclamation point | Warning | Harmful in contact with skin
Acute Toxicity: Inhalation, Category 4 | Exclamation point | Warning | Harmful if inhaled
Acute Toxicity: Oral, Category 4 | Exclamation point | Warning | Harmful if swallowed

GHS Hazard Phrases

H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.
H332 - Harmful if inhaled.
H302 - Harmful if swallowed.

GHS Precaution Phrases

P262 - Do not get in eyes, on skin, or on clothing.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P273 - Avoid release to the environment.

GHS Response Phrases

P302+350 - IF ON SKIN: Gently wash with plenty of soap and water. P361 - Remove/Take off immediately all contaminated clothing. P363 - Wash contaminated clothing before reuse.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P311 - Call a POISON CENTER or doctor/physician.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P313 - Get medical advice/attention.
GHS Storage and Disposal Phrases

Potential Health Effects (Acute and Chronic)

Inhalation

Vapors are extremely irritating and corrosive. Irritating to the nose, throat and respiratory tract.

Skin Contact

Harmful in contact with skin. Can cause chemical burn.

Eye Contact

Corrosive/irritation to eyes. Causes eye burns.

Ingestion

Harmful if swallowed. This product may produce corrosive damage to the gastrointestinal tract if it is swallowed. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract.

Recommended Exposure Limits

Not established.

OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Poly(oxy(methyl-1,2-ethanediyl)</td>
<td>9046-10-0</td>
<td>60 - 80 %</td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>111-40-0</td>
<td>15 - 25 %</td>
</tr>
<tr>
<td>2,4-Pentanediol, 2-Methyl-</td>
<td>107-41-5</td>
<td>1.0 - 10 %</td>
</tr>
<tr>
<td>4,4'-Isopropylidenediphenol</td>
<td>80-05-7</td>
<td>1.0 - 10 %</td>
</tr>
<tr>
<td>Bisphenol-a based epoxy resin</td>
<td>25068-38-6</td>
<td>1.0 - 10 %</td>
</tr>
</tbody>
</table>

4. First Aid Measures

In Case of Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If experiencing respiratory symptoms: Get medical attention immediately.

In Case of Skin Contact

In case of contact, immediately wash skin with soap and copious amounts of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops or persists.

In Case of Eye Contact

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Get medical attention immediately.

In Case of Ingestion

If swallowed, wash out mouth with water provided person is conscious. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Get medical attention immediately.

Signs and Symptoms Of Exposure

Eyes: Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Skin: Can cause severe skin burns. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Inhalation: Vapors are irritating to the respiratory system, may cause throat pain and cough.
5. Fire Fighting Measures

Flash Pt: > 200.00 F  Method Used: Pensky-Marten Closed Cup
Explosive Limits: LEL: NE  UEL: NE
Autoignition Pt: No data available.

Fire Fighting Instructions
Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Flammable Properties and Hazards
Combustible material: may burn but does not ignite readily.

Hazardous Combustion Products
In a fire, product may produce the following: Carbon monoxide, Carbon dioxide, Fire may produce irritating, corrosive and/or toxic gases.

Suitable Extinguishing Media
Dry chemical, CO2, water spray or regular foam.

Unsuitable Extinguishing Media
Do not use a direct water stream, which may spread fire.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled
PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL.
Absorb with sand or vermiculite and place in closed containers for disposal. Ventilate the area.

Protective Precautions, Protective Equipment and Emergency Procedures
Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves. Where splashing is possible, full chemically resistant protective clothing, and boots are required.

Environmental Precautions
Prevent entry into waterways, sewers, basements or confined areas.

7. Handling and Storage

Hazard Label Information:
Avoid contact with skin and eyes.  Do not get on skin and clothing.  Avoid inhalation of vapor or mist.

Precautions To Be Taken in Handling
Provide adequate ventilation. Do not breathe vapor. Do not get in eyes, on skin or on clothing.

Precautions To Be Taken in Storing
Store away from: Acids, Oxidizers, ketones.

Other Precautions
Wash thoroughly after handling.

8. Exposure Controls/Personal Protection

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>OSHA PEL</th>
<th>ACGIH TWA</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. *Poly(oxy(methyl-1,2-ethanediyl)</td>
<td>9046-10-0</td>
<td>No data.</td>
<td>No data. TLV:</td>
<td>No data.</td>
</tr>
<tr>
<td>2. Diethylenetriamine</td>
<td>111-40-0</td>
<td>No data.</td>
<td>1 ppm TLV:</td>
<td>No data.</td>
</tr>
<tr>
<td>3. 2,4-Pentanediol, 2-Methyl-</td>
<td>107-41-5</td>
<td>No data.</td>
<td>25 ppm</td>
<td>CEIL: 121 mg/m3</td>
</tr>
<tr>
<td>4. 4,4'-Isopropylidenediphenol</td>
<td>80-05-7</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td>5. Bisphenol-a based epoxy resin</td>
<td>25068-38-6</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
</tbody>
</table>

Protective Equipment Summary - Hazard Label Information:
Neoprene gloves  Safety glasses, or goggles.  Impervious clothing.  Chemical resistant boots
Respiratory Equipment (Specify Type)
Use local exhaust ventilation to maintain airborne concentrations below the TLV, or if values are unknown. Suitable respiratory equipment should be used in cases of insufficient ventilation or where operational procedures demand it. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Eye Protection
Safety glasses, or goggles.

Protective Gloves
Chemical resistant gloves.

Other Protective Clothing
Impervious clothing. Where splashing is possible, full chemically resistant protective clothing, safety glasses or face shield and boots are required.

Engineering Controls (Ventilation etc.)
Good general ventilation should be sufficient to control airborne levels. Safety shower and eye bath.

Work/Hygienic/Maintenance Practices
Wash contaminated clothing before reuse. Discard contaminated shoes. Wash thoroughly after handling.

Environmental Exposure Controls
Avoid runoff into storm sewers and ditches which lead to waterways.

<table>
<thead>
<tr>
<th>Physical and Chemical Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical States:   [ ] Gas     [ X ] Liquid     [ ] Solid</td>
</tr>
<tr>
<td>Melting Point:     NE</td>
</tr>
<tr>
<td>Boiling Point:     NE</td>
</tr>
<tr>
<td>Decomposition Temperature:     NE</td>
</tr>
<tr>
<td>Autoignition Pt:   No data.</td>
</tr>
<tr>
<td>Flash Pt:          &gt; 200.00 F</td>
</tr>
<tr>
<td>Method Used:       Pensky-Marten Closed Cup</td>
</tr>
<tr>
<td>Explosive Limits:  LEL:  NE        UEL:   NE</td>
</tr>
<tr>
<td>Specific Gravity (Water = 1):  ~ .963</td>
</tr>
<tr>
<td>Density:           ~ 8.03 LB/GL</td>
</tr>
<tr>
<td>Vapor Pressure (vs. Air or mm Hg):     NE</td>
</tr>
<tr>
<td>Vapor Density (vs. Air = 1):     NE</td>
</tr>
<tr>
<td>Evaporation Rate:     NE</td>
</tr>
<tr>
<td>Solubility in Water:  NE</td>
</tr>
<tr>
<td>Percent Volatile:     N.D.</td>
</tr>
<tr>
<td>VOC / Volume:        NE</td>
</tr>
<tr>
<td>HAP / Volume:        NP</td>
</tr>
<tr>
<td>Saturated Vapor Concentration:    NE</td>
</tr>
</tbody>
</table>

Appearance and Odor
10. Stability and Reactivity

Stability: Unstable [ ] Stable [ X ]

Reactivity
Avoid: acids, alkalis, oxidizing agents.

Conditions To Avoid - Instability
Extreme temperatures.

Incompatibility - Materials To Avoid
Strong oxidizing agents, acids, ketones.

Hazardous Decomposition Or Byproducts
Fire may produce irritating, corrosive and/or toxic gases.

Hazardous decomposition products formed under fire conditions.
Carbon monoxide, Carbon dioxide, Nitrogen oxides.

Possibility of Hazardous Polymerization:
Will occur [ ] Will not occur [ X ]

11. Toxicological Information

Toxicological Information
May cause sensitization by skin contact.

Chronic Toxicological Effects
Skin sensitization.

Irritation or Corrosion
Corrosive! Damages skin and eyes.

Symptoms related to Toxicological Characteristics
Skin: Contact with substance may cause severe burns to skin. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
Eyes: Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Permanent eye damage including blindness could result.
Inhalation: Inhalation of vapors/fumes causes respiratory irritation with throat discomfort, coughing or difficulty breathing.

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>NTP</th>
<th>IARC</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Poly(oxy(methyl-1,2-ethanediyl))</td>
<td>9046-10-0</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>2. Diethylenetriamine</td>
<td>111-40-0</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
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<td>3. 2,4-Pentanediol, 2-Methyl-</td>
<td>107-41-5</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>4. 4,4'-Isopropylidenediphenol</td>
<td>80-05-7</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>5. Bisphenol-a based epoxy resin</td>
<td>25068-38-6</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

12. Ecological Information

General Ecological Information
Avoid release to the environment. Do not empty into drains. May be hazardous to the environment if released in large quantities.

Results of PBT and vPvB assessment
No data available.

Persistence and Degradability
Not readily biodegradable.
Bioaccumulative Potential
No data available.

Mobility in Soil
not reported, unknown.

13. Disposal Considerations

Waste Disposal Method
Incorporate into licensed treatment, storage or disposal facility.

14. Transport Information

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name
Amines, Liquid, Corrosive n.o.s. (Modified Polyamine)

DOT Hazard Class:
8

DOT Hazard Label:
CORROSIVE

UN/NA Number:
UN2735

Packing Group:
III

Precautionary Label
Corrosive! Damages skin and eyes. Vapors may be harmful to the respiratory tract. May be harmful if swallowed.

AIR TRANSPORT (ICAO/IATA)

ICAO/IATA Shipping Name
Amines, Liquid, Corrosive n.o.s. (Modified Polyamine)

UN Number:
2735

Hazard Class:
8 - CORROSIVE

Packing Group:
III

MARINE TRANSPORT (IMDG/IMO)

IMDG/IMO Shipping Name
Amines, Liquid, Corrosive n.o.s. (Modified Polyamine)

UN Number: Hazard
2735

Class: Packing
8 - CORROSIVE

Group: IMDG EMS
III

Number: Marine
FA,SB

Pollutant:
No

15. Regulatory Information

US EPA SARA Title III

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>Sec.302 (EHS)</th>
<th>Sec.304 RQ</th>
<th>Sec.313 (TRI)</th>
<th>Sec.110</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Poly(oxy(methyl-1,2-ethanediyl)</td>
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<td>No</td>
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<td>25068-38-6</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Regulatory Information
SARA Section 311/312: Acute Health Hazard.

16. Other Information

CA=CIRCA NA=NOT AVAILABLE NE=NOT ESTABLISHED NR=NOT REGULATED NP= NOT APPLICABLE PR=PROPERTY TS=TRADE SECRET ?=UNKNOWN.
Company Policy or Disclaimer

The information contained in this MSDS is taken from sources believed to be accurate as of the date hereof; however, Epoxy Systems, Inc. makes no expressed or implied warranty in respect to the accuracy of the information or the suitability of the recommendations, and assumes no liabilities to any user thereof.

Revision Date: 08/30/2015