1. Product Identification

Product name: General Purpose Epoxy Resin
SDS Number: 0100A00
Product type: Epoxy polymer mixture.
Recommended use of the chemical and restrictions on use: Directed at, but not limited to, the coating, bonding, and reinforcing of wood and fiber composites.
Restrictions: None known.
Manufacturer/Supplier information
  Company name: SYSTEM THREE RESINS, INC.
  Address: 8517 Commerce Place Dr NE
            Lacey, WA 98516
            United States
  Telephone: 1-253-333-8118
  Website: www.systemthree.com
  Email: support@systemthree.com
  Emergency Contact

CHEMTEL (U.S. and CANADA) 1-800-704-9215
CHEMTEL (Outside the U.S.) – Call Collect accepted +1-360-256-7365

2. Hazard(s) Identification

Classification of substance or mixture/Signal Word
  DANGER.
  Skin Corrosion/Irritation - Category 2
  Serious Eye Damage/Eye Irritation - Category 2
  Skin Sensitizer – Category 1
  Specific Target Organ Toxicity (Single Exposure) [Respiratory tract irritation] – Category 3

GHS Label Elements
Hazards Pictograms

Hazard Statements/Classification of substance or mixture
  H315 Causes skin irritation.
  H317 May cause an allergic skin reaction.
  H319 Causes serious eye irritation.
  H335 May cause respiratory irritation.

Precautionary statements
  Precautionary Statements
    Prevention
      P201 Obtain special instructions before use.
      P261 Avoid breathing vapors.
      P264 Wash hands thoroughly after handling.
      P271 Use only outdoors or in a well-ventilated area.
      P272 Contaminated work clothing should not be allowed out of the workplace.
      P280 Wear protective gloves. Wear eye or face protection.
Response

P304 + 340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P302+352 IF ON SKIN: Wash with soap and water.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. P308 + P313 If exposed or concerned: Get medical attention.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage

P401 Store above 32 °F / 0 °C
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Disposal

P501 Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified (HNOC)

None Available.

3. Composition/Information On Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Content (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diglycidyl Ether of Bisphenol A</td>
<td>25068-38-6</td>
<td>60 – 70 %</td>
</tr>
<tr>
<td>Alkyl Glycidyl Ether</td>
<td>68609-97-2</td>
<td>15 – 20%</td>
</tr>
<tr>
<td>Alkyl Glycidyl Ether</td>
<td>74398-71-3</td>
<td>1 – 10%</td>
</tr>
<tr>
<td>Diglycidyl Ether of Bisphenol F</td>
<td>28064-14-4</td>
<td>1 – 10%</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.

4. First-Aid Measures

Skin contact

Remove contaminated clothing and shoes and wipe excess off skin. Flush skin with water. Follow by washing in soap and water. If irritation occurs, seek medical attention. Do not reuse clothing until cleaned. Contaminated leather articles (shoes) cannot be decontaminated and should be destroyed.

Eye contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Seek medical attention.

Ingestion

Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Following exposure or if feeling unwell. Never give anything by mouth to an unconscious person. If unconscious, place in a recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a color, tie, belt or waistband.

Inhalation

Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments

No specific treatment.
### 5. Fire-Fighting Measures

| Suitable extinguishing media | Alcohol-resistant foam, dry chemical, water fog or carbon dioxide (CO2). |
| Unsuitable extinguishing media | None known. |
| Specific hazards arising from the chemical | In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated must be contained and prevented from being discharged to any waterway, sewer or drain. |
| Hazardous decomposition products | Decomposition products may include the following materials: Carbon dioxide, Carbon monoxide |
| Special protective actions 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. |
| Special protective equipment for fire-fighters | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |
| Further information | Do not allow run-off from firefighting to enter drains or water courses. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |

### 6. Accidental Release Measures

| Personal precautions | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Wear proper protective clothing, gloves and eye/face protection. |
| Emergency procedures | If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. |
| Methods and materials for containment/cleanup | Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. |
| Environmental precautions | 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). |

### 7. Handling and Storage

| Precautions for safe handling | Put on appropriate personal protective equipment. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid contact with skin and eyes. 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, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. When using, do not eat, drink or smoke. 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.

Precautions/Recommendations for safe/proper storage
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 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.

8. Exposure Controls/Personal Protection

Occupational Exposure Limits
None established.

Appropriate engineering controls
Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls
Use appropriate containment to avoid environmental contamination. Do not allow spill to enter sewers or waterways.

Individual protection measures/Personal protective equipment

Eye/face protection
Splash-proof goggles or safety spectacles with side shields are recommended. Always wear eye protection when sanding cured epoxy resins to avoid dust in eyes.

Hand protection
Always wear impervious gloves: butyl rubber, nitrile rubber, Neoprene, PVC disposable gloves,

Skin protection
Wear clean, body-covering clothing to avoid skin contact.

Respiratory protection
Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Special instructions for protection and hygiene
Discard contaminated leather articles. Remove contaminated clothing. Wash at the end of each work shift and before eating smoking or using the toilet. Provide readily accessible eye wash stations and safety showers.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical family</td>
<td>Epoxy Resin</td>
</tr>
<tr>
<td>Appearance</td>
<td>Pourable liquid</td>
</tr>
<tr>
<td>Physical State</td>
<td>Epoxy polymer mixture</td>
</tr>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Water clear</td>
</tr>
<tr>
<td>Odor</td>
<td>Little or no odor</td>
</tr>
<tr>
<td>Density (Specific Gravity)</td>
<td>9.5-9.7 lb/gal (1.1-1.2)</td>
</tr>
<tr>
<td>Viscosity</td>
<td>600-750 cps @ 25°C</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Data not available</td>
</tr>
</tbody>
</table>
Initial boiling point and boiling range: Data not available
Flash point: >300°F, Pensky-Martens Closed Cup
Evaporation rate: Slower than ether
Flammability (solid, gas): Data not available
Upper/lower flammability limit (by volume)
  Upper flammability limit (by volume): N/A
  Lower flammability limit (by volume): N/A
Material VOC: None
Vapor density: Heavier than air
Relative density: Not determined
Solubility in water: Negligible, in water
Partition coefficient: n-octanol/water: Data not available
Auto-ignition temperature: 300°C (572.00°F)
Decomposition temperature: Not available

10. Stability and Reactivity

Reactivity: Stable.
Chemical Stability: Stable under normal conditions.
Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid: Epoxy resins and epoxy resin hardeners react with each other producing heat. They should not be mixed with each other under uncontrolled conditions or in large mass as the ensuing exotherm may result in heat and smoke, resulting in hazardous decomposition products.
Incompatible materials: Reactive or incompatible with the following materials:
  Strong oxidizing agents
  Lewis acids
  Mineral acids
Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Other hazards: None known.

11. Toxicological Information

Acute Health Hazard (components)
No comprehensive data (ingestion, inhalation, dermal) on mixture (product).

<table>
<thead>
<tr>
<th>Component</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diglycidyl Ether of Bisphenol A</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>11,400 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rat</td>
<td>2,000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Diglycidyl Ether of Bisphenol F</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>&gt;2,000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rat</td>
<td>&gt;2,000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Alkyl Glycidyl Ether</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>17,100 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>
### LD50 Oral

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Oral</th>
<th>Species</th>
<th>Test</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkyl Glycidyl Ether</td>
<td>&gt;5,000 mg/kg</td>
<td>Rat</td>
<td>Skin</td>
<td>-</td>
</tr>
</tbody>
</table>

### LD50 Dermal

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Dermal</th>
<th>Species</th>
<th>Test</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkyl Glycidyl Ether</td>
<td>&gt;2,000 mg/kg</td>
<td>Rabbit</td>
<td>Skin</td>
<td>-</td>
</tr>
</tbody>
</table>

### Irritation/Corrosion (components)

<table>
<thead>
<tr>
<th>Component</th>
<th>Result</th>
<th>Species</th>
<th>Test</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diglycidyl Ether of Bisphenol A</td>
<td>Moderate to severe irritation</td>
<td>Rabbit</td>
<td>Skin</td>
<td>4 h</td>
</tr>
<tr>
<td></td>
<td>Mild irritation</td>
<td>Rabbit</td>
<td>Eye</td>
<td>24 h</td>
</tr>
<tr>
<td>Diglycidyl Ether of Bisphenol F</td>
<td>Mild irritant</td>
<td>Rabbit</td>
<td>Skin</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Mild irritant</td>
<td>Rabbit</td>
<td>Eye</td>
<td>-</td>
</tr>
<tr>
<td>Alkyl Glycidyl Ether</td>
<td>Moderate irritant</td>
<td>Rabbit</td>
<td>Skin</td>
<td>24 h</td>
</tr>
</tbody>
</table>

### Sensitization

No information on product itself.

### Mutagenicity

No information on product itself.

### Carcinogenicity

No information on product itself.

### Reproductive Toxicity

No information on product itself.

### Teratogenicity

No information on product itself.

### Specific target organ toxicity (single exposure)

<table>
<thead>
<tr>
<th>Component</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diglycidyl Ether of Bisphenol A</td>
<td>Category 3</td>
<td></td>
<td>Respiratory tract irritation</td>
</tr>
<tr>
<td>Diglycidyl Ether of Bisphenol F</td>
<td>Category 3</td>
<td></td>
<td>Respiratory tract irritation</td>
</tr>
<tr>
<td>Alkyl Glycidyl Ether</td>
<td>Category 3</td>
<td></td>
<td>Respiratory tract irritation</td>
</tr>
</tbody>
</table>

### Specific target organ toxicity (repeated exposure)

No information on product itself.

### Aspiration hazard

No information on product itself.

### Potential acute health effects

**Eye Contact**
- Causes serious eye irritation.

**Inhalation**
- May cause respiratory irritation.

**Skin Contact**
- Causes skin irritation. May cause an allergic skin reaction.

**Ingestion**
- Irritating to mouth, throat and stomach.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye Contact**
- Adverse symptoms may include the following:
  - Pain
  - Watering
  - Redness

**Inhalation**
- Adverse symptoms may include the following:
  - Respiratory tract irritation
  - Coughing

**Skin Contact**
- Adverse symptoms may include the following:
  - Irritation
  - Redness

**Ingestion**
- No specific data.
Delayed and immediate effects and also chronic effects from short and long term exposure

Potential chronic health effects

General
Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity
No known significant effects or critical hazards.

Mutagenicity
No known significant effects or critical hazards.

Teratogenicity
No known significant effects or critical hazards.

Developmental effects
No known significant effects or critical hazards.

Fertility effects
No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates (ATEmix) Not available.

12. Ecological Information

Ecotoxicity
No information on product itself.

<table>
<thead>
<tr>
<th>Component</th>
<th>Test</th>
<th>Species</th>
<th>Result</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diglycidyl Ether of Bisphenol A</td>
<td>Acute LC50</td>
<td>Fish</td>
<td>1.3 mg/l</td>
<td>96 h</td>
</tr>
<tr>
<td></td>
<td>Acute LC50</td>
<td>Daphnia</td>
<td>2.1 mg/l</td>
<td>48 h</td>
</tr>
<tr>
<td>Diglycidyl Ether of Bisphenol F</td>
<td>Acute LC50</td>
<td>Fish</td>
<td>1.5 mg/l</td>
<td>96 h</td>
</tr>
<tr>
<td></td>
<td>Acute LC50</td>
<td>Daphnia</td>
<td>1.7 mg/l</td>
<td>48 h</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC</td>
<td>Daphnia</td>
<td>0.3 mg/l</td>
<td>21 d</td>
</tr>
<tr>
<td>Alkyl Glycidyl Ether</td>
<td>Acute LC50</td>
<td>Fish</td>
<td>1.8 g/l</td>
<td>96 h</td>
</tr>
<tr>
<td></td>
<td>Acute EC50</td>
<td>Daphnia</td>
<td>7.2 mg/l</td>
<td>48 h</td>
</tr>
<tr>
<td></td>
<td>Acute EC50</td>
<td>Algae</td>
<td>844 mg/l</td>
<td>72 h</td>
</tr>
</tbody>
</table>

Persistence and degradability
No information on product itself.

Bioaccumulative Potential
No information on product itself.

<table>
<thead>
<tr>
<th>Component</th>
<th>LogPow</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diglycidyl Ether of Bisphenol A</td>
<td>2.64 – 3.78</td>
<td>3 – 31 31.00</td>
<td>Low</td>
</tr>
<tr>
<td>Diglycidyl Ether of Bisphenol F</td>
<td>3</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>Alkyl Glycidyl Ether</td>
<td>3.77</td>
<td>160 – 263 160.00</td>
<td>low</td>
</tr>
</tbody>
</table>

Mobility in Soil

Soil/water partition coefficient (KOC) No information on product itself.

Other adverse effects
No known significant effects or critical hazards.

13. Disposal Considerations

Waste from residues/ unused products
Product should not be allowed to enter drains, water courses or the soil; dispose of this material and its containers in a safe way. Contact supplier if guidance is required.
Contaminated packaging
Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

<table>
<thead>
<tr>
<th>Regulatory information</th>
<th>UN/NA number</th>
<th>Proper Shipping Name</th>
<th>Classes/*PG</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td></td>
<td>Not regulated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TDG</td>
<td></td>
<td>Not regulated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMO/IMDG</td>
<td>UN3082</td>
<td>Environmentally Hazardous Substance, Liquid, n.o.s. (Bisphenol-A Epichlorohydrin Resin)</td>
<td>Class 9 III</td>
<td></td>
</tr>
<tr>
<td>IATA</td>
<td>UN3082</td>
<td>Environmentally Hazardous Substance, Liquid, n.o.s. (Bisphenol-A Epichlorohydrin Resin)</td>
<td>Class 9 III</td>
<td></td>
</tr>
</tbody>
</table>

*PG: Packing group

Special precautions for user: Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15. Regulatory Information

UNITED STATES

U.S. Federal Regulations

- United States – TSCA 12(b) – Chemical export notification: None Required.
- United States – TSCA 5(a)2 – Final significant new use rules: Not Listed.
- United States – TSCA 5(a)2 – Proposed significant new use rules: Not Listed.
- United States – TSCA 5(e) – Substance consent order: Not listed.

California Prop. 65

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer. WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>Cancer</th>
<th>Reproductive</th>
<th>No significant risk level</th>
<th>Maximum acceptable dosage level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxirane, 2-(phenoxy)methyl-</td>
<td>Yes</td>
<td>No</td>
<td>5 µg/day</td>
<td>No</td>
</tr>
<tr>
<td>Oxirane, 2-(chloromethyl)-</td>
<td>Yes</td>
<td>Yes</td>
<td>9 µg/day</td>
<td>No</td>
</tr>
</tbody>
</table>

EPA SARA 302 Extremely Hazardous Substances
None required.

EPA SARA 302/304/311/312 Hazardous Chemicals
Acute Health Hazard.

United States inventory (TSCA 8b)
All components are listed or exempted.

CANADA

WHMIS (Canada)
Class D-2B: Material causing other toxic effects (Toxic).

Canadian NPRI
None required.

CEPA Toxic substances
None required.

INTERNATIONAL REGULATIONS

Australia inventory (AICS): All components are listed or exempted.
Canada inventory: All components are listed or exempted.
Korea inventory: All components are listed or exempted.
Japan inventory: All components are listed or exempted.
China inventory (IECSC): All components are listed or exempted.
New Zealand inventory (NZIoC): All components are listed or exempted.
Philippines inventory (PICCS): All components are listed or exempted.
Taiwan inventory (CSNN): All components are listed or exempted.

16. Other Information, Including Date of Preparation or Last Revision

HMIS Rating

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Date of Preparation       January 7, 2020
Date of Last Revision      September 19, 2019
Revision #                  4.0
More Information            1-253-333-8118
Prepared by                 System Three Resins Inc.

The information contained herein is based on the data available to us and is believed to be correct. However, System Three Resins, Inc. makes no warranty, expressed or implied, regarding the accuracy of these data or the results to be obtained from the use thereof. System Three assumes no responsibility for injury from the use of the product described herein.