1. Product Identification

Product name: Clear Coat Hardener, Part B
SDS Number: 0600800
Product type: Curing Agent
Recommended use of the chemical and restrictions on use: Directed at, but not limited to, the coating and laminating of fiber composites and wood.
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: CHEMT (U.S. and CANADA) 1-800-704-9215
CHEMT (Outside the U.S.) – Call Collect accepted +1-360-256-7365

2. Hazard(s) Identification

Classification of substance or mixture/Signal Word:
- DANGER
  - Acute Toxicity (oral) – Category 4
  - Skin Corrosion/Irritation – Category 1
  - Serious Eye Damage/Eye Irritation – Category 1
  - Skin Sensitization – Category 1
  - Specific Target Organ Toxicity (Single Exposure) [Respiratory tract irritation] – Category 3
  - Aquatic Hazard (Acute) – Category 4
  - Aquatic Hazard (Long-term) – Category 4

GHS Label Elements
Pictograms:

Hazard Statements/Classification of substance or mixture:
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H335 May cause respiratory irritation.
- H413 May cause long lasting harmful effects to aquatic life.

Precautionary statements:
- Precautionary Statements
  - Prevention:
    - P260 Do not breathe dusts or mists.
    - P261 Avoid breathing vapors.
    - P264 Wash hands thoroughly after handling.
    - P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves. Wear eye or face protection.

Response
P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310 Immediately call a POISON CENTER/doctor.
P303+361+353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P363 Wash contaminated clothing before reuse.

Storage
P401 Store at room temperature in a well-ventilated area.
P405 Store locked up.

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>Cycloaliphatic Amine Blend</td>
<td>Proprietary</td>
<td>50 – 60%</td>
</tr>
<tr>
<td>Polyoxypropylenediamine</td>
<td>9046-10-0</td>
<td>20 – 25%</td>
</tr>
<tr>
<td>1,3-cyclohexanediethanimine adduct</td>
<td>Proprietary</td>
<td>10 – 15%</td>
</tr>
<tr>
<td>Alkylphenol Blend</td>
<td>Proprietary</td>
<td>10 – 15%</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
Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Flush immediately with copious amounts of water. Initiate and maintain continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Cover wound with sterile dressing.

Eye contact
Hold eyelids apart, initiate and maintain gently and continuous irrigation until the patient receives medical attention. If medical care is not promptly available, continue to irrigate for one hour.

Ingestion
Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victim’s head to the side.

Inhalation
Move to fresh air.

Indication of immediate medical attention and special treatment needed, if necessary
Notes to physician
Treat symptomatically.

Specific treatments
No specific treatments.

5. Fire-Fighting Measures

Suitable extinguishing media
Alcohol-resistant foam, carbon dioxide (CO₂), dry chemical, water fog.

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. May generate ammonia gas. May generate toxic nitrogen oxide gases. Use of water may result in the formation of very toxic aqueous solutions.

### Hazardous decomposition products

Decomposition products may include the following materials:
- Carbon dioxide
- Carbon monoxide
- Nitrogen oxides

### 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 material is spilled, avoid contact with material. Persons not wearing appropriate protective equipment should leave the area of the spill until cleanup is complete.

#### 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

Avoid contact with skin and eyes. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Use personal protective equipment. When using, do not eat, drink, or smoke.

#### Precautions/Recommendations for safe/proper storage

Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep from freezing.

### 8. Exposure Controls/Personal Protection

#### Occupational Exposure Limits

Not 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
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. 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
Wear gloves at all times when handling product, avoid direct contact with skin. When finished using product, dispose of gloves properly and wash hands with warm, soapy water.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical family</td>
<td>Amine curing agent</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear liquid</td>
</tr>
<tr>
<td>Physical State</td>
<td></td>
</tr>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Ammoniacal</td>
</tr>
<tr>
<td>Density (Specific Gravity)</td>
<td>8.28 lb/gal (0.9 – 1.0)</td>
</tr>
<tr>
<td>Viscosity</td>
<td>50 – 100 CPS @ 77°F (25°C)</td>
</tr>
<tr>
<td>pH</td>
<td>Alkaline</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Slower than ether</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available</td>
</tr>
<tr>
<td>Upper/lower flammability limit (by volume)</td>
<td>Not available</td>
</tr>
<tr>
<td>Material VOC</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not available</td>
</tr>
</tbody>
</table>
10. Stability and Reactivity

Reactivity: Stable under normal conditions.

Chemical Stability: The product is stable.

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 a large mass as the ensuing exotherm may result in heat and smoke.

Incompatible materials: Strong oxidizing agents and mineral acids.

Hazardous decomposition products: Oxides of carbon, nitrogen.

Other hazards: None known.

11. Toxicological Information

**Acute Health Hazard (components)**

<table>
<thead>
<tr>
<th>Component</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyoxypolylenediamine</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>2,885 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>2,980 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LC50 Inhalation</td>
<td>Rat</td>
<td>&gt;0.74 mg/l</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>Polyoxypolylenediamine</td>
<td>Skin – Corrosive</td>
<td>Rabbit</td>
<td>Similar to OECD Guideline 404</td>
<td>-</td>
</tr>
<tr>
<td>Eye – Risk of serious damage to eyes</td>
<td>Rabbit</td>
<td>Similar to OECD Guideline 405</td>
<td>-</td>
<td></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)**

No information on product itself.

**Specific target organ toxicity (repeated exposure)**

No information on product itself.

**Aspiration hazard**

No information on product itself.

**Potential acute health effects**

No comprehensive data (ingestion, inhalation, dermal) on mixture (product).
Eye Contact
Causes serious eye damage.

Inhalation
May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin Contact
Causes severe burns. May cause an allergic skin reaction.

Ingestion
Harmful if swallowed. May cause burns to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

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

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

Skin Contact
Adverse symptoms may include the following:
- Pain or irritation
- Redness
- Blistering may occur

Ingestion
Adverse symptoms may include the following:
- Stomach pains

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 significant effects or critical hazards.

Mutagenicity
No significant effects or critical hazards.

Teratogenicity
No significant effects or critical hazards.

Developmental effects
No significant effects or critical hazards.

Fertility effects
No significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates (ATEmix)

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>1529.0 mg/kg</td>
</tr>
<tr>
<td>Dermal</td>
<td>3506.1 mg/kg</td>
</tr>
<tr>
<td>Inhalation (vapors)</td>
<td>N/A</td>
</tr>
</tbody>
</table>

12. Ecological Information

Ecotoxicity
No data is available on the product itself.

<table>
<thead>
<tr>
<th>Component</th>
<th>Test</th>
<th>Endpoint</th>
<th>Exposure</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyoxypropylenediamine</td>
<td>OECD 203 Fish, Acute Toxicity Test</td>
<td>Acute EC50</td>
<td>96 hr Semi- static</td>
<td>Fish</td>
<td>&gt;15 mg/l</td>
</tr>
<tr>
<td></td>
<td>OECD 203 Fish, Acute Toxicity Test</td>
<td>Acute LC50</td>
<td>96 hr Static</td>
<td>Fish</td>
<td>772.14 mg/l</td>
</tr>
<tr>
<td>Component</td>
<td>Test</td>
<td>Period</td>
<td>Result</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>----------------------------------------------</td>
<td>---------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polyoxypropylenediamine</td>
<td>OECD 301B Ready Biodegradability – CO2 Evolution Test</td>
<td>28 days</td>
<td>0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Persistence and degradability**

No data is available on the product itself.

**Bioaccumulative Potential**

No data is available on the product itself.

<table>
<thead>
<tr>
<th>Component</th>
<th>LogPow</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyoxypropylenediamine</td>
<td>1.34</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

**Mobility in Soil**

- **Soil/water partition coefficient (KOC)**
  No data is available on the 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.

**International Transport Regulations**

- **DOT**
  - UN/NA number: UN2735
  - Proper Shipping Name: Polyamines, liquid, corrosive, n.o.s. (Polyoxypropylenediamine, 1,3-cyclohexanediethanamine)
  - Classes/*PG: Class 8 II

- **TDG**
  - UN/NA number: UN2735
  - Proper Shipping Name: Polyamines, liquid, corrosive, n.o.s. (Polyoxypropylenediamine, 1,3-cyclohexanediethanamine)
  - Classes/*PG: Class 8 II

- **IMO/IMDG**
  - UN/NA number: UN2735
  - Proper Shipping Name: Polyamines, liquid, corrosive, n.o.s. (Polyoxypropylenediamine, 1,3-cyclohexanediethanamine)
  - Classes/*PG: Class 8 II

- **IATA**
  - UN/NA number: UN2735
  - Proper Shipping Name: Polyamines, liquid, corrosive, n.o.s. (Polyoxypropylenediamine, 1,3-cyclohexanediethanamine)
  - Classes/*PG: Class 8 II

*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.

Clean Air Act – Ozone Depleting Substances (ODS)

This product does not contain nor is it manufactured with ozone depleting substances.

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)

None.

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

EPA SARA 302 Extremely Hazardous Substances

None known.

EPA SARA 302/304/311/312 Hazardous Chemicals

Acute Health Hazard

SARA 313

Form R – Reporting requirements

None.

CERCLA Hazardous substances

None.

United States inventory (TSCA 8b)

All components are listed or exempted.

CANADA

WHMIS (Canada)

Class D-2B: Material causing other toxic effects (Toxic).
Class E: Corrosive material.

Canadian NPRI

CEPA Toxic substances

None required.

None required.

INTERNATIONAL REGULATIONS

International Lists

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

Health 3

Flammability 1

Physical Hazard 0

Date of Preparation

January 8, 2020

Date of Last Revision

September 12, 2019

Revision #

5.0

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.