

1. Product Identification

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|---------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Product Name | M-BALM Part A |
| SDS Number | 1500A00 |
| Product Type | Epoxy Polymer Mixture |
| Recommended use of the chemical and restrictions on use | Rot Repair Resin Component |
| Restrictions | None known. |
| Manufacture/Supplier Information | |
| Company Name | SYSTEM THREE RESINS, INC. |
| Address | 3500 W. Valley Hwy North, Suite 105 Auburn, WA 98001-2436 |
| Telephone | (253) 333-8118 |
| Website | www.systemthree.com |
| Email | Support-08@systemthree.com |
| Emergency Contact | CHEMTREC (U.S. and CANADA) (800) 424-9300 CHEMTREC (Outside the U.S.) (703) 527-0585 |

2. Hazard(s) Identification

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|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Classification | SKIN CORROSION/IRRITATION - Category 2, H315 SENSITIZATION, SKIN - Category 1, H317 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1, H318 ACUTE TOXICITY, INHALATION – Category 4, H332 SENSITIZATION, RESPIRATORY - Category 1, H334 GERM CELL MUTAGENICITY – Category 2, H341 REPRODUCTIVE TOXICITY – Category 2, H361 SPECIFIC TARGET ORGAN TOXICITY, SINGLE EXPOSURE – Category 1, H371 SPECIFIC TARGET ORGAN TOXICITY, REPEATED EXPOSURE – Category 2, H373 ACUTE AQUATIC TOXICITY – Category 3, H402 CHRONIC AQUATIC TOXICITY – Category 3, H412 |
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Label Elements

Symbol



Signal Word

WARNING

Hazard Statements

H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H401: Toxic to aquatic life.
H411: Toxic to aquatic life with long lasting effect.

2. Hazard(s) Identification

Precautionary Statements

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| Prevention | P261: Avoid breathing fumes/vapors. P264: Wash hands and exposed skin thoroughly after handling. P272: Contaminated work clothes should not be allowed out of the workplace. P273: Avoid release to the environment. P280: Wear eye protection/face protection. Wear protective gloves. |
| Response | P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332 + P313: If skin irritation occurs: Get medical advice/attention. P337 + P313: If eye irritation persists: Get medical attention/advice. P362: Take off contaminated clothing and wash before reuse. P391: Collect spillage. |
| Storage | P405: Store locked up. |
| Disposal | P501: Disposal of contents/container to be specified in accordance with regulations. |
| General | Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. |
| Hazards Not Otherwise Classified (HNOC) | Severe respiratory irritant. Moderate skin irritant. Severe eye irritant. May cause sensitization by skin contact. 0% of this mixture consists of ingredients of unknown acute toxicity. |
| OSHA/HCS Status | This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). |

3. Composition/Information on Ingredients

| Component | % | CAS Number |
|-----------------------------------------|--------|------------|
| Diglycidyl Ether of Bisphenol A (DGEBA) | 60-70* | 25068-38-6 |
| Alkylglycidyl Ether | 20-30* | 17557-23-2 |
| Benzyl Alcohol | 10-15* | 100-51-6 |

*=Various

Any concentration shown as a range is due to batch variation in the petroleum source used.

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

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| Skin Contact | Get medical attention immediately. Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands. Safety shower should be located in immediate work area. |
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4. First Aid Measures

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| Eye Contact | Get medical attention immediately. 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 15 minutes. Suitable emergency eye wash facility should be available in work area. |
| Ingestion | Get medical attention immediately. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |
| Inhalation | Get medical attention immediately. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |

Most Important Symptoms/Effects, Acute and Delayed

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|--------------|---------------------------------------------------------------------|
| Skin Contact | Causes severe skin irritation. May cause an allergic skin reaction. |
| Eye Contact | Causes serious eye irritation. |
| Ingestion | Irritating to mouth, throat and stomach. |
| Inhalation | May cause respiratory irritation. |

Over-exposure Signs/Symptoms

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| Skin Contact | Adverse symptoms may include the following: Irritation Redness |
| Eye Contact | Adverse symptoms may include: Pain or irritation Watering Redness |
| Ingestion | No specific data. |
| Inhalation | Adverse symptoms may include the following: Respiratory tract irritation Coughing |

Indication of Immediate Medical Attention and Special Treatment Needed

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| Notes to Physician | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled or if extended exposure to eye and skin tissues have occurred. |
| Specific Treatments | No specific treatment. |
| Protection of First Responders | No action taken shall be taken involving any personal risk without suitable training. If it is suspected that gas or vapor is still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. |

See toxicological information (Section 11)

5. Fire Fighting Measures

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| Lower Explosive Limit (LEL) | N/A |
| Upper Explosive Limit (UEL) | N/A |

5. Fire Fighting Measures

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| Specific Hazards Arising From the Chemicals | In a fire or if heated, a pressure increase will occur and the container may burst. |
| Suitable Extinguishing Media | Alcohol-resistant foam, dry chemical, dry sand, limestone powder or carbon dioxide (CO ₂). |
| Unsuitable Extinguishing Media | Use of water may produce environmentally hazardous products. Do not allow run-off from the firefighting to enter drains or water courses. |
| Products of Combustion | Decomposition products may include carbon monoxide, carbon dioxide, aldehydes, acids and halogenated compounds. Burning produces noxious and toxic fumes. |
| Protection of Firefighters | 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. Fire-fighters should wear appropriate protection equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in a positive pressure mode. |

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

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| For Non-Emergency Personnel | 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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
| For Emergency Responders | If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel". |
| 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). |
| <u>Methods For Containment</u> | |
| Small Spill | Stop leak if without risk. Move containers from spill area. Absorb with an inert dry absorbent material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. Wash the spill area clean with water and detergent, observing environmental requirements. |
| Large Spill | 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 inert dry absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Wash the spill area clean with water and detergent, observing environmental requirements. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. |

7. Handling and Storage

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| Protective Measures | Put on appropriate personal protective equipment (see Section 8). Avoid exposure -- obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Avoid breathing vapor or mist. Do not swallow. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. |
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7. Handling and Storage

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| Protective Measures (cont.) | Empty containers retain product residue and can be hazardous. Do not reuse container. |
| General Occupational Hygiene | 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. |
| General Occupational Hygiene (cont.) | See Section 8 for additional information on hygiene measures. |
| Safe Storage Conditions | 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) and food and drink. 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:

| List | Components | CAS-No. | Type | Value |
|---------|----------------|----------|------|------------|
| ACGIH | None | | TLV | N/A |
| AIHA | Benzyl Alcohol | 100-51-6 | WEEL | 10 ppm TWA |
| OSHA Z1 | None | | PEL | N/A |

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| Engineering Controls | Use only with adequate ventilation. Use explosion-proof process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Provide readily accessible eye wash stations and safety showers. |
| 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. |

Individual Protection Measures

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| Hygiene Measures | Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Discard contaminated leather items. Ensure that eyewash stations and safety showers are close to the workstation location. |
| Eye/Face Protection | Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Recommended: chemical splash goggles. |
| <u>Skin Protection</u> | |
| Hand Protection | Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. |

8. Exposure Controls/Personal Protection

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|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hand Protection (cont.) | Recommended gloves: Neoprene PVC disposable Butyl-rubber Nitrile rubber |
| Body Protection | Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Long sleeve shirts and pants without cuffs are minimal recommended. |
| Other Skin Protection | Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| 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. |

9. Physical and Chemical Properties

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|-------------------------|-------------------|
| Physical State | Liquid |
| Color | Clear |
| Odor | Little to no odor |
| pH | Not available |
| Melting Point | Not applicable |
| Boiling Point | Not applicable |
| Specific Gravity | 1.1 – 1.3 |
| Solubility in Water | Negligible |
| Evaporation Rate | Slower than ether |
| Vapor Pressure | Not available |
| Vapor Density (Air = 1) | Heavier than air |
| VOC Content | None |
| Viscosity | 140 – 200 CPS |

10. Stability and Reactivity

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| Reactivity | No specific test data related to reactivity is available for this product or its ingredients. |
| Chemical Stability | Stable under normal conditions. |
| 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 exothermic reaction may produce heat, smoke and hazardous decomposition products. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. |
| Incompatible Materials | Strong oxidizing agents. Mineral and organic acids Sodium hypochlorite Reactive metals (e.g. sodium, calcium, zinc etc.). |
| Hazardous Decomposition Products | Under normal conditions of storage and use, hazardous decomposition products should not be produced. Toxic fumes may be evolved when product is burned. Decomposition products may include carbon oxides (CO, CO ₂), acids and aldehydes. |
| Possibility of Hazardous Reactions | Under normal conditions of storage and use, hazardous reactions will not occur. |

11. Toxicological Information

Information on Toxicological Effects

Acute Toxicity

| Component | CAS No | Result | Species | Dose | Exposure |
|---------------------------------|------------|--------------------------|------------|-----------------------------|----------|
| Benzyl Alcohol | 100-51-6 | LD50 Oral | Rat | 1620 mg/kg | - |
| Diglycidyl Ether of Bisphenol A | 25068-38-6 | LD50 Oral LD50 Dermal | Rat Rat | 11,400 mg/kg 2,000 mg/kg | - |
| Alkylglycidyl Ether | 17557-23-2 | LD50 Oral | Rat | 4,500 mg/kg | - |

Sensitization

| Component | CAS No | Test | Species | Result | Exposure |
|---------------------------------|------------|------|---------|-------------------------------|----------|
| Diglycidyl Ether of Bisphenol A | 25068-38-6 | Skin | Rabbit | Moderate to severe irritation | 4 h |
| | | Eye | | Mild irritation | 24 h |
| Benzyl Alcohol | 100-51-6 | Skin | Rabbit | No irritation | 24h |
| | 100-51-6 | Eye | Rabbit | Irritation | 24h |

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|----------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Carcinogenicity | No data is available for this product. |
| Reproductive Toxicity | In vitro tests showed mutagenic effects (Phenol). |
| Teratogenicity | No data is available for this product. |
| Specific Target Organ Toxicity (single exposure) | No data is available for this product. |
| Specific Target Organ Toxicity (repeated exposure) | No data is available for this product. |
| Aspiration Hazard | No data is available for this product. |
| Information on likely routes of exposure | No additional data is available for this product. |
| Additional Information | Benzyl Alcohol: Central nervous system depression. Liver irregularities based on human evidence. |

12. Ecological Information

Ecotoxicity

| Component | CAS No | Test | Species | Dose | Exposure |
|---------------------------------|------------|------|--------------------------------|----------|----------|
| Benzyl Alcohol | 100-51-6 | LC50 | Lepomis macrochirus (bluegill) | 10 mg/l | 96 h |
| | 100-51-6 | EC50 | Daphnia magna (water flea) | 55 mg/l | 24 h |
| Diglycidyl Ether of Bisphenol A | 25068-38-6 | LC50 | Fish | 1.3 mg/l | 96 h |
| | 25068-38-6 | LC50 | Daphnia Magna (water flea) | 2.1 mg/l | 48 h |

Persistence and Degradability

Biodegradability

Not data is available on the product itself.

12. Ecological Information

Bioaccumulative Potential

| Component | LogPow | BCF | Potential |
|---------------------------------|-------------|------|-----------|
| Diglycidal Ether of Bisphenol A | 2.64 – 3.78 | 3-31 | Low |

Mobility in Soil

Soil/water Partition Coefficient (Koc) Not available.

Other Adverse Effects No known significant effects or critical hazards.

13. Disposal Considerations

Other Adverse Effects

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport Information

| | DOT Classification | IMDG | IATA |
|--------------------------|--------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| UN Number | Not regulated | 3082 | 3082 |
| UN Proper Shipping Name | - | Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A Epichlorohydrin Resin) | Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A Epichlorohydrin Resin) |
| Transport Hazard Classes | - | 9 | 9 |
| Packing Group | - | III | III |
| Environmental Hazards | - | YES | YES |
| Additional Information | - | EmS: F-A S-F | ERG Code: 9L |

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

U.S. Federal Regulation

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

DSL Status

All components of this product are on the Canadian DSL list.

SARA 302

None.

SARA 311/312 Hazards

None.

SARA 313

None.

Massachusetts Right To Know Components

| Component | CAS-No. | Revision Date |
|----------------|----------|---------------|
| Benzyl Alcohol | 100-51-6 | 4/24/1993 |

15. Regulatory Information

New Jersey Right To Know Components

| Component | CAS-No. | Revision Date |
|------------------------------------------|------------|---------------|
| Alkylglycidyl Ether | 17557-23-2 | - |
| Benzyl Alcohol | 100-51-6 | 4/24/1993 |
| Diglycidyl Ether of Bisphenol A (DGEBCA) | 25068-38-6 | - |

Pennsylvania Right To Know Components

| Component | CAS-No. | Revision Date |
|------------------------------------------|------------|---------------|
| Alkylglycidyl Ether | 17557-23-2 | - |
| Benzyl Alcohol | 100-51-6 | 4/24/1993 |
| Diglycidyl Ether of Bisphenol A (DGEBCA) | 25068-38-6 | - |

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.

16. Other Information

HMIS Rating

Health

2

Flammability

1

Physical Hazard

0

History

Date of Printing 12/17/15

Date of Issue/Date of Revision 12/17/15

Date of Previous Issue None.

References

None.

Disclaimer

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