

# MATERIAL SAFETY DATA SHEET

**Anchor Seal, Inc.**

**AMINE CURING AGENT**

| <b>Section 1. Chemical Product and Company Identification</b>  |   |
|--|---|
| <b>Product name/ SY5233FR (1Y8)</b><br><b>Trade Name Epoxy Amine Curing Agent PART B</b><br><b>Manufacturer</b><br>ANCHOR SEAL, Inc<br>54 Great Republic Drive<br>Gloucester, MA 01930 | <b>IN CASE OF EMERGENCY:</b><br><br>INFOTRAC: 1-800-535-5053<br><br>INFORMATION: 1 800-669-5217 |
| <b>Date of Preparation:</b> =10/20/09  | <b>Replaces:</b> 9-24-09  |
| <b>Prepared By:</b> Peter E. Spinney   |   |

| <b>Section 2. Composition, Information on Ingredients</b> |              |                        |                      |
|---|--------------|------------------------|----------------------|
| <i>Component Information</i>                              |              | <i>Exposure Limits</i> |                      |
| <i>Chemical Name</i>                                      | <i>CAS#</i>  | <i>TLV(ppm)ACGIH</i>   | <i>OSHA PEL, TWA</i> |
| Proprietary Mixture                                       | Trade Secret | N/E                    | N/E                  |

| <b>Section 3. Hazards Identification</b>   |  |                                    |              |           |
|--|--|------------------------------------|--------------|-----------|
| CAUTION! May cause eye irritation. May cause skin irritation with prolonged contact. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Do not take internally. |  |                                    |              |           |
| <b>Potential Health Effects</b>  |  | <b>Primary Routes of Exposure:</b> |              |           |
| X Skin contact   | X Skin Absorption  | X Eye Contact                      | X Inhalation | Ingestion |
| <b>Routes of Exposure</b>  | <b>Symptoms</b>  |                                    |              |           |
| <b>Eyes</b>  | Contact with product may cause irritation, pain and transient edema.   |                                    |              |           |
| <b>Skin</b>  | Contact with product may cause irritation, itching and discomfort.   |                                    |              |           |
| <b>Inhalation</b>  | Inhalation of vapor may cause irritation to the respiratory tract with coughing and chest pain.                          |                                    |              |           |
| <b>Ingestion</b>   | Swallowing this material can cause gastrointestinal irritation, nausea and vomiting.                                     |                                    |              |           |
| <b>Effects of Chronic Overexposure</b>   | Prolonged or repeated exposure can cause sensitization resulting in itching, swelling or rashes on subsequent exposures. |                                    |              |           |
| <b>Carcinogenicity</b>   | OSHA: N/L  | IARC: N/L                          | NTP: N/L     |           |

| <b>Section 4. First Aid Measures</b> |  |
|--------------------------------------|--|
| <b>Eyes</b>                          | Immediately wash the eyes with large amounts of water for at least 15 minutes, occasionally lifting the lower and upper lids. Get medical attention immediately.                                     |
| <b>Skin</b>                          | Immediately wash the contaminated skin with soap and water. If this chemical penetrates the clothing, immediately remove the clothing, wash the skin with soap and water, and get medical attention. |
| <b>Inhalation</b>                    | Immediately move the exposed person to fresh air. If breathing is difficult, properly trained personnel may administer oxygen. Get medical if symptoms persist.                                      |
| <b>Ingestion</b>                     | If large quantities have been swallowed, DO NOT INDUCE VOMITING. If victim is conscious and alert, give 2 - 4 cups of lukewarm water. Get medical attention.   |

| <b>Section 5. Fire Fighting Measures</b> |  |
|--|--|
| <b>Extinguishing Media:</b>              |  |
| Water                                    | X Carbon Dioxide    X Dry Chemical    X Foam    Alcohol Foam |

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| <b>Flash Point</b>                           | >200°F SETA Flash    LEL: N/D    UEL: N/D   |
| <b>Flammability Classification OSHA/NFPA</b> | Flash Pt. N/A    Class    Liquid  |
| <b>Extinguishing Media</b>                   | Carbon dioxide, dry chemical, foam.   |
| <b>Unusual Fire and Explosions Hazards</b>   | Isolate fire area and deny unnecessary entry.<br>Fire fighters should wear positive-pressure self-contained breathing apparatus ( SCBA) and protective clothing.<br>Cool closed containers with WATER SPRAY to avoid explosion.<br>Heat from fire can generate vapor and decomposition products that may cause a health hazard. |

## ***Section 6. Accidental Release Measures***

ISOLATE AREA OF THE SPILL! Eliminate all ignition sources. Soak up small spills with inert solids such as vermiculite or other absorbent materials. Shovel into suitable disposal container. Persons not wearing protective equipment should be excluded from the area of spill until cleanup has been completed.

## ***Section 7. Handling & Storage***

Store material in a clean, cool, ventilated area away from all sources of ignition. Clean up spills at once. Keep container tightly closed when not in use. Always wear protective equipment. Wash hands and other exposed areas thoroughly after handling. Handle mixed resin and hardener in accordance with the potential hazard of the curing agent used. Provide appropriate ventilation/respiratory protection against nuisance dust during sanding/grinding of cured product.

## ***Section 8. Exposure Controls/Personal Exposure***

|                               |  |
|-------------------------------|--|
| <b>Eye Protection</b>         | Avoid splashing. Wear chemical-resistant safety goggles or face shield. Contact lenses must not be worn.   |
| <b>Skin Protection</b>        | Chemical resistant synthetic rubber (neoprene, nitrile) gloves and other protective clothing is recommended to prevent repeated or prolonged skin contact.   |
| <b>Respiratory Protection</b> | If personal exposure cannot be controlled below applicable limits by area ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in section 2. |
| <b>Ventilation</b>            | General area ventilation is acceptable if the exposure is maintained below applicable exposure limits. ( See Section 2) Local exhaust is recommended for confined areas. See 29 CFR 1910.146                             |
| <b>Other Precautions</b>      | Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.   |

## ***Section 9. Physical and Chemical Properties***

|   |                     |                                 |                          |
|---|---------------------|---------------------------------|--------------------------|
| <b>Percent Volatile Content by Volume (PBV) or Weight (PBW)</b> | N/A                 | <b>Specific Gravity (gm/cc)</b> | 0.96-0.98                |
| <b>VOC Content ( less water) Note 1</b>                         | N/A                 | <b>Weight per Gallon</b>        | 7.8                      |
| <b>Boiling Point</b>  | >200C               | <b>Evaporation Rate</b>         | N/A                      |
| <b>Vapor Pressure (mm Hg)</b>                                   | 1 mbar at 10C (50F) | <b>Solubility in Water</b>      | Total                    |
| <b>Vapor Density (Air=1)</b>                                    | >1                  | <b>Appearance and Odor</b>      | Clear liquid, amine odor |

## ***Section 10. Stability and Reactivity***

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|---|---|
| <b>Stability</b>                        | Stable  |
| <b>Conditions to Avoid</b>              | Protect from heat, sparks, flame and possible sources of ignition.  |
| <b>Incompatibility</b>                  | Avoid contact with strong acids and bases   |
| <b>Hazardous Decomposition Products</b> | Fumes produced when heated to decomposition may contain Carbon dioxide, carbon monoxide, aldehydes and other hazardous gases.   |
| <b>Hazardous Polymerization</b>         | Mixing large quantities of resin and hardener will generate significant heat. Uncontrolled cure conditions may char and decompose the resin generating unidentified toxic fumes and vapors. |

**Section 11. Toxicological Information Acute Toxicity** (see Section 3. for Exposure Symptoms)

| <i>Chemical Identity</i> | <i>ORAL LD 50</i> | <i>DERMAL LD 50</i> | <i>Inhalation LC 50</i> |
|--------------------------|-------------------|---------------------|-------------------------|
| Polyoxypropylenediamine  | 2.88 g/kg rat     | 2.98 g/kg rabbit    | N/D                     |
|                          |                   |                     |                         |

**Section 12. Ecological Information**

Material has not been tested for potential adverse effects to the environment.

**Section 13 Disposal Considerations**

RCRA: This product, if disposed as shipped, is not considered a hazardous waste as specified in 40 CFR 261. Dispose of in accordance with all applicable federal, state and local regulations.

**Section 14 Transportation Information**

This product if offered for shipment is regulated by US DOT 49 CFR Parts 171 - 180: Regulation of Hazardous Materials Transportation in Commerce.

|                             |   |
|-----------------------------|---|
| <b>Shipping Information</b> | Amines, Liquid, Corrosive, N.O.S. (Polyoxypropylenediamine) |
| <b>Classification</b>       | 8   |
| <b>Identification</b>       | UN2735  |
| <b>Packing Group</b>        | 111   |
| <b>Label</b>                | Corrosive   |

**Section 15. Regulatory Information**

*Regulations Governing Product:*

Inventory Status: United States (TSCA) - All ingredients are on the inventory or exempt from listing.

SARA TITLE III

|   |        |                   |                     |
|---|--------|-------------------|---------------------|
| EPCRA 311/312 Tier II Chemical Inventory Reporting: |        | Immediate (acute) |                     |
|   | Health | Flammability      | Chemical Reactivity |
| HMIS  | 3      | 1                 | 0                   |

*Regulations Governing Ingredients*

|                      |                         |                  |                     |                         |
|----------------------|-------------------------|------------------|---------------------|-------------------------|
| <i>Chemical Name</i> | <i>CAS #/ Category#</i> | <i>CERCLA RQ</i> | <i>EPCRA 313 RQ</i> | <i>EPCRA 302 RQ EHS</i> |
|----------------------|-------------------------|------------------|---------------------|-------------------------|

**Section 16 Other Information**

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## REFERENCES

CRC Press: Handbook of Chemical and Physical Constants by David R. Lide

Merck & Company: The Merck Index

Sigma-Aldrich Company: Aldrich Handbook of Fine Chemicals

Dictionary of Toxicology by Robert Lewis

US Department of Transportation, Research and Special Programs Administration: Hazardous Materials Table

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