SAFETY DATA SHEET

Anchor Seal, Inc.  EPOXY HARDENER

1. Identification

1.1 Product Name: SY6023W (Part B)
1.2 Material Uses: Component of an Epoxy System
Issue Date: 9/18/14
Supersedes 1/24/13
Reason for revision: New format
1.3 Manufacturer:
ANCHOR-SEAL, INC.
54 Great Republic Drive
Gloucester, MA 01930
Tel. 978-515-6004
Email: sales@anchorseal.com

1.4 In Case of Emergency: INFOTRAC: 1-800-535-5053
Outside the US and Canada, call 1-352-323-3500

2. Hazards Identification

2.1 OSHA/HCS status: This material is classified as Hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification: Corrosive, causes skin & eye burns. May be harmful in contact with skin or if swallowed. May cause sensitization by skin contact. May be harmful if swallowed. Aspiration hazard if swallowed- can enter lungs and cause damage. Dangerous for the environment. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Skin contact: Corrosive. May cause burns resulting in permanent damage. May cause skin sensitization or an allergic reaction which becomes evident on re-exposure to this material. May be absorbed through the skin.
Eye contact: Corrosive. May cause severe burns resulting in permanent damage. Risk of serious damage to the eyes.
Ingestion: Corrosive, may cause severe burns and permanent damage to mouth, throat and stomach. May be fatal if swallowed.
Inhalation: Corrosive. May cause severe burns resulting in permanent damage. May cause irritation of nose, throat and lungs with cough, difficulty breathing or shortness of breath; or pulmonary edema (fluid in the lungs) with cough, wheezing, abnormal lung sounds, possibly progressing to shortness of breath and bluish discoloration of the skin. Repeated inhalation may cause lung damage. May cause lung sensitization, an allergic reaction, which becomes evident on re-exposure to this material.
2.1 cont.
Classification according to EC No. 1272/2008 (CLP/GHS)

Hazard statements:

**Skin Irritation**

- H312  Harmful in contact with the skin.
- H314  Causes skin burns.
- H317  May cause an allergic skin reaction and sensitization.

**Eye Irritation**

- H314  Causes eye burns.
- H318  Causes serious eye damage.
- H319  Causes serious eye irritation.

**Inhalation**

- H332  Harmful if inhaled. Corrosive, may cause burns and permanent damage.
- H334  May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Oral Toxicity**

- H303, H305 May be harmful if swallowed. Aspiration hazard if swallowed.

**Aquatic**

- H413  May cause long lasting harmful effects to aquatic life.

H4 Classification according to Directive 67/548/EEC:

- Xi  Irritant R36/38, R43
- N  R51/53

2.2 Label Elements (EC 1272/2008)

Hazard pictograms:

![Signal Word: Warning](image1)
![Warning](image2)
![Danger](image3)

2.3 Precautionary statements:

- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P264 Wash thoroughly after handling.
- P273 Avoid release to the environment.
- P280 Wear eye protection / face protection, protective gloves & clothing.
- P284 In case of inadequate ventilation, wear respiratory protection.
- P302 + P352 **IF ON SKIN:** Wash immediately with plenty of soap and water.
- P333 + P313 If skin irritation or rash occurs: Get medical advice / attention.

See toxicological information (Section 11)

GENERAL INFORMATION: Read the entire SDS for a more thorough evaluation of the hazards.
SAFETY DATA SHEET

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3. Composition information

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS number</th>
</tr>
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<tbody>
<tr>
<td>Triethylenetetramine</td>
<td>112-24-3</td>
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</table>

Mixtures: Concentration of composition has been withheld as a Trade Secret

4. First Aid Measures

4.1 Eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of running tepid water for 15 minutes, occasionally lifting the upper and lower eyelids. If effects occur get medical attention as appropriate.

Skin contact: Wash immediately with warm soapy water. Get medical attention if irritation develops. Wash clothing or personal items that cannot be decontaminated.

Inhalation: P304, P340 Move exposed person to fresh air and keep comfortable for breathing.

If not breathing or if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen clothing such as collar, tie, belt or waistband.

Ingestion: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Notes to physician: No specific treatment. Treat symptomatically. Call Poison Control Center if large quantities have been ingested.

4.2 Symptoms of exposure:

Eye contact: Irritation and redness, pain.

Skin contact: Irritation, redness, itching.

Inhalation: Dizziness, difficulty breathing if fumes are highly concentrated.

Ingestion: No information.

Notes to physician: To the best of our knowledge, experiences about acute systemic health effects in human beings are not available. No specific antidote known. Symptomatic treatment. If necessary, administer activated charcoal (10-20g) and sodium sulfate (20g).

5. Fire-Fighting Measures

NFPA Flammable classification: Combustible liquid 111B

Flash point: >110°C

5.1 Extinguishing Media

Suitable: Water fog, carbon dioxide, foam, dry chemical.

Not Suitable: None

5.2 Special hazards: Combustion products may include: carbon oxides, nitrous gases and ammonia.

5.3 Special protective actions for fire fighters: Use protective fire fighting clothing and positive pressure self-contained breathing apparatus (SCBA) to protect against potential harmful and/or irritating fumes. Do not use high volume water jet as this may spread the area of the fire. Use water spray to cool unopened containers.

6. Accidental Release Measures

6.1 Personal precautions: Isolate area; keep unnecessary and unprotected personnel away from spill area. Avoid contact with skin, eyes and clothing. Use appropriate safety equipment. No health effects expected from the cleanup of this material if contact can be avoided.

6.2 Environmental precautions: Avoid disposal of spilled material and runoff and contact with soil, waterways, drains and sewers.

6.3 Methods for cleaning up: Contain and absorb large spills with an inert, non-flammable absorbent carrier (such as earth, sand or clay). Shovel into labeled open-top drums or plastic bags for further decontamination if necessary. Wash the spillage area clean with liquid decontaminant. (See section 13 for disposal considerations). Notify applicable government authorities if release is reportable.
7. Handling & Storage

7.1 Precautions for safe handling: Avoid personal contact with the product. Use only with adequate ventilation to ensure that the occupational exposure limit is not exceeded. Regularly monitor the efficiency of the ventilation system. Avoid the formation and breathing of aerosols, mists and vapors. (See section 8 Exposure control for details). Keep stocks of de-contaminant readily available.

7.2 Storage: Keep containers tightly closed and store in a cool, dry well ventilated area.

8. Exposure controls/personal protection

8.1 Exposure parameters: None established.

8.2 Engineering controls: Ventilation through local exhaust if appropriate.
Eye/face protection: Safety glasses, goggles, face mask as appropriate.
Skin & hand protection: Protective clothing as necessary to guard against product contact. PVC, neoprene or nitrile rubber gloves.
Respiratory protection: Not needed under normal use conditions under adequate ventilation.
Other protective equipment: Eye wash stations and emergency showers should be available. The type and degree of personal protective equipment will depend on the specific work operation.

8.3 Environmental exposure controls: None established.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties.
Appearance : Liquid
Color : Clear
Type of odor : Ammonia or amine
Vapor pressure : ca. 0.00 kPa (25°C)
Vapor density : 5 (air=1)
Boiling point : >200°C
Flash point : >100°C
pH : Alkaline
Auto ignition temperature : >300°C
Specific gravity : 0.98 grams / cc
Water solubility : Complete

10. Stability and Reactivity

10.1 Reactivity: Reacts with strong acids and strong oxidizing agents.

10.2 Stability: Stable at room temperature.

10.3 Hazardous polymerization: Will not occur by itself. Masses of more than one pound of product plus an epoxy resin will cause irreversible polymerization with considerable heat build up.

10.4 Conditions to avoid: Keep away from heat and sources of ignition. Do not smoke.

10.5 Incompatible materials: Copper, copper alloys, organic absorbents (sawdust) ketones.

10.6 Hazardous decomposition products: Uncontrolled exothermic reaction of epoxy resin releases carbon monoxide, carbon dioxide, nitrogen compounds and ammonia.
11. **Toxicological Information**

11.1 **Acute oral toxicity:** LD50 (rat): >2,000 mg/kg.
    
    **Acute dermal toxicity:** LD50 (rabbit) >800 mg/kg
    
    **Acute inhalation toxicity:** No data

    **Skin irritation:** Rabbit, corrosive, subcategory 1C
    
    **Eye irritation:** Rabbit, risk of serious damage to eyes.
    
    **Product sensitization:** Guinea pig, may cause sensitization by skin contact.

12. **Ecological Information**

12.1 **Toxicity:** No data

12.2 **Persistence and biodegradability:** Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

13. **Disposal Considerations**

13.1 **Waste treatment methods:** Do not dump into any sewers, on the ground, or into any body of water. Significant quantities of waste product residues should be processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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 requirements. Incineration is the preferred method of disposal.

    **Container disposal:** Drain container of all residual material prior to disposal.

14. **Transport Information**

14.1 **DOT Road/Rail:** Class 8 UN 2259 PG II Label: Corrosive

14.2 **Proper shipping name:** Triethylenetetramine

14.3 **Sea transport IMDG-Code:** Class 8 UN2259 PG II

14.4 **EmS F-A, S-B**

14.5 **Proper shipping name:** Triethylenetetramine

14.6 **Air Transport ICAO-TI/IATA-DGR:** Class 8 UN2259 PG II

14.7 **Proper shipping name:** Triethylenetetramine
15. Regulatory Information

15.1 Safety health and environmental regulations/legislation:

SARA Title III Section 311/312 (40CFR370): Acute health hazard.
SARA Title III Section 313 (40CFR372): No reportable components.
CERCLA Status (40CFR302): No reportable quantity components.
TSCA Inventory status: None listed.
OSHA/NTP/IARC Carcinogen Status: Not listed.
Chemicals known to the state of California to cause Cancer or reproductive toxicity: None
Pennsylvania (Worker and Community Right-to-Know Act): Hazardous Substances List and/or Environmental Hazardous Substance List and/or Special Hazardous Substance List: To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

16. Other Information

HMIS/NFPA rating: Health: 3 Fire: 1 Reactivity: 0
(Personal protective equipment selection is best assigned by the user after performing a hazard assessment on the product as it is to be used in the specific work process).