

SAFETY DATA SHEET

Anchor Seal, Inc.

EPOXY RESIN

1. Identification

1.1 Product Name: SY5820 (Part A)

1.2 Recommended Use: Adhesive, coating, casting, tooling, potting and encapsulation.

Issue Date: 8/25/14

Supersedes: 1/22/13

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: Irritant, Dangerous for the environment.

Skin contact: Prolonged or repeated exposure may cause skin irritation; may cause skin sensitization by skin contact.

Eye contact: May cause irritation; corneal injury is unlikely.

Ingestion: Single dose oral toxicity is considered to be very low; ingestion of small a amount is not expected to be harmful.

Inhalation: Over exposure to vapors is considered unlikely due to the physical properties of the material.

Classification according to EC No. 1272/2008 (CLP/GHS)

| | |
|----------------------------------|--------------------|
| Skin Irritation Cat. 2 | H315 |
| Skin Sensitization Cat. 1 | H317 |
| Eye Irritation Cat. 2 | H319 |
| Aquatic Chronic 2 | H411 |
| Xi | R36/38, R43 |
| N | R51/53 |

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2.2 Label Elements:

Hazard pictograms:



Signal word: Warning

Hazard statements:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

EUH 205 Contains epoxy constituents. May cause an allergic reaction.

2.3 Precautionary statements:

P264 Wash thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves / protective clothing / eye protection / face protection.

P302 + P352 **IF ON SKIN:** Wash with plenty of soap and water.

P333 + P313 If skin irritation or rash occurs: Get medical advice / attention.

Contains: Epoxy resin (reaction product: Bisphenol –A / Epichlorohydrin)

See toxicological information (Section 11)

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

3. Composition information

| | <u>Name</u> | <u>CAS number</u> | <u>EINECS No.</u> |
|--------------------|--|-------------------|-------------------|
| 3.1 Substances | Epoxy resin | 25068-38-6 | 500-033-5 |
| 3.2 Mixtures: | Concentration of composition has been withheld as a Trade Secret | | |
| 3.3 Classification | (per DSD Directive): Xi R36/38 R43; N R51/53 | | |

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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: Move exposed person to fresh air. If not breathing, 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.

5. Fire-Fighting Measures

NFPA Flammable classification: Combustible liquid III B

Flash point: >200C

5.1 Extinguishing Media

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

Not Suitable: None

5.2 Special hazards: Combustion products may include: carbon monoxide, carbon dioxide, nitrogen oxides, hydrocarbons and HCN.

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.

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 and 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 breathing 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.

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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, safety shoes.

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 | : Viscous liquid |
| Color | : Black |
| Type of odor | : Faint to slight epoxy odor |
| Vapor pressure | : 0.03 mbar @ 171°F (77°C) |
| Vapor density | : Heavier than air |
| Evaporation rate | : No data available |
| Boiling point | : >400°F |
| Melting point | : Not applicable |
| Auto ignition temperature | : Not applicable |
| Specific gravity | : 2.25 grams / cc |
| Water solubility | : Insoluble |
| pH | : No Data |

10. Stability and Reactivity

10.1 Reactivity: Reacts with acids, amines, bases and strong oxidizing agents._

10.2 Stability: Stable at room temperature. Upon prolonged storage the material may crystallize which is a reversible condition: crystallized material can be liquefied back by heating slowly to 50°C for 6-24 hours.

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

10.4 Conditions to avoid: Acids, bases, amines, strong oxidizing agents.

10.5 Incompatible materials: See conditions to avoid.

10.6 Hazardous decomposition products: Uncontrolled exothermic reaction of epoxy resin releases carbon monoxide, carbon dioxide and phenolics.

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11. Toxicological Information

11.1 Acute oral toxicity: LD50 (rat): >5,000 mg/kg.

Acute dermal toxicity: LD50 (rabbit) >2,000 mg/kg

Acute inhalation toxicity: The LC50 has not been determined.

12. Ecological Information

12.1 Toxicity (ecotoxicity effects) moderately toxic to aquatic organisms on an acute basis LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested.

12.2 Persistence and degradability: 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. This product is not defined or designated as a hazardous waste by RCRA 40CFR261.

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

14. Transport Information

14.1 DOT Bulk and Non-Bulk: Not regulated for ground transport

14.2 ADR, IMDG: Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A/epichlorohydrin epoxy resin)

14.3 Transport hazard class: 9 ID Number: UN3082 PG III

14.4 EMS Number: F-A, S-F Marine pollutant: Yes.

14.5 Special precautions for user: None available.

14.6 ICAO/IATA: Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A/epichlorohydrin epoxy resin)

Hazard class: 9 ID Number: UN3082 Packing Group: III

Cargo and Passenger packing instruction: 964

Marine Pollutant: Yes

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15. Regulatory Information

15.1 Safety health and environmental regulations/legislation:

OSHA Hazard Communication Standard: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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: Reported/included.

Canadian DSL Status: Reported/included.

Canadian WHMIS Classification: D2B.

OSHA/NTP/IARC Carcinogen Status: Not listed.

Chemicals known to the state of California to cause Cancer or reproductive toxicity: This product contains Epichlorohydrin CAS # 106-89-8 (trace amount).

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.

Risk phrases: R36/38 Irritating to the eyes and skin.

R43 May cause sensitization by skin contact.

R51/53 Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

Safety phrases: S3/7/9 Keep container tightly closed in a cool, well-ventilated place.

S24/25 Avoid contact with the skin and eyes.

S28 After contact with skin, wash immediately with plenty of soapy water.

S37/39 Wear suitable gloves and eye/face protection.

S61 Avoid release to the environment. Refer to special instructions/SDS.

Hazard symbols: Xi Irritant, N Dangerous for the environment.

16. Other Information

HMIS/NFPA rating: Health: 2 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).