

SAFETY DATA SHEET

Anchor Seal, Inc.

EPOXY HARDENER

1. Identification

1.1 Product Name: SY5233FR (2K35) (Part B)

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

Issue Date: 9/18/14

Supersedes: 4/24/13

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: DANGER! 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. May cause long lasting harmful effects to aquatic life.

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 burns resulting in permanent damage. Risk of serious damage to the eyes.

Ingestion: Corrosive. May cause severe and permanent damage to mouth, throat and stomach. Harmful if swallowed.

Inhalation: Corrosive. May cause 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.

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

2.2 Label Elements

Hazard pictograms:



Signal word: **Warning**



Warning



Danger

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.

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3. Composition Information

	<u>Name</u>	<u>CAS number</u>
3.1 Substances:	Polyoxypropylenediamine	9046-10-0
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.

5. Fire-Fighting Measures

NFPA Flammable classification: Combustible liquid IIIB

Flash point: >120C Pensky-Martens closed cup

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 vermiculite, 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.

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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 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.

Suitable materials: mild steel, stainless steel. Unsuitable: aluminum and copper.

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	: N/D
Vapor density	: >1 (air = 1)
Boiling point	: >200°C
Flash point	: >100C
pH	: Alkaline
Auto ignition temperature	: >300C
Specific gravity	: 0.95 grams / cc
Water solubility	: Complete

10. Stability and Reactivity

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

10.2 Stability: Stable.

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: Acids, ammonia, carbon oxides, aldehydes and ketones.

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

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11. Toxicological Information

11.1 Acute oral toxicity: LD50 (rat): >2800 mg/kg.

Acute dermal toxicity: LD50 (rabbit) >2,900 mg/kg

Acute inhalation toxicity: Irritating to respiratory system.

Skin irritation: Corrosive to the skin. Causes burns.

Eye irritation: Corrosive to eyes. Causes burns.

Product sensitization: Guinea pig, not sensitizing.

12. Ecological Information

12.1 Toxicity: LC50 Fish: >200 mg/l / 96 h.

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 2735 PG III Label: Corrosive

14.2 Proper shipping name: Amines, liquid, corrosive, n.o.s. (Polyoxypropylenediamine)

14.3 Sea transport IMDG-Code: Class 8 UN2735 PG III

14.4 EmS F-A, S-B

14.5 Proper shipping name: Amines, liquid, corrosive, n.o.s. (Polyoxypropylenediamine)

14.6 Air Transport ICAO-TI/IATA-DGR: Class 8 UN2735 PG III

14.7 Proper shipping name: Amines, liquid, corrosive, n.o.s. (Polyoxypropylenediamine)

Passenger & Cargo Aircraft Quantity limitation: 5L Packing instructions: 852

Cargo Aircraft Only: Quantity limitation: 60L Packing instructions: 820.

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15. Regulatory Information

15.1 Safety health and environmental regulations/legislation:

OSHA Hazard Communication Standard: Corrosive Material. 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: 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.

WHIMS (Canada) : Class E: Corrosive material.

CEPA (DSL) : All components are listed or exempted.

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).

Label Requirements: CAUSES EYE AND SKIN BURNS. CAUSES RESPIRATORY TRACT IRRITATION. MAY BE HARMFUL IF SWALLOWED. ASPIRATION HAZARD IF SWALLOWED CAN ENTER LUNGS AND CAUSE DAMAGE.