

SAFETY DATA SHEET

Anchor Seal, Inc.

EPOXY HARDENER

1. Identification

1.1 Product Name: SY4021 (Part B)

1.2 Recommended Use: Component of an Epoxy System. Adhesive, coating, encapsulation.

Issue Date: 9/15/14

Supersedes 3/8/13

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! Causes severe eye and skin burns. May cause sensitization by skin contact. Risk of serious damage to the eyes. Harmful if swallowed. Causes burns of the mouth and throat. May be harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Skin contact: Harmful in contact with the skin. Brief contact may cause skin burns. Severely irritating to the skin. May cause skin sensitization or an allergic reaction which becomes evident on re-exposure to this material.

Eye contact: Severely irritating to the eyes. May cause irreversible damage including blindness. Chemical burns may occur.

Ingestion: May be fatal if swallowed. Swallowing may result in burns of the mouth and throat.

Inhalation: Toxic if inhaled. Severely irritating to the respiratory system.. Repeated inhalation may cause lung damage. May cause lung sensitization, an allergic reaction, which becomes evident on re-exposure to this material. Exposure can produce sensorimotor effects.

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2.1 cont.

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

Health Hazard statements:

Skin Irritation H312 Harmful in contact with the skin.

H314, H315 Causes severe skin burns. Causes skin irritation.

H317 May cause an allergic skin reaction and sensitization.

Eye Irritation H318 Causes serious eye damage.

H319 Causes serious eye irritation.

Inhalation H331 Toxic if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness

Oral Toxicity H302 Harmful if swallowed.

Aquatic H412 Harmful to aquatic life with long lasting effects.

Xi Irritant R36/38, R43

N R51/53

2.2 Label Elements

Hazard pictograms:



Signal word: Warning

Warning

Warning

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 hazard

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3. Composition/information on Ingredients

	<u>Name</u>	<u>CAS number</u>
3.1 Substances:	N-(2-Aminoethyl)piperazine	140-31-8
	Phenol, 4-Nonyl-, Branched	84852-15-3
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. Remove contaminated clothing. Get medical attention if irritation develops. Discard clothing or personal items that cannot be decontaminated.

Inhalation: 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, watering, pain.

Skin contact: Irritation, redness, itching.

Inhalation: Coughing, wheezing, dizziness, visual disturbances, difficulty breathing if fumes are concentrated.

Ingestion: May cause severe and permanent damage to mouth, throat and stomach.

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: >200F

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.

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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	: Amber clear
Type of odor	: Ammonia or amine
Vapor pressure	: <1 mm Hg @ 20C (68F)
Vapor density	: 6.5 (air=1)
Boiling point	: >200°C
Flash point	: >200F
pH	: Alkaline
Auto ignition temperature	: N/D
Specific gravity	: 0.97-1.02 grams / cc
Water solubility	: Slight

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 with epoxy resin releases carbon monoxide, carbon dioxide, nitrogen compounds and ammonia.

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11. Toxicological Information

11.1 Acute oral toxicity: LD50 (rat): >2,000 mg/kg.

Acute dermal toxicity: LD50 (rabbit) >1,000 mg/kg

Acute inhalation toxicity: No data.

Skin irritation: Severe skin irritation, possible burns.

Eye irritation: Severe eye irritation, corrosive, possible corneal injury and blindness.

Product sensitization: May cause sensitization by skin contact.

12. Ecological Information

12.1 Toxicity to fish: Slightly toxic on an acute basis. LC₅₀ of 10-100 mg/L in the most sensitive species.

12.2 Toxicity to microorganisms: No data available on the product.

12.3 Persistence and biodegradability: Not expected to be readily biodegradable.

13. Disposal Considerations

13.1 Waste treatment methods: RCRA Hazard Class: D002 (Corrosive) Regulated under 40 CFR 261.22 as EPA Hazardous Waste based on its corrosive nature. 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.

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14. Transport Information:

14.1 DOT: Bulk and Non-Bulk

Proper Shipping name: Corrosive liquid, basic, organic, n.o.s.
Technical Shipping Name: (Nonyl Phenol, Aminoethylpiperazine)
Hazard Class: 8 UN3267 PG III
Marine Pollutant: Nonyl Phenol ERG # 153

14.2 TDG/IATA: Bulk and Non-Bulk

Proper Shipping name: Corrosive liquid, basic, organic, n.o.s.
Technical Shipping Name: (Nonyl Phenol, Aminoethylpiperazine)
Hazard Class: 8 UN3267 PG III

14.3 IMDG: Bulk and Non-Bulk

Proper Shipping name: Corrosive liquid, basic, organic, n.o.s.
Technical Shipping Name: (Nonyl Phenol, Aminoethylpiperazine)
Hazard Class: 8 UN3267 PG III
Marine Pollutant: Nonyl Phenol ERG # 153

15. Regulatory Information

15.1 Safety health and environmental regulations/legislation:

SARA Title III Section 311/312 (40CFR370): Immediate (acute) health hazard, delayed (chronic) health hazard.
SARA Title III Section 313 (40CFR372): None listed.
SARA Title III: Section 304 - CERCLA (40CFR302): None listed.
TSCA Inventory status: Section 8(b) All components are listed.
TSCA Export notification: Section 12(b) None listed.
OSHA/NTP/IARC Carcinogen Status: Not listed.
California Prop. 65: None listed.
Canadian WHMIS: Classified as D2B (materials causing other toxic effects, toxic material) E (corrosive).

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).