

SPI Supplies Division

Structure Probe, Inc.

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Manufacturer's CAGE: 1P573

Safety Data Sheet

Date Effective: September 16, 2015

SPI Catalog# 05062-AB – Part B Hardener

SPI Supplies® Conductive Silver Epoxy Kit

Section 1: Identification

Chemical Name/Synonyms..... Hardener

Chemical family.....amine

Emergencies

Contacting CHEMTREC:

24 Hour Emergency Use Only #'s...

Worldwide phone: 1-(703)-527-3887

Worldwide FAX: 1-(703)-741-6090

Toll-free phone: 1-(800)-424-9300 USA only

Product or Trade Name.....SPI Supplies® Conductive Silver Epoxy Hardener
..... (sold in 2.5 gram single-use packets)

CAS #'s..... 000112-24-3, 26950-63-0

Chemical Formula..... Mixture

GHS Classification:

Acute toxicity, Oral (Category 5)

Acute toxicity, Dermal (Category 4)

Skin corrosion (Category 1B)

Serious eye damage (Category 1)

Skin sensitization (Category 1)

Inhalation (Category 5)

Pictograms:



Signal word:

Danger

Warning

Hazard Statements:

H303: May be harmful if swallowed

H312: Harmful in contact with skin

H317: May cause allergic skin reaction

H318: Causes serious eye damage

H333: May be harmful if inhaled

Precautionary Statements:

P102: Keep out of reach of children

P 103 Read label before use

P262: Do not get in eyes, on skin, or on clothing

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

P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing

P308+313: If exposed or concerned: Get medical advice/attention

P402+404+235: Store in a dry place. Store in a closed container. Keep cool.

Hazardous Material Information System USA

Health.....2

Fire Hazard.....1

Reactivity.....0

Personal Protection.....B

NFPA Rating (estimated)

Health.....2

Flammability.....1

Reactivity.....0

Section 2: Composition

Name	CAS#	Percentage	Einecs#
3,6-diazaoctanethylenediamine	112-24-3	>75	203-950-6
Triethylenetetramine, propyloxylated	26950-63-0	<25	500-055-5

Section 3: Hazard Identification

EMERGENCY OVERVIEW

Immediate Concerns: Corrosive. Will cause eye burns and permanent tissue damage.

Potential Health Effects:

Eyes: Corrosive to the eyes and may cause severe damage including blindness

Skin: Causes skin burns, irritation and possible allergic reaction

Ingestion: Can burn mouth, throat, and stomach

Inhalation: Prolonged or repeated inhalation may cause lung damage and/or central nervous system disturbances.

Signs and Symptoms of Overexposure:

Eyes: Eyes may become irritated, red or itchy

Skin: Skin may become itchy, red or irritated

Ingestion: Ingestion of this material can cause mouth, throat, esophageal, and gastrointestinal tract irritation

Acute toxicity: Symptoms of overexposure include: tearing of eyes, burning sensation in the throat, cough, chest discomfort or skin burning

Chronic Effects: Corrosive and may cause severe and permanent damage to mouth, throat and stomach

Section 4: First Aid Measures

Skin Contact: Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

Eye Contact: Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

Ingestion: If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Wash out mouth with water, provided person is conscious. Never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Section 5: Fire Fighting Measures

Flash Point: 347F

Extinguishing Media: Use foam, dry chemical, carbon dioxide or fine water spray when fighting fires involving this material.

Hazardous Combustion Products: Oxides of Carbon, aldehydes, amines, aniline, acids and other organic substances may be formed during combustion. The chemical nature and quantity of decomposition by-products will vary widely depending on the conditions of combustion.

Fire Fighting Procedures: Firefighters/rescue personnel should wear positive pressure self-contained breathing apparatus and full protective equipment. Cool exposed containers with water to prevent pressure buildup. If large quantities are involved, evacuate area and fight fire from a safe distance.

Section 6: Accidental Release Measures

Small Spill: (Product is sold only in 2.5 gram single-use packets) Activate available exhaust ventilation equipment in the immediate spill area. Wipe up or absorb spilled material with paper towels or other absorbent material. Wash area with soapy water to remove residue. Collect absorbed material and water rinses in appropriate containers. Dispose of in accordance with current Federal, State and local regulations.

Spill response operations must be conducted in accordance with the provisions of OSHA 29 CFR 1910.120. Review the entire MSDS before proceeding with spill response.

Section 7: Handling and Storage

General Procedures: Minimize contact with unprotected skin and eyes and ensure that adequate ventilation is provided in the work area. Store material in a cool, dry place.

Handling: Keep container closed when not in use, avoid contact with eyes and prolonged or repeated contact with skin. Maintain good housekeeping practices.

Storage: Keep container closed when not in use, store in a cool dry place away from heat and flames. Keep out of reach of children and do not re-use this container.

Section 8: Exposure Controls and Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits:

Chemical Name	ACGIH	NIOSH	OSHA – Final PELs
3,6-diazaoctanethylenediamine	NE	NE	NE

NE = Not Established

Personal Protective Equipment

Eyes and Face: Wear safety glasses with side shields or goggles and face shield.

Skin: Wear impervious gloves and appropriate protective clothing or equipment to prevent prolonged or repeated contact with skin. Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using restroom facilities. Promptly remove contaminated clothing and launder thoroughly before reuse.

Respiratory: Provide effective mechanical exhaust ventilation to draw vapors, mists or fumes generated during processing away from the worker and prevent routine inhalation, especially during elevated temperature processing. A respiratory protection program that meets OSHA's 20 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9: Physical and Chemical Properties

Physical State: Liquid

Odor: Amine like

Appearance: Clear

Color: Amber

Boiling Point: > 392 F

Flash Point: 347 F

Specific Gravity: 1.020

Section 10: Stability and Reactivity

Stable: Yes

Hazardous Polymerization: No

Stability: Stable under normal handling and storage conditions.

Polymerization: Will not vigorously polymerize, decompose, condense or become self-reactive under conditions of shocks, pressure, or temperature. Uncontrolled mixing with resins may cause hazardous polymerization.

Conditions to Avoid: Contact with acidic, basic, or oxidizing materials. Avoid storage in open containers, exposure to open flame or uncontrolled heat, uncontrolled mixing, or exposure to incompatible substances.

Hazardous Decomposition Products: Oxides of carbon, aldehydes, amines, aniline, acids and other organic substances may be formed during combustion. The chemical nature and quantity of decomposition by-products will vary widely depending on the condition of combustion.

Section 11: Toxicological Information

ACUTE

Chemical Name	ORAL LD50(rat)	DERMAL LD50(rabbit)
3,6-diazaoctanethylenediamine	2500 to 4300 mg/kg	>= 2000 mg/kg

Eye Effects: Contains materials irritating to the eyes. Symptoms may include blurred vision, burning sensation, and tearing.

Skin Effects: Contains materials that cause moderate skin irritation. Prolonged or repeated exposure to the liquid may exert a defatting or drying action on the skin, possibly resulting in dermatitis. This product may cause skin sensitization/allergic skin reactions that may be severe in certain individuals. Symptoms include rash, itching, hives, swelling.

Section 12: Ecological Information

Environmental Data: Do not flush to sewer.

Section 13: Disposal Considerations

Disposal Method: Dispose of container and unused contents in accordance with federal, state, and local requirements.

Empty Container: Do not reuse container. Keep away from heat, flames, or sparks. Do not cut, puncture, or weld on or near this container.

Section 14: Transport Information

Not restricted for transportation.

Section 15: Regulatory Information

TSCA:

CAS# 112-24-3 is listed on the TSCA Inventory.

CAS# 26950-63-0 is listed on the TSCA Inventory.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

ACUTE: Yes

CHRONIC: Yes

SARA TITLE III Section 313

This product does not contain any component above the "de minimus" level.

STATE

CAS# 112-24-3 can be found on the following state right to know lists: Massachusetts, New Jersey, Pennsylvania.

CAS# 26950-63-0 can be found on the following state right to know lists: New Jersey, Pennsylvania.

California Prop 65: None of the components of this product are listed.

European/International Regulations

Hazard Symbol: C

Risk Phrases

- R 21 Harmful in contact with skin
- R 34 Causes burns
- R 43 May cause sensitization by skin contact
- R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Safety Phrases

- S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection
- S 45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible)
- S 61 Avoid release to the environment. Refer to special instructions/safety data sheets

WGK (Water Danger / Protection)

CAS# 112-24-3: 2

CANADA

DSL/NDSL

- CAS# 112-24-3 is listed on the DSL
- CAS# 26950-63-0 is listed on the DSL

WHMIS

This product has a WHMIS classification of E, D1B, D2B.

Canadian Ingredient Disclosure List

CAS# 112-24-3 is on the Canadian Ingredient Disclosure List.

Section 16: Other Information

Disclaimer of Liability:

Caution! Do not use SPI Supplies products or materials in applications involving implantation within the body; direct or indirect contact with the blood pathway; contact with bone, tissue, tissue fluid, or blood; or prolonged contact with mucous membranes. Products offered by SPI Supplies are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. SPI Supplies will not provide to customers making devices for such applications any notice, certification, or information necessary for such medical device use required by US FDA (Food and Drug Administration) regulation or any other statute. SPI Supplies and Structure Probe, Inc. make no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues of fluids.

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