

SPI Supplies Division

Structure Probe, Inc.

P.O. Box 656 West Chester, PA 19381-0656 USA

Phone: 1-(610)-436-5400 Fax: 1-(610)-436-5755

spi3spi@2spi.com

<http://www.2spi.com>

Manufacturer's CAGE: 1P573

Safety Data Sheet

Date Effective: September 16, 2015

**SPI #05062-AB Conductive Silver Epoxy Adhesive,
Part A**

Section 1: Identification

Chemical Name/Synonyms.....Chemical Name/Synonyms... Conductive Silver Epoxy Adhesive, Part A

Chemical family.....Mixture

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.....Chemical Name/Synonyms... Conductive Silver Epoxy Adhesive, Part A

Chemical Formula..... Not available

GHS Classification

Skin irritation (Category 2)

Eye irritation (Category 2A)

Skin sensitization (Category 1)

Acute aquatic toxicity (Category 2)

Chronic Aquatic toxicity (Category 2)

GHS Label elements



Signal word:

Warning

Hazard Statements

H 315 Causes skin irritation

H 317 May cause an allergic skin reaction

H 319 Causes serious eye irritation

H 410 Very toxic to aquatic life with long lasting effects

Precautionary Statements

P 103 Read label before use

P 273 Avoid release to the environment

P 280 Wear protective gloves/protective clothing/eye protection/face protection

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

NFPA Rating:

(estimated) Health: 2 ; Flammability: 1 ; Reactivity: 0

Hazardous Material Information System USA

Health.....2
Fire Hazard.....1
Reactivity.....0
Personal Protection.....C

NFPA Rating (estimated)

Health.....2
Flammability.....1
Reactivity.....0

Section 2: Composition

Component Name	CAS #	Percent	EINECS/ELINCS
Silver	007440-22-4	72.5	231-131-3
Bisphenol A/epichlorohydrin Resin	25068-38-6	<30	500-033-5
1,3-Propanediol,2-ethyl-2-(hydroxymethyl)-,polymerwith2-(chloromethyl)oxirane Not available			030499-70-8 <8

Section 3: Hazard Identification**Emergency overview:**

Appearance: Opaque Liquid

Warning!

Mild skin irritant. May cause sensitization. May cause mild eye irritation. May be harmful if swallowed.

Target Organs: Eyes, Skin

Potential Health Effects

Eye: Contact may cause eye irritation.

Skin: May cause skin irritation. Allergic reactions are possible. Skin may become itchy, red, or irritated.

Ingestion: Small amounts (a tablespoonful) swallowed during normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury. May cause vomiting.

Inhalation: This material is not likely to be hazardous by inhalation. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

Chronic: Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).

Section 4: First Aid Measures

Eyes: Immediately flush eyes with plenty of water. Seek medical attention if irritation persists.

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

Ingestion: Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and seek medical attention.

Inhalation: If exposed to excessive levels of dusts or fumes, remove to fresh air. Seek medical attention if cough or other symptoms develop.

Section 5: Fire Fighting Measures

Flash Point: 220°F (104.4°C)

General Information:

Fire fighters and rescue personnel should wear positive pressure self-contained breathing apparatus and full protective equipment. Cool exposed containers with water to prevent pressure buildup.

Extinguishing Media:

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

Hazardous Combustion Products: Carbon monoxide, carbon dioxide, 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 dependig on the conditions of combustion.

Section 6: Accidental Release Measures

General Information: Ventilate area.

Spills/Leaks:

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 all International, Federal, State and Local regulations.

Section 7: Handling and Storage

Handling:

Minimize contact with unprotected skin and eyes. Ensure that adequate ventilation is provided to the work area. Maintain good housekeeping practices.

Storage:

Store material in a cool, dry place. Keep container closed when not in use. Keep away from heat and flame. Keep out of reach of children. Do not re-use the container.

Section 8: Exposure Controls and Personal Protection

Engineering Controls:

An eyewash station and safety shower should be available to the work area. Provide mechanical exhaust ventilation.

Exposure Limits:

Chemical Name	ACGIH TLV		OSHA PELs		
	ppm	mg/m ³	ppm	mg/m ³	
Bisphenol A/epichlorohydrin Resin	TWA	N.E.	N.E.	N.E.	
	STEL	N.E.	N.E.	N.E.	
1,3-Propanediol,2-ethyl-2-(hydroxymethyl)-,polymer with 2-(chloromethyl)oxirane				TWA	N.E.
N.E.	N.E.	N.E.			
Silver	TWA	0.01		0.1	

N.E. = Not Established

Personal Protective Equipment

Eyes: Safety glasses with side shields or chemical splash goggles

Skin: Wear impervious gloves and protective clothing 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 to prevent routine inhalation, especially during elevated temperature processing. Ventilation must be sufficient to maintain airborne levels of chemicals below their PEL/TLV values. If exposures exceed PEL/TLV values, use properly fitted respirator that meets OSHA 1910.134 and ANSI Z88.2 requirements.

Section 9: Physical and Chemical Properties

Physical State: Liquid

Appearance: Opaque

Color: Silver

Odor: Slight

pH: n/a

Vapor Pressure: n/a

Vapor Density: n/a

Evaporation Rate: n/a

Viscosity: n/a

Boiling Point: n/a

Freezing/Melting Point: n/a

Autoignition Temperature: n/a

Flash Point: 220°F (104.4°C)

Decomposition Temperature: n/a

Explosion Limits:

Lower: n/a
Upper: n/a
Solubility in water: Slight
Specific Gravity/Density: 3.26 gm/cm³

n/a = not available

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal handling and storage conditions.

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

Incompatibility with Other Materials: Acidic, basic, or oxidizing materials.

Hazardous Decomposition of Products: Carbon monoxide, carbon dioxide, 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.

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

Section 11: Toxicological Information

ACUTE:

Chemical Name	ORAL LD50(RAT)	Dermal LD50(RABBIT)
Bisphenol A/epichlorhydrin Resin	>2000 mg/kg	>2000 mg/kg
Silver	>5000 mg/kg	

Section 12: Ecological Information

Exotoxicity: No data available.

Environmental Fate: No data available.

Aquatic: No data available. Do not flush to sewer.

Atmospheric: No data available.

Physical: No data available.

Section 13: Disposal Considerations

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

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

Section 14: Transport Information

US DOT Hazard Class: Not regulated buy DOT in less than Bulk (119 gallon) quantities. DOT RQ for silver is 1000 pounds.

IATA (for international shipments): Not regulated in less than Bulk (119 gallon) quantities.

Section 15: Regulatory Information

United States:

SARA TITLE III

ACUTE: yes

CHRONIC: yes

SARA Section 313:

Silver

72.5%

CERCLA RQ:

Silver

1000 pounds

TSCA

1,3-Propanediol,2-ethyl-2-(hydroxymethyl)-polymer with 2-(chloromethyl)oxirane is listed.

OSHA:

Skin sensitiser, Irritant

State (Individual states in the USA)

Silver, CAS# 7440-22-4, is listed on the Massachusetts, New Jersey, and Pennsylvania Right to Know Components.

California No Significant Risk Level:

California Prop. 65:

Phenyl Glycidyl Ether, CAS# 122-60-1, is present at <6ppm. This material is known to the State of California to cause cancer.

European/International Regulations:

European Labeling in Accordance with EC Directives

WARNING

Hazard Symbols:

Risk Phrases:

R36/38 Irritating to 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:

S24/25 Avoid contact with skin and eyes

Canada

DSL List: 25068-38-6, 30499-70-8, and 7440-22-4 are on the DSL List.

This product has a WHMIS classification of D2B.

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.

The information and recommendations set forth above are taken from sources believed to be accurate as of the date hereof, however SPI Supplies and Structure Probe, Inc. make no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assume no liability to any user thereof. The information contained in this sheet does not constitute a hazard assessment and should not be used in place of the user's own assessment of work place risks as required by other health and safety legislation. Be aware of the Structure Probe, Inc. [Copyright Policy](#). Structure Probe, Inc. grants a nonexclusive license to make unlimited copies of this safety sheet for internal use only. Quite obviously, this information would pertain only to this material when purchased from SPI Supplies as product from other sources, with other ingredients and impurity levels could have substantially different properties.