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: December 8, 2014

SPI Catalog # 01300-XX - SPI Cold Mount Epoxy Kit for Metallography - Hardener

Section 1: Identification

Chemical Name/Synonyms..... Hardener for Cold Mount Epoxy Kit

Chemical family..... Aliphatic Amine/Polyamide Blend

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..... Hardener for Cold Mount Epoxy Resin Kit

CAS #'s..... 68410-23-1, 26950-63-0

Chemical Formula..... mixture

GHS Classification

Skin Sensitizer (1)
Skin Corrosion/Irritation (2)
Eye Damage/Irritation (2B)
Specific Target Organ Toxicity – Single Exposure(3)

GHS Label Elements:

Signal word: Warning

Hazard statement(s)

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H310 Causes eye irritation.
H335 May cause respiratory irritation.

Precautionary statement(s)

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the work area.
P281 Use personal protective equipment as required (gloves).
P362 Take off contaminated clothing and wash before reuse.
P302+P350 IF ON SKIN: Gently wash with plenty of soap

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, of present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.

Hazardous Material Information System USA
Health..... 3
Fire Hazard..... 1
Reactivity..... 0
Personal Protection.....

NFPA Rating (estimated)
Health..... 3
Flammability..... 1
Reactivity..... 0

Section 2: Composition

Chemical description	CAS No.	Concentration	EC No.
Polyamide Resin	68410-23-1	65%-70%	
Propoxylated Triethylenetriamine	26950-63-0	30%-35%	500-055-5

Section 3: Hazard Identification

Emergency overview:
Harmful
Irritating to the eyes
Irritating to the respiratory system
Irritating to the skin
Risk of serious damage to eyes
Harmful if swallowed
May cause sensitization by inhalation

Appearance: Viscous liquid, amber

Flash Point: 105°C (225°F)

Target Organs: Eyes, Respiratory System, Skin.

Potential Health Effects

Eye: Causes eye irritation. Risk of serious damage to eyes.

Skin: Causes skin irritation. May cause sensitization by skin contact.

Ingestion: Harmful if swallowed.

Ingestion: Harmful if swallowed. Due to irritant properties, swallowing may result in burns/ulceration of mouth, stomach, and lower gastrointestinal tract with subsequent stricture. Aspiration of vomitus may cause lung injury.

Inhalation: May cause respiratory irritation. May cause sensitization by inhalation.

Section 4: First Aid Measures

Description of necessary first-aid measures:

** Never give fluids or induce vomiting if patient is unconscious or is having convulsions.**

Inhalation: Move effected persons to fresh air; if effects occur, consult a physician.

Skin Contact: Immediate, continued and thorough washing in flowing water for at least 30 minutes is imperative, while removing contaminated clothing. Prompt medical consultation is essential. Wash clothing before reuse. Destroy contaminated leather items.

Eye Contact: Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist.

Ingestion: Do not induce vomiting. Give one glass (ca. 1 cup or 250 ml) of water or milk if available and transport to medical facility. Do not give anything by mouth to an unconscious person.
Note to physician: Due to irritant properties, swallowing may result in burns/ulceration of mouth, stomach and lower gastrointestinal tract with subsequent stricture. Aspiration of vomitus may cause lung injury. Suggest endotracheal/esophageal control if lavage is done. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

Most Important symptoms/effects, acute and delayed:

Potential Health Effects:

Skin contact: Mild skin irritation.

Chronic Health Hazard: This product contains no listed carcinogens according to IARD, ACGIH, and/or OSHA in concentrations of 0.1 percent or greater. Repeated or prolonged contact causes sensitization, asthma and eczema.

Aggravated Medical Conditions: Skin disorder and Allergies. Adverse skin effects (such as rash, irritation or corrosion).

Indication of immediate medical attention and special treatment needed, if necessary: N/A

Section 5: Fire Fighting Measures

Suitable extinguishing media:

Water fog or fine spray. Carbon dioxide. Alcohol resistant foam. Dry chemical fire extinguishers.

Specific hazards arising from the chemical:

Flash point is 105°C (225°F). Combustion products may include and are not limited to: Nitrogen oxides. Carbon dioxide. Carbon monoxide.

Special protective actions for fire-fighters:

Wear positive-pressure self-contained breathing apparatus and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots and gloves.)

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Wear adequate personal protective equipment; see Section 8, EXPOSURE CONTROLS/PERSONAL PROTECTION.

Methods and materials for containment and clean up:

Large spills: Contain with dike. Pump into suitable and properly labeled containers.

Small spills: Dilute with water and recover or use non-combustible absorbent material/sand and shovel into appropriate containers. Neutralize residues with a dilute solution of acetic acid.

Section 7: Handling and Storage

Precautions for safe handling:

Keep container dry. Do not ingest. Do not breathe gas/fumes/mist/spray/dust. If ingested, seek medical advice immediately and show the container, label, or this document. Avoid contact with skin and eyes.

Conditions for safe storage, including any incompatibilities:

Store under nitrogen blanket for maximum shelf life. Product should not come in contact with copper or copper-bearing alloys. Storage Temperature and Shelf Life: Store between 10°C and 27°C for maximum shelf life.

Section 8: Exposure Controls and Personal Protection

Control parameters: Not available

Appropriate engineering controls:

Good general ventilation should be sufficient for most conditions. Local exhaust ventilation my be necessary for operations involving machining of dry or cured material.

Individual protection measures, such as personal protective equipment:

Respiratory Protection: For use of this material in its uncured state, no respiratory protection should be needed with use of adequate local exhaust. However, if handling at elevated temperatures or without sufficient ventilation, use of an approved air-purifying or supplied air respirator is recommended. Use a CE approved air-purifying respirator with cartridge/filter for Amines or Ammonia.

Skin Protection: Us protective clothing chemically resistant to this material. Selection of specific items such as face shield, gloves, boots, apron, or full body suit will depend on operation. Safety shower should be located in immediate work area. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse or dispose of properly. Items which cannot be decontaminated, such as shoes, belts and watchbands, should be removed and disposed o properly.

Hand protection: Use chemical resistant gloves classified under standard EN 374: Protective gloves against chemicals and microorganisms.

Eye/Face Protection: Eye wash fountain should be located in immediate work area. Use chemical goggles. A full-face shield and vapor respirator is recommended for operations involving spraying or other operations placing this material under pressurized conditions.

Section 9: Physical and Chemical Properties

Appearance (physical state, color, etc.): Viscous Liquid, Amber
Odor: Amine Odor
Odor Threshold: Not available
pH: Basic
Melting point/freezing point: Not determined
I**nitial boiling point and boiling range:** Not determined
Flash Point: 105°C (225F)
Evaporation rate: Not available
Flammability (solid, gas): Not available
Upper/lower flammability or explosive limits: Not determined
Vapor pressure: Not determined
Vapor Density: Not available
Relative density (Specific Gravity): 0.95 – 1.05
Solubility: Slightly Soluble in Water
Partition coefficient, n-octanol/water: Not available
Auto-ignition temperature: >300°C
Decomposition temperature: Not available
Viscosity: Not available

Section 10: Stability and Reactivity

Reactivity: Not available
Chemical stability: Stable under normal handling and storage conditions, see Section 7, Handling and Storage.
Possibility of hazardous reactions: Not available
Conditions to avoid? Not available
Incompatible materials: Acrylates. Aldehydes. Ketones. Halogenated organic compounds. Oxidizing agents. Acids. Copper and its alloys (brass, Bronze, etc.) Mixture with these materials will result in a temperature and/or pressure increase.
Hazardous decomposition products: Not available

Section 11: Toxicological Information

Likely routes of exposure: Not available

Symptoms related to the physical, chemical and toxicological characteristics:

Irritation:

Skin: Prolonged contact may cause irritation or skin burns. Symptoms may include pain, severe local redness and tissue damage. Skin contact has caused allergic skin reactions in certain sensitized individuals.

Eyes: may cause pain disproportionate to the level of irritation to eye tissues. May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

Inhalation: May cause allergic respiratory response. Excessive exposure may cause irritation to upper respiratory tract (nose and throat).

Delayed and immediate effects and also chronic effects from short and long term exposure:

Carcinogen: This product contains no materials that are reported as known or suspect carcinogens in levels above 0.1%.

Mutagen: This product contains no materials that are reported as known or suspect mutagens in levels above 0.1%.

Reproductive Hazard: This product contains no materials that are known or suspected of causing a reproductive hazard in levels above 0.1%.

Numerical measures of toxicity:

This finished product has not been tested to determine individual toxicological/ecological limits. Individual components of this mixture have been independently tested by the raw material manufacturers and any know results have been presented below. The results for the individual components may not be representative of the toxicity of this finished product.

Ingredient Name	CAS No.	%	Test	Result	Route	Species
Propoxylated Triethylenetriamine	26950-63-0	25-30%	LD50	>2,000 mg/kg	Oral,	Rat
			LD50	>2,100 mg/kg	Dermal	Rabbit
Polyamide Resin	68410-23-1	65-70%	LD50	>16 mL/kg	Oral,	Rat
			LD50	6.5 mL/kg	Dermal,	Rabbit

Section 12: Ecological Information

Ecotoxicity: No data available

Persistence and degradability: Not available

Bioaccumulative potential: Not available

Mobility in soil: Not available

Other adverse effects: Not available

Section 13: Disposal Considerations

Disposal methods:

Preferred method of disposal includes incineration under controlled conditions in accordance with all local and national laws and regulations. The generation of waste should be avoided or minimized wherever possible. Untreated material is not suitable for disposal. Waste, even small quantities, should never be poured down drains, sewers, or watercourses. Waste must be disposed of in accordance with federal, state and local environmental control regulations. This material, when properly mixed and cured with its resin component at the proper mix ration, may be safely land filled.

Contaminated packaging:

Empty containers can only be disposed of when the remaining product adhering to the container walls has been removed. Hazard warning labels should be removed from the container only after it has been properly emptied.

Section 14: Transport Information

UN number: Not regulated

UN proper shipping name: Liquid Plastic, NOI

Transport hazard class(es): Not regulated

Packing group, if applicable: Not regulated

Environmental hazards: Not available

Transport in bulk: Not applicable

Special precautions for user: Not available

Section 15: Regulatory Information

Safety, health and environmental regulations:

TSCA: This product is manufactured in compliance with all provisions of the Toxic Substances Control Act, 15 U.S.C.2601 et. Seq. This product contains a chemical substance that is subject to export notification under Section 12(b) of the Toxic Substances Control Act, 15 U.S.C. 2601 et. Seq.

Toxic Substances Control Act (TSCA) 12(b) Components: None Known

EPA SARA Title III section 302 (40CFR370) Hazard Class: Immediate Health Hazard, Delayed Health Hazard

EPA SARA Title III section 313 (40CFR 372) Toxic Chemicals above "de minimum" levels: None

California Proposition 65: SUBSTANCES (component(s) known to the State of California to cause cancer and/or reproductive harm and subject to warning and discharge requirements under the "Safe Drinking Water and Toxic Enforcement Act of 1986"): **NONE**

CANADA REGULATIONS

WHMIS Classification: D2B – skin sensitizer

WHMIS Symbol(s):

DSL: Components of this product have been reported to Environment Canada in accordance with subsection 25 of the Canadian Environmental Protection Act and are included on the Domestic Substances List.

Hazardous Products Act Information: This product contains the following ingredients which are Controlled Products and/or on the Ingredient Disclosure List (Canadian HPA section 13 and 14): none listed

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.