

Disclaimer: The information in this SDS relates to the product named and is based upon information Epoxy International considers to be accurate. No warranty expressed or implied is intended. This information is offered exclusively for your consideration and interpretation. The Corporate Safety and Environmental Affairs Department is responsible for the preparation of this Safety Data Sheet.

Safety Data Sheet

Epoxy International

SILVER-BOND 7 RESIN**SDS Number:** 907-R
SDS Date: 09/27/2015

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product name: SILVER-BOND 7 (Resin)
SDS number: 907-R
Product type: Resin
Chemical family: Epoxy resin
Company Address: Epoxy International
200 Allens Ave,
Providence, RI 02903
Email: info@epoxyinternational.com
Emergency Contact Number : (888) 522-6742
Fax: (877) 522-6742
Chemtrec (Domestic): (800) 424-9300
Chemtrec (International): (703) 527-3887

SECTION 2: HAZARDS IDENTIFICATION

Form: Viscous Liquid
OSHA/HCS Status: This material is considered hazardous by the OSHA Hazard Communications Standard (29 CFR 1910.1200)
Emergency overview: WARNING!
CAUSES EYE AND SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY CAUSE RESPIRATORY TRACT IRRITATION. HEATED MATERIAL CAN CAUSE THERMAL BURNS.

Potential acute health effects:

Inhalation: Slightly irritating to the respiratory system.
Ingestion: Not expected to be harmful under normal conditions of use.
Skin: Irritating to skin. May cause sensitization by skin contact material. Can cause thermal burns.
Eyes: Irritating to eyes. Heated material can cause thermal burns.

Potential chronic health effects:

Chronic effects: No known significant effects or critical hazards.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.
Developmental effects: No known significant effects or critical hazards.
Fertility effects: No known significant effects or critical hazards.

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Target organs: Review section 2 and 11 for any additional assessments.

Over-exposure signs/symptoms

Inhalation: Adverse symptoms may include the following respiratory tract irritation coughing.

Skin: Adverse symptoms may include the following: irritation and or redness

Eyes: Adverse symptoms may include the following: pain and or irritation, watering and redness.

SECTION 3: COMPOSITION INFORMATION ON INGREDIENTS

Ingredient's name	CAS NUMBER	% BY WEIGHT
Bisphenol-A-(Epichlorohydrin); Epoxy Resin	25068-38-6	<25%
Silver	7440-22-4	>75%

**Any applicable Canadian trade secret numbers will be listed in section 15.

SECTION 4: FIRST AID MEASURES

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention.

Skin contact: Flush contaminated skin with a plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wears gloves, continue to rinse for at least 10 minutes. In the event of any complains or symptoms, avoid further exposure. Wash clothing before reuse. For contact with hot product flush contaminated skin with large amounts of cold water to dissipate heat. Gear with clean cotton sheeting or gauze. Get medical attention immediately.

Inhalation: Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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Ingestion:

Wash out mouth with water. Remove dentures if any. Move person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting is dangerous. Do not induce vomiting unless directed to do so medical personnel. If vomiting occurs, the head should be kept low that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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Protection of First Aid personnel: In the event of body contact. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Notes to physician: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

SECTION 5: FIRE FIGHTING MEASURES

FLAMMABILITY OF THE PRODUCT: In a fire or if heated, a pressure increase will occur and the container may burst.

EXTINGUISHING MEDIA

Suitable: Use an extinguishing agent suitable for the surrounding fire.

Not suitable: N/A

Special exposure hazards: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Hazardous Combustion Products: Decomposition products may include the following materials: carbon oxides.

Special protective equipment: Fire-fighters should wear appropriate protective equip self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Large spill: Stop leak if without risk. Move containers from spill area. For molten material, allow the product to cool and solidify. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Small spill Use an extinguishing agent suitable for the surrounding fire.

*For safety and environmental precautions, please review entire SDS for necessary information.

SECTION 7: HANDLING AND STORAGE

Handling: Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processes. Workers should wash hands and face before eating,

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drinking or smoking. Persons with history of skin sensitization problems should not be employed in any process in which this product is used. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator whenventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material,

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kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Note: This resin may be handled, shipped and stored at elevated temperature in bulk.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

CONSULT LOCAL AUTHORITIES FOR ACCEPTABLE EXPOSURES LIMITS

Ventilation:	Use only with adequate ventilation. If user operations generate dust, fumes gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Eyes:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
Skin:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Clothing measures:	Employee must wear appropriate protective clothing and equipment to prevent any possibility of skin contact with this substance. Uniforms, coveralls, or a lab coat should be worn.
HYGIENE MEASURES:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to workstation location.
Respiratory measures:	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels. the hazards of the products of the safe working limits of the selected respirator.
Recommended monitoring procedures:	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
Environmental exposure controls:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

GENERAL INFORMATION:

PHYSICAL FORM:	Liquid
COLOR:	Clear
ODOR:	Slight
BOILING POINT:	>260°C, >500°F
FLASH POINT:	> 249 °C , > 480 °F
SOLUBILITY IN WATER:	Negligible

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SPECIFIC GRAVITY (WATER=1) :

1.2

VAPOR PRESSURE:

0.03 @ 77°C, 171°F

VAPOR DENSITY (AIR = 1) :

3.6

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VOLATILES:	Negligible
SHELF LIFE:	6 months

SECTION 10: STABILITY AND REACTIVITY

Stability:	The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.
Materials to avoid:	Reactive or incompatible with the following materials: Oxidizers, Acids, Amines
Conditions to avoid:	Strong oxidizer.
Hazardous decompositions products:	Decomposition products may include the following materials: Carbon Oxides.
Hazardous polymerization conditions:	CONDITIONS Heat may cause hazardous polymerization.
Reactivity:	Stable under normal conditions
Other hazards:	Reacts with considerable heat release with some curing agents.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Ingredient name

ACUTE ORAL TOXICITY:	LD50 – Low toxicity, LD50 >2000 mg/kg
ACUTE DERMAL TOXICITY:	LD50 – Low toxicity, LD50 > 2000 mg/kg.
SENSITIZATION:	May cause skin sensitization
CARCINOGENICITY:	Recent 2-year bioassays in rats and mice exposed by the dermal route to the diglycidyl ether of bisphenol A (BADGE) yielded no evidence of carcinogenicity to the skin or any other organs. This study clarifies prior equivocal results from a 2-year mouse skin painting study, which were suggestive, but not conclusive, for weak carcinogenic activity. Note: Diglycidyl ether of bisphenol A (BADGE) is a component in all BPA/ECH based epoxy resins.
MUTAGENICITY:	Resins of this type, liquid resins based on diglycidyl ether of bisphenol A have proved to be inactive when tested by in vivo mutagenicity assays. These resins have shown activity in in-vitro microbial mutagenicity screening and have produced chromosomal aberrations in cultured rat liver cells. The significance of these tests to man is unknown.
<u>POTENTIAL HEALTH EFFECTS :</u>	
Inhalation:	Not expected to be a relevant route of exposure, however, under conditions where exposure to vapors or mists is possible, could cause respiratory tract irritation.
Skin:	May be mildly irritating to the skin. Contact with hot material can cause thermal burns which may result in permanent damage. May cause skin sensitization.
Eyes:	May be mildly irritating to the eyes.

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Contact with hot material can cause thermal burns which may
result in permanent damage or blindness.

Ingestion:

Not likely to be a relevant route of exposure

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SECTION 12: ECOLOGICAL INFORMATION

Environmental effects

No known significant effects or critical hazards

Other adverse effects

No known significant effects or critical hazards.

SECTION 13: DISPOSAL INFORMATION

Waste disposal The generations of waste should be avoided or minimize wherever possible. 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 authority requirements. Avoid dispersal of spilled and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORTATION INFORMATION

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

International Transport Regulations

<i>Regulatory Information</i>	<i>UN/NA Number</i>	<i>Proper shipping name</i>	<i>Classes/Packaging Group</i>	<i>Reportable Quantity (RQ)</i>
CFR	non-regulated	non-regulated	non-regulated	non-regulated
IATA (Cargo)	non-regulated	non-regulated	non-regulated	non-regulated
TDG	non-regulated	non-regulated	non-regulated	non-regulated
IMO/IMDG	non-regulated	non-regulated	non-regulated	non-regulated

SECTION 15: REGULATORY INFORMATION

US Regulation

HCS Irritating materials, sensitizing material

Classification:

Canada (WHMIS): Class D-2B: Material causing other toxic effects (Toxic).
Canada lists: Canadian NPRI: None Required

China (IECSC) On the IECSC inventory

US Federal Regulations **SARA 311/312** classification immediate (acute) health hazard.

SARA 313 – Supplier Notification

This product contains the following toxic chemical(s) subject to the reporting requirements of section 313 of Title 3 of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372.
None required.

SARA 302 Extremely Hazardous Substances None Required

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State Regulation	Massachusetts RTK Substances	None Required
	New Jersey RTK Substances	None Required
.....	Pennsylvania RTK Hazardous Substances	None Required

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California Prop. 65

WARNING: This Product contains a chemical
known to the state of California to cause
cancer. Oxirane. (Phenoxyethyl)-122-60-1

International Regulations	Europe inventory	all components are listed or exempted.
	Australia inventory (AICS)	all components are listed or exempted.
	China inventory (IECSC)	all components are listed or exempted.
	Korea inventory (KECI)	all components are listed or exempted.
	Philippines inventory (PICCS)	all components are listed or exempted.
	Japan inventory (ENCS)	all components are listed or exempted.
	Canada inventory	all components are listed or exempted.
	United States inventory (TSCA 8b)	all components are listed or exempted.
	New Zealand inventory (NZIoC)	Not determined.

WARNING: This product contains the following chemicals that are known to the State of California to cause cancer, birth defects or other reproductive harm. Unless a concentration is specified in Section 2 of the SDS, the below chemical/s are present in trace amounts.

Component	CAS Number
None reportable	N/A

SECTION 16: REGULATORY INFORMATION**HMIS® Hazard Ratings**

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs by OSHA's 29 CFR 1910.1200, we choose to provide them as a service to our customers using HMIS®. These ratings are to be used only with a fully implemented HMIS® program. To deal adequately with the safe handling of this material, all the information contained in this SDS must be considered.

NPCA recommends that employers must determine appropriate PPE for the actual conditions under which this product is used in their workplace. For information on PPE codes, consult the HMIS® Implementation Manual.

When two ratings are provided for Health, the first represents the material 'as supplied', and the second represents the material 'in use'.

* = chronic health hazard

HMIS® is a registered trademark of the National Paint and Coatings Association (NPCA).

Health**2****Flammability****1****Physical Hazard****0****Notice to reader:**

The information provided herein was believed by Epoxy International to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply suitability of the product for its intended use. All products supplied by Epoxy International are subject to Epoxy International's terms and conditions of sale. EPOXY INTERNATIONAL MAKES NO WARRANTY, EXPRESSED OR FOR ANY PURPOSE OF CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY EPOXY INTERNATIONAL, except that the product shall conform to Epoxy International specifications. Nothing contained herein constitutes an offer for the sale of any product.

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Safety Data Sheet

Epoxy International

SILVER-BOND 7 HARDENER

SDS Number: 907-H
SDS Date: 10/16/2015

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product name: SILVER-BOND 7 (HARDENER)
SDS number: 907-H
Product type: HARDENER
Chemical family: Epoxy HARDENER
Company Address: Epoxy International
410 South Main St
Providence, RI 02903
Email: info@epoxyinternational.co
Emergency Contact Number : (888) 522-6742
Fax: (877) 522-6742
Chemtrec (Domestic): (800) 424-9300
Chemtrec (International): (703) 527-3887

SECTION 2: HAZARDS IDENTIFICATION

Form: Viscous Liquid

OSHA/HCS Status: This material is considered hazardous by the OSHA Hazard Communications Standard (29 CFR 1910.1200)

Emergency overview: WARNING!
CAUSES EYE AND SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY CAUSE RESPIRATORY TRACT IRRITATION. HEAD MATERIAL CAN CAUSE THERMAL BURNS.

Potential acute health effects:

Inhalation: Slightly irritating to the nose and to the respiratory system.
Ingestion: Will cause irritation of mouth, throat, and stomach.
Skin: Irritating to skin. May cause sensitization by skin contact material. Can cause thermal burns.
Eyes: Irritating to eyes. Heated material can cause thermal burns. Risk of serious damage to eyes. Excessive tear formation

Potential chronic health effects:

Chronic effects: Contains material that can cause target organ damage.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: Contains material which may cause birth defects, based on animal data.

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Developmental effects:

No known significant effects or critical hazards.

Fertility effects:

No known significant effects or critical hazards.

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Target organs:	Contains material which causes damage to the following organs: Kidneys, Lungs. Review Section 2 and 11 for any additional assessments.
<u>Over-exposure signs/symptoms</u>	
Inhalation:	Adverse symptoms may include the following: respiratory tract irritation coughing. Wheezing and breathing difficulties, asthma.
Ingestion:	Adverse symptoms may include the following: nausea, vomiting and diarrhea.
Skin:	Adverse symptoms may include the following: irritation and or redness
Eyes:	Adverse symptoms may include the following: pain and or irritation, watering and redness.
Medical Conditions aggravated By over-exposure	Pre-existing respiratory and skin disorders and disorders involving any other target organs mentioned in this SDS as being at risk may be aggravated by over-exposure to this product.

SECTION 3: COMPOSITION INFORMATION ON INGREDIENTS

Ingredient's name	CAS NUMBER	% BY WEIGHT
Triethylenetetramine	112-24-3	>90%

**Any applicable Canadian trade secret numbers will be listed in section 15.

SECTION 4: FIRST AID MEASURES

Eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention. Chemical burns must be treated promptly by a physician.
Skin contact:	Flush contaminated skin with a plenty of water. Wash contaminated clothing thoroughly with water before removing it, or wears gloves, continue to rinse for at least 10 minutes. In the event of any complains or symptoms, avoid further exposure. Wash clothing before reuse. For contact with hot product flush contaminated skin with large amounts of cold water to dissipate heat. Gear with clean cotton sheeting or gauze. Get medical attention immediately.
Inhalation:	Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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Ingestion:

Wash out mouth with water. Remove dentures if any. Move person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting is dangerous. Do not induce vomiting unless directed to do so medical personnel. If vomiting occurs, the head should be kept low that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If

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unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of First Aid personnel: In the event of body contact. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Notes to physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposure person may need to be kept under medical surveillance for 48 hours.

SECTION 5: FIRE FIGHTING MEASURES

FLAMMABILITY OF THE PRODUCT: In a fire or if heated, a pressure increase will occur and the container may burst.

EXTINGUISHING MEDIA

Suitable: Use an extinguishing agent suitable for the surrounding fire.

Not suitable: N/A

Special exposure hazards: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Hazardous Combustion Products: Decomposition products may include the following materials: carbon oxides.

Special protective equipment: Fire-fighters should wear appropriate protective equip self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Large spill: Stop leak if without risk. Move containers from spill area. For molten material, allow the product to cool and solidify. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Small spill: Use an extinguishing agent suitable for the surrounding fire.

*For safety and environmental precautions, please review entire SDS for necessary information.

Atom Adhesives

Email: info@atomadhesives.com

SECTION 7: HANDLING AND STORAGE

Handling:	Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processes. Workers should wash hands and face before eating, drinking or smoking. Persons with history of skin sensitization problems should not be employed in any process in which this product is used. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Storage:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Note: This HARDENER may be handled, shipped and stored at elevated temperature in bulk.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

CONSULT LOCAL AUTHORITIES FOR ACCEPTABLE EXPOSURES LIMITS

Ventilation:	Use only with adequate ventilation. If user operations generate dust, fumes gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Eyes:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
Skin:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Clothing measures:	Employee must wear appropriate protective clothing and equipment to prevent any possibility of skin contact with this substance. Uniforms, coveralls, or a lab coat should be worn.
HYGIENE MEASURES:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to workstation location.
Respiratory measures:	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels. the hazards of the products of the safe working limits of the selected respirator.
Recommended monitoring procedures:	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
Environmental exposure controls:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

GENERAL INFORMATION:

PHYSICAL FORM	Liquid
COLOR	Amber
ODOR	Fishy

Atom Adhesives

Email: info@atomadhesives.com

BOILING POINT:

FLASH POINT:

SOLUBILITY IN WATER:

SPECIFIC GRAVITY (WATER=1):

VAPOR PRESSURE:

VAPOR DENSITY (AIR = 1):

PERCENT VOLATILES:

SHELF LIFE:

SECTION 10: STABILITY AND REACTIVITY

Stability: The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.

Materials to avoid: Reactive or incompatible with the following materials: Oxidizers, Acids, Amines

Conditions to avoid: Strong oxidizer.

Hazardous decomposition products: Decomposition products may include the following materials: Carbon Oxides.

Hazardous polymerization conditions: CONDITIONS Heat may cause hazardous polymerization.

Reactivity: Stable under normal conditions

Other hazards Reacts with considerable heat release with some curing agents.

SECTION 11: TOXICOLOGICAL INFORMATION

ROUTE OF ENTRY

Eye Contact, Skin Contact; Inhalation

COMPONENT

IARC

(group)

NTP

OSHA Substance Specific Regulation

There is no evidence that this product poses a carcinogenic risk under normal conditions of handling and use.

CHRONIC (LONG TERM) EFFECTS OF EXPOSURE:

EFFECTS OF CHRONIC EXPOSURE

CONDITIONS Heat may cause hazardous polymerization.

REACTIVITY May polymerize with amine compounds

TARGET ORGANS

Skin; Eyes

SKIN SENSITIZATION

Sensitizer. May cause allergic reaction.

PRODUCT TOXICOLOGY

PRODUCT INFORMATION

This data sheet is based on a consideration of the property of the constituents

EYE IRRITATION

It is Irritating, but does not injure eye tissue.

COMPONENT

ACUTE HEALTH

NOTES

Ingestion: LD50: 2,500 mg/kg
Species: Rat

Inhalation:

No data is available on the product itself

Triethylenetetramine Skin: LD50:805 mg/kg
Species: Rabbit

May cause irritation of mouth, throat and digestive tract a depression of the central nervous system.

Triethylenetetramine

DERMAL TOXICITY

Dermal LD50: Rabbit 3.97 ml/kg

Repeated or prolonged skin contact may result in moderate irritation.

Triethylenetetramine

EYE IRRITATION

May cause sensitization by skin contact. Sensitization occurred in laboratory animals after repeated exposures.

Triethylenetetramine

EYE IRRITATION

Results from a battery of short term genotoxicity tests on this material or its components indicate mutagenic activity. .

SECTION 12: ECOLOGICAL INFORMATION

Environmental effects

Potential effect on environment watercourses.

Do not allow entering drains, sewers or

Mobility

Slightly soluble

Atom Adhesives

Email: info@atomadhesives.com

Potential to bioaccumulation	No known significant effects or critical hazards
Other adverse effects	None

SECTION 13: DISPOSAL INFORMATION

Waste disposal The generations of waste should be avoided or minimize wherever possible. 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 authority requirements. Avoid dispersal of spilled and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORTATION INFORMATION

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

International Transport Regulations

<i>Regulatory Information</i>	<i>UN/NA Number</i>	<i>Proper shipping name</i>	<i>Classes/Packaging Group</i>	<i>Reportable Quantity (RQ)</i>
CFR	non-regulated	non-regulated	non-regulated	non-regulated
IATA (Cargo)	non-regulated	non-regulated	non-regulated	non-regulated
TDG	non-regulated	non-regulated	non-regulated	non-regulated
IMO/IMDG	non-regulated	non-regulated	non-regulated	non-regulated

SECTION 15: REGULATORY INFORMATION

US Regulations

HCS Classification: Irritating materials, sensitizing material

Canada (WHMIS): Class D-2B: Material causing other toxic effects (Toxic).

Canada lists: Canadian NPRI: None Required

China (IECSC) On the IECSC inventory

US Federal Regulations **SARA 311/312** classification immediate (acute) health hazard.

SARA 313 – Supplier Notification

This product contains the following toxic chemical(s) subject to the reporting requirements of section 313 of Title 3 of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372. None required.

SARA 302 Extremely Hazardous Substances None Required

State Regulation

Massachusetts RTK Substances

None Required

New Jersey RTK Substances

None Required

Pennsylvania RTK Hazardous Substances

None Required

California Prop. 65

WARNING: This Product contains a chemical know to the state of California to cause cancer. Oxirane, (Phenoxyethyl) –122-60-1

International Regulations

Europe inventory

all components are listed or exempted.

Australia inventory (AICS)

all components are listed or exempted.

China inventory (IECSC)

all components are listed or exempted.

Korea inventory (KECI)

all components are listed or exempted.

Atom Adhesives

Email: info@atomadhesives.com

Philippines inventory (PICCS)	all components are listed or exempted.
Japan inventory (ENCS)	all components are listed or exempted.
Canada inventory	all components are listed or exempted.
United States inventory (TSCA 8b)	all components are listed or exempted.
New Zealand inventory (NZIoC)	Not determined.

WARNING: This product contains the following chemicals that are known to the State of California to cause cancer, birth defects or other reproductive harm. Unless a concentration is specified in Section 2 of the SDS, the below chemical/s are present in trace amounts.

Component	CAS Number
None reportable	N/A

SECTION 16: REGULATORY INFORMATION

HMIS® Hazard Ratings

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs by OSHA's 29 CFR 1910.1200, we choose to provide them as a service to our customers using HMIS®. These ratings are to be used only with a fully implemented HMIS® program. To deal adequately with the safe handling of this material, all the information contained in this SDS must be considered.

NPCA recommends that employers must determine appropriate PPE for the actual conditions under which this product is used in their workplace. For information on PPE codes, consult the HMIS® Implementation Manual.

When two ratings are provided for Health, the first represents the material 'as supplied', and the second represents the material 'in use'.

* = chronic health hazard

HMIS® is a registered trademark of the National Paint and Coatings Association (NPCA).

Health	Flammability	Physical Hazard
3*	1	0

Notice to reader:

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