



SAFETY DATA SHEET

1. Product Identification

Product name	SilverTip® Coating and Laminating Resin
SDS Number	0900A
Product type	Epoxy polymer mixture.
Recommended use of the chemical and restrictions on use	Directed at, but not limited to, the laminating and coating of fiber composite and wood
Restrictions	None known.
Manufacturer/Supplier information	
Company name	SYSTEM THREE RESINS, INC.
Address	3500 W. Valley Hwy North Suite 105 Auburn, WA 98001-2436 United States
Telephone	1-253-333-8118
Website	www.systemthree.com
Email	support-08@systemthree.com
Emergency Contact	CHEMTREC (U.S. and CANADA) 1-800-424-9300 CHEMTREC (Outside the U.S.) 1-703-527-0585

2. Hazard(s) Identification

Classification of substance or mixture/Signal word

WARNING.

GHS Label Elements
Hazard Pictograms



Hazard statements

H302 Acute Toxicity
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

Precautionary Statements
Prevention

P280 Wear protective gloves. Wear eye or face protection.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.

Response

P308 + P313 If exposed or concerned: Get medical attention.

Storage

P401 Store above 32 °F / 0 °C

Disposal

P501 Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified (HNOC)

None Available.

3. Composition/Information On Ingredients

Chemical Name	CAS Number	Content (%)
Diglycidyl Ether of Bisphenol A	25068-38-6	70 – 80 %
Benzyl Alcohol	100-51-6	10 – 15 %
Alkylglycidyl Ether	17557-23-2	10 – 15 %

4. First-Aid Measures

Inhalation	Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention.
Skin contact	Remove contaminated clothing and shoes and wipe excess off skin. Flush skin with water. Follow by washing in soap and water. If irritation occurs, seek medical attention. Do not reuse clothing until cleaned. Contaminated leather articles (shoes) cannot be decontaminated and should be destroyed.
Eye contact	Flush with water for 15 minutes holding eye lids open. Seek medical attention.
Ingestion	Do not give liquids if victim is unconscious or very drowsy. Otherwise, give no more than 2 glasses of water and induce vomiting by giving 2 tablespoons syrup of ipecac (1 tablespoon and 1 glass of water for child). If ipecac is unavailable, give 2 glasses of water and induce vomiting by touching finger to back of throat. Keep head below hips while vomiting. Get medical attention.
Most important symptoms/effects, acute and delayed	Burns. Irritation. Pre-existing skin conditions may be aggravated by prolonged or repeated contact. Persons with sensitive airways (e.g., asthmatics) may be sensitive to vapors.
Indication of immediate medical attention and special treatment needed	Treat symptoms as they appear.

5. Fire-Fighting Measures

Suitable extinguishing media	Foam, carbon dioxide, dry chemical, water fog.
Unsuitable extinguishing media	None known
Specific hazards arising from the chemical	Potential skin irritation.
Special protective equipment and precautions for fire-fighters	When fighting chemical fires wear full protective equipment with self-contained breathing apparatus. Water spray may be used to cool fire-exposed containers. Toxic fumes may be evolved when this substance is burned.
Fire-fighting equipment/instructions	Full fire suit and self-contained breathing apparatus.
Specific methods	Water spray may be used to cool fire-exposed containers. Toxic fumes may be evolved when this substance is burned.
General fire hazards	Epoxy in mass can create exotherm.

6. Accidental Release Measures

Personal precautions	Wear proper personal protective equipment (PPE). Avoid direct contact with material.
Protective equipment	Proper PPE includes: disposable gloves, eye protection and skin protection.
Emergency procedures	If materials is spilled, avoid contact with material. Persons not wearing appropriate protective equipment should leave the area of the spill until cleanup is complete.

Methods and materials for containment/cleanup

Stop spill at source, dike area to prevent spreading, pump liquid to salvage tank or drum. Remaining liquid may be taken up on clay, diatomaceous earth, sawdust or other absorbent, and shoveled into disposal container.

Environmental precautions

Skin sensitizer, harmful to aquatic life.

7. Handling And Storage

Precautions for safe handling

Always wear protective, disposable gloves when handling epoxy products to prevent exposure.

Precautions/Recommendations for safe/proper storage

Store epoxy products in temperature stable environment, out of the reach of pets or children. Securely fasten container lids and tops, and prevent products from sitting and below freezing temperatures.

Chemical incompatibilities

None known.

8. Exposure Controls/Personal Protection

Permissible exposure limit (OSHA)

None established

Threshold limit value (ACGIH)

None established

Biological Toxicology

Not available

Appropriate engineering controls

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures/Personal protective equipment

Eye/face protection

Splash proof goggles or safety spectacles with side shields are recommended. Always wear eye protection when sanding cured epoxy to avoid dust in eyes.

Hand protection

Always wear impervious gloves, neoprene, vinyl or rubber.

Skin protection

Wear clean, body-covering clothing to avoid skin contact.

Respiratory protection

Use a NIOSH approved respiratory device when sanding cured epoxy to prevent dust in lungs.

General hygiene during/after use

Wear gloves at all times when handling product, avoid direct contact with skin. When finished using product, dispose of gloves properly and wash hands with warm, soapy water.

9. Physical And Chemical Properties

Chemical family

Epoxy Resin

Appearance

Clear viscous liquid

Physical State

Epoxy polymer mixture

Form

Liquid

Color

Water clear

Odor

Mild

Odor threshold

Not determined

Density (Specific gravity)

9.47 lb/gal (1.1-1.3)

Viscosity

700 cps @ 25°C

pH	Data not available
Melting point/freezing point	Data not available
Initial boiling point and boiling range	Data not available
Flash point	>300°F, Pensky-Martens Closed Cup
Evaporation rate	Slower than ether
Flammability (solid, gas)	Data not available
Upper/lower flammability or explosive limits	
Upper flammability limit (by volume)	N/A
Lower flammability limit (by volume)	N/A
Material VOC	None
Vapor density	Heavier than air
Relative density	Not determined
Solubility	Negligible, in water
Partition coefficient: n-octanol/water	3
Auto-ignition temperature	300°C (572.00°F)
Decomposition temperature	Not available

10. Stability And Reactivity

Reactivity	None
Chemical stability	Stable
Possibility of hazardous reactions	Hazardous polymerization will not occur
Conditions to avoid	Epoxy resins and epoxy resin hardeners react with each other producing heat. They should not be mixed with each other under uncontrolled conditions or in large mass as the ensuing exotherm may result in heat and smoke, resulting in hazardous decomposition products.
Incompatible materials	Strong oxidizing agents, Lewis and mineral acids.
Hazardous decomposition products	Oxides of carbon, aldehydes, acids.

11. Toxicological Information

Information of likely routes of exposure

Ingestion	LD50 Oral, Rat: 11,400 mg/kg LD50 Dermal, Rat: 2,200 mg/kg
Inhalation	Not available.
Skin contact	Skin – Erythema/Eschar 404 Acute Dermal Irritation/Corrosion, Rabbit: 1.5 – 2. Skin – Edema 404 Acute Dermal Irritation/Corrosion, Rabbit: 1.0 – 1.5. Skin – Moderate irritant, Rabbit: 24 hrs. Skin – Severe irritant, Rabbit: 24 hrs.
Eye contact	Eyes – 405 Acute Eye Irritation/Corrosion, Rabbit: 0. Eyes – Redness of the conjunctive, Rabbit: 0.7. Eyes – Mild irritant: N/A.

Symptoms related to the physical, chemical, and toxicological characteristics

Ingestion	No specific data.
Inhalation	Adverse symptoms may include the following: respiratory tract infection, coughing.
Skin contact	Adverse symptoms may include the following: irritation.
Eye contact	Adverse symptoms may include the following: pain or irritation, watering, redness.
Information on toxicology	Not available.

12. Ecological Information

Ecotoxicity

Product	Result	Species	Exposure
Diglycidyl Ether of Bisphenol A Resin	Acute LC50 1.3 mg/l – 203 Fish, Acute Toxicity Test	Fish – Fish	96 h
	Acute EC50 2.1 mg/l – 202 Daphnia sp. Acute Immobilization Test and Reproduction Test	Aquatic invertebrates. Water Flea	48 h
	Acute NOEC 0.3 mg/l – 211 Daphnia Magna Reproduction Test	Aquatic invertebrates. Water Flea	21 d
	Acute LC50 > 11 mg/l	Aquatic plants – Algae	72 h

Persistence and degradability Not available

Bioaccumulative potential

Diglycidyl Ether of Bisphenol A Resin **LogPow** – 3, **BCF** – NA, **Potential** – Low.

Mobility in soil Not available.

Other adverse effects No known significant effects or critical hazards

13. Disposal Considerations

If Material is Spilled Avoid contact with material. Persons not wearing appropriate protective equipment should leave the area of the spill until cleanup is complete. Stop spill at source, dike area to prevent spreading, pump liquid to salvage tank or drum. Remaining liquid may be taken up on clay, diatomaceous earth, sawdust, or other absorbent, and shoveled into disposal containers.

Waste Disposal Method Waste is not hazardous by RCRA criteria (40 CFR 261). Place in an appropriate disposal facility in compliance with local regulations.

14. Transport 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

Regulatory information	UN/NA number	Proper Shipping Name	Classes/*PG	Reportable Quantity (RQ)
US DOT		Non-regulated		
TDG		Non-regulated		

IMO/IMDG	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (LIQUID EPOXY RESIN)	Class 9 III
IATA (Cargo)	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (LIQUID EPOXY RESIN)	Class 9 III

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15. Regulatory Information

UNITED STATES

U.S. Federal Regulations

United States – TSCA 12(b) – Chemical export notification: None Required.
United States – TSCA 5(a)2 – Final significant new use rules: Not Listed.
United States – TSCA 12(b) – Proposed significant new use rules: None Required.
United States – TSCA 5(e) – Substance consent order: Not listed.

California Prop. 65

This product contains chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm.

United States inventory (TSCA 8b)

All components are listed or exempted

CANADA

WHMIS (Canada)

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

Canadian NPRI CEPA Toxic substances

None Required
None Required

INTERNATIONAL REGULATIONS

International Lists

Australia inventory (AICS): All components are listed or exempted.
Canada inventory: All components are listed or exempted.
Japan inventory: All components are listed or exempted.
China inventory (IECSC): All components are listed or exempted.

16. Other Information, Including Date Of Preparation Or Last Revision

Date of Preparation	March 11, 2015
More Information	1-253-333-8118
Prepared By	W. Smoot

1. Product Identification

Product name	SilverTip [®] Fast Hardener Part B	
SDS Number	0900B	
Product type	Curing Agent	
Manufacturer/Supplier information		
Company name	SYSTEM THREE RESINS, INC.	
Address	3500 W. Valley Hwy, Suite Suite 105 Auburn, WA 98991-2436 United States	
Telephone	1-253-333-8118	
Website	www.systemthree.com	
Email	support-08@systemthree.com	
Emergency Contact	CHEMTREC (U.S. and CANADA)	1-800-424-9300
	CHEMTREC (Outside the U.S.)	1-703-527-0585

2. Hazard(s) Identification

Classification of substance or mixture/Signal Word

DANGER

GHS Label Elements
Hazard Pictograms



Hazard Statements/Classification of substance or mixture

H302 Harmful if swallowed
H314 Corrosive to skin
H315 May cause sensitization by skin contact.
H361fd Respiratory irritant
H400 Acute Hazard to aquatic life
H410 Chronic hazard to aquatic life

Precautionary statements

Precautionary Statements
Prevention

P280 Wear protective gloves. Wear eye or face protection.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.

Response

P308 + P313 If exposed or concerned: Get medical attention.

Storage

P401 Store at room temperature in a well ventilated area.

Disposal

P501 Dispose of contents and container in accordance with all local, regional, national and international regulations.

3. Composition/Information On Ingredients

Chemical Name	CAS Number	Content (%)
Aliphatic Amines	Trade Secret	60 – 70%
Alkyl Phenols	Trade Secret	15 – 20%
Benzyl Alcohol	100-51-6	15 – 20%
Aromatic Amine	1477-55-0	5 – 10%

4. First-Aid Measures

General advice	Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.
Skin contact	Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Flush immediately with copious amounts of water. Initiate and maintain continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Cover wound with sterile dressing.
Eye contact	Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical attention. If medical care is not promptly available, continue to irrigate for one hour.
Ingestion	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victim's head to the side
Inhalation	Move to fresh air.

5. Fire-Fighting Measures

Suitable extinguishing media	Alcohol-resistant foam. Carbon dioxide (CO ₂). Dry chemical Water Fog
Specific hazards arising from the chemical	Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.
Special protective equipment and precautions for fire-fighters Fire-fighting equipment/instructions	Avoid contact with skin. A face shield should be worn. Use personal protective equipment. Wear self-contained breathing apparatus for firefighting if necessary.
Further information	Do not allow run-off from firefighting to enter drains or water courses. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. Accidental Release Measures

Personal precautions	Wear proper protective clothing, gloves and eye/face protection. Use self-contained breathing apparatus and chemically protective clothing.
Emergency procedures	Use appropriate containment to avoid environmental contamination. Do not allow spill to enter into sewers or waterways. Construct a dike to prevent spreading.

Methods and materials for containment/cleanup	Stop spill at source, dike area to prevent spreading, place in proper waste container. Contact Chemtrec for further instruction. Approach suspected leak areas with caution.
Environmental precautions	Use appropriate containment to avoid environmental contamination. Do not allow spill to enter into sewers or waterways.

7. Handling And Storage

Precautions for safe handling	Avoid contact with skin and eyes. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Use personal protective equipment. When using, do not eat, drink or smoke.
Precautions/Recommendations for safe/proper storage	Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep from freezing.

8. Exposure Controls/Personal Protection

Engineering controls	Provide readily accessible eye wash stations and safety showers. Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.
Individual protection measures/Personal protective equipment	
Eye/face protection	Splash-safe glasses
Hand protection	Butyl-rubber, Nitrile rubber, Neoprene Gloves, PVC disposable gloves, Impervious gloves.
Skin protection	Impervious clothing, Full rubber suit (rain gear), Rubber or plastic boots, Slicker suit.
Environmental exposure controls	Use appropriate containment to avoid environmental contamination. Do not allow spill to enter sewers or waterways.
Special instructions for protection and hygiene	Discard contaminated leather articles. Remove contaminated clothing. Wash at the end of each work shift and before eating smoking or using the toilet. Provide readily accessible eye wash stations and safety showers.

9. Physical And Chemical Properties

Chemical family	Amine Curing Agent
Appearance	Clear liquid
Physical State	Amine mixture
Form	Liquid
Color	Colorless
Odor	Ammoniacal
Relative density	0.9 – 1.0
Viscosity	525 cps at 77 °F (25 °C)
pH	Alkaline
Initial boiling point and boiling range	NA
Flash point	NA

Vapor pressure

NA

10. Stability And Reactivity

Chemical Stability

Stable under normal conditions.

Incompatible materials

Organic acids (i.e. acetic acid, citric acid, etc.).
Mineral acids.
Sodium hypochlorite.
Oxidizing agents.

Hazardous decomposition products

Nitric acid
Ammonia
Aldehydes
Nitrogen oxides (NO_x)
Nitrogen oxide can react with water vapors to form corrosive nitric acid.
Carbon monoxide.
Carbon dioxide (CO₂).

11. Toxicological Information

Acute Health Hazard (components)	
*No comprehensive data (ingestion, inhalation, dermal) on mixture (product).	
Sensitization	May cause sensitization of susceptible persons by skin contact.
Chronic Health Hazard	Aquatic

12. Ecological Information

Ecotoxicity

Aquatic toxicity

No data on the product itself.

Alkyl Phenols

Aquatic Acute 1: 2.5 =< C < 25%
Aquatic Chronic 1: 2.5 =< C < 25%

Persistence and degradability

No data on product itself.

13. Disposal Considerations

Waste from residues/ unused products

Product should not be allowed to enter drains, water courses or the soil; dispose of this material and its containers in a safe way. Contact supplier if guidance is required.

Contaminated packaging

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

14. Transport Information

DOT

UN/ID No.

UN2735

Proper shipping name

Amines, liquid, corrosive, n.o.s., (4,4'-Methylenebis(cyclohexyl)amine, methylimidazole, 1-).

Class or Division

8

Packing group

III

Label(s) 8
Marine Pollutant Yes

IATA

UN/ID No. UN2735
Proper shipping name Amines, liquid, corrosive, n.o.s., (ethlyeneamine).

Class or Division 8
Packing group III
Label(s) 8
Marine Pollutant Yes

Note** This product contains a substance that: 1) is regulated as a Marine Pollutant, or 2) meets the definitely of toxic to the aquatic environment. For more information contact System Three technical support.

IMDG

UN/ID No. UN2735
Proper shipping name Amines, liquid, corrosive, n.o.s., (ethlyeneamine).

Class or Division 8
Packing group III
Label(s) 8
Marine Pollutant Yes

Note** This product contains a substance that: 1) is regulated as a Marine Pollutant, or 2) meets the definitely of toxic to the aquatic environment. For more information contact System Three technical support

TDG

UN/ID No. UN2735
Proper shipping name Amines, liquid, corrosive, n.o.s., (ethyleneamine).

Class or Division 8
Packing group III
Label(s) 8
Marine Pollutant No

Note** This product contains a substance that: 1) is regulated as a Marine Pollutant, or 2) meets the definition of toxic to the aquatic environment. For more information contact System Three technical support

Further Information

The transportation information is not intended to convey all specific regulatory data relating to this material. For complete transportation information, contact System Three technical support.

15. Regulatory Information

UNITED STATES

Toxic Substance Control Act (TSCA) 12(b) – Components: None.

OSHA Hazard Communication Standard (29 CFR 1910.1 200) Hazard Classes: Corrosive. Sensitizer.

California Prop. 65: This product does not contain any chemicals known to the state of California to cause cancer, birth defects or any other harm.

EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification: None

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above ‘de minimus’ level: None.

WHMIS Hazard Classification: Class E Corrosive Material.

INTERNATIONAL REGULATIONS

International Lists

USA inventory (TSCA 8b): Included on inventory
EU (EINECS): Included on EINECS inventory or polymer substance, monomers
Australia inventory (AICS): Included on inventory
Canada inventory (DSL): Included on inventory
Japan inventory (ENCS): Included on inventory
China inventory (IECSC): Included on inventory
South Korea inventory (ECL): Included on inventory

16. Other Information, Including Date Of Preparation Or Last Revision

HMIS Rating

Health	3
Flammability	1
Physical Hazard	0

Date of Preparation March 26, 2015

More Information 1-253-333-8118

Prepared By W. Smoot, System Three Resins Inc.

1. Product Identification

Product name	SilverTip [®] Slow Hardener Part B	
SDS Number	0901B	
Product type	Curing Agent	
Manufacturer/Supplier information		
Company name	SYSTEM THREE RESINS, INC.	
Address	3500 W. Valley Hwy, Suite Suite 105 Auburn, WA 98991-2436 United States	
Telephone	1-253-333-8118	
Website	www.systemthree.com	
Email	support-08@systemthree.com	
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Prevention

P280 Wear protective gloves. Wear eye or face protection.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.

Response

P308 + P313 If exposed or concerned: Get medical attention.

Storage

P401 Store at room temperature in a well ventilated area.

Disposal

P501 Dispose of contents and container in accordance with all local, regional, national and international regulations.

3. Composition/Information On Ingredients

Chemical Name	CAS Number	Content (%)
Aliphatic Amine Mixture	Trade Secret	70 – 80%
Alkyl Phenol Mixture	Trade Secret	15 – 20%
Benzyl Alcohol	100-51-6	10– 15%

4. First-Aid Measures

General advice	Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.
Skin contact	Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Flush immediately with copious amounts of water. Initiate and maintain continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Cover wound with sterile dressing.
Eye contact	Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical attention. If medical care is not promptly available, continue to irrigate for one hour.
Ingestion	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victim's head to the side
Inhalation	Move to fresh air.

5. Fire-Fighting Measures

Suitable extinguishing media	Alcohol-resistant foam. Carbon dioxide (CO ₂). Dry chemical Water Fog
Specific hazards arising from the chemical	Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.
Special protective equipment and precautions for fire-fighters Fire-fighting equipment/instructions	Avoid contact with skin. A face shield should be worn. Use personal protective equipment. Wear self-contained breathing apparatus for firefighting if necessary.
Further information	Do not allow run-off from firefighting to enter drains or water courses. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. Accidental Release Measures

Personal precautions	Wear proper protective clothing, gloves and eye/face protection. Use self-contained breathing apparatus and chemically protective clothing.
Emergency procedures	Use appropriate containment to avoid environmental contamination. Do not allow spill to enter into sewers or waterways. Construct a dike to prevent spreading.

Methods and materials for containment/cleanup	Stop spill at source, dike area to prevent spreading, place in proper waste container. Contact Chemtrec for further instruction. Approach suspected leak areas with caution.
Environmental precautions	Use appropriate containment to avoid environmental contamination. Do not allow spill to enter into sewers or waterways.

7. Handling And Storage

Precautions for safe handling	Avoid contact with skin and eyes. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Use personal protective equipment. When using, do not eat, drink or smoke.
Precautions/Recommendations for safe/proper storage	Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep from freezing.

8. Exposure Controls/Personal Protection

Engineering controls	Provide readily accessible eye wash stations and safety showers. Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.
Individual protection measures/Personal protective equipment	
Eye/face protection	Splash-safe glasses
Hand protection	Butyl-rubber, Nitrile rubber, Neoprene Gloves, PVC disposable gloves, Impervious gloves.
Skin protection	Impervious clothing, Full rubber suit (rain gear), Rubber or plastic boots, Slicker suit.
Environmental exposure controls	Use appropriate containment to avoid environmental contamination. Do not allow spill to enter sewers or waterways.
Special instructions for protection and hygiene	Discard contaminated leather articles. Remove contaminated clothing. Wash at the end of each work shift and before eating smoking or using the toilet. Provide readily accessible eye wash stations and safety showers.

9. Physical And Chemical Properties

Chemical family	Amine Curing Agent
Appearance	Clear liquid
Physical State	Amine mixture
Form	Liquid
Color	Colorless
Odor	Ammoniacal
Relative density	0.9 – 1.0
Viscosity	525 cps at 77 °F (25 °C)
pH	Alkaline
Initial boiling point and boiling range	NA
Flash point	NA

Vapor pressure

NA

10. Stability And Reactivity

Chemical Stability

Stable under normal conditions.

Incompatible materials

Organic acids (i.e. acetic acid, citric acid, etc.).
Mineral acids.
Sodium hypochlorite.
Oxidizing agents.

Hazardous decomposition products

Nitric acid
Ammonia
Aldehydes
Nitrogen oxides (NO_x)
Nitrogen oxide can react with water vapors to form corrosive nitric acid.
Carbon monoxide.
Carbon dioxide (CO₂).

11. Toxicological Information

Acute Health Hazard (components)

*No comprehensive data (ingestion, inhalation, dermal) on mixture (product).

Sensitization

May cause sensitization of susceptible persons by skin contact.

Chronic Health Hazard

Aquatic

12. Ecological Information

Ecotoxicity

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Persistence and degradability

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Waste from residues/ unused products

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Contaminated packaging

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

14. Transport Information

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UN/ID No.

UN2735

Proper shipping name

Amines, liquid, corrosive, n.o.s., (4,4'-Methylenebiscyclohexanamine, Methylimidazole, 1-).

Class or Division

8

Packing group

III

Label(s) 8
Marine Pollutant Yes

IATA

UN/ID No. UN2735
Proper shipping name Amines, liquid, corrosive, n.o.s., (ethyleneamine).

Class or Division 8
Packing group III
Label(s) 8
Marine Pollutant Yes

Note** This product contains a substance that: 1) is regulated as a Marine Pollutant, or 2) meets the definition of toxic to the aquatic environment. For more information contact System Three technical support.

IMDG

UN/ID No. UN2735
Proper shipping name Amines, liquid, corrosive, n.o.s., (ethyleneamine).

Class or Division 8
Packing group III
Label(s) 8
Marine Pollutant Yes

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UNITED STATES

Toxic Substance Control Act (TSCA) 12(b) – Components: None.

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California Prop. 65: This product does not contain any chemicals known to the state of California to cause cancer, birth defects or any other harm.

EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification: None

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above 'de minimus' level: None.

WHMIS Hazard Classification: Class E Corrosive Material.

INTERNATIONAL REGULATIONS

International Lists

USA inventory (TSCA 8b): Included on inventory
EU (EINECS): Included on EINECS inventory or polymer substance, monomers
Australia inventory (AICS): Included on inventory
Canada inventory (DSL): Included on inventory
Japan inventory (ENCS): Included on inventory
China inventory (IECSC): Included on inventory
South Korea inventory (ECL): Included on inventory

16. Other Information, Including Date Of Preparation Or Last Revision

HMIS Rating

Health	3
Flammability	1
Physical Hazard	0

Date of Preparation March 26, 2015

More Information 1-253-333-8118

Prepared By W. Smoot, System Three Resins Inc.