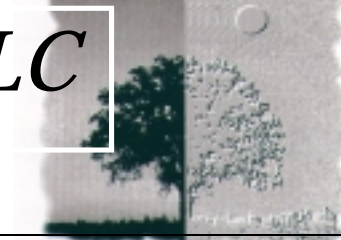


RESIN TECHNOLOGY GROUP, LLC

M A T E R I A L S A F E T Y D A T A S H E E T



1. MATERIAL IDENTIFICATION

Product Name: **TIGA 920-H RESIN**

EMERGENCY PHONE: For product emergency involving spill, leak, fire, exposure, or accident call CHEMTREC at (800) 424-9300. For all other inquiries call Resin Technology Group, LLC at (508) 230-8070.

2. COMPOSITION

HAZARDOUS COMPONENTS	CAS NO.	PERCENT	Exposure Limits	
			ACGIH TLV-TWA	OSHA PEL
Silver (metal)	7440-22-4	< 100	0.1 mg/m ³	0.01 mg/m ³
Glycidyl Ether Mixture	Proprietary	< 25	N.E.	N.E.

Abbreviations: N.E. = Not Established

3. HEALTH HAZARDS IDENTIFICATION

Primary Routes of Exposure: Eyes: Yes Skin: Yes Inhalation: Yes

Eye Contact: May cause severe irritation.

Skin Contact: May cause sensitization and severe irritation.

Inhalation: Effects are not known.

Ingestion: Effects are not known.

4. FIRST AID MEASURES

Eyes: Flush eyes thoroughly with water, for at least 15 minutes, while holding eyelids open. Seek medical attention.

Skin: Remove contaminated clothing, wipe from skin, and flush with water. Use soap or follow by washing with soap and water. Wash contaminated clothing thoroughly before reuse. Obtain medical attention if symptoms persist.

Inhalation: Remove to fresh air, and provide oxygen or artificial respiration if needed. Obtain medical attention if symptoms persist.

Ingestion: Give at least 3 to 4 glasses of water unless the patient is convulsing, or unconscious. Do not induce vomiting.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flashpoint:	> 214 °F, estimated
Explosive Limits:	Not determined
Auto-Ignition Temperature:	Not determined
Hazardous Decomposition Products:	Formaldehyde, carbon oxides, silicon dioxide, and aldehydes

Fire Fighting Instructions: When sufficiently large quantities are present, firefighters should be equipped with full bunker gear, including a positive pressure, NIOSH approved, self-contained breathing apparatus.

Extinguishing Media: Use carbon dioxide, dry chemical, or appropriate foam.

6. ACCIDENTAL RELEASE MEASURES

Ventilate the spill area, and evacuate if necessary. Absorb with a suitable material, and dispose of properly. Flush the area with water to remove trace residue. Clean-up personnel should use adequate protective equipment.

7. HANDLING AND STORAGE

Store in a cool dry place. Keep away from ignition sources and high temperatures. Avoid contact with incompatible materials. Wear protective eyewear, chemical-resistant gloves, and other protective clothing as appropriate.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering/Ventilation Controls: General ventilation may be acceptable under most conditions, although local ventilation is required to control exposure whenever vapors, mists, or dusts are generated.

Respiratory Protection: When airborne limits are exceeded, a NIOSH-approved respirator for organic vapors, a supplied-air respirator, or a self-contained breathing apparatus is required.

Skin Protection: Impervious gloves and protective clothing should be worn as necessary.

Eye Protection: Chemical splash goggles or safety glasses with side shields should be worn as appropriate.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/State:	Silver liquid
Odor:	Not determined
Specific Gravity:	Not determined
Solubility in Water:	Negligible
pH:	Not determined
Boiling Point:	Not determined
Freezing Point:	Not determined
Vapor Pressure (mmHg):	Not determined
Vapor Density (air=1):	Not determined

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions and use.

Conditions and Materials to Avoid: Keep away from ignition sources and high temperatures. Reacts with strong oxidizing agents.

Hazardous Decomposition Products: Formaldehyde, carbon oxides, silicon dioxide, and aldehydes.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

This section provides toxicological information with regard to the pure form of the component indicated. It is suggested that persons trained in its evaluation interpret this information.

Glycidyl Ether Mixture

Acute Oral LD₅₀: >1410 mg/kg (rat)

Acute Dermal LD₅₀: >2150 mg/kg (rabbit)

Acute Inhalation LC₅₀ of one of the chemicals in this mixture: 3466 mg/m³

12. ECOLOGICAL INFORMATION

No data found.

13. DISPOSAL CONSIDERATIONS

Keep out of surface waters, sewers, and waterways entering or leading to surface waters. Notify authorities if any exposure to the environment occurs or is likely to occur. Utilize an appropriate disposal facility, in compliance with applicable federal, state, and local environmental control regulations.

14. TRANSPORT INFORMATION

D.O.T. Classification: Not Regulated

Hazard Class: None **UN #:** None **PG:** None **ERG #:** None **Hazard Labels:** None

I.A.T.A. Classification: Not Regulated

Hazard Class: None **UN #:** None **PG:** None **ERG #:** None **Hazard Labels:** None

15. REGULATORY INFORMATION**TSCA**

The chemical components of this product are included in the TSCA Chemical Substance Inventory, as required.

SARA TITLE III**Section 313 - Toxic Chemicals**

Pursuant to Section 313, this product contains a chemical in a concentration equal to or greater than the *de minimis* level:

<u>Hazardous Components</u>	<u>CAS #</u>	<u>Percent</u>
Silver (metal)	7440-22-4	< 100

Section 311/312 - Hazard Categories

Fire Hazard:	No
Reactivity Hazard:	No
Sudden Release of Pressure Hazard:	No
Immediate (Acute) Health Hazard:	Yes
Delayed (Chronic) Health Hazard:	No

NFPA Hazards:	Health: 2	Flammability: 1	Reactivity: 0
HMIS Hazards:	Health: 2	Flammability: 1	Reactivity: 0

STATE REGULATIONS / RIGHT TO KNOW

California Proposition 65: This product contains a chemical or chemicals which are recognized by the State of California to cause cancer, birth defects, or other reproductive harm, including epichlorohydrin.

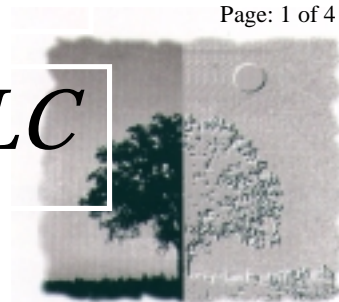
Resin Technology Group, LLC urges each customer or recipient of this MSDS to study it carefully in order to become aware of and understand the hazards associated with the product. The reader should consider consulting reference works or individuals that are experts in ventilation, toxicology, and/or fire prevention, as necessary to use and understand the data contained in this MSDS.

To promote safe handling, customers and recipients should, 1 - notify their employees, agents, contractors, and others whom they know or suspect will use this material or the information in this MSDS and any other information regarding hazards or safety. 2 - furnish this same information to each of their customers for the product. 3 - request their customers to notify their employees, customers and other users of the product of this information.

The information contained herein is based on the data available to Resin Technology Group, LLC, and is believed to be correct. However, Resin Technology Group, LLC makes no warranty, expressed or implied, regarding the accuracy of this data or the results to be obtained from the use thereof. Resin Technology Group, LLC assumes no responsibility for injury from the use of the product described herein.

RESIN TECHNOLOGY GROUP, LLC

M A T E R I A L S A F E T Y D A T A S H E E T



1. MATERIAL IDENTIFICATION

Product Name: **TIGA 920-H HARDENER**

EMERGENCY PHONE: For product emergency involving spill, leak, fire, exposure, or accident call CHEMTREC at (800) 424-9300. For all other inquiries call Resin Technology Group, LLC at (508) 230-8070.

2. COMPOSITION

HAZARDOUS COMPONENTS	CAS NO.	PERCENT	Exposure Limits	
			ACGIH TLV-TWA	OSHA PEL
Silver (metal)	7440-22-4	< 90	0.1 mg/m ³	0.01 mg/m ³
Hardener Mixture	Proprietary	< 30	N.E.	N.E.

Abbreviations: N.E. = Not Established

3. HEALTH HAZARDS IDENTIFICATION

Primary Routes of Exposure: Eyes: Yes Skin: Yes Inhalation: No

Eye Contact: May cause severe chemical burns.

Skin Contact: May cause burns.

Inhalation: Effects are not known.

Ingestion: May be moderately toxic. Will cause burns.

4. FIRST AID MEASURES

Eyes: Flush eyes thoroughly with water for at least 15 minutes while holding eyelids open. Seek medical attention.

Skin: Remove contaminated clothing, wipe from skin, and flush the area with water for at least 15 minutes. Follow by washing with soap and water. Wash contaminated clothing thoroughly before reuse. Obtain medical attention.

Inhalation: Remove to fresh air, and provide oxygen or artificial respiration if needed. Obtain medical attention.

Ingestion: Do not induce vomiting. Obtain medical attention.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flashpoint:	> 260 °F, estimated
Explosive Limits:	Not determined
Auto-Ignition Temperature:	Not determined
Hazardous Decomposition Products:	Carbon monoxide, carbon dioxide, nitrogen oxides, and ammonia

Fire Fighting Instructions: When sufficiently large quantities are present, firefighters should be equipped with full bunker gear, including a positive pressure, NIOSH approved, self-contained breathing apparatus. Fire-exposed containers may be cooled with water.

Extinguishing Media: Use water, carbon dioxide, dry chemical, or appropriate foam.

6. ACCIDENTAL RELEASE MEASURES

Ventilate the spill area, and evacuate if necessary. Remove all ignition sources. Absorb with a suitable material, and dispose of properly. Clean-up personnel should use adequate protective equipment, including respiratory protection.

7. HANDLING AND STORAGE

Store in a cool dry place away from ignition sources and high temperatures. Avoid contact with incompatible materials. Wear protective eyewear, chemical-resistant gloves, and other protective clothing as appropriate.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering/Ventilation Controls: General ventilation may be acceptable under most conditions to control exposure when vapors, mists, or dusts are generated.

Respiratory Protection: When local ventilation is unavailable and airborne limits are exceeded, a NIOSH-approved respirator, a supplied-air respirator, or a self-contained breathing apparatus is required.

Skin Protection: Impervious gloves and protective clothing should be worn as necessary.

Eye Protection: Chemical splash goggles or safety glasses with side shields should be worn as appropriate.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/State:	Silver liquid
Specific Gravity:	Not determined
Odor:	Not determined
Solubility in Water:	Partial
pH:	Not determined
Boiling Point:	Not determined
Freezing Point:	Not determined
Vapor Pressure (mmHg):	Not determined
Vapor Density (air=1):	Not determined

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions and use.

Conditions and Materials to Avoid: Keep away from ignition sources and high temperatures. Reacts with acids, oxidizing agents, ammonia, acetylene, and halogenated organic compounds.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, nitrogen oxides, and ammonia.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

This product is not known to have undergone toxicological testing.

12. ECOLOGICAL INFORMATION

No data found.

13. DISPOSAL CONSIDERATIONS

Keep out of surface waters, sewers, and waterways entering or leading to surface waters. Notify authorities if any exposure to the environment occurs or is likely to occur. Utilize an appropriate disposal facility, in compliance with applicable federal, state, and local environmental control regulations.

14. TRANSPORT INFORMATION

D.O.T. Classification: Not Regulated

Hazard Class: None **UN #:** None **PG:** None **ERG #:** None **Hazard Labels:** None

I.A.T.A. Classification: Not Regulated

Hazard Class: None **UN #:** None **PG:** None **ERG #:** None **Hazard Labels:** None

15. REGULATORY INFORMATION**TSCA**

The chemical components of this product are included in the TSCA Chemical Substance Inventory, as required.

SARA TITLE III**Section 313 - Toxic Chemicals**

Pursuant to Section 313, this product contains a chemical in a concentration equal to or greater than the *de minimis* level:

<u>HAZARDOUS COMPONENTS</u>	<u>CAS NO.</u>	<u>PERCENT</u>
Silver (metal)	7440-22-4	< 90

Section 311/312 - Hazard Categories

Fire Hazard:	No
Reactivity Hazard:	Yes
Sudden Release of Pressure Hazard:	No
Immediate (Acute) Health Hazard:	Yes
Delayed (Chronic) Health Hazard:	No

NFPA Hazards:	Health: 3	Flammability: 1	Reactivity: 1
HMIS Hazards:	Health: 3	Flammability: 1	Reactivity: 1

STATE REGULATIONS / RIGHT TO KNOW

California Proposition 65: This product is not known to contain any chemicals which are recognized by the State of California to cause cancer, birth defects, or other reproductive harm.

Resin Technology Group, LLC urges each customer or recipient of this MSDS to study it carefully in order to become aware of and understand the hazards associated with the product. The reader should consider consulting reference works or individuals that are experts in ventilation, toxicology, and/or fire prevention, as necessary to use and understand the data contained in this MSDS.

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