

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: **XTR-311 Resin**

Revision Date: 10/10/08

His Glassworks, Inc.  
91 Webb Cove Road  
Asheville, NC 28804 USA  
800-914-7463, 828-254-2559, M-F 9:00am - 4:00pm

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS Number</u>	<u>%</u>	<u>TWA</u>		<u>STEL</u>		<u>Ceiling</u>	
			<i>OSHA</i> <i>ACGIH</i> ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Phenol,4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl) oxirane	025068-38-6	80 –100						
n-Butyl glycidyl ether	002426-08-6	up to 20	50 25	270 133	- -	- -	- -	- -

COMMENTS: a. NIOSH - Value based on 15 minutes.

## 3. HAZARDS IDENTIFICATION

Effects of Overexposure                      Repeated contact or breathing of vapors may cause irritation; material is also a strong sensitizer. Eye and skin contact may cause transient irritation.

## 4. FIRST AID MEASURES

Eyes    Flush with water, get medical attention.  
Skin    Wash with soap and water; remove contaminated clothing.  
Inhalation    Remove to fresh air.  
Ingestion    No known antidote but give milk or water; induce vomiting if large amount swallowed.

## 5. FIREFIGHTING MEASURES

Flashpoint    164°F  
Flashpoint Method                                    setaflash  
Extinguishing Media                                Dry chemicals, chemical foam, carbon dioxide, water.  
Special Firefighting Measures                    Avoid breathing smoke. Addition of water may reduce flame intensity.  
Fire and Explosion Hazards                      Toxic gases may be liberated; handle as combustible; store in a cool place.  
Flammable Limits                                    N/A  
LEL    N/A  
UEL    N/A

## 6. ACCIDENTAL RELEASE MEASURES

Spill and Leak Procedures                        Prevent skin and eye contact. Soak up in absorbent material or scrape up and transfer to disposal container. Wipe up remaining residue with solvents, observing solvent flammability cautions or use detergents.

## 7. HANDLING AND STORAGE

Special Sensitivity                                 Store in cool place in closed containers.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Local Exhaust	Recommended
Mechanical Exhaust	Recommended
Eye Protection Requirements	Safety glasses or goggles
Glove Requirements	Rubber or plastic disposable.

Other Protection As required to prevent all body contact; eye bath and/or safety shower.  
Respirator Requirements Air supplied or organic canister, mask in confined areas.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Clear, low viscosity liquid, slight sweet odor.
Boiling Point (°F):	> 350
Solubility in Water:	low
Specific Gravity (H <sub>2</sub> O=1):	1.2
Evaporation Rate (BuAc=1):	low
Vapor Pressure (mm Hg.):	< 1
Vapor Density (air = 1):	> 4
Percent Volatile:	< 0.2

## 10. STABILITY AND REACTIVITY

Stability:	Stable
Conditions to Avoid (Stability):	Avoid uncontrolled excess heating over long periods; avoid uncontrolled amine reactions
Incompatibility (Materials to Avoid):	Strong acids and bases, strong oxidizing agents.
Hazardous Decomposition	Carbon monoxide, carbon dioxide, aldehydes, phenol.
Products:	
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid (Reactivity):	High temperatures, strong acids; certain organics, metallic acids.

## 11. TOXICOLOGICAL INFORMATION

Primary Entry Route(s):	Skin, eyes, inhalation.
Oral, LD50:	Ingestion LD50 900 mg/kg. Dermal > 20 ml/kg. Inhalation > 3500 ppm.
Other Notes on Toxicity:	Considered Mutagenic

## 12. ECOLOGICAL INFORMATION

Not available

## 13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods:	Dispose of as hazardous waste according to local, state and federal regulations. Disposal method can be land burial or chemical incineration as regulated by all governmental agencies.
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## 14. TRANSPORTATION INFORMATION

Not Applicable

## 15. REGULATORY INFORMATION

TSCA: All components are on the TSCA inventory.

### STATE LAWS:

The information given and the recommendations made herein apply to our product(s) alone and are not combined with other product(s). Such are based on our research and on data from other reliable sources and are believed to be accurate. No guaranty of

accuracy is made. It is the purchaser's responsibility before using any product to verify this data under their own operating conditions and to determine whether the product is suitable for their purposes.

## 16. OTHER INFORMATION

MSDS Date: 10/10/97 Revision: B HMIS Coding: H: 3 F: 2 R: O

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: **XTR-311 Hardener**

Revision Date: 10/10/97

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS Number</u>	<u>%</u>	<u>TWA</u>		<u>STEL</u>		<u>Ceiling</u>	
			<i>OSHA</i> ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
1-propanamine,3,3'-(oxybis(2,1--ethanediyloxy))bis	004246-51-9	80-100						

## 3. HAZARDS IDENTIFICATION

Effects of Overexposure                      Repeated contact or breathing of vapors may cause irritation; material is also a strong sensitizer. Eye and skin contact may cause transient irritation.

## 4. FIRST AID MEASURES

Eyes    Flush with water, get medical attention.  
Skin    Wash with soap and water; remove contaminated clothing.  
Inhalation    Remove to fresh air.  
Ingestion    No known antidote but give milk or water; do NOT induce vomiting if swallowed; get medical attention.

## 5. FIREFIGHTING MEASURES

Flashpoint    > 250°F  
Flashpoint Method                                      PMCC  
Extinguishing Media                                      Dry chemicals, chemical foam, carbon dioxide, water.  
Special Firefighting Measures                      Avoid breathing smoke. Addition of water may reduce flame intensity.  
Fire and Explosion Hazards                      Toxic gases may be liberated; handle as combustible; store in a cool place.  
Flammable Limits                                      N/A/V  
LEL    N/A  
UEL    N/A

## 6. ACCIDENTAL RELEASE MEASURES

Spill and Leak Procedures                      Prevent skin and eye contact. Soak up in absorbent material, or scrape up, and transfer to disposal container. Wipe up remaining residue with solvents, observing solvent flammability cautions, or use detergents.

## 7. HANDLING AND STORAGE

Special Sensitivity                      Store in cool place in closed containers.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Local Exhaust	Recommended
Mechanical Exhaust	Recommended
Eye Protection Requirements	Safety glasses or goggles
Glove Requirements	Rubber or plastic disposable.
Other Protection	As required to prevent all body contact; eye bath and/or safety shower.
Respirator Requirements	Air supplied or organic canister, mask in confined areas.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor	Light amber liquid, slight amine odor.
Boiling Point (°F)	295
Solubility in Water	high
Specific Gravity (H <sub>2</sub> O=1)	1.0
Evaporation Rate (BuAc=1)	low
Vapor Pressure (mm Hg.)	low
Vapor Density (air = 1)	ND
Percent Volatile	low

## 10. STABILITY AND REACTIVITY

Stability:	Stable
Conditions to Avoid (Stability):	Avoid contact with metals corroded by liquid amines; avoid high temperatures.
Incompatibility (Materials to Avoid):	Strong acids and bases, strong oxidizing agents.
Hazardous Decomposition Products:	Carbon monoxide, carbon dioxide, aldehydes, nitrogen oxides, thermal products.
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid (Reactivity):	Chlorinated compounds; exotherms when used to cure epoxy resins.

## 11. TOXICOLOGICAL INFORMATION

Primary Entry Route(s):	Skin, eyes, inhalation.
Oral, LD50:	Ingestion LD50 4290 mg/kg. Dermal LD50 2500 mg/kg.

## 12. ECOLOGICAL INFORMATION

Not available

## 13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods	Dispose of as hazardous waste according to local, state and federal regulations. Disposal method can be land burial or chemical incineration as regulated by all governmental agencies.
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## 14. TRANSPORTATION INFORMATION

Not Applicable

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## **16. OTHER INFORMATION**

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