

# MATERIAL SAFETY DATA SHEET

Date Prepared: 2/24/05  
Everfix Resin Part A

Page: 1  
MSDS Number: 130010

## SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### Material Identity

Product Name: Everfix Resin Part A  
Product Numbers: 100642A, 100643A  
Product Use: Epoxy Resin

### Company

Fibre Glass-Evercoat  
a Division of Illinois Tool Works Inc.  
6600 Cornell Road  
Cincinnati, Ohio USA  
Phone: 513-489-7600

### Emergency Telephone Numbers:

CHEMTREC: 1-800-424-9300  
CANUTEC: 1-613-996-6666

Prepared By: Safety Department

## SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	EINECS Number	% (by weight)
Bisphenol A/ Epichlorohydrin Resin	25068-38-6	N/L	100 %

OSHA Regulatory Status: This material is classified as hazardous under OSHA regulations.

## SECTION 3. HAZARDS IDENTIFICATION

### \*\*\*EMERGENCY OVERVIEW\*\*\*

WARNING! MAY CAUSE ALLERGIC SKIN REACTION. CAUSES EYE, SKIN, NOSE AND THROAT IRRITATION. HARMFUL IF SWALLOWED.

### Potential Health Effects

#### Acute Effects (Short Term):

- Eye:** Contact with liquid or vapor may result in irritation, redness, tearing, and blurred vision.
- Skin:** May cause skin irritation. Prolonged or repeated contact may cause allergic skin reaction. Symptoms may include redness, burning, drying and cracking of skin, and skin burns.
- Swallowing:** Ingestion of this material may cause gastrointestinal irritation, nausea, diarrhea, and vomiting. Aspiration of this material into the lungs due to vomiting may produce chemical pneumonitis which can be fatal.
- Inhalation:** Excessive inhalation of vapors may cause nasal and respiratory irritation, acute nervous system depression, fatigue, weakness, nausea, headache, and dizziness. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8).

## MATERIAL SAFETY DATA SHEET

Date Prepared: 2/24/05  
Everfix Resin Part A

Page: 2  
MSDS Number: 130010

### **Chronic Effects of Overexposure (Long Term):**

**Epoxy Resin:** Prolonged or repeated contact may cause allergic skin reaction.

**Cancer Information:** This product does not contain any substance, which is listed as a carcinogen by NTP, IARC or OSHA in quantities greater than 0.1%.

**Other Health Effects:** None known.

**Primary Route(s) of Entry:** Inhalation, Skin contact, Eye contact, Ingestion, Skin absorption.

### **SECTION 4. FIRST AID MEASURES**

- Eyes:** Flush eyes gently with water for at least 15 minutes. Seek immediate medical attention.
- Skin:** Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.
- Swallowing:** Consult a physician or poison control center immediately. DO NOT INDUCE VOMITING. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. If possible, do not leave individual unattended. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs.
- Inhalation:** If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, oxygen may be beneficial if administered by trained personnel.

### **SECTION 5. FIRE FIGHTING MEASURES**

**Flash Point:** >200 °F (>93.3 °C)

**Explosive Limit:** Lower: N/A Upper: N/A

**Autoignition Temperature:** N/E

**OSHA Flammability Class:** Combustible Liquid – Class IIIB

**Hazardous Products of Combustion:** May form toxic and corrosive gases: carbon dioxide, carbon monoxide, chlorine and various hydrocarbons.

**Fire and Explosion Hazards:** Material may burn although not readily ignitable.

**Extinguishing Media:** Regular foam, carbon dioxide, dry chemical.

## MATERIAL SAFETY DATA SHEET

Date Prepared: 2/24/05

Page: 3

Everfix Resin Part A

MSDS Number: 130010

**Fire Fighting Instructions:** Water may be used to keep fire-exposed containers cool until fire is out. Wear a self-contained breathing apparatus NIOSH approved with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment.

**NFPA Rating:** Health - 1, Flammability - 1, Reactivity - 0

### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

**In Case of Spill:** Eliminate all sources of ignition such as flares, flames (including pilot lights), and electrical sparks. Ventilate the area. Wear proper protective equipment (Section 8). Avoid breathing vapors. Collect with an inert absorbant and dispose of properly.

### **SECTION 7. HANDLING AND STORAGE**

**Handling:** All hazard precautions given in the data sheet must be observed. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Do not take internally. Close container after each use. **Keep out of reach of children.**

**Storage:** Store material in a cool, well-ventilated area. For maximum product quality, avoid prolonged storage at temperatures above 75°F (25°C). Do not use or store near heat, sparks, or open flame. Keep container tightly closed. Avoid contact with incompatible materials.

### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Eye Protection:** Chemical splash goggles in compliance with OSHA regulations are recommended.

**Skin Protection:** Protective gloves and proper clothing should be worn to prevent skin contact. Gloves should be made of neoprene or natural rubber. A barrier cream may be used for additional skin protection. To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

**Respiratory Protection:** No respiratory protection is ordinarily required under normal conditions of use.

**Engineering Controls:** No exposure controls are ordinarily required under normal conditions of use.

**Exposure Guidelines:**  
None Established

### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

## MATERIAL SAFETY DATA SHEET

Date Prepared: 2/24/05  
Everfix Resin Part A

Page: 4  
MSDS Number: 130010

<b>Boiling Point:</b>	>500 °F / >260 °C	<b>Vapor Density:</b>	Heavier than air.
<b>Specific Gravity / Density:</b>	1.17/9.75 lbs/gal	<b>Percent Volatiles by weight:</b>	0 %
<b>Evaporation Rate:</b>	Slower than ethyl ether.	<b>Physical State:</b>	Liquid
<b>Melting Point:</b>	N/E	<b>pH:</b>	Neutral
<b>Odor:</b>	Slight odor.	<b>Solubility:</b>	Insoluble in water.
<b>Vapor Pressure:</b>	0.03 mmHg @171 °F/ 77°C	<b>Appearance:</b>	Clear Liquid
<b>Octanol/Water Partition Coefficient:</b>	N/E	<b>VOC (as applied 1:1 mix - less exempts and water):</b>	0 lbs/gal or 0 g/L
<b>VHAP Content by weight – as packaged:</b>	0		

### SECTION 10. STABILITY AND REACTIVITY

**Hazardous Polymerization:** Product will not undergo hazardous polymerization.

**Hazardous Decomposition:** May form toxic and corrosive gases: carbon dioxide, carbon monoxide, chlorine and various hydrocarbons.

**Chemical Stability:** Stable under normal handling conditions.

**Incompatibility:** Avoid contact in uncontrolled conditions with: epoxy curing agents, strong acids, strong oxidizing agents and strong bases.

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Acute Toxicity Data:

Ingredient	CAS #	LD <sub>50</sub> Oral-Rat	LC <sub>50</sub> Inhalation-Rat
Bisphenol A/ Epichlorohydrin Resin	25068-38-6	11,400 mg/kg	N/E

N/E-Not Established

**Carcinogenicity:** See Cancer Information, Section 3.

**Mutagenicity:** No significant evidence found.

**Teratogenicity:** No significant evidence found.

### SECTION 12. ECOLOGICAL INFORMATION

## MATERIAL SAFETY DATA SHEET

Date Prepared: 2/24/05

Page: 5

Everfix Resin Part A

MSDS Number: 130010

**Ecotoxicity:** This material should not be released to sewage, draining systems or any body of water exceeding concentrations of approved limits under applicable regulations and permits.

### SECTION 13. DISPOSAL CONSIDERATION

**RCRA Hazardous Waste:** This material as supplied, if discarded, would not be regulated as a hazardous waste under RCRA (40 CFR 261). Dispose of in accordance with applicable federal, state, and local regulations.

**RCRA Hazard Class:** This material would be regulated as EPA non-RCRA.

### SECTION 14. TRANSPORT INFORMATION

**DOT Description:** The DOT Classification for shipping is dependant on quantity, type of packaging (a kit may include other components), or method of shipment.

### SECTION 15. REGULATORY INFORMATION

#### US Federal Regulations

##### TSCA (Toxic Substances Control Act) Status

TSCA (USA) The intentional ingredients of this product are listed.

##### CERCLA RQ - 40 CFR 302.4(a)

Component \_\_\_\_\_ RQ (lbs.)

None

##### SARA Title III: Section 302- Extremely Hazardous Substances

None

##### SARA Title III: Section 313- Toxic Chemical List

Component \_\_\_\_\_ CAS Number \_\_\_\_\_ Percentage \_\_\_\_\_

None

#### International Regulations

**EINECS (Europe)** The intentional ingredients of this product are listed.

**DSL (Canada)** The intentional ingredients of this product are listed.

##### WHMIS Classification

**Health Hazard:** D2B (Other toxic effects)

**Physical Hazard:**

#### State and Local Regulations

##### California Proposition 65:

This product contains the following chemical(s) known to the state of California to cause cancer. EPICHLOROHYDRIN

## MATERIAL SAFETY DATA SHEET

Date Prepared: 2/24/05

Page: 6

Everfix Resin Part A

MSDS Number: 130010

This product contains the following chemical(s) known to the state of California to cause birth defects or reproductive harm. EPICHLOROHYDRIN

### **SECTION 16. OTHER INFORMATION**

**HMIS Rating:** Health – 1, Flammability - 1, Reactivity - 0  
Key- 0=Least, 1=Slight, 2=Moderate, 3=Serious, 4=Extreme, \*=Chronic Effects

**Other Precautions for Use:** This product must be mixed with Everfix Hardener prior to use. Please refer to the Material Safety Data Sheet (#100642B) for hardener before using.

Additional Information may be obtained by calling the Evercoat MSDS Hotline at 1-800-729-7600.

**NOTICE:** The information accumulated herein is believed to be correct as of the date issued from sources, which are believed to be accurate and reliable. Since it is not possible to anticipate all circumstances of use, recipients are advised to confirm, in advance of need, that the information is current, applicable and suitable to their circumstances.

# MATERIAL SAFETY DATA SHEET

Date Prepared: 1/23/07  
Everfix Hardener Part B

Page: 1  
MSDS Number: 130003

## SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### Material Identity

Product Name: Everfix Hardener Part B  
Product Numbers: 100642B, 100643B  
Product Use: Epoxy Hardener

### Company

Fibre Glass-Evercoat  
a Division of Illinois Tool Works Inc.  
6600 Cornell Road  
Cincinnati, Ohio USA  
Phone: 513-489-7600

### Emergency Telephone Numbers:

CHEMTREC: 1-800-424-9300  
CANUTEC: 1-613-996-6666

Prepared By: Safety Department

## SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	EINECS Number	% (by weight)
Nonylphenol	84852-15-3	284-325-5	50 – 55
Polymethyl ethanediyl	9046-10-0	N/L	30 – 35
n-Aminoethylpiperazine	140-31-8	205-411-0	5 – 10
Benzenedicarboxylic acid	6422-86-2	229-176-9	5 – 10
2,4,6 Tris dimethylaminomethyl phenol	90-72-2	202-013-9	1 – 5

OSHA Regulatory Status: This material is classified as hazardous under OSHA regulations.

## SECTION 3. HAZARDS IDENTIFICATION

### \*\*\*EMERGENCY OVERVIEW\*\*\*

WARNING! CORROSIVE MATERIAL. VAPOR HARMFUL. MAY CAUSE ALLERGIC RESPIRATORY REACTION. MAY CAUSE EYE AND SKIN BURNS.

### Potential Health Effects

#### Acute Effects (Short Term):

**Eye:** Contact with liquid or vapor may result in irritation, redness, tearing, and blurred vision. Prolonged or repeated contact is corrosive to eyes. May cause temporary and reversible hazy or blurred vision.

**Skin:** May cause severe skin irritation. Prolonged or repeated contact is corrosive to skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns.

## MATERIAL SAFETY DATA SHEET

Date Prepared: 1/23/07  
Everfix Hardener Part B

Page: 2  
MSDS Number: 130003

**Swallowing:** Ingestion of this material may cause severe gastrointestinal irritation, nausea, diarrhea, and vomiting. Swallowing of a corrosive material may result in severe ulceration, inflammation and possible perforation of the upper alimentary tract, with hemorrhage and fluid loss. Aspiration of this material into the lungs due to vomiting may produce chemical pneumonitis which can be fatal.

**Inhalation:** Excessive inhalation of vapors may cause severe nasal and respiratory irritation, acute nervous system depression, fatigue, weakness, nausea, headache, and dizziness. Prolonged or repeated contact is corrosive to the respiratory tract. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8).

### **Chronic Effects of Overexposure (Long Term):**

**Polymethyl ethanediyl:** Repeated inhalation may cause lung damage. Swallowing of a corrosive material may result in severe ulceration, inflammation and possible perforation of the upper alimentary tract, with hemorrhage and fluid loss.

**2,4,6 Tris dimethylaminomethyl phenol:** Overexposure to this material may provoke an asthma attack.

**Nonylphenol:** This substance is corrosive to the eyes, the skin, and the respiratory tract. Overexposure can injure the cornea and cause blindness.

**Cancer Information:** This product does not contain any substance, which is listed as a carcinogen by NTP, IARC or OSHA in quantities greater than 0.1%.

**Other Health Effects:** None known.

**Primary Route(s) of Entry:** Inhalation, Skin contact, Eye contact, Ingestion, Skin absorption.

## **SECTION 4. FIRST AID MEASURES**

- Eyes:** Flush eyes gently with water for at least 15 minutes. Seek immediate medical attention.
- Skin:** Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.
- Swallowing:** Consult a physician or poison control center immediately. DO NOT INDUCE VOMITING. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. If possible, do not leave individual unattended.

## MATERIAL SAFETY DATA SHEET

Date Prepared: 1/23/07  
Everfix Hardener Part B

Page: 3  
MSDS Number: 130003

**Inhalation:** If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, oxygen may be beneficial if administered by trained personnel.

### **SECTION 5. FIRE FIGHTING MEASURES**

**Flash Point:** >200 °F (>93.3 °C)

**Explosive Limit:** Lower: 1.6% Upper: 6.5%

**Autoignition Temperature:** 572.0 °F (300.0 °C)

**OSHA Flammability Class:** Combustible Liquid – Class IIIB

**Hazardous Products of Combustion:** May form toxic and corrosive gases: carbon dioxide, carbon monoxide, ammonia, nitrogen, irritating aldehydes and ketones, phenols, and various hydrocarbons.

**Fire and Explosion Hazards:** Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point.

**Extinguishing Media:** Regular foam, carbon dioxide, dry chemical.

**Fire Fighting Instructions:** Water may be used to keep fire-exposed containers cool until fire is out. Wear a self-contained breathing apparatus NIOSH approved with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment.

**NFPA Rating:** Health - 2, Flammability - 1, Reactivity - 0

### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

**In Case of Spill:** Eliminate all sources of ignition such as flares, flames (including pilot lights), and electrical sparks. Ventilate the area. Wear proper protective equipment (Section 8). Avoid breathing vapors. Collect with an inert absorbant and dispose of properly.

### **SECTION 7. HANDLING AND STORAGE**

**Handling:** All hazard precautions given in the data sheet must be observed. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Use only with adequate ventilation. Do not breathe sanding dust, vapors or spray mist. Do not take internally. Close container after each use. **Keep out of reach of children.**

## MATERIAL SAFETY DATA SHEET

Date Prepared: 1/23/07

Page: 4

Everfix Hardener Part B

MSDS Number: 130003

**Storage:** Store material in a cool, well-ventilated area. For maximum product quality, avoid prolonged storage at temperatures above 75°F (25°C). Do not use or store near heat, sparks, or open flame. Keep container tightly closed. Avoid contact with incompatible materials.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Eye Protection:** Chemical splash goggles in compliance with OSHA regulations are recommended.

**Skin Protection:** Protective gloves and proper clothing should be worn to prevent skin contact. Gloves should be made of neoprene or natural rubber. A barrier cream may be used for additional skin protection. To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

**Respiratory Protection:** Use a NIOSH approved respirator designed to remove particulate matter and organic solvent vapors.

**Engineering Controls:** Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below acceptable limits. Explosion-proof ventilation system is acceptable.

**Exposure Guidelines:**  
None Established

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Boiling Point:</b>	431 - 752 °F / 222 - 400 °C	<b>Vapor Density:</b>	Heavier than air.
<b>Specific Gravity / Density:</b>	1.08/9.0 lbs/gal	<b>Percent Volatiles by weight:</b>	10 - 15 %
<b>Evaporation Rate:</b>	Slower than ethyl ether.	<b>Physical State:</b>	Liquid
<b>Melting Point:</b>	35.6°F/ 2°C	<b>pH:</b>	Neutral
<b>Odor:</b>	Mild odor.	<b>Solubility:</b>	Insoluble in water.
<b>Vapor Pressure:</b>	<0.001 mmHg @68 °F/20°C (nonylphenol)	<b>Appearance:</b>	Clear Yellow Liquid
<b>Octanol/Water Partition</b>	3.28 (nonylphenol)	<b>VOC (material):</b>	1.0 lbs/gal

### SECTION 10. STABILITY AND REACTIVITY

## MATERIAL SAFETY DATA SHEET

Date Prepared: 1/23/07  
Everfix Hardener Part B

Page: 5  
MSDS Number: 130003

**Hazardous Polymerization:** Product will not undergo hazardous polymerization.

**Hazardous Decomposition:** May form toxic and corrosive gases: carbon dioxide, carbon monoxide, ammonia, nitrogen, irritating aldehydes and ketones, phenols, and various hydrocarbons.

**Chemical Stability:** Stable under normal handling conditions.

**Incompatibility:** Avoid contact in uncontrolled conditions with: moisture, strong acids, strong oxidizing agents and strong bases.

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Acute Toxicity Data:

Ingredient	CAS #	LD <sub>50</sub> Oral-Rat	LC <sub>50</sub> Inhalation-Rat
Polymethyl ethanediyl	9046-10-0	2,880 mg/kg	N/E
n-Aminoethylpiperazine	140-31-8	2,140 mg/kg	N/E
2,4,6 Tris dimethylaminomethyl phenol	90-72-2	1,200 mg/kg	N/E

N/E-Not Established

**Carcinogenicity:** See Cancer Information, Section 3.

**Mutagenicity:** No significant evidence found.

**Teratogenicity:** No significant evidence found.

### SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Nonylphenol is very toxic to aquatic organisms and should not be released to sewage, draining systems or any body of water exceeding concentrations of approved limits under applicable regulations and permits. In the food chain this is important to humans, because bioaccumulation takes place, specifically in fish and seafood.

### SECTION 13. DISPOSAL CONSIDERATION

**RCRA Hazardous Waste:** This material as supplied, if discarded, would not be regulated as a hazardous waste under RCRA (40 CFR 261). Dispose of in accordance with applicable federal, state, and local regulations.

**RCRA Hazard Class:** This material would be regulated as EPA non-RCRA.

### SECTION 14. TRANSPORT INFORMATION

**DOT Description:** The DOT Classification for shipping is dependant on



## MATERIAL SAFETY DATA SHEET

Date Prepared: 1/23/07  
Everfix Hardener Part B

Page: 7  
MSDS Number: 130003

**Other Precautions for Use:** This product must be mixed with Everfix Resin prior to use. Please refer to the Material Safety Data Sheet (#100642A) for resin before using.

Additional Information may be obtained by calling the Evercoat MSDS Hotline at 1-800-729-7600.

**NOTICE:** The information accumulated herein is believed to be correct as of the date issued from sources, which are believed to be accurate and reliable. Since it is not possible to anticipate all circumstances of use, recipients are advised to confirm, in advance of need, that the information is current, applicable and suitable to their circumstances.