

## Material Safety Data Sheet

Revision Date: 08/12  
Version 2.0

Print Date: 08/21/12  
MSDS Identification: 3100CR - Part A

Novolac Epoxy Resin

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name : 3100CR - Part A

Product Use Description : Novolac Epoxy Resin

Company : Protective Floorings and Linings  
A Division of Milamar Coatings, LLC  
311 N.W. 122nd St, Suite 100  
Oklahoma City, OK 73114

Telephone : 405-755-8448

Emergency Telephone Number: ChemTel 800-255-3924 or 813-248-0585 (International)

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

Components	CAS Number	Concentration (Weight)
Epoxy Phenol Novolac Resin	28064-14-4	100%

### 3. HAZARDS INFORMATION

#### Emergency Overview

Yellow liquid.  
Aromatic odor.  
May cause allergic skin reaction.  
May cause eye irritation.

#### Potential Health Effects

Eye : May cause slight eye irritation. Corneal injury is unlikely.

Skin : Prolonged or repeated exposure may cause moderate skin irritation. May cause more severe response if skin is abraded (scratched or cut). Has caused allergic skin reactions when tested in guinea pigs. Prolonged skin contact is unlikely to result in absorption of harmful amounts.

Ingestion : Low toxicity if swallowed. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury.

Inhalation : At room temperature, exposure to vapor is minimal due to low volatility; vapor from heated material may cause respiratory irritation.

Systemic Effects : No relevant information found.

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Cancer Information	:	No relevant information found.
Teratology (Birth Defects)	:	No relevant information found.
Reproductive Effects	:	No relevant information found.

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## 4. FIRST AID MEASURES

Eyes	:	Flush eyes thoroughly with water for several minutes. Remove contact lenses after initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.
Skin Contact	:	Wash skin with plenty of water. Items which cannot be decontaminated, including leather articles such as shoes, belts, and watch bands should be disposed of properly.
Ingestion	:	If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.
Inhalation	:	Move person to fresh air; if effects occur, consult a physician.
NOTES TO PHYSICIAN	:	Consider additional thorough skin wash with mild non-abrasive soap and plenty of warm water for at least 15 minutes. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

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## 5. FIRE-FIGHTING MEASURES

### Flammable Properties

Flash Point	:	495 degrees F
Method Used	:	PMCC
Auto Ignition Temperature	:	Not applicable

### Flammability Limits

LFL	:	Not applicable
UFL	:	Not applicable

Hazardous Combustion Products	:	During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and / or irritating. Combustion products may include and are not limited to : phenolic compounds, carbon monoxide, and carbon dioxide.
Other Flammability Information	:	Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Dense smoke is emitted when burned without sufficient oxygen.
Extinguishing Media	:	Water fog or fine spray, dry chemical fire extinguishers, carbon dioxide fire extinguishers and foam. Do not use direct water steam. May spread fire. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective. Water fog,

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applied gently may be used as a blanket for fire extinguishment.

- Fire Fighting Instructions : Keep people away. Isolate fire area and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of re-ignition has passed. Fight fire from protected location or safe distances. Consider use of unmanned hose holder or monitor nozzles. Immediately withdraw all personnel from area in case of rising sound from venting safety device or discoloration of the container. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Water fog, applied gently, may be used as a blanket for fire extinguishment.
- Protective Equipment For Fire Fighters : Wear positive pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

## 6. ACCIDENTAL RELEASE MEASURES : (See Section 15 For Regulatory Information).

- Protect People : Isolate area. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls / Personal Protection. Refer to Section 7, Handling, for additional precautionary measures.
- Protect The Environment : Prevent from entering the soil, ditches, sewers, waterways and / or groundwater. See Section 12, Ecological Information.
- Cleanup : Absorb with material such as sand. Collect in suitable and properly labeled containers. Remove residual with soap and hot water. Solvents are not recommended for clean up unless the recommended exposure guidelines and safe handling practices for the specific solvent are followed. Consult appropriate solvent MSDS for handling information and exposure guidelines

## 7. HANDLING AND STORAGE

- Handling : Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. See Section 8, Exposure Controls / Personal Protection.
- Storage : No specific requirements. Additional storage information on this product may be obtained by calling your PF&L sales or customer service contact.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Engineering Measures : Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.
- Eye Protection : Use safety glasses.
- Skin Protection : Remove contaminated clothing immediately, wash skin area with soap and water, and

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launder clothing before reuse or dispose of properly. Items which cannot be decontaminated, such as shoes, belts and watchbands, should be removed and disposed of properly. If hands are cut or scratched, use gloves chemically resistant to this material for even brief exposures.

Respiratory Protection : For most conditions, no respiratory protection should be needed; however, if handling at elevated temperatures without sufficient ventilation, use an approved air-purifying respirator.

Exposure Limit(s) : None established

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance / Physical State : Yellow Liquid

Odor : Aromatic

Vapor Pressure : Extremely low, not determined

Vapor Density : Not determined

Boiling Point : Decomposes

Solubility In Water : < 0.1 at 20 degrees C.

Specific Gravity : 1.19

Freezing Point : May Solidify < -15 degrees C.

## 10. STABILITY AND REACTIVITY

Chemical Stability : Thermally stable at typical use temperatures.

Conditions To Avoid : Avoid temperatures above 350 degrees C, 662 degrees F. Potentially violent decomposition can occur above 350 degrees C, 662 degrees F. Generation of gas during decomposition can cause pressure in closed systems. Pressure build-up can be rapid.

Incompatibility With Other Materials : Avoid contact with oxidizing materials, acids, bases. Avoid unintended contact with amines.

Hazardous Decomposition Products : Decomposition products depend upon temperature, air supply and the presence of other materials. Gases are released during decomposition. Uncontrolled exothermic reaction of epoxy resins release phenolics, carbon monoxide and water.

## 11. TOXICOLOGICAL INFORMATION

Skin : The dermal LD50 has not been determined.

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Ingestion

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The oral LD 50 for rats is > 2000 mg/kg.

Mutagenicity:

:

No relevant information found.

## 12. ECOLOGICAL INFORMATION

Movement And Partitioning

:

Based largely or completely on information for diglycidyl ether of bisphenol A: Bioconcentration potential is moderate. Potential for mobility in soil is low.

Degradation And Persistence

:

Based largely or completely on information for diglycidyl ether of bisphenol A: after 28 days: 12%. Bases on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions

## 13. DISPOSAL CONSIDERATIONS

Disposal

:

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State / Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility

FOR UNUSED AND UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: recycler, reclaimer, incinerator or other thermal destruction device.

## 14. TRANSPORT INFORMATION

CFR

Proper Shipping Name

:

not regulated

Class

:

UN / ID No.

:

Packing Group

:

## 15. REGULATORY INFORMATION

Chemical Name

:

Phenol-formaldehyde Polymer, Glycidyl Ether

Listed Inventories

:

On 40CFR710 Section 8b Chemical Substances Inventory and Canadian Domestic Substances List.  
EINECS Number: 500-006-8  
Philippines PICCS Listed  
China SEPA Listed  
Japan MITI Listed  
Korea ECL Listed  
Australia AICS Listed

SARA / TITLE III

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Section 311 / 312 : Not Hazardous

Section 313 Listed Chemicals : None

CERCLA : Not subject to any special reporting requirements

WHMIS : D2B

## 16. OTHER INFORMATION

The information contained above is given in good faith based on the best data available at this time. No warranty, expressed or implied is made. User assumes full responsibility for determining appropriate use and application of the product. Consult PF&L, Inc. for further information.

Prepared By

: Protective Floorings and Linings. EH&S Product Safety Department