

# Safety Data Sheet

according to 1907/2006/EC (REACH),  
1272/2008/EC (CLP), and GHS

Printing date: 02.11.2012

Revision: 02.11.2012

## 1 Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name: Epo-Seal PR Part A**
- **Application of the substance / the preparation:** Epoxy resin
- **1.3 Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**  
InterAmerican Resins Corp.  
PO Box 4156,  
Vega Baja, PR 00693  
Tel (706) 279-4114
- **Further information obtainable from:** Product Safety Department
- **1.4 Emergency telephone number:**  
ChemTel Inc.  
(800)255-3924, +1 (813)248-0585

## 2 Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

Muta. 2; H341: Suspected of causing genetic defects.



GHS09 environment

Aquatic Chronic 2; H411: Toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2; H315: Causes skin irritation.

Skin Sens. 1; H317: May cause an allergic skin reaction.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xi; Irritant

R36/38: Irritating to eyes and skin.



Xi; Sensitising

R43: May cause sensitisation by skin contact.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07 GHS08 GHS09

- **Signal word:** Warning
- **Hazard-determining components of labelling:**  
Reaction products of Epichlorohydrin and Bisphenol A oxirane, mono[(C12-14-alkyloxy)methyl] derivs
- **Hazard statements**  
H315: Causes skin irritation.  
H317: May cause an allergic skin reaction.  
H341: Suspected of causing genetic defects.  
H411: Toxic to aquatic life with long lasting effects.  
Contains epoxy constituents. May produce an allergic reaction.  
Contains Reaction products of Epichlorohydrin and Bisphenol A, oxirane, mono[(C12-14-alkyloxy)methyl] derivs. May produce an allergic reaction.
- **Precautionary statements**  
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P281: Use personal protective equipment as required.  
P273: Avoid release to the environment.  
P264: Wash thoroughly after handling.  
P272: Contaminated work clothing should not be allowed out of the workplace.  
P201: Obtain special instructions before use.  
P202: Do not handle until all safety precautions have been read and understood.  
P321: Specific treatment (see on this label).  
P362: Take off contaminated clothing and wash before reuse.  
P363: Wash contaminated clothing before reuse.  
P308+P313: IF exposed or concerned: Get medical advice/attention.  
P332+P313: If skin irritation occurs: Get medical advice/attention.  
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.  
P302+P352: IF ON SKIN: Wash with plenty of soap and water.  
P391: Collect spillage.  
P405: Store locked up.  
P501: Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Hazard description:**
- **WHMIS-symbols:**  
D2A - Very toxic material causing other toxic effects

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D2B - Toxic material causing other toxic effects

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• **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 1

Reactivity = 0

• **HMIS-ratings (scale 0 - 4)**



Health = \*2

Fire = 1

Reactivity = 0

• **2.3 Other hazards**

• **Results of PBT and vPvB assessment**

• **PBT:** Not applicable.

• **vPvB:** Not applicable.

## 3 Composition/information on ingredients

• **Description:** Mixture of substances listed below with nonhazardous additions.

• **Dangerous components:**

CAS: 25085-99-8	Reaction products of Epichlorohydrin and Bisphenol A Xi R36/38 Muta. 2, H341 Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Skin Sens. 1A, H317	50-100%
CAS: 68609-97-2 EINECS: 271-846-8 Index number: 603-103-00-4	oxirane, mono[(C12-14-alkyloxy)methyl] derivs Xi R38:  Xi R43 Skin Irrit. 2, H315; Skin Sens. 1, H317	10-25%
CAS: 106-89-8 EINECS: 203-439-8 Index number: 603-026-00-6	1-chloro-2,3-epoxypropane T Carc. Cat. 2 R45-23/24/25;  C R34;  Xi R43 R10 Flam. Liq. 3, H226 Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 Carc. 1B, H350 Skin Corr. 1B, H314 Skin Sens. 1, H317	< 0.1%

• **Additional information:** For the wording of the listed risk phrases refer to section 16.

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## 4 First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:**  
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**  
Immediately wash with water and soap and rinse thoroughly.  
Immediately remove any clothing soiled by the product.  
If skin irritation continues, consult a doctor.
- **After eye contact:**  
Remove contact lenses if worn.  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**  
Allergic reactions  
Nausea  
Dizziness
- **Hazards** Danger of impaired breathing.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
Treat skin and mucous membrane with antihistamine and corticoid preparations.  
Monitor circulation.

## 5 Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture**  
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.
- **Additional information** Cool endangered receptacles with water spray.

## 6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Remove persons from danger area.  
Use respiratory protective device against the effects of fumes/dust/aerosol.  
Ensure adequate ventilation  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

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- **6.3 Methods and material for containment and cleaning up:**

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Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Clean the affected area carefully; suitable cleaners are:

Warm water and cleansing agent

- **6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7 Handling and storage

- **7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- **Information about fire - and explosion protection:** No special measures required.

- **7.2 Conditions for safe storage, including any incompatibilities**

- **Storage:**

- **Requirements to be met by storerooms and receptacles:** No special requirements.

- **Information about storage in one common storage facility:**

Store away from oxidizing agents.

Store away from foodstuffs.

Do not store together with acids.

- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.

- **7.3 Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- **Respiratory protection:**

Use suitable respiratory protective device in case of insufficient ventilation.

Use suitable respiratory protective device when aerosol or mist is formed.

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• **Protection of hands:**

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Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

• **Material of gloves**

Butyl rubber, BR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

• **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• **Eye protection:**



Safety glasses

Goggles recommended during refilling

## 9 Physical and chemical properties

• **9.1 Information on basic physical and chemical properties**

• **General Information**

• **Appearance:**

Form:	Liquid
Colour:	Light yellow
Odour:	Characteristic
Odour threshold:	Not determined.

pH-value:	Not determined.
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• **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	220°C (428 °F)

Flash point:	150°C (302 °F)
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Flammability (solid, gaseous):	Not applicable.
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• **Ignition temperature:**

Decomposition temperature:	Not determined.
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· <b>Self-igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapour pressure:</b>	Not determined.
· <b>Density at 20°C:</b>	0,96 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>9.2 Other information</b>	No further relevant information available.

## 10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**  
Reacts with oxidizing agents.  
Reacts with amines.  
Exothermic polymerization.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** Carbon monoxide and carbon dioxide

## 11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:**  
Sensitization possible through skin contact.

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Sensitizing effect through inhalation is possible by prolonged exposure.

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- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant

## 12 Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:** The product contains materials that are harmful to the environment.

- **12.2 Persistence and degradability** The product is not easily, but potentially degradable.

- **12.3 Bioaccumulative potential**

Due to the distribution coefficient n-octanol/water an accumulation in organisms is possible.

- **12.4 Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- **12.5 Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **12.6 Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **13.1 Waste treatment methods**

- **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

- **Uncleaned packaging:**

- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

- **14.1 UN-Number**

- DOT, ADR, ADN, IMDG, IATA N/A

- **14.2 UN proper shipping name**

- DOT, ADR, ADN, IMDG, IATA N/A

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- **14.3 Transport hazard class(es)**

- DOT, ADR, ADN

- Class N/A

- **IMDG**



- Class N/A

- **IATA**



- Class N/A

- **14.4 Packing group**

- DOT, ADR, IMDG, IATA N/A

- **14.5 Environmental hazards:**

Product contains environmentally hazardous substances:  
Reaction products of Epichlorohydrin and Bisphenol A  
Yes  
Symbol (fish and tree)

- **Marine pollutant:**

- **14.6 Special precautions for user**

Not applicable.

- **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

- **UN "Model Regulation":**

-

## 15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

- **United States (USA)**

- **SARA**

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

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- **Proposition 65 (California):**

- **Chemicals known to cause cancer:**

106-89-8	1-chloro-2,3-epoxypropane
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- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

106-89-8	1-chloro-2,3-epoxypropane
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- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenic Categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

- **Canada**

- **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

- **Canadian Ingredient Disclosure list (limit 0.1%)**

106-89-8	1-chloro-2,3-epoxypropane
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- **Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients is listed.

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H226: Flammable liquid and vapour.

H301: Toxic if swallowed.

H311: Toxic in contact with skin.

H314: Causes severe skin burns and eye damage.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H331: Toxic if inhaled.

H341: Suspected of causing genetic defects.

H350: May cause cancer.

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H411: Toxic to aquatic life with long lasting effects.

R10: Flammable.

R23/24/25: Toxic by inhalation, in contact with skin and if swallowed.

R34: Causes burns.

R36/38: Irritating to eyes and skin.

R38: Irritating to skin.

R43: May cause sensitisation by skin contact.

R45: May cause cancer.

**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)