Printing date 31.10.2012 Revision: 31.10.2012

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

- . 1.1 Product identifier
- . Trade name: Poly-Krete FC Part A
- . Article number:
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- . 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.

Eye Irrit. 2; H319: Causes serious eye irritation.

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

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

T; Toxic

R46: May cause heritable genetic damage.

Xi; Irritant

R36/38: Irritating to eyes and skin.

X Xi; Sensitising

(Contd. on page 2)

Safety Data Sheet

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

Printing date 31.10.2012 Revision: 31.10.2012

Trade name: Poly-Krete FC Part A

(Contd. of page 1)

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.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

. 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 1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane

hexamethylene diacrylate

· Hazard statements

H315: Causes skin irritation.

H319: Causes serious eve irritation.

H317: May cause an allergic skin reaction.

H341: Suspected of causing genetic defects.

H411: Toxic to aquatic life with long lasting effects.

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.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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.

P337+P313: If eye irritation persists: Get medical advice/attention.

(Contd. on page 3)

Printing date 31.10.2012 Revision: 31.10.2012

Trade name: Poly-Krete FC Part A

(Contd. of page 2)

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

D2B - Toxic material causing other toxic effects



NFPA ratings (scale 0 - 4)



Health = 2Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = *2 Fire = 1REACTIVITY O Reactivity = 0

- Indicates a long term health hazard from repeated or prolonged exposures.
- HMIS Long Term Health Hazard Substances

25085-99-8 Reaction products of Epichlorohydrin and Bisphenol A

- . 2.3 Other hazards
- · Results of PBT and vPvB assessment
- . PBT: Not applicable. . **vPvB**: Not applicable.

3 Composition/information on ingredients

- . 3.2 Mixtures
- . **Description:** Mixture of substances listed below with nonhazardous additions.

	Dangerous	components:
--	-----------	-------------

CAS: 25085-99-8

Reaction products of Epichlorohydrin and Bisphenol A 💹 T Muta. Cat. 3 R46; 🔀 Xi R38; 🔀 Xi R43; 👺 N R51

Muta. 2, H341

4 Aquatic Chronic 2, H411

① Skin Irrit. 2, H315; Skin Sens. 1A, H317

(Contd. on page 4)

> 50%%

Printing date 31.10.2012 Revision: 31.10.2012

Trade name: Poly-Krete FC Part A

		(Contd. of page 3)	
CAS: 13048-33-4	hexamethylene diacrylate	< 25%	
EINECS: 235-921-9	🗙 Xi R36/38; 🗙 Xi Ŕ43		
Index number: 607-109-00-8	\$\tilde{\text{ts}} \text{ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317}		
CAS: 17557-23-2	1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane	< 25%	
EINECS: 241-536-7	xi R38; xi R43 xi R43		
Index number: 603-094-00-7	♦ Skin Irrit. 2, H315; Skin Sens. 1, H317		
• Additional information: For the wording of the listed risk phrases refer to section 16.			

4 First aid measures

- . 4.1 Description of first aid measures
- . General information: Immediately remove any clothing soiled by the product.
- . 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:

Protect unharmed eye.

Rinse opened eye for several minutes under running water. Then consult a doctor.

Do not remove contact lenses if worn.

· 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.
- · For safety reasons unsuitable extinguishing agents: None.
- · 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.

(Contd. on page 5)

Printing date 31.10.2012 Revision: 31.10.2012

Trade name: Poly-Krete FC Part A

(Contd. of page 4)

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

Use respiratory protective device against the effects of fumes/dust/aerosol.

Remove persons from danger area.

Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

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.

(Contd. on page 6)

Safety Data Sheet

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

Printing date 31.10.2012 Revision: 31.10.2012

Trade name: Poly-Krete FC Part A

(Contd. of page 5)

- . **DNELs** No further relevant information available.
- . PNECs No further relevant information available.
- Additional Occupational Exposure Limit Values for possible hazards during processing:

106-89-8 1-chloro-2,3-epoxypropane (< 0,1%%)

PEL (USA) 19 mg/m³, 5 ppm

Skin

REL (USA) See Pocket Guide App. A

TLV (USA) 1,9 mg/m³, 0,5 ppm

Skin

EL (Canada) 0,1 ppm

Skin; IARC 2A, R

EV (Canada) 0,5 ppm

Skin

- · 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 eves 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.

· Protection of hands:



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.

(Contd. on page 7)

(Contd. of page 6)

(Contd. on page 8)

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

Printing date 31.10.2012 Revision: 31.10.2012

Trade name: Poly-Krete FC Part A

. Eye protection:

· Vapour density

Contact lenses should not be worn.



Safety glasses

Goggles recommended during refilling

- · Body protection: Protective work clothing
- · Limitation and supervision of exposure into the environment

No further relevant information available.

· Risk management measures

See Section 7 for additional information. No further relevant information available.

9 Physical and chemical properties				
General Information Appearance:	Appearance:			
Form: Colour:	Liquid Light yellow			
. Odour:	Mild			
· Odour threshold:	Not determined.			
· pH-value:	Not determined.			
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	Undetermined. 220 °C (428 °F)			
· Flash point:	97 °C (207 °F)			
. Flammability (solid, gaseous):	Not applicable.			
. Ignition temperature:				
Decomposition temperature:	Not determined.			
· Self-igniting:	Product is not self-igniting.			
· Danger of explosion:	Product does not present an explosion hazard.			
Explosion limits: Lower:	Not determined.			
Upper:	Not determined.			
· Vapour pressure:	Not determined.			
Density at 20 °C:Relative density	1,13 g/cm ³ Not determined.			

Not determined.

Printing date 31.10.2012 Revision: 31.10.2012

Trade name: Poly-Krete FC Part A

(Contd. of page 7)

. **Evaporation rate** Not determined.

. Solubility in / Miscibility with

water: Not miscible or difficult to mix.

. Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not determined. **Kinematic:** Not determined.

• **9.2 Other information** 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 catalysts, oxidizing agents and strong alkali.

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.

Sensitizing effect through inhalation is possible by prolonged exposure.

· 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:

- · Sensitisation Sensitization possible by skin contact.
- . Repeated dose toxicity Repeated exposures may result in skin and/or respiratory sensitivity.

(Contd. on page 9)

Printing date 31.10.2012 Revision: 31.10.2012

Trade name: Poly-Krete FC Part A

(Contd. of page 8)

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 not expected.

- · 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, IATA . ADR, IMDG	N/A UN3082			
14.2 UN proper shipping nameDOT, IATAADRIMDG	N/A 3082 Environmentally Hazardous Substance, Liquid, N.O.S. (Reaction products of Epichlorohydrin and Bisphenol A) Environmentally Hazardous Substance, Liquid, N.O.S. (Reaction products of Epichlorohydrin and Bisphenol A), Marine Pollutant			

Printing date 31.10.2012 Revision: 31.10.2012

Trade name: Poly-Krete FC Part A

	(Contd. of page 9)			
· 14.3 Transport hazard class(es)				
. DOT, IATA				
. Class	N/A			
. ADR, IMDG				
· Class · Label	9 Miscellaneous dangerous substances and articles.			
. 14.4 Packing group	<u> </u>			
. DOT, IATA	N/A			
. ADR, IMDG	III			
. 14.5 Environmental hazards:				
. Marine pollutant:	Yes			
Consist months of (ADD):	Symbol (fish and tree)			
Special marking (ADR):	Symbol (fish and tree)			
· 14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and			
. EMS Number:	articles. F-A,S-F			
. 14.7 Transport in bulk according to Annex II of				
MARPOL73/78 and the IBC Code	Not applicable.			
. Transport/Additional information:				
. ADR				
. Limited quantities (LQ)	5L			
· UN "Model Regulation":	UN3082, Environmentally Hazardous Substance, Liquid, N.O.S., 9, III			

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.

(Contd. on page 11)

Printing date 31.10.2012 Revision: 31.10.2012

Trade name: Poly-Krete FC Part A

(Contd. of page 10)

- . Proposition 65 (California):
- · Chemicals known to cause cancer:

Present in trace quantities.

106-89-8 1-chloro-2,3-epoxypropane

. Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

Present in trace quantities.

106-89-8 1-chloro-2,3-epoxypropane

. Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- . Carcinogenic Categories
- EPA (Environmental Protection Agency)

None of the ingredients is listed.

· IARC (International Agency for Research on Cancer)

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%)

None of the ingredients is listed.

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

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H341: Suspected of causing genetic defects.

(Contd. on page 12)

Printing date 31.10.2012 Revision: 31.10.2012

Trade name: Poly-Krete FC Part A

H411: Toxic to aquatic life with long lasting effects.

(Contd. of page 11)

R36/38: Irritating to eyes and skin.

R38: Irritating to skin.

R43: May cause sensitisation by skin contact. R46: May cause heritable genetic damage.

R51: Toxic to aquatic organisms.

· 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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)