

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

Printing date 20.08.2012

Revision: 20.08.2012

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

- **1.1 Product identifier**
- Trade name: **Poly-Krete FC Part B**
- **1.2 Application of the substance / the preparation:** Epoxy curing agent
- **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**



GHS05 corrosion

Skin Corr. 1B; H314: Causes severe skin burns and eye damage.



GHS09 environment

Aquatic Acute 1; H400: Very toxic to aquatic life.

Aquatic Chronic 1; H410: Very toxic to aquatic life with long lasting effects.



GHS07

Acute Tox. 4; H302: Harmful if swallowed.

Acute Tox. 4; H332: Harmful if inhaled.

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

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



C; Corrosive

R34: Causes burns.



Xn; Harmful

R22: Harmful if swallowed.



Xi; Sensitising

R43: May cause sensitisation by skin contact.

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N; Dangerous for the environment

R50: Very toxic to aquatic organisms.

- **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**



GHS05 GHS07 GHS09

- **Signal word** Danger

- **Hazard-determining components of labelling:**

m-phenylenebis(methylamine)

Formaldehyde, polymer with 1,3-benzenedimethanamine, 4-(1,10dimethylethyl)phenol, nonyl phenol, and C,C,C-trimethyl-1,6-hexanediamine

trimethylhexane-1,6-diamine

Benzyl alcohol

- **Hazard statements**

H302+H332: Harmful if swallowed or if inhaled.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H410: Very toxic to aquatic life with long lasting effects.

Contains Formaldehyde, polymer with 1,3-benzenedimethanamine, 4-(1,10dimethylethyl)phenol, nonyl phenol, and C,C,C-trimethyl-1,6-hexanediamine, trimethylhexane-1,6-diamine, 3-aminomethyl-3,5,5-trimethylcyclohexylamine. May produce an allergic reaction.

- **Precautionary statements**

P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of reach of children.

P103: Read label before use.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P273: Avoid release to the environment.

P264: Wash thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

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P272: Contaminated work clothing should not be allowed out of the workplace.

P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

P310: Immediately call a POISON CENTER or doctor/physician.

P321: Specific treatment (see on this label).

P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P363: Wash contaminated clothing before reuse.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P301+P330+P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P330: Rinse mouth.

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:**

D2B - Toxic material causing other toxic effects

E - Corrosive material



· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



· **HMIS Long Term Health Hazard Substances**

None of the ingredients is listed.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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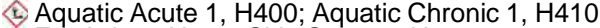
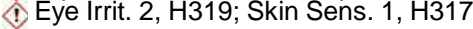

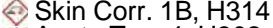
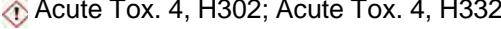

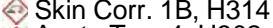
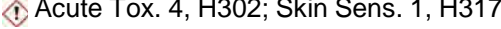
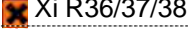
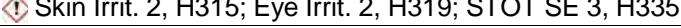
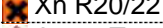
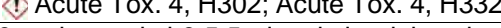

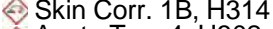
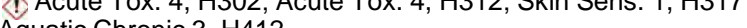

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3 Composition/information on ingredients

- **3.2 Mixtures**

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

- **Dangerous components:**

CAS: 104242-08-2	Formaldehyde, polymer with 1,3-benzenedimethanamine, 4-(1,10dimethylethyl)phenol, nonyl phenol, and C,C,C-trimethyl-1,6-hexanediamine   	< 50%
CAS: 1477-55-0 EINECS: 216-032-5	m-phenylenebis(methylamine)   	< 24%
CAS: 25620-58-0 EINECS: 247-134-8	trimethylhexane-1,6-diamine   	< 13%
CAS: 98-54-4 EINECS: 202-679-0	4-tert-butylphenol  	< 12%
CAS: 100-51-6 EINECS: 202-859-9 Index number: 603-057-00-5	Benzyl alcohol  	< 10%
CAS: 2855-13-2 EINECS: 220-666-8 Index number: 612-067-00-9	3-aminomethyl-3,5,5-trimethylcyclohexylamine    	< 5%

- **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.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- **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.

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- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact:**
Protect unharmed eye.
Rinse opened eye for several minutes under running water.
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Do not induce vomiting; call for medical help immediately.
Rinse out mouth and then drink plenty of water.
- **4.2 Most important symptoms and effects, both acute and delayed**
Allergic reactions
Coughing
Breathing difficulty
Gastric or intestinal disorders
- **Hazards**
Danger of gastric perforation.
Danger of pulmonary oedema.
Danger of impaired breathing.
- **4.3 Indication of any immediate medical attention and special treatment needed**
If swallowed, gastric irrigation with added, activated carbon.
Monitor circulation, possible shock treatment.
If necessary oxygen respiration treatment.
Medical supervision for at least 48 hours.
Treat skin and mucous membrane with antihistamine and corticoid preparations.

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.
In case of fire, the following can be released:
Nitrogen oxides (NO_x)
Carbon monoxide (CO)
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **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**
Use respiratory protective device against the effects of fumes/dust/aerosol.

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Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

· **6.2 Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

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.

· **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:**

Store in a cool location.

Provide ventilation for receptacles.

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

Do not store together with acids.

Store away from oxidizing agents.

Store away from foodstuffs.

· **Further information about storage conditions:**

Store in cool, dry conditions in well sealed receptacles.

Store receptacle in a well ventilated area.

· **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.

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- **8.1 Control parameters**

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

1477-55-0 m-phenylenebis(methylamine)

REL (USA)	Short-term value: C 0,1 mg/m ³ Skin
TLV (USA)	Short-term value: C 0,1 mg/m ³ Skin
EL (Canada)	Short-term value: C 0,1 mg/m ³ Skin
EV (Canada)	Skin

100-51-6 Benzyl alcohol

WEEL (USA)	10 ppm
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- **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.
 Do not inhale gases / fumes / aerosols.
 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.

- **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
 Nitrile rubber, NBR
 Neoprene gloves

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 can not 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.

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- **Eye protection:**
Contact lenses should not be worn.



Safety glasses

Goggles recommended during refilling

- **Body protection:** Protective work clothing

9 Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

· Form:	Liquid
· Colour:	Yellow
· Odour:	Ammonia-like
· Odour threshold:	Not determined.

· **pH-value at 20°C:** >11

· Change in condition

· Melting point/Melting range:	Undetermined.
· Boiling point/Boiling range:	180°C (356 °F)

· **Flash point:** > 140°C (> 284 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 435°C (815 °F)

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Product is not selfigniting.

· **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:** 1,01 g/cm³

· **Relative density** Not determined.

· **Vapour density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with water:**

Fully miscible.

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

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- **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 and stored according to specifications.
- **10.3 Possibility of hazardous reactions**
Exothermic polymerization.
Reacts with strong acids and oxidizing agents.
Reacts with peroxides and other radical forming substances.
- **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
Nitrogen oxides (NO_x)
Ammonia

11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

1477-55-0 m-phenylenebis(methylamine)

Oral	LD50	1040 mg/kg (rat)
Inhalative	LC50/4 h	2,4 mg/l (rat)

25620-58-0 trimethylhexane-1,6-diamine

Oral	LD50	900 mg/kg (rat)
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- **Primary irritant effect:**
 - **on the skin:** Caustic effect on skin and mucous membranes.
 - **on the eye:** Strong caustic 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:
Harmful
Corrosive

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Irritant

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Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** The material is harmful to the environment.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **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.
 Must not reach sewage water or drainage ditch undiluted or unneutralized.
 Danger to drinking water if even small quantities leak into the ground.
 Also poisonous for fish and plankton in water bodies.
 Very toxic for aquatic organisms
- **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 disposed of with household garbage after solidification following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.
 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.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- **14.1 UN-Number**
- **DOT, ADR, IMDG, IATA** UN3267

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- 14.2 UN proper shipping name
- DOT, IATA

Corrosive Liquid, Basic, Organic, N.O.S. (M-Phenylenebis (Methylamine), Trimethylhexamethylenediamines)

3267 Corrosive Liquid, Basic, Organic, N.O.S. (M-Phenylenebis (Methylamine), Trimethylhexamethylenediamines), Environmentally Hazardous

Corrosive Liquid, Basic, Organic, N.O.S. (M-Phenylenebis (Methylamine), Trimethylhexamethylenediamines), Marine Pollutant

- ADR

- IMDG

- 14.3 Transport hazard class(es)

- DOT



- Class
- Label

8 Corrosive substances.
8

- ADR



- Class
- Label

8 (C7) Corrosive substances.
8

- IMDG



- Class
- Label

8 Corrosive substances.
8

- IATA



- Class
- Label

8 Corrosive substances.
8

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<ul style="list-style-type: none"> · 14.4 Packing group · DOT, ADR, IMDG, IATA 	II
<ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): 	Product contains environmentally hazardous substances: Formaldehyde, polymer with 1,3-benzenedimethanamine, 4-(1,10dimethylethyl)phenol, nonyl phenol, and C,C,C-trimethyl-1,6-hexanediamine Yes Symbol (fish and tree) Symbol (fish and tree)
<ul style="list-style-type: none"> · 14.6 Special precautions for user · Danger code (Kemler): · EMS Number: · Segregation groups 	Warning: Corrosive substances. 80 F-A,S-B Alkalis
<ul style="list-style-type: none"> · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	Not applicable.
<ul style="list-style-type: none"> · Transport/Additional information: 	
<ul style="list-style-type: none"> · ADR · Tunnel restriction code 	E
<ul style="list-style-type: none"> · UN "Model Regulation": 	UN3267, Corrosive Liquid, Basic, Organic, N.O.S. (M-Phenylenebis (Methylamine), Trimethylhexamethylenediamines), Environmentally Hazardous, 8, II

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.

- **Proposition 65 (California):**

- **Chemicals known to cause cancer:**

50-00-0 | formaldehyde

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

None of the ingredients is listed.

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

None of the ingredients is listed.

- **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%)**

None of the ingredients is listed.

- **Canadian Ingredient Disclosure list (limit 1%)**

1477-55-0 m-phenylenebis(methylamine)

25620-58-0 trimethylhexane-1,6-diamine

98-54-4 4-tert-butylphenol

100-51-6 Benzyl alcohol

2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine

- **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**

H302: Harmful if swallowed.

H312: Harmful in contact with skin.

H314: Causes severe skin burns and eye damage.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H332: Harmful if inhaled.

H335: May cause respiratory irritation.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

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

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H412: Harmful to aquatic life with long lasting effects.

R20/22: Harmful by inhalation and if swallowed.

R21/22: Harmful in contact with skin and if swallowed.

R22: Harmful if swallowed.

R34: Causes burns.

R36: Irritating to eyes.

R36/37/38: Irritating to eyes, respiratory system and skin.

R43: May cause sensitisation by skin contact.

R50: Very toxic to aquatic organisms.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent