Revision: 20.08.2012 Printing date 20.08.2012

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

- · 1.1 Product identifier
- · Trade name: Poly-Krete HD Part B
- · 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



GHS08 health hazard

Repr. 2; H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child.



GHS05 corrosion

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



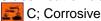
GHS09 environment

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



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

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



R34: Causes burns.



Xn; Harmful

R20/22-62-63: Harmful by inhalation and if swallowed. Possible risk of impaired fertility. Possible risk of harm to the unborn child.



Xi; Sensitising

R43: May cause sensitisation by skin contact.

(Contd. on page 2)

Printing date 20.08.2012 Revision: 20.08.2012

Trade name: Poly-Krete HD Part B

(Contd. of page 1)



N; Dangerous for the environment

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· 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.

- · 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 GHS08 GHS09

- · Signal word Danger
- · Hazard-determining components of labelling:

cyclohex-1,2-ylenediamine nonylphenol

· Hazard statements

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child.

H411: Toxic to aquatic life with long lasting effects.

Contains cyclohex-1,2-ylenediamine. 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.

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.

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.

(Contd. on page 3)

Printing date 20.08.2012 Revision: 20.08.2012

Trade name: Poly-Krete HD Part B

(Contd. of page 2)

P321: Specific treatment (see on this label).

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

P363: Wash contaminated clothing before reuse.

P308+P313: IF exposed or concerned: Get medical advice/attention.

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

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

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
- E Corrosive material



· NFPA ratings (scale 0 - 4)



Health = 2 Fire = 1

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = *2 Fire = 1

REACTIVITY Reactivity = 0

- · 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.

(Contd. on page 4)

Printing date 20.08.2012 Revision: 20.08.2012

Trade name: Poly-Krete HD Part B

| | | (Contd. of page |
|--|---|-----------------|
| Dangerous components: | | |
| CAS: 100-51-6 EINECS: 202-859-9 | Benzyl alcohol ▼ Xn R20/22 | 25-50% |
| Index number: 603-057-00-5 | 1 Acute Tox. 4, H302; Acute Tox. 4, H332 | |
| CAS: 694-83-7 EINECS: 211-776-7 | cyclohex-1,2-ylenediamine ☐ C R34; X R43 | 25-50% |
| | Skin Corr. 1B, H314 Skin Sens. 1, H317 | |
| CAS: 25154-52-3 EINECS: 246-672-0 Index number: 601-053-00-8 | nonylphenol | 10-25% |
| | Repr. 2, H361fd Skin Corr. 1B, H314 Aquatic Acute 1; Aquatic Chronic 1, H410 Acute Tox. 4, H302 | |

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.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact:

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
- 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

(Contd. on page 5)

Printing date 20.08.2012 Revision: 20.08.2012

Trade name: Poly-Krete HD Part B

(Contd. of page 4)

- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

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.
- Information about storage in one common storage facility:

Store away from foodstuffs.

Do not store together with oxidizing and acidic materials.

- 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.

(Contd. on page 6)

Printing date 20.08.2012 Revision: 20.08.2012

Trade name: Poly-Krete HD Part B

(Contd. of page 5)

- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

100-51-6 Benzyl alcohol

WEEL (USA) 10 ppm

- · 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.
- 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

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.

· Eye protection:



Safety glasses

Goggles recommended during refilling

· Body protection: Protective work clothing

(Contd. on page 7)

Printing date 20.08.2012 Revision: 20.08.2012

Trade name: Poly-Krete HD Part B

(Contd. of page 6)

| 9 Physical and chemical properties | | | |
|---|--|--|--|
| 9.1 Information on basic physical an General Information | · 9.1 Information on basic physical and chemical properties · General Information | | |
| · Appearance: | | | |
| Form: | Liquid | | |
| Colour: | Amber coloured | | |
| · Odour: | Ammonia-like | | |
| · Odour threshold: | Not determined. | | |
| · pH-value: | Not determined. | | |
| Change in condition | | | |
| Melting point/Melting range: | Undetermined. | | |
| Boiling point/Boiling range: | > 147°C (> 297 °F) | | |
| · Flash point: | 102°C (216 °F) | | |
| · Flammability (solid, gaseous): | Not applicable. | | |
| · Ignition temperature: | 370°C (698 °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 at 20°C: | 0,1 hPa (< 0,1 mm Hg - Estimated) | | |
| Density at 20°C: | 1,03 g/cm ³ | | |
| Relative density | Not determined. | | |
| · Vapour density | Not determined. | | |
| · Evaporation rate | Not determined. | | |
| · Solubility in / Miscibility with | | | |
| water: | Not miscible or difficult to mix. | | |
| · Segregation coefficient (n-octanol/w | vater): Not determined. | | |
| · Viscosity: | | | |
| Dynamic: | Not determined. | | |
| Kinematic: | Not determined. | | |
| · 9.2 Other information | No further relevant information available. | | |

(Contd. on page 8)

Printing date 20.08.2012 Revision: 20.08.2012

Trade name: Poly-Krete HD Part B

(Contd. of page 7)

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 acids, alkalis and oxidizing agents.

Reacts with peroxides.

- · 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products:

Aldehyde

Nitrogen oxides

Carbon monoxide and carbon dioxide

Ammonia

11 Toxicological information

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

| · LD/LC5 | · LD/LC50 values relevant for classification: | | |
|----------|---|---------------------|--|
| 100-51- | 100-51-6 Benzyl alcohol | | |
| Oral | LD50 | 1230 mg/kg (rat) | |
| Dermal | LD50 | 2000 mg/kg (rabbit) | |
| 25154-5 | 25154-52-3 nonylphenol | | |
| Oral | LD50 | 1620 mg/kg (rat) | |

- · 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.
- 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

Irritant

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: No further relevant information available.

(Contd. on page 9)

Printing date 20.08.2012 Revision: 20.08.2012

Trade name: Poly-Krete HD Part B

(Contd. of page 8)

- 12.2 Persistence and degradability The product is partly biodegradale. Significant residuals remain.
- · 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.
- · Ecotoxical effects:
- · Remark: Toxic for fish
- · Additional ecological information:
- · General notes:

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water Do not allow product to reach ground water, water course or sewage system, even in small quantities. Must not reach sewage water or drainage ditch undiluted or unneutralized.

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

Also poisonous for fish and plankton in water bodies.

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

Can be disposed of with household garbage with prior chemical-physical or biological treatment following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

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

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

| 14 Transport information | | |
|--|--|--|
| · 14.1 UN-Number · DOT, ADR, IMDG, IATA | UN2735 | |
| · 14.2 UN proper shipping name | | |
| DOT, IATA | POLYAMINES, LIQUID, CORROSIVE, N.O.S. | |
| ADR | 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. | |
| | ENVIRONMENTALLY HAZARDOUS | |
| · IMDG | POLYAMINES, LIQUID, CORROSIVE, N.O.S. | |
| | MARINE POLLUTANT | |
| | MARINE POLLUTANT (Contd. on par | |

Printing date 20.08.2012 Revision: 20.08.2012

Trade name: Poly-Krete HD Part B

| 440 Tanananthananthalasa (a.) | | (Contd. of pa |
|---|---|---------------|
| 14.3 Transport hazard class(es) | | |
| DOT | | |
| CORROGIVE | | |
| Class | 8 Corrosive substances. | |
| Label | 8 | |
| ADR | | |
| *** | | |
| Class | 8 (C7) Corrosive substances. | |
| Label | 8 | |
| IMDG | | |
| * | | |
| Class | 8 Corrosive substances. | |
| Label | 8 | |
| IATA | | |
| Class | 8 Corrosive substances. | |
| Label | 8 | |
| 14.4 Packing group | | |
| DOT, ADR, IMDG, IATA | III | |
| 14.5 Environmental hazards: | | |
| Marine pollutant: | Yes | |
| Special marking (ADR): | Symbol (fish and tree) Symbol (fish and tree) | |
| 14.6 Special precautions for user | Warning: Corrosive substances. | |
| Danger code (Kemler): | 80 | |
| EMS Number: | F-A,S-B | |
| Segregation groups | Alkalis | |
| 14.7 Transport in bulk according to Ann | | |
| MARPOL73/78 and the IBC Code | Not applicable. | |

Safety Data Sheet

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

Printing date 20.08.2012 Revision: 20.08.2012

Trade name: Poly-Krete HD Part B

| | (Contd. of page 10 | |
|-------------------------------------|--|--|
| · Transport/Additional information: | | |
| · ADR · Tunnel restriction code | E | |
| · UN "Model Regulation": | UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S., ENVIRONMENTALLY HAZARDOUS, 8, 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):

| 100-51-6 | Benzyl | alcohol |
|----------|--------|---------|
| 00400= | | 4 0 1 |

694-83-7 cyclohex-1,2-ylenediamine

25154-52-3 nonylphenol

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

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· 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.

(Contd. on page 12)

Printing date 20.08.2012 Revision: 20.08.2012

Trade name: Poly-Krete HD Part B

· Canada (Contd. of page 11)

| Canadian | Domestic | Substances | List (DSL | |
|----------|-----------------|-------------------|-----------|--|

| 100-51-6 | Benzyl alcohol |
|------------|---------------------------|
| | cyclohex-1,2-ylenediamine |
| 25154-52-3 | nonylphenol |

Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

Ingredients are listed as required.

| 100-51-6 | Benzyl alcohol |
|------------|----------------|
| 25154-52-3 | nonylphenol |

· 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.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H332: Harmful if inhaled.

H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child.

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

R20/22: Harmful by inhalation and if swallowed.

R22: Harmful if swallowed.

R34: Causes burns.

R43: May cause sensitisation by skin contact.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R62: Possible risk of impaired fertility.

R63: Possible risk of harm to the unborn child.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning

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