

# SAFETY DATA SHEET



Date Prepared : 4/30/2015  
 MSDS No : 11730084\_PT41 - RESIN  
 Date-Revised : 5/5/2015  
 Revision No : 3

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT DESCRIPTION:** Z-POXY FINISHING RESIN KIT 4OZ (72) - RESIN

### MANUFACTURER

Pacer Technology  
 3281 E. Guasti Rd., Suite 260  
 Ontario, CA 91761

**Emergency Contact:** CHEMTREC

**Emergency Phone:** 800-424-9300

**Alternate Emergency Phone:** 703-527-3887

**Product Stewardship:** 909-987-0550

### 24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (800) 424-9300

## 2. HAZARDS IDENTIFICATION

### GHS CLASSIFICATIONS

#### Health:

Skin Irritation, Category 2  
 Eye Irritation, Category 2  
 Skin Sensitization, Category 1  
 Mutagenicity, Category 2

#### Environmental:

Aquatic Toxicity, Category 3

### GHS LABEL ELEMENTS

Non-Hazardous per vendor information.



Exclamation  
 mark



Health  
 hazard

**SIGNAL WORD:** WARNING

### HAZARD STATEMENTS

H315: Causes skin irritation.  
 H319: Causes serious eye irritation.  
 H412: Harmful to aquatic life with long lasting effects.  
 H317: May cause an allergic skin reaction.  
 H341: Suspected of causing genetic defects .

### PRECAUTIONARY STATEMENT(S)

#### Prevention:

5468C4VS: Contains epoxy constituents. May produce an allergic reaction.  
 P280: Wear protective gloves/protective clothing/eye protection/face protection.  
 P281: Use personal protective equipment as required.  
 P202: Do not handle until all safety precautions have been read and understood.



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# SAFETY DATA SHEET



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P261: Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P264: Wash skin and hands thoroughly after handling.  
 P272: Contaminated work clothing should not be allowed out of the workplace.  
 P273: Avoid release to the environment.

## Response:

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P308+P313: IF exposed or concerned: Get medical advice/attention.  
 P302+P352: IF ON SKIN: Wash with plenty of soap and water.  
 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.  
 P362: Take off contaminated clothing and wash before reuse.  
 P363: Wash contaminated clothing before reuse.

## Storage:

P405: Store locked up.

## Disposal:

7944L5O1: Dispose of in a manner consistent with federal, state, and local regulations.

## EMERGENCY OVERVIEW

**PHYSICAL APPEARANCE:** Clear to pale yellow, transparent liquid

**IMMEDIATE CONCERNS:** Irritating to eyes/skin. May cause skin sensitization.

## POTENTIAL HEALTH EFFECTS

**EYES:** Causes eye irritation.

**SKIN:** May cause skin irritation.

**MEDICAL CONDITIONS AGGRAVATED:** Pre-existing eye and skin disorders or lung allergies may be aggravated by exposure.

**ROUTES OF ENTRY:** Inhalation, ingestion and skin absorption are major routes of entry.

**SENSITIZATION:** May cause sensitization.

**WARNING CAUTION LABELS:** Harmful. Keep out of Reach of Children.

**COMMENTS:** Contains epoxy constituents. See information supplied by the manufacturer.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Bisphenol A/Epichlorohydrin based epoxy resin	75 - 100	25085-99-8
2,3-EPOXYPROPYL O-TOLYL ETHER	10 - 30	2210-79-9

## 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

**SKIN:** Irritation occurs upon direct contact. Remove contaminated clothing and wash affected areas with soap and water. Get medical attention if systems persist.

**INGESTION:** If swallowed, seek medical advice immediately and show this container or label.

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**INHALATION:** Remove to fresh air. Get medical attention if breathing is difficult.

## 5. FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Water spray, foam, carbon dioxide, dry chemicals.

**FIRE FIGHTING EQUIPMENT:** As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

**HAZARDOUS DECOMPOSITION PRODUCTS:** During combustion or elevated temperatures (>260 C) may form carbon monoxide, aldehydes, acids and other unidentified organic substances.

## 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Scrape as much material as you can from the surface using a stiff metal or plastic scraper. Clean the residue with acetone or alcohol and place in a disposable container.

### ENVIRONMENTAL PRECAUTIONS

**WATER SPILL:** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 7. HANDLING AND STORAGE

**HANDLING:** Avoid direct contact with eyes and prolonged contact with skin. Wash hands with soap and water after use.

**STORAGE:** Do not exceed 250 F (121 C) in use. Use in well ventilated area.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

**SKIN:** S36/37: Wear suitable protective clothing and gloves.

**RESPIRATORY:** S38: In case of insufficient ventilation, wear suitable respiratory equipment.

**WORK HYGIENIC PRACTICES:** Wash hands with soap and water after use. Launder contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**ODOR:** Epoxy odor.

**ODOR THRESHOLD:** No data available

**APPEARANCE:** Clear Paste

**COLOR:** Clear to pale yellow

**pH:** No data available

**PERCENT VOLATILE:** No data available

**FLASHPOINT AND METHOD:** 252°C to 458.6°C Pensky-Martens CC

**FLAMMABLE LIMITS:** No data available

**AUTOIGNITION TEMPERATURE:** No data available

**VAPOR PRESSURE:** No data available

# SAFETY DATA SHEET



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**VAPOR DENSITY:** (Air=1)

**Notes:** No data available

**BOILING POINT:** No data available

**FREEZING POINT:** No data available

**MELTING POINT:** No data available

**THERMAL DECOMPOSITION:** No data available

**SOLUBILITY IN WATER:** Negligible

**EVAPORATION RATE:** No data available

**DENSITY:** No data available

**SPECIFIC GRAVITY:** 1.14 g/L

**VISCOSITY #1:** 1500 Centipoise

**MOLECULAR WEIGHT:** No data available

**COEFF. OIL/WATER:** No data available

**COMMENTS:** No data available

## 10. STABILITY AND REACTIVITY

**STABLE:** Yes

**HAZARDOUS POLYMERIZATION:** No

**HAZARDOUS DECOMPOSITION PRODUCTS:** The by products expected in incomplete pyrolysis or combustion of epoxy resins are mainly phenolics, carbon monoxide and water.

**INCOMPATIBLE MATERIALS:** Strong acids and alkalis, reactive metals and strong oxidizing agents.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

**NOTES:** May cause eye irritation, skin irritation and irritation of respiratory tract.

**CHRONIC:** R68: Possible risk of irreversible effects.

**SENSITIZATION:** R43: May cause sensitization by skin contact.

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** Prevent product from entering drains or sewers in case of spill.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Dispose of following all Local Authority requirements for disposal.

## 14. TRANSPORT INFORMATION

**DOT (DEPARTMENT OF TRANSPORTATION)**

**PROPER SHIPPING NAME:** Not restricted

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## AIR (ICAO/IATA)

SHIPPING NAME: Not restricted

## VESSEL (IMO/IMDG)

SHIPPING NAME: Not restricted

## 15. REGULATORY INFORMATION

### UNITED STATES

#### TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Bisphenol A/Epichlorohydrin based epoxy resin	25085-99-8
2,3-EPOXYPROPYL O-TOLYL ETHER	2210-79-9

### CANADA

#### WHMIS HAZARD SYMBOL AND CLASSIFICATION

## 16. OTHER INFORMATION

APPROVED BY: Samantha Stouffer TITLE: Quality and Safety Manager

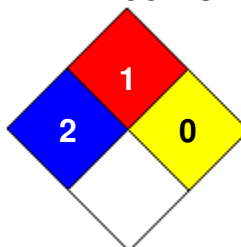
PREPARED BY: Emmanuel Mukund Date-Revised: 5/5/2015

REVISION SUMMARY: This MSDS replaces the 5/5/2015 MSDS.

### HMIS RATING

HEALTH	<input type="checkbox"/>	2
FLAMMABILITY	<input type="checkbox"/>	1
PHYSICAL HAZARD	<input type="checkbox"/>	0
PERSONAL PROTECTION	<input type="checkbox"/>	

### NFPA CODES



### MANUFACTURER DISCLAIMER:

To the best of our knowledge, the information contained herein is accurate. However, Pacer Technology does not assume any liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.



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# SAFETY DATA SHEET



Date Prepared : 5/16/2008  
 MSDS No : 11730084\_PT41 - HARDENER  
 Date-Revised : 5/18/2015  
 Revision No : 2

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT DESCRIPTION:** Z-POXY FINISHING RESIN KIT 4OZ (72) - HARDENER

### MANUFACTURER

Pacer Technology  
 3281 E. Guasti Rd., Suite 260  
 Ontario, CA 91761  
**Emergency Contact:** CHEMTREC  
**Emergency Phone:** 800-424-9300  
**Alternate Emergency Phone:** 703-527-3887  
**Product Stewardship:** 909-987-0550

## 2. HAZARDS IDENTIFICATION

### GHS CLASSIFICATIONS

#### Health:

Acute Toxicity (Oral), Category 4  
 Acute Toxicity (Inhalation), Category 4  
 Skin Corrosion, Category 1B  
 Skin Sensitization, Category 1

#### Environmental:

Aquatic Toxicity, Category 3

### GHS LABEL ELEMENTS



Corrosion



Exclamation  
mark

**SIGNAL WORD:** DANGER

### HAZARD STATEMENTS

H302: Harmful if swallowed.  
 H314: Causes severe skin burns and eye damage.  
 H317: May cause an allergic skin reaction.  
 H332: Harmful if inhaled.  
 H412: Harmful to aquatic life with long lasting effects.

### PRECAUTIONARY STATEMENT(S)

#### Prevention:

3559CN3R: P271: Use only outdoors or in a well-ventilated area.  
 P280: Wear protective gloves/protective clothing/eye protection/face protection.  
 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.



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 Date-Revised : 5/18/2015  
 Revision No : 2

9663G3CU: P501: Dispose of contents/containers in accordance with all local, state, and federal requirements.

## EMERGENCY OVERVIEW

**PHYSICAL APPEARANCE:** Light yellow colored viscous liquid.

**IMMEDIATE CONCERNS:** R20/22: Harmful by inhalation and if swallowed.

R36/38: Irritating to eyes and skin.

S2: Keep Out of Reach of Children.

## POTENTIAL HEALTH EFFECTS

**EYES:** S24/25: Avoid Contact with skin and eyes.

**SKIN:** R43: May cause sensitization by skin contact.

**INGESTION:** Irritating to mouth, throat and stomach.

**INHALATION:** Irritating to the nose, throat and respiratory tract.

**MEDICAL CONDITIONS AGGRAVATED:** Pre-existing skin, eye and lung conditions.

**ROUTES OF ENTRY:** Inhalation, ingestion and skin absorption are major routes of entry.

**IRRITANCY:** Irritating to eyes, respiratory system and skin.

**SENSITIZATION:** May cause allergic skin reaction.

**WARNING CAUTION LABELS:** Harmful. Keep out of Reach of Children.

**COMMENTS HEALTH:** S46: If swallowed, seek medical advice immediately and show this container or label.

**COMMENTS:** Contains epoxy constituents. See information supplied by manufacturer.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Benzyl alcohol	20 - 40	100-51-6
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL	10 - 15	90-72-2
3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE	3 - 5	2855-13-2
3,6,9-TRIAZAUNDECAMETHYLENEDIAMINE	1 - 10	112-57-2
Bis(dimethylamino)methyl phenol	3	71074-89-0

## 4. FIRST AID MEASURES

**EYES:** S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**SKIN:** Irritation occurs upon direct contact. Remove contaminated clothing and wash affected areas with soap and water.

**INGESTION:** If swallowed, seek medical advice immediately and show this container or label.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**EYES:** Causes eye irritation.

**SKIN:** R43: May cause sensitization by skin contact.

**INGESTION:** Ingestion of this material can cause mouth, throat, esophageal, and gastrointestinal tract irritation.

# SAFETY DATA SHEET



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**Date-Revised :** 5/18/2015  
**Revision No :** 2

**INHALATION:** Prolonged or excessive inhalation may cause respiratory tract irritation.

**ACUTE TOXICITY:** Slightly irritating to eyes and respiratory tracts.

**CHRONIC EFFECTS:** Irritating to eyes, respiratory system and skin.

## 5. FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Water spray, foam, carbon dioxide, dry chemicals.

**FIRE FIGHTING PROCEDURES:** Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

**FIRE FIGHTING EQUIPMENT:** As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide/dioxide in a fire. Ammonia when heated. Irritating and toxic fumes at elevated temperatures. Nitrogen oxides in a fire, which can react with water vapor to form corrosive nitric acid (TVL 2ppm). Combustion of product under oxygen-starved conditions can be expected to produce toxic products including nitriles and amides.

## 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Polymerize with water. Solid material may be scraped from surface.

**LARGE SPILL:** Absorb the liquid and scrub the area with detergent and water. Avoid runoff into storm sewers and ditches which lead to waterways.

### ENVIRONMENTAL PRECAUTIONS

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

## 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** S51: Use only in well-ventilated areas.

**HANDLING:** Avoid breathing (dust, vapor, mist, gas). Avoid contact with skin, eyes and clothing. Keep container closed when not in use.

**STORAGE:** Store in a cool place in original container and protect from sunlight. Keep away from sources of ignition.

**STORAGE TEMPERATURE:** Ambient room temperature (70F/21C).

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Use only in a well ventilated area.

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

**SKIN:** Avoid contact with skin.

**RESPIRATORY:** S51: Use only in well-ventilated areas.

**PROTECTIVE CLOTHING:** Launder contaminated clothing before reuse.

**WORK HYGIENIC PRACTICES:** Avoid contact with skin and eyes. Wash thoroughly after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES



# SAFETY DATA SHEET



**Date Prepared :** 5/16/2008  
**MSDS No :** 11730084\_PT41 - HARDENER  
**Date-Revised :** 5/18/2015  
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Chemical Name	Flash Point (°C)
Benzyl alcohol	200

**PHYSICAL STATE:** Liquid

**ODOR:** Ammonia Odor.

**ODOR THRESHOLD:** No data available

**APPEARANCE:** Pale yellow viscous liquid.

**COLOR:** Clear to pale yellow

**pH:** No data available

**PERCENT VOLATILE:** No data available

**FLASHPOINT AND METHOD:** 93°C (200°F) Pensky-Martens CC

**FLAMMABLE LIMITS:** Not Available

**AUTOIGNITION TEMPERATURE:** No data available

**VAPOR PRESSURE:** No data available

**VAPOR DENSITY:** No data available

**BOILING POINT:** No data available

**FREEZING POINT:** No data available

**MELTING POINT:** No data available

**THERMAL DECOMPOSITION:** No data available

**SOLUBILITY IN WATER:** Slightly soluble.

**EVAPORATION RATE:** No data available

**DENSITY:** No data available

**SPECIFIC GRAVITY:** 1.04 (water=1)

**VISCOSITY:** No data available

## 10. STABILITY AND REACTIVITY

**STABLE:** Yes

**HAZARDOUS POLYMERIZATION:** No

**STABILITY:** Stable.

**CONDITIONS TO AVOID:** Avoid storage near large masses of epoxy resins.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Combustible by-products of carbon monoxide/dioxide, hydrogen sulfide and oxides of sulfur.

**INCOMPATIBLE MATERIALS:** Avoid strong oxidizing agents and amines especially when hot.

## 11. TOXICOLOGICAL INFORMATION

**ACUTE**

# SAFETY DATA SHEET



Date Prepared : 5/16/2008  
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Chemical Name	ORAL LD <sub>50</sub> (rat)	DERMAL LD <sub>50</sub> (rabbit)	INHALATION LC <sub>50</sub> (rat)
Benzyl alcohol	1230	2000	1000

**EYE EFFECTS:** Mildly to moderately irritating.

**SKIN EFFECTS:** Irritating to skin. May cause allergic skin reaction with prolonged contact.

**SENSITIZATION:** Irritating to skin. May cause allergic skin reaction with prolonged contact.

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** Do not flush to sewer.

**ECOTOXICOLOGICAL INFORMATION:** No data available.

**AQUATIC TOXICITY (ACUTE):** No data available.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Cure by mixing with equal portion of paired component for non-hazardous solid waste disposal.

**FOR LARGE SPILLS:** Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on adsorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal. After all visible traces, including ignitable vapors, have been removed thoroughly wet vacuum the area. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal.

**PRODUCT DISPOSAL:** Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

## 14. TRANSPORT INFORMATION

### DOT (DEPARTMENT OF TRANSPORTATION)

**PROPER SHIPPING NAME:** Not restricted

**TECHNICAL NAME:** Not restricted

### AIR (ICAO/IATA)

**SHIPPING NAME:** Not restricted

### VESSEL (IMO/IMDG)

**SHIPPING NAME:** Not restricted

## 15. REGULATORY INFORMATION

### UNITED STATES

#### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

**311/312 HAZARD CATEGORIES:** Acute Health Hazard Chronic Health Hazard

**313 REPORTABLE INGREDIENTS:** None above reporting de minimus.

#### TSCA (TOXIC SUBSTANCE CONTROL ACT)

# SAFETY DATA SHEET



Date Prepared : 5/16/2008  
 MSDS No : 11730084\_PT41 - HARDENER  
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Chemical Name	CAS
Benzyl alcohol	100-51-6
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL	90-72-2
3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE	2855-13-2
3,6,9-TRIAZAUNDECAMETHYLENEDIAMINE	112-57-2

**TSCA STATUS:** All ingredients in this mixture are in compliance with TSCA.

**CALIFORNIA PROPOSITION 65:** None known.

## CANADA

### WHMIS HAZARD SYMBOL AND CLASSIFICATION

IRRITANT

## 16. OTHER INFORMATION

**APPROVED BY:** Samantha Stouffer    **TITLE:** Quality and Safety Manager

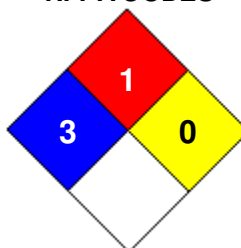
**Date-Revised:** 5/18/2015

**REVISION SUMMARY:** This MSDS replaces the 5/12/2015 MSDS.

### HMIS RATING

HEALTH	<input type="checkbox"/>	3
FLAMMABILITY	<input type="checkbox"/>	1
PHYSICAL HAZARD	<input type="checkbox"/>	0
PERSONAL PROTECTION	<input type="checkbox"/>	

### NFPA CODES



### MANUFACTURER DISCLAIMER:

To the best of our knowledge, the information contained herein is accurate. However, Pacer Technology does not assume any liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.



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# SAFETY DATA SHEET



Date Prepared : 4/30/2015  
 MSDS No : 11730082\_PT40 - RESIN  
 Date-Revised : 5/5/2015  
 Revision No : 3

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT DESCRIPTION:** Z-POXY FINISHING RESIN KIT 12OZ (36) - RESIN

### MANUFACTURER

Pacer Technology  
 3281 E. Guasti Rd., Suite 260  
 Ontario, CA 91761

**Emergency Contact:** CHEMTREC

**Emergency Phone:** 800-424-9300

**Alternate Emergency Phone:** 703-527-3887

**Product Stewardship:** 909-987-0550

### 24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (800) 424-9300

## 2. HAZARDS IDENTIFICATION

### GHS CLASSIFICATIONS

#### Health:

Skin Irritation, Category 2  
 Eye Irritation, Category 2  
 Skin Sensitization, Category 1  
 Mutagenicity, Category 2

#### Environmental:

Aquatic Toxicity, Category 3

### GHS LABEL ELEMENTS

Non-Hazardous per vendor information.



Exclamation  
mark



Health  
hazard

**SIGNAL WORD:** WARNING

### HAZARD STATEMENTS

H315: Causes skin irritation.  
 H319: Causes serious eye irritation.  
 H412: Harmful to aquatic life with long lasting effects.  
 H317: May cause an allergic skin reaction.  
 H341: Suspected of causing genetic defects .

### PRECAUTIONARY STATEMENT(S)

#### Prevention:

5468C4VS: Contains epoxy constituents. May produce an allergic reaction.  
 P280: Wear protective gloves/protective clothing/eye protection/face protection.  
 P281: Use personal protective equipment as required.  
 P202: Do not handle until all safety precautions have been read and understood.



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P261: Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P264: Wash skin and hands thoroughly after handling.  
 P272: Contaminated work clothing should not be allowed out of the workplace.  
 P273: Avoid release to the environment.

## Response:

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P308+P313: IF exposed or concerned: Get medical advice/attention.  
 P302+P352: IF ON SKIN: Wash with plenty of soap and water.  
 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.  
 P362: Take off contaminated clothing and wash before reuse.  
 P363: Wash contaminated clothing before reuse.

## Storage:

P405: Store locked up.

## Disposal:

7944L5O1: Dispose of in a manner consistent with federal, state, and local regulations.

## EMERGENCY OVERVIEW

**PHYSICAL APPEARANCE:** Clear to pale yellow, transparent liquid

**IMMEDIATE CONCERNS:** Irritating to eyes/skin. May cause skin sensitization.

## POTENTIAL HEALTH EFFECTS

**EYES:** Causes eye irritation.

**SKIN:** May cause skin irritation.

**MEDICAL CONDITIONS AGGRAVATED:** Pre-existing eye and skin disorders or lung allergies may be aggravated by exposure.

**ROUTES OF ENTRY:** Inhalation, ingestion and skin absorption are major routes of entry.

**SENSITIZATION:** May cause sensitization.

**WARNING CAUTION LABELS:** Harmful. Keep out of Reach of Children.

**COMMENTS:** Contains epoxy constituents. See information supplied by the manufacturer.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Bisphenol A/Epichlorohydrin based epoxy resin	75 - 100	25085-99-8
2,3-EPOXYPROPYL O-TOLYL ETHER	10 - 30	2210-79-9

## 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

**SKIN:** Irritation occurs upon direct contact. Remove contaminated clothing and wash affected areas with soap and water. Get medical attention if systems persist.

**INGESTION:** If swallowed, seek medical advice immediately and show this container or label.

# SAFETY DATA SHEET



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**INHALATION:** Remove to fresh air. Get medical attention if breathing is difficult.

## 5. FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Water spray, foam, carbon dioxide, dry chemicals.

**FIRE FIGHTING EQUIPMENT:** As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

**HAZARDOUS DECOMPOSITION PRODUCTS:** During combustion or elevated temperatures (>260 C) may form carbon monoxide, aldehydes, acids and other unidentified organic substances.

## 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Scrape as much material as you can from the surface using a stiff metal or plastic scraper. Clean the residue with acetone or alcohol and place in a disposable container.

### ENVIRONMENTAL PRECAUTIONS

**WATER SPILL:** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 7. HANDLING AND STORAGE

**HANDLING:** Avoid direct contact with eyes and prolonged contact with skin. Wash hands with soap and water after use.

**STORAGE:** Do not exceed 250 F (121 C) in use. Use in well ventilated area.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

**SKIN:** S36/37: Wear suitable protective clothing and gloves.

**RESPIRATORY:** S38: In case of insufficient ventilation, wear suitable respiratory equipment.

**WORK HYGIENIC PRACTICES:** Wash hands with soap and water after use. Launder contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**ODOR:** Epoxy odor.

**ODOR THRESHOLD:** No data available

**APPEARANCE:** Clear Paste

**COLOR:** Clear to pale yellow

**pH:** No data available

**PERCENT VOLATILE:** No data available

**FLASHPOINT AND METHOD:** 252°C to 458.6°C Pensky-Martens CC

**FLAMMABLE LIMITS:** No data available

**AUTOIGNITION TEMPERATURE:** No data available

**VAPOR PRESSURE:** No data available

# SAFETY DATA SHEET



Date Prepared : 4/30/2015  
 MSDS No : 11730082\_PT40 - RESIN  
 Date-Revised : 5/5/2015  
 Revision No : 3

**VAPOR DENSITY:** (Air=1)

**Notes:** No data available

**BOILING POINT:** No data available

**FREEZING POINT:** No data available

**MELTING POINT:** No data available

**THERMAL DECOMPOSITION:** No data available

**SOLUBILITY IN WATER:** Negligible

**EVAPORATION RATE:** No data available

**DENSITY:** No data available

**SPECIFIC GRAVITY:** 1.14 g/L

**VISCOSITY #1:** 1500 Centipoise

**MOLECULAR WEIGHT:** No data available

**COEFF. OIL/WATER:** No data available

**COMMENTS:** No data available

## 10. STABILITY AND REACTIVITY

**STABLE:** Yes

**HAZARDOUS POLYMERIZATION:** No

**HAZARDOUS DECOMPOSITION PRODUCTS:** The by products expected in incomplete pyrolysis or combustion of epoxy resins are mainly phenolics, carbon monoxide and water.

**INCOMPATIBLE MATERIALS:** Strong acids and alkalis, reactive metals and strong oxidizing agents.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

**NOTES:** May cause eye irritation, skin irritation and irritation of respiratory tract.

**CHRONIC:** R68: Possible risk of irreversible effects.

**SENSITIZATION:** R43: May cause sensitization by skin contact.

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** Prevent product from entering drains or sewers in case of spill.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Dispose of following all Local Authority requirements for disposal.

## 14. TRANSPORT INFORMATION

**DOT (DEPARTMENT OF TRANSPORTATION)**

**PROPER SHIPPING NAME:** Not restricted

# SAFETY DATA SHEET



Date Prepared : 4/30/2015  
 MSDS No : 11730082\_PT40 - RESIN  
 Date-Revised : 5/5/2015  
 Revision No : 3

## AIR (ICAO/IATA)

SHIPPING NAME: Not restricted

## VESSEL (IMO/IMDG)

SHIPPING NAME: Not restricted

## 15. REGULATORY INFORMATION

### UNITED STATES

#### TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Bisphenol A/Epichlorohydrin based epoxy resin	25085-99-8
2,3-EPOXYPROPYL O-TOLYL ETHER	2210-79-9

### CANADA

#### WHMIS HAZARD SYMBOL AND CLASSIFICATION

## 16. OTHER INFORMATION

APPROVED BY: Samantha Stouffer TITLE: Quality and Safety Manager

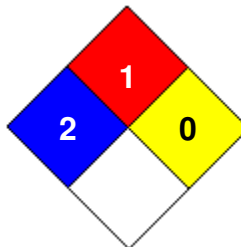
PREPARED BY: Emmanuel Mukund Date-Revised: 5/5/2015

REVISION SUMMARY: This MSDS replaces the 5/5/2015 MSDS.

### HMIS RATING

HEALTH	<input type="checkbox"/>	2
FLAMMABILITY	<input type="checkbox"/>	1
PHYSICAL HAZARD	<input type="checkbox"/>	0
PERSONAL PROTECTION	<input type="checkbox"/>	

### NFPA CODES



### MANUFACTURER DISCLAIMER:

To the best of our knowledge, the information contained herein is accurate. However, Pacer Technology does not assume any liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.



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# SAFETY DATA SHEET



Date Prepared : 5/16/2008  
 MSDS No : 11730082\_PT40 - HARDENER  
 Date-Revised : 5/18/2015  
 Revision No : 2

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT DESCRIPTION:** Z-POXY FINISHING RESIN KIT 12OZ (36) - HARDENER

### MANUFACTURER

Pacer Technology  
 3281 E. Guasti Rd., Suite 260  
 Ontario, CA 91761  
**Emergency Contact:** CHEMTREC  
**Emergency Phone:** 800-424-9300  
**Alternate Emergency Phone:** 703-527-3887  
**Product Stewardship:** 909-987-0550

## 2. HAZARDS IDENTIFICATION

### GHS CLASSIFICATIONS

#### Health:

Acute Toxicity (Oral), Category 4  
 Acute Toxicity (Inhalation), Category 4  
 Skin Corrosion, Category 1B  
 Skin Sensitization, Category 1

#### Environmental:

Aquatic Toxicity, Category 3

### GHS LABEL ELEMENTS



Corrosion



Exclamation  
mark

**SIGNAL WORD:** DANGER

### HAZARD STATEMENTS

H302: Harmful if swallowed.  
 H314: Causes severe skin burns and eye damage.  
 H317: May cause an allergic skin reaction.  
 H332: Harmful if inhaled.  
 H412: Harmful to aquatic life with long lasting effects.

### PRECAUTIONARY STATEMENT(S)

#### Prevention:

3559CN3R: P271: Use only outdoors or in a well-ventilated area.  
 P280: Wear protective gloves/protective clothing/eye protection/face protection.  
 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.



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# SAFETY DATA SHEET



Date Prepared : 5/16/2008  
 MSDS No : 11730082\_PT40 - HARDENER  
 Date-Revised : 5/18/2015  
 Revision No : 2

9663G3CU: P501: Dispose of contents/containers in accordance with all local, state, and federal requirements.

## EMERGENCY OVERVIEW

**PHYSICAL APPEARANCE:** Light yellow colored viscous liquid.

**IMMEDIATE CONCERNS:** R20/22: Harmful by inhalation and if swallowed.

R36/38: Irritating to eyes and skin.

S2: Keep Out of Reach of Children.

## POTENTIAL HEALTH EFFECTS

**EYES:** S24/25: Avoid Contact with skin and eyes.

**SKIN:** R43: May cause sensitization by skin contact.

**INGESTION:** Irritating to mouth, throat and stomach.

**INHALATION:** Irritating to the nose, throat and respiratory tract.

**MEDICAL CONDITIONS AGGRAVATED:** Pre-existing skin, eye and lung conditions.

**ROUTES OF ENTRY:** Inhalation, ingestion and skin absorption are major routes of entry.

**IRRITANCY:** Irritating to eyes, respiratory system and skin.

**SENSITIZATION:** May cause allergic skin reaction.

**WARNING CAUTION LABELS:** Harmful. Keep out of Reach of Children.

**COMMENTS HEALTH:** S46: If swallowed, seek medical advice immediately and show this container or label.

**COMMENTS:** Contains epoxy constituents. See information supplied by manufacturer.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Benzyl alcohol	20 - 40	100-51-6
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL	10 - 15	90-72-2
3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE	3 - 5	2855-13-2
3,6,9-TRIAZAUNDECAMETHYLENEDIAMINE	1 - 10	112-57-2
Bis(dimethylamino)methyl phenol	3	71074-89-0

## 4. FIRST AID MEASURES

**EYES:** S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**SKIN:** Irritation occurs upon direct contact. Remove contaminated clothing and wash affected areas with soap and water.

**INGESTION:** If swallowed, seek medical advice immediately and show this container or label.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**EYES:** Causes eye irritation.

**SKIN:** R43: May cause sensitization by skin contact.

**INGESTION:** Ingestion of this material can cause mouth, throat, esophageal, and gastrointestinal tract irritation.

# SAFETY DATA SHEET



**Date Prepared :** 5/16/2008  
**MSDS No :** 11730082\_PT40 - HARDENER  
**Date-Revised :** 5/18/2015  
**Revision No :** 2

**INHALATION:** Prolonged or excessive inhalation may cause respiratory tract irritation.

**ACUTE TOXICITY:** Slightly irritating to eyes and respiratory tracts.

**CHRONIC EFFECTS:** Irritating to eyes, respiratory system and skin.

## 5. FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Water spray, foam, carbon dioxide, dry chemicals.

**FIRE FIGHTING PROCEDURES:** Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

**FIRE FIGHTING EQUIPMENT:** As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide/dioxide in a fire. Ammonia when heated. Irritating and toxic fumes at elevated temperatures. Nitrogen oxides in a fire, which can react with water vapor to form corrosive nitric acid (TVL 2ppm). Combustion of product under oxygen-starved conditions can be expected to produce toxic products including nitriles and amides.

## 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Polymerize with water. Solid material may be scraped from surface.

**LARGE SPILL:** Absorb the liquid and scrub the area with detergent and water. Avoid runoff into storm sewers and ditches which lead to waterways.

### ENVIRONMENTAL PRECAUTIONS

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

## 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** S51: Use only in well-ventilated areas.

**HANDLING:** Avoid breathing (dust, vapor, mist, gas). Avoid contact with skin, eyes and clothing. Keep container closed when not in use.

**STORAGE:** Store in a cool place in original container and protect from sunlight. Keep away from sources of ignition.

**STORAGE TEMPERATURE:** Ambient room temperature (70F/21C).

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Use only in a well ventilated area.

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

**SKIN:** Avoid contact with skin.

**RESPIRATORY:** S51: Use only in well-ventilated areas.

**PROTECTIVE CLOTHING:** Launder contaminated clothing before reuse.

**WORK HYGIENIC PRACTICES:** Avoid contact with skin and eyes. Wash thoroughly after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

# SAFETY DATA SHEET



Date Prepared : 5/16/2008  
 MSDS No : 11730082\_PT40 - HARDENER  
 Date-Revised : 5/18/2015  
 Revision No : 2

Chemical Name	Flash Point (°C)
Benzyl alcohol	200

**PHYSICAL STATE:** Liquid

**ODOR:** Ammonia Odor.

**ODOR THRESHOLD:** No data available

**APPEARANCE:** Pale yellow viscous liquid.

**COLOR:** Clear to pale yellow

**pH:** No data available

**PERCENT VOLATILE:** No data available

**FLASHPOINT AND METHOD:** 93°C (200°F) Pensky-Martens CC

**FLAMMABLE LIMITS:** Not Available

**AUTOIGNITION TEMPERATURE:** No data available

**VAPOR PRESSURE:** No data available

**VAPOR DENSITY:** No data available

**BOILING POINT:** No data available

**FREEZING POINT:** No data available

**MELTING POINT:** No data available

**THERMAL DECOMPOSITION:** No data available

**SOLUBILITY IN WATER:** Slightly soluble.

**EVAPORATION RATE:** No data available

**DENSITY:** No data available

**SPECIFIC GRAVITY:** 1.04 (water=1)

**VISCOSITY:** No data available

## 10. STABILITY AND REACTIVITY

**STABLE:** Yes

**HAZARDOUS POLYMERIZATION:** No

**STABILITY:** Stable.

**CONDITIONS TO AVOID:** Avoid storage near large masses of epoxy resins.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Combustible by-products of carbon monoxide/dioxide, hydrogen sulfide and oxides of sulfur.

**INCOMPATIBLE MATERIALS:** Avoid strong oxidizing agents and amines especially when hot.

## 11. TOXICOLOGICAL INFORMATION

**ACUTE**

# SAFETY DATA SHEET



Date Prepared : 5/16/2008  
 MSDS No : 11730082\_PT40 - HARDENER  
 Date-Revised : 5/18/2015  
 Revision No : 2

Chemical Name	ORAL LD <sub>50</sub> (rat)	DERMAL LD <sub>50</sub> (rabbit)	INHALATION LC <sub>50</sub> (rat)
Benzyl alcohol	1230	2000	1000

**EYE EFFECTS:** Mildly to moderately irritating.

**SKIN EFFECTS:** Irritating to skin. May cause allergic skin reaction with prolonged contact.

**SENSITIZATION:** Irritating to skin. May cause allergic skin reaction with prolonged contact.

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** Do not flush to sewer.

**ECOTOXICOLOGICAL INFORMATION:** No data available.

**AQUATIC TOXICITY (ACUTE):** No data available.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Cure by mixing with equal portion of paired component for non-hazardous solid waste disposal.

**FOR LARGE SPILLS:** Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on adsorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal. After all visible traces, including ignitable vapors, have been removed thoroughly wet vacuum the area. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal.

**PRODUCT DISPOSAL:** Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

## 14. TRANSPORT INFORMATION

### DOT (DEPARTMENT OF TRANSPORTATION)

**PROPER SHIPPING NAME:** Not restricted

**TECHNICAL NAME:** Not restricted

### AIR (ICAO/IATA)

**SHIPPING NAME:** Not restricted

### VESSEL (IMO/IMDG)

**SHIPPING NAME:** Not restricted

## 15. REGULATORY INFORMATION

### UNITED STATES

#### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

**311/312 HAZARD CATEGORIES:** Acute Health Hazard Chronic Health Hazard

**313 REPORTABLE INGREDIENTS:** None above reporting de minimus.

#### TSCA (TOXIC SUBSTANCE CONTROL ACT)

# SAFETY DATA SHEET



Date Prepared : 5/16/2008  
 MSDS No : 11730082\_PT40 - HARDENER  
 Date-Revised : 5/18/2015  
 Revision No : 2

Chemical Name	CAS
Benzyl alcohol	100-51-6
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL	90-72-2
3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE	2855-13-2
3,6,9-TRIAZAUNDECAMETHYLENEDIAMINE	112-57-2

**TSCA STATUS:** All ingredients in this mixture are in compliance with TSCA.

**CALIFORNIA PROPOSITION 65:** None known.

## CANADA

### WHMIS HAZARD SYMBOL AND CLASSIFICATION

IRRITANT

## 16. OTHER INFORMATION

**APPROVED BY:** Samantha Stouffer    **TITLE:** Quality and Safety Manager

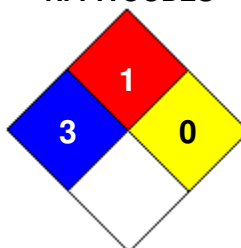
**Date-Revised:** 5/18/2015

**REVISION SUMMARY:** This MSDS replaces the 5/12/2015 MSDS.

### HMIS RATING

HEALTH	<input type="checkbox"/>	3
FLAMMABILITY	<input type="checkbox"/>	1
PHYSICAL HAZARD	<input type="checkbox"/>	0
PERSONAL PROTECTION	<input type="checkbox"/>	

### NFPA CODES



### MANUFACTURER DISCLAIMER:

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