

## EPOXON Pool Paint Hardener (Part B)

### SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	EPOXON Pool Paint Hardener (Part B)
<b>Other Means of Identification</b>	N/A
<b>Product Family</b>	Epoxy Hardeners
<b>Recommended Use</b>	Used over concrete (swimming pools or fountain) which has been acid etched, sand-blasted, or previously painted with an epoxon coating.
<b>Restrictions on Use</b>	This product is designed as part of a system in 2 parts and must be mixed, according to manufacturer's instructions, with the appropriate partner product before use.
<b>Manufacturer/Supplier Identifier</b>	R&D Technical Solutions Ltd., 7000 Davand Drive, Mississauga, ON, L5T 1J5, 905-795-9900, www.rdsolutions.ca
<b>Emergency Phone No.</b>	CANUTEC, 1-613-996-6666, 24 HR

### SECTION 2. HAZARD IDENTIFICATION

#### Classification

Acute toxicity (Oral) - Category 4; Acute toxicity (Dermal) - Category 4; Acute toxicity (Inhalation) - Category 3; Skin corrosion - Category 1; Serious eye damage - Category 1; Respiratory sensitization - Category 1; Skin sensitization - Category 1; Germ cell mutagenicity - Category 1

#### Label Elements



Danger

Hazard Statement(s):

H331	Toxic if inhaled.
H302 + H312	Harmful if swallowed or in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H360	May damage fertility or the unborn child.
H340	May cause genetic defects.

Precautionary Statement(s):

P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands and skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	In case of inadequate ventilation wear respiratory protection (NIOSH approved air-purifying respirator with an appropriate cartridge).
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P311	Call a POISON CENTRE or doctor.
P363	Wash contaminated clothing before reuse.
P333 + P313	If skin irritation or rash occurs: Get medical advice or attention.

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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 CENTRE or doctor.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTRE or doctor.

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

P311 Call a POISON CENTRE or doctor.

**Storage:**

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

**Disposal:**

P501 Dispose of contents and container in accordance with local, regional, national and international regulations.

**Note:**

68

% of the mixture consists of an ingredient or ingredients of unknown acute toxicity inhalation.

**Other Hazards**

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers
Fatty acids, C18-unsatd., dimers, polymers with bisphenol A, epichlorohydrin, tall-oil fatty acids, tetraethylenepentamine and triethylenetetramine	106906-26-7	50-60	
Benzyl alcohol	100-51-6	20-30	
Diethylenetriamine	111-40-0	3-5	
Bisphenol-A Epoxy Resin	80-05-7	3-5	
Tetraethylenepentamine	112-57-2	2-4	
Triethylenetetramine	112-24-3	2-4	

**Notes**

Any concentration shown as a range is to protect confidentiality or due to batch variations. Concentrations are expressed in % weight/weight.

### SECTION 4. FIRST-AID MEASURES

**First-aid Measures**

**Inhalation**

Take precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective equipment). Remove source of exposure or move to fresh air. If experiencing respiratory symptoms (e.g. coughing, shortness of breath, wheezing), call a Poison Centre or doctor. Avoid mouth-to-mouth contact by using a barrier device. If exposed or concerned, get medical advice or attention.

**Skin Contact**

Avoid direct contact. Wear chemical protective clothing if necessary. Take off immediately contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Quickly and gently blot or brush away excess chemical. Immediately rinse skin with lukewarm, gently flowing water for at least 60 minutes. Immediately call a Poison Centre or doctor. If skin irritation occurs, get medical advice or attention. Safely dispose of contaminated clothing, shoes and leather goods. DO NOT re-use.

**Eye Contact**

Avoid direct contact. Wear chemical protective gloves if necessary. Quickly and gently blot or brush chemical off the face. Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for at least 30 minutes, while holding the eyelid(s) open. Remove contact lenses, if present, after the initial 1-2 minutes and continue flushing for several additional minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. Immediately call a Poison Centre or doctor.

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## **Ingestion**

Rinse mouth with water. Do not induce vomiting. If vomiting occurs naturally, lie on your side in the recovery position. Rinse mouth with water again. Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the Poison Centre or doctor. If exposed or concerned, get medical advice or attention.

## **First-aid Comments**

Get medical advice or attention if you feel unwell or are concerned. Some of the first-aid procedures recommended here require advanced first-aid training.

## **Most Important Symptoms and Effects, Acute and Delayed**

Can cause severe irritation of the nose and throat. May burn the skin. Permanent scarring may result. Can cause lung injury. The vapour also irritates or burns the skin. Permanent scarring can result. The vapour also irritates or burns the eyes. Permanent damage including blindness can result. Skin sensitizer. May cause an allergic skin reaction in some people.

## **Immediate Medical Attention and Special Treatment**

### **Target Organs**

Skin, respiratory system.

### **Special Instructions**

Not applicable.

### **Medical Conditions Aggravated by Exposure**

Asthma, eye conditions, skin conditions, skin allergies, kidney conditions, liver conditions.

## **SECTION 5. FIRE-FIGHTING MEASURES**

### **Extinguishing Media**

#### **Suitable Extinguishing Media**

Carbon dioxide, dry chemical powder or appropriate foam.

#### **Unsuitable Extinguishing Media**

Do not use direct water stream - may cause fire to spread.

### **Specific Hazards Arising from the Product**

Heating increases the release of toxic vapour. Closed containers may rupture violently when heated releasing contents.

In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide; corrosive, oxidizing nitrogen oxides; corrosive, flammable ammonia.

### **Special Protective Equipment and Precautions for Fire-fighters**

Evacuate area. Approach fire from upwind to avoid hazardous vapours or gases. Knock down vapours or gases with water fog or fine water spray. Dike and recover contaminated water for appropriate disposal.

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

### **Personal Precautions, Protective Equipment, and Emergency Procedures**

Do not touch damaged containers or spilled product unless wearing appropriate protective equipment. Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area.

### **Environmental Precautions**

Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas. Minimize the use of water to prevent environmental contamination.

### **Methods and Materials for Containment and Cleaning Up**

Review Section 7 (Handling) of this safety data sheet before proceeding with clean-up. Contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for

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disposal. Contaminated absorbent poses the same hazard as the spilled product. Review Section 13 (Disposal Considerations) of this safety data sheet. Large spills or leaks: dike spilled product to prevent runoff.

#### Other Information

Report spills to local health, safety and environmental authorities, as required.

## SECTION 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Prevent all skin contact. Do not get in eyes. Wear personal protective equipment to avoid direct contact with this chemical. Only use where there is adequate ventilation. Avoid release to the environment. Do NOT eat, drink or store food in work areas.

### Conditions for Safe Storage

Store in an area that is: cool, well-ventilated, secure and separate from work areas, separate from incompatible materials (see Section 10: Stability and Reactivity). Empty containers may contain hazardous residue. Store separately. Keep closed. Follow all precautions given on this safety data sheet.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Not available.

Consult local authorities for provincial or state exposure limits.

### Appropriate Engineering Controls

General ventilation is usually adequate. Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

### Individual Protection Measures

#### Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

#### Skin Protection

Chemical-resistant, impervious gloves which comply with an approved standard should be worn at all times when handling. Wear chemical protective clothing e.g. gloves, aprons, boots.

Butyl rubber, neoprene rubber, nitrile rubber.

#### Respiratory Protection

Not usually required when working with small quantities. In case of inadequate ventilation wear respiratory protection. During spraying, wear suitable respiratory equipment. Wear a powered air-purifying respirator with an appropriate cartridge.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

<b>Appearance</b>	Colourless - amber liquid. Particle Size: Not applicable
<b>Odour</b>	Ammonia-like
<b>Odour Threshold</b>	Not available
<b>pH</b>	> 7
<b>Melting Point/Freezing Point</b>	Not available (melting); Not available (freezing)
<b>Initial Boiling Point/Range</b>	> 200 °C (392 °F)
<b>Flash Point</b>	>= 97 °C (207 °F)
<b>Evaporation Rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not available
<b>Upper/Lower Flammability or Explosive Limit</b>	Not available (upper); Not available (lower)
<b>Vapour Pressure</b>	Not available
<b>Vapour Density (air = 1)</b>	Not available

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<b>Relative Density (water = 1)</b>	1.02
<b>Solubility</b>	Practically insoluble in water; Not available (in other liquids)
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	Not available (kinematic); Not available (dynamic)
<b>Other Information</b>	
<b>Physical State</b>	Liquid
<b>Molecular Formula</b>	Not applicable
<b>Molecular Weight</b>	Not applicable
<b>Bulk Density</b>	Not available
<b>Surface Tension</b>	Not available
<b>Critical Temperature</b>	Not available
<b>Electrical Conductivity</b>	Not available
<b>Vapour Pressure at 50 deg C</b>	Not available
<b>Saturated Vapour Concentration</b>	Not available
<b>VOC</b>	Not available

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions of use.

### Chemical Stability

Normally stable.

### Possibility of Hazardous Reactions

N-Nitrosamimes, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations.

### Conditions to Avoid

Prolonged exposure to high temperatures. Freezing.

### Incompatible Materials

Avoid contact with: nitrous acid and other nitrosating agents. Metals (e.g. aluminum), organic acids (e.g. acetic acid), oxidizing agents (e.g. peroxides).

Corrosive to: copper, galvanized surfaces, aluminum alloys, zinc.

### Hazardous Decomposition Products

Can include, but not limited to: very toxic carbon monoxide, carbon dioxide; very toxic, flammable aldehydes; corrosive, flammable ammonia. volatile amines corrosive, oxidizing nitrogen oxides.

## SECTION 11. TOXICOLOGICAL INFORMATION

No data for the product itself. ATE values are calculated based on toxicity values of individual components of this product.

### Likely Routes of Exposure

Skin contact; eye contact; inhalation.

### Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Fatty acids, C18-unsatd., dimers, polymers with bisphenol A, epichlorohydrin,		> 2000 mg/kg (rat)	> 2000 mg/kg (rabbit)

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tall-oil fatty acids, tetraethylenepentamine and triethylenetetramine			
Benzyl alcohol	> 4.168 mg/L (rat) (4-hour exposure) (vapour)	1230 mg/kg (rat)	2000 mg/kg (rabbit)
Diethylenetriamine		1080 mg/kg (rat)	1090 mg/kg (rabbit)
Bisphenol-A Epoxy Resin	Not available	3300 mg/kg (female rat)	3600 mg/kg (rabbit)

Inhalation ATEmix = 0.53 mg/L (4-hour exposure) (vapour)

68% of the mixture consists of an ingredient or ingredients of unknown acute toxicity (inhalation)

Oral ATEmix = 1773.53 mg/kg

Dermal ATEmix = 1777.55 mg/kg

#### **Skin Corrosion/Irritation**

There is limited evidence of moderate or severe irritation. There is limited evidence of skin corrosion. The vapour also irritates the skin.

#### **Serious Eye Damage/Irritation**

Animal tests show serious eye damage. May irritate or burn the eyes. Permanent damage including blindness may result. (Diethylenetriamine). (Bisphenol-A Epoxy Resin)

#### **STOT (Specific Target Organ Toxicity) - Single Exposure**

##### **Inhalation**

Product mist may irritate the respiratory system. May cause severe nose and throat irritation, severe lung injury.

##### **Skin Absorption**

No information was located.

##### **Ingestion**

Harmful Can cause effects as described for skin contact. May cause depression of the central nervous system. May cause severe irritation or burns to the mouth, throat and stomach. Permanent damage can result.

#### **Aspiration Hazard**

Not known to be an aspiration hazard.

#### **STOT (Specific Target Organ Toxicity) - Repeated Exposure**

May cause irritation of the respiratory system. May cause respiratory tract injury.

#### **Respiratory and/or Skin Sensitization**

No information was located for respiratory sensitization. Can cause an allergic reaction (skin sensitization) based on animal tests.

#### **Carcinogenicity**

<b>Chemical Name</b>	<b>IARC</b>	<b>ACGIH®</b>	<b>NTP</b>	<b>OSHA</b>
Benzyl alcohol	Not evaluated	Not Listed	Not Listed	
Bisphenol-A Epoxy Resin	Not evaluated	Not Listed	Not Listed	

Not known to cause cancer.

#### **Key to Abbreviations**

IARC = International Agency for Research on Cancer. ACGIH® = American Conference of Governmental Industrial Hygienists. NTP = National Toxicology Program.

#### **Reproductive Toxicity**

##### **Development of Offspring**

May harm the unborn child.

##### **Sexual Function and Fertility**

May cause effects on sexual function and/or fertility.

##### **Effects on or via Lactation**

No information was located.

#### **Germ Cell Mutagenicity**

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May be mutagenic based on limited evidence.

#### Interactive Effects

No information was located.

## SECTION 12. ECOLOGICAL INFORMATION

This product has not been tested. The toxicity value statements have been derived from the properties of individual components.

#### Ecotoxicity

May be harmful to aquatic life.

##### Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Fatty acids, C18-unsatd., dimers, polymers with bisphenol A, epichlorohydrin, tall-oil fatty acids, tetraethylenepentamine and triethylenetetramine		0.48 mg/L (Daphnia magna (water flea); 48-hour)		
Benzyl alcohol	460 mg/L (Pimephales promelas (fathead minnow); 96-hour)	230 mg/L (Daphnia magna (water flea); 48-hour)		700 mg/L (Pseudokirchneriella subcapitata (algae); 72-hour; static)

##### Chronic Aquatic Toxicity

Chemical Name	NOEC Fish	EC50 Fish	NOEC Crustacea	EC50 Crustacea
Benzyl alcohol	51 mg/L (Daphnia magna (water flea); 21-day)			

#### Persistence and Degradability

No information was located.

#### Bioaccumulative Potential

No information was located.

#### Mobility in Soil

No information was located.

#### Other Adverse Effects

There is no information available.

## SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal Methods

This product and its container must be disposed of as hazardous waste. Do NOT dump into any sewers, on the ground or into any body of water. Dispose of contents and container in accordance with local, regional, national and international regulations. The required hazard evaluation of the waste and compliance with the applicable hazardous waste laws are the responsibility of the user.

## SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canadian TDG	UN2079	Diethylenetriamine Solution	8	II

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US DOT	UN2079	Diethylenetriamine Solution	8	II
OMI (transport maritime)	UN2079	Diethylenetriamine Solution	8	II

**Environmental Hazards** Environmentally Hazardous Substance (Tetraethylenepentamine)

**Special Precautions** Not applicable

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

## SECTION 15. REGULATORY INFORMATION

### Safety, Health and Environmental Regulations

#### Canada

##### Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

#### USA

##### Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

## SECTION 16. OTHER INFORMATION

**SDS Prepared By** Compliance & Documentation Coordinator

**Phone No.** 905-795-9900

**Date of Preparation** July 05, 2016

**Date of Last Revision** July 05, 2016

**Revision Indicators** Not applicable.

**Key to Abbreviations** ACGIH® = American Conference of Governmental Industrial Hygienists  
IARC = International Agency for Research on Cancer  
NIOSH = National Institute for Occupational Safety and Health  
NTP = National Toxicology Program  
OSHA = US Occupational Safety and Health Administration

**References** CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).  
Registry of Toxic Effects of Chemical Substances (RTECS®) database. Accelrys, Inc. Available from Canadian Centre for Occupational Health and Safety (CCOHS).

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