

IMPAX 5020 FLOOR RESURFACER HARDENER

This product appears in the following stock number(s):

4011U

Last revised: 10/01/03

Printed: 2/7/2005

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**Tradename:** IMPAX 5020 FLOOR RESURFACER HARDENER**General use:** The following information applies to the hardener component of the two-part kit. When properly mixed and cured, the product is not hazardous.**Chemical family:** Polyamine curing agent**MANUFACTURER**ITW Philadelphia Resins
130 Commerce Dr.
Montgomeryville, PA 18936**EMERGENCY INFORMATION****Emergency telephone number**
(CHEMTREC): (800) 424-9300
Other Calls: (215) 855-8450**2. COMPOSITION/INFORMATION ON INGREDIENTS****HAZARDOUS CONSTITUENTS****Exposure limits**

Constituent	Abbr.	CAS No.	Weight percent	ACGIH TLV	OSHA PEL	Other Limits
Benzyl alcohol	BZOH	100516	> 30	n/e	n/e	10 ppm (AIHA)
Phenol		108952	1-10	5 ppm	5ppm	5 ppm (Canada)
Triethylenetetramine	TETA	112243	1-10	n/e	n/e	1 ppm (skin) (AIHA-WEEL)
1,6-Diaminohexane		124094	< 10	0.5 ppm	n/e	5 mg/m3 (AIHA-WEEL)
Reaction Product of Amine, Phenol and Formaldehyde		68479801	< 35	n/e	n/e	n/e
1,2-Cyclohexanediamine		694837	< 25	n/e	n/e	n/e
Cycloaliphatic Amine		*	< 35	n/e	n/e	n/e

"TLV" means the Threshold Limit Value exposure (eight-hour, time-weighted average, unless otherwise noted) established by the American Conference of Governmental Industrial Hygienists. "STEL" indicates a short-term exposure limit. "PEL" indicates the OSHA Permissible Exposure Limit. "n/e" indicates that no exposure limit has been established. An asterisk (*) indicates a substance whose identity is a trade secret of our supplier and unknown to us.

3. HAZARDS IDENTIFICATION

Emergency Overview

Appearance, form, odor: Amber liquid with ammoniacal odor.

WARNING! Eye, skin and respiratory irritant. Harmful if absorbed through skin. May cause skin and respiratory sensitization. Contains material which may cause kidney, liver, pancreas and spleen damage based on animal data.

Potential health effects

Primary routes of exposure: Skin contact Skin absorption Eye contact Inhalation Ingestion

Symptoms of acute overexposure:

Skin: Severe irritant. Potential sensitizer.

Eyes: Severe irritant

Inhalation:

Irritation of nose and throat; nausea and vomiting in severe cases. Potential respiratory sensitizer.

Ingestion:

Ingestion may cause bleeding of the gastrointestinal tract and the vomiting of blood.

Effects of chronic overexposure:

1) Adsorption of phenolic solutions through the skin may be very rapid and can cause death. Lesser exposures can cause damage to the kidneys, liver, pancreas, and spleen, and edema of the lungs. Chronic exposures can cause death from liver and kidney damage. 2) TETA may cause respiratory sensitization and chronic lung toxicity (cough, tightness of chest, shortness of breath).

Carcinogenicity – OSHA regulated: No

ACGIH: No

National Toxicology Program: No

International Agency for Research on Cancer: Yes

Cancer-suspect constituent(s) : Silica

Medical conditions which may be aggravated by exposure:

Asthma. Chronic respiratory disease (e.g. Bronchitis, Emphysema). Eye disease. Skin disorders and allergies.

Other effects:

Repeated and/or prolonged exposure to low concentrations of vapor may cause: sore throat, eye irritation, nausea, faintness, headache, which are transient. Repeated and /or prolonged exposures may result in: adverse skin effects (such as defatting, rash, or irritation), adverse eye effects (such as conjunctivitis or corneal damage). Phenol is a human poison by ingestion.

4. FIRST AID MEASURES

First aid for eyes:

Immediately flush with clean water for at least 15 minutes while gently holding eyelids open. Get medical help as soon as possible.

First aid for skin:

Immediately remove contaminated clothing and excess contaminant. Flush skin with water. Wash thoroughly with soap and warm water. Consult a physician if irritation develops.

First aid for inhalation:

Remove patient to fresh air. Give oxygen or artificial respiration if needed. See a doctor if symptoms persist.

First aid for ingestion:

Do not induce vomiting. Dilute with lots of milk or water and get immediate medical help.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water Carbon dioxide Dry chemical Foam Alcohol foam**Flash Point (°F):** > 200**Method:** PMCC**Explosive limits in air (percent) -- Lower:** n/d **Upper:** n/d**Special firefighting procedures:**

Firefighters should wear self-contained breathing apparatus and sufficient protective clothing to prevent eye and skin contact.

Unusual fire and explosion hazards:

Toxic fumes will be released when this material burns or is thermally decomposed.

Hazardous products of combustion:

Oxides of carbon, oxides of nitrogen, ammonia and unidentified organic combustion products.

6. ACCIDENTAL RELEASE MEASURES**Spill control:**

Avoid personal contact. Eliminate ignition sources. Ventilate area.

Containment:

Dike, contain and absorb with clay, sand or other suitable material.

Cleanup:

For large spills, pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand, or other suitable material and dispose of properly. Flush area with water to remove trace residue.

Special procedures:

Prevent spill from entering drainage/sewer systems, waterways, and surface waters.

7. HANDLING AND STORAGE**Handling precautions:**

Avoid breathing vapors. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after using and particularly before eating, drinking, smoking, applying cosmetics, or using toilet facilities.

Laundry contaminated clothing and protective gear before reuse. Discard contaminated leather articles.

Handle mixed resin and hardener in accordance with the potential hazard of the curing agent used. Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against silica dust during sanding/grinding of cured product.

Storage:

Store in a cool, dry area away from high temperatures and flames. Keep away from oxidizers. Keep container tightly closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Engineering controls****Ventilation :**

Use ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits (or to the lowest feasible levels when limits have not been established). Although good general mechanical ventilation is usually adequate for most industrial applications, local exhaust ventilation is preferred (see ACGIH - Industrial Ventilation). Local exhaust may be required for confined areas (see OSHA 1910.146).

Other engineering controls :

Have emergency shower and eye wash available.

Personal protective equipment

Eye and face protection:

Chemical goggles if liquid contact is likely, or Safety glasses with side shields.

Skin protection:

Chemical-resistant gloves and other gear as required to prevent skin contact.

Respiratory protection:

None needed in normal use with proper ventilation. In poorly ventilated areas use NIOSH approved organic vapor cartridge respirator for uncured resin, dust/particle respirator during grinding/sanding operations for cured resin, or fresh airline respirator as exposure levels dictate (see OSHA 1910.134).

9. PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity:	1.01	Boiling point (°F):	>350
Melting point (°F):	liquid	Vapor density (air = 1):	n/d
Vapor pressure (mmHg):	<1 at 70 °F	Evaporation rate (butyl acetate = 1):	n/d
VOC (grams/liter):	< 25	Solubility in water:	Appreciable
Percent volatile by volume:	0	pH (5% solution or slurry in water):	9.5-10.0
Percent solids by weight:	100		

10. STABILITY AND REACTIVITY

This material is chemically stable. Hazardous polymerization will not occur.

Conditions to avoid :

Exposure to open flame or extreme heat.

Incompatible materials:

Strong oxidizing agents, acids, and chlorinated organic compounds.

Hazardous products of decomposition:

Oxides of nitrogen and carbon; ammonia.

Conditions under which hazardous polymerization may occur:

Heat is released when this material is mixed with epoxy resin; be careful when mixing a pound or more.

11. TOXICOLOGICAL INFORMATION

Acute oral effects: LD50 (rat): > 2200 mg/kg

No data.

Acute dermal effects: LD50 (rabbit): > 669 mg/kg, based on phenol

A moderate irritant to the skin of a rabbit. Phenol is rapidly absorbed through the skin and can cause death.

Acute inhalation effects: LC50 (rat): No data

Exposure: hours.

No data.

Eye irritation:

A severe irritant to the eye of a rabbit.

Subchronic effects:

Absorption of phenolic solutions through the skin may be very rapid and cause death. Lesser exposures can cause damage to the kidneys, liver, pancreas and spleen, and edema of the lungs.

Carcinogenicity, teratogenicity, and mutagenicity:

TETA has tested positive in screening tests for mutagenicity. TETA was found fetotoxic and teratogenic when fed to rats at 0.83% and 1.67% of diet. When applied dermally to the skin of pregnant guinea pigs, there was a 90% abortion rate or death of fetus with developmental anomalies. Phenol has been shown to produce fetotoxic effects in laboratory animals. Phenol has been shown to be a mutagenic in germ cells, in vivo.

Other chronic effects:

Repeated overexposure to phenol can cause effects on the heart and nervous system including changes in heart rate, blood pressure, respiration, as well as tremors and lung disorders. Chronic exposures can cause death from liver and kidney damage. It has been generally observed in animal studies that aliphatic amines can cause changes in the lungs, liver, kidneys and heart. TETA has been found to produce liver and kidney damage and brain congestion in dermally exposed animals.

Toxicological information on hazardous chemical constituents of this product:

Constituent	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 4hr, (rat)
Benzyl alcohol	1230 mg/kg	2000 mg/kg	> 2000 ppm
Phenol	317 mg/kg	630 mg/kg	> 3600 mg/m ³
Triethylenetetramine	2500 mg/kg	805 mg/kg	n/d
1,6-Diaminohexane	750 mg/kg	1110 mg/kg	n/d
Reaction Product of Amine, Phenol and Formaldehyde	n/d	n/d	n/d
1,2-Cyclohexanediamine	1 g/kg	n/d	> 3200 mg/m ³
Cycloaliphatic Amine	n/d	n/d	n/d

'n/d' = 'not determined'

12 ECOLOGICAL INFORMATION**Ecotoxicity:**

No data.

Mobility and persistence:

Phenol: Biodegradability = 99.5% at 7days.

Environmental fate:

No data.

13. DISPOSAL CONSIDERATIONS

Please see also Section 15, Regulatory Information.

Waste management recommendations:

If this material becomes a waste, it would not be a hazardous waste by RCRA criteria (40CFR 261). Dispose of according to applicable federal, state, and local regulations.

14. TRANSPORT INFORMATION

Proper shipping name: Non-regulated

Technical name :

Hazard class : N/A

UN number: N/A

Packing group: N/A

Emergency Response Guide no.: N/A

IMDG page number: N/A

Other:

15. REGULATORY INFORMATION**U.S. Federal Regulations****TSCA**

All ingredients of this product are listed, or are exempt from listing, on the TSCA inventory.

The following RCRA code(s) applies to this material if it becomes waste:

None

Regulatory status of hazardous chemical constituents of this product:

Constituent	Extremely Hazardous*	Toxic Chemical**	CERCLA RQ (lbs)	TSCA 12B Export Notification
Benzyl alcohol	No	No	0.0	Not required
Phenol	Yes	Yes	1000.0	Required
Triethylenetetramine	No	No	0.0	Not required
1,6-Diaminohexane	No	No	0.0	Not required
Reaction Product of Amine, Phenol and Formaldehyde	No	No	0.0	Not required
1,2-Cyclohexanediamine	No	No	0.0	Not required
Cycloaliphatic Amine	No	No	0.0	Not required

*Consult the appropriate regulations for emergency planning and release reporting requirements for substances on the SARA Section 301 Extremely Hazardous Substance list.

**Substances for which the "Toxic Chemical" column is marked "Yes" are on the SARA Section 313 list of Toxic Chemicals, for which release reporting may be required. For specific requirements, consult the appropriate regulations.

For purposes of SARA Section 312 hazardous materials inventory reporting, the following hazard classes apply to this material: - Immediate health hazard -- Delayed health hazard -

Canadian regulations

WHMIS hazard class(es): D1B; D2A

16. OTHER INFORMATION

Hazardous Materials Identification System (HMIS) ratings:	Health 3*	Flammability 1	Reactivity 1
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Other information:

Trade Secrecy Registry Numbers: New Jersey: 80100094-5055P; 80100094-5056P, 80100094-5057P.

The information and recommendations in this document are based on the best information available to us at the time of preparation, but we make no other warranty, express or implied, as to its correctness or completeness, or as to the results of reliance on this document.

IMPAX 5020 FLOOR RESURFACER RESIN

This product appears in the following stock number(s):

4011U

Last revised: 01/18/05

Printed: 2/7/2005

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**Tradename:** IMPAX 5020 FLOOR RESURFACER RESIN**General use:** This information applies to the resin component of the two-part kit; handle freshly-mixed resin and hardener as recommended for the hardener. After curing, the product is not hazardous.**Chemical family:** Epoxy resin**MANUFACTURER**ITW Philadelphia Resins
130 Commerce Dr.
Montgomeryville, PA 18936**EMERGENCY INFORMATION****Emergency telephone number**
(CHEMTREC): (800) 424-9300
Other Calls: (215) 855-8450**2. COMPOSITION/INFORMATION ON INGREDIENTS****HAZARDOUS CONSTITUENTS****Exposure limits**

Constituent	Abbr.	CAS No.	Weight percent	ACGIH TLV	OSHA PEL	Other Limits
1,4- Cyclohexanedimethanol diglycidyl Ether		14228730	10-20	n/e	n/e	n/e
2-Ethylhexyl glycidyl ether		2461156	1-10	n/e	n/e	n/e
Bisphenol A diglycidyl ether resin	DGEBPA	25068386	75-90	n/e	n/e	n/e

"TLV" means the Threshold Limit Value exposure (eight-hour, time-weighted average, unless otherwise noted) established by the American Conference of Governmental Industrial Hygienists. "STEL" indicates a short-term exposure limit. "PEL" indicates the OSHA Permissible Exposure Limit. "n/e" indicates that no exposure limit has been established. An asterisk (*) indicates a substance whose identity is a trade secret of our supplier and unknown to us.

3. HAZARDS IDENTIFICATION**Emergency Overview**

Appearance, form, odor: Straw liquid with irritating odor.

WARNING! Eye, skin and respiratory irritant. Potential skin sensitizer.**Potential health effects****Primary routes of exposure:** Skin contact Skin absorption Eye contact Inhalation Ingestion**Symptoms of acute overexposure:****Skin:** Moderate irritant (redness, itching, burning). Contact at elevated temperatures can cause thermal burns. May cause skin sensitization (rashes, hives).**Eyes:** Moderate irritant (stinging, burning sensation, tearing, redness, swelling). Contact at elevated temperatures can

cause thermal burns which may result in permanent damage or blindness.

Inhalation:

If the product is poorly ventilated, strongly heated or atomized, the vapor or mist can cause irritation of the respiratory tract. Coughing and chest pain may result.

Ingestion:

Acute oral toxicity is low. May cause gastric distress. Large oral doses may produce moderate depression and slight difficulty breathing.

Effects of chronic overexposure:

Repeated or prolonged exposure may cause adverse respiratory effects (cough, tightness of chest, shortness of breath), eye effects (conjunctivitis, corneal damage), or skin effects (rash, irritation, corrosion). Prolonged or repeated skin contact may cause sensitization, with itching, swelling, or rashes on later exposure. Studies have shown bisphenol A diglycidyl ether resin to be a sensitizing agent causing allergic contact dermatitis.

Carcinogenicity -- OSHA regulated: No

ACGIH: No

National Toxicology Program: No

International Agency for Research on Cancer:No

Cancer-suspect constituent(s) : None

Medical conditions which may be aggravated by exposure:

Eye disease, skin disorders (e.g. eczema) and allergies, asthma and respiratory diseases (e.g. Bronchitis, Emphysema). Development of preexisting skin or lung allergy symptoms may increase.

Other effects:

Repeated or prolonged exposure to low concentrations of vapor may cause sore throat and eye irritation, which are transient. See section 11.

4. FIRST AID MEASURES**First aid for eyes:**

Flush eye with clean water for at least 20 minutes while gently holding eyelids open, lifting upper and lower lids. Get immediate medical attention.

First aid for skin:

Immediately remove contaminated clothing and excess contaminant. Flush skin with water for at least 15 minutes. Wash thoroughly with soap and warm water. Consult a physician if irritation develops.

First aid for inhalation:

Remove patient to fresh air. Administer oxygen if breathing is difficult. Get medical attention if symptoms persist.

First aid for ingestion:

Do NOT induce vomiting. Rinse mouth out with water, then sip water to remove taste from mouth. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips (if sitting) or to the side (if lying down) to prevent aspiration. Get medical attention.

5. FIRE FIGHTING MEASURES**General fire and explosion characteristics:**

Class IIIB.

Extinguishing media:

Water

Carbon dioxide

Dry chemical

Foam

Alcohol foam

Flash Point (°F): > 200

Method: PMCC

Explosive limits in air (percent) -- Lower: n/d

Upper: n/d

Special firefighting procedures:

Material will not burn unless preheated. Do not enter confined space without full bunker gear. Firefighters should wear self-contained breathing apparatus and protective clothing. Cool fire exposed containers with water.

Unusual fire and explosion hazards:

Sudden reaction and fire may result if product is mixed with an oxidizing agent. Heating above 300 deg F in the presence of air may cause slow oxidative decomposition and above 500 deg F may cause polymerization. Personnel in vicinity and downwind should be evacuated.

Hazardous products of combustion:

When heated to decomposition it emits fumes of Cl⁻, carbon monoxide, other fumes and vapors varying in composition and toxicity.

6. ACCIDENTAL RELEASE MEASURES**Spill control:**

Avoid personal contact. Eliminate ignition sources. Ventilate area.

Containment:

Dike, contain and absorb with clay, sand or other suitable material.

Cleanup:

For large spills, pump to storage/ salvage vessels. Soak up residue with an absorbent such as clay, sand, or other suitable material and dispose of properly. Flush area with water to remove trace residue.

Special procedures:

Prevent spill from entering drainage/ sewer systems, waterways, and surface waters. Collect run-off water and transfer to drums or tanks for later disposal. Notify local health authorities and other appropriate agencies if such contamination occurs.

7. HANDLING AND STORAGE**Handling precautions:**

Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after using and particularly before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Launder contaminated clothing and protective gear before reuse. Discard contaminated leather articles. Handle mixed resin and hardener in accordance with the potential hazard of the curing agent used. Provide appropriate ventilation/ respiratory protection against decomposition products (see Section 10) during welding/ flame cutting operations and to protect against dust during sanding/ grinding of cured product.

Storage:

Store in a cool, dry area away from high temperatures and flames.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Engineering controls****Ventilation :**

Use ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits (or to the lowest feasible levels when limits have not been established). Although good general mechanical ventilation is usually adequate for most industrial applications, local exhaust ventilation is preferred (see ACGIH - Industrial Ventilation). Local exhaust may be required for confined areas (see OSHA 1910.146).

Other engineering controls :

Have emergency shower and eye wash available.

Personal protective equipment**Eye and face protection:**

Chemical goggles if liquid contact is likely, or Safety glasses with side shields.

Skin protection:

Chemical-resistant gloves and other gear as required to prevent skin contact.

Respiratory protection:

None needed in normal use with proper ventilation. In poorly ventilated areas use NIOSH approved organic vapor cartridge respirator for uncured resin, dust/ particle respirator during grinding/ sanding operations for cured resin, or fresh airline respirator as exposure levels dictate (see OSHA 1910.134).

9. PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity:	1.16	Boiling point (°F):	> 300
Melting point (°F):	n/d	Vapor density (air = 1):	>1
Vapor pressure (mmHg):	< 11 at 70 °F	Evaporation rate (butyl acetate = 1):	<<1
VOC (grams/liter):	< 25	Solubility in water:	< 1%
Percent volatile by volume:	0	pH (5% solution or slurry in water):	neutral
Percent solids by weight:	100		

10. STABILITY AND REACTIVITY

This material is chemically stable. Hazardous polymerization will not occur.

Conditions to avoid :

Open flame and extreme heat

Incompatible materials:

Strong Lewis or mineral acids, strong oxidizing agents, strong mineral & organic bases (esp. primary and secondary aliphatic amines). Peroxides. Sodium or calcium hypochlorite.

Hazardous products of decomposition:

Oxides of carbon; aldehydes, acids and other organic substances may be formed during combustion or elevated temperature (>500 deg F) degradation.

Conditions under which hazardous polymerization may occur:

Heat is generated when resin is mixed with curing agents; Run-a-way cure reactions may char and decompose the resin, generating unidentified fumes and vapors which may be toxic.

11. TOXICOLOGICAL INFORMATION

Acute oral effects: LD50 (rat): 11,400 mg/kg (DGE BPA Resin)

Acute dermal effects: LD50 (rabbit): > 20 mg/l (DGE BPA Resin)

DGE BPA: Draize -1.6 (rabbit)

Acute inhalation effects: LC50 (rat): No deaths in saturated air (DGE BPA)

Exposure: hours.

Eye irritation:

DGEBPA: Draize -2 (rabbit)

Subchronic effects:

No data available.

Carcinogenicity, teratogenicity, and mutagenicity:

1) **MUTAGENICITY:** Liquid resins based on diglycidyl ether of Bisphenol A (DGEBPA), have proved to be inactive when tested by in vivo mutagenicity assays. These resins have shown activity in in vitro microbial mutagenicity screening and have produced chromosomal aberrations in cultured rat liver cells. The significance of these tests to man is unknown. 2) **CARCINOGENICITY:** Recent 2-year bioassays in rats and mice exposed by the dermal route to DGEBPA yielded no evidence of carcinogenicity to the skin or any other organs. This study clarifies prior equivocal results from a 2-year mouse skin painting study, which were suggestive, but not conclusive, for weak carcinogenic activity. 3) The International Agency for Research on Cancer (IARC) concluded that DGEBPA is not classifiable as a carcinogen (IARC group 3), that is human and animal evidence of carcinogenicity is inadequate.

Other chronic effects:

DGEBPA: Prolonged or repeated skin contact may cause sensitization, with itching, swelling, or rashes on later exposure. Studies have shown bisphenol A diglycidyl ether resin to cause allergic contact dermatitis.

Toxicological information on hazardous chemical constituents of this product:

Constituent	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 4hr, (rat)
1,4- Cyclohexanedimethanol diglycidyl Ether	> 1000 mg/kg	> 1000 mg/kg	n/d
2-Ethylhexyl glycidyl ether	7800 mg/kg	> 2000 mg/kg	n/d
Bisphenol A diglycidyl ether resin	11.4 g/kg	>20 ml/kg	no deaths

'n/d' = 'not determined'

12 ECOLOGICAL INFORMATION**Ecotoxicity:**

No data available.

Mobility and persistence:

No data available.

Environmental fate:

No data available.

13. DISPOSAL CONSIDERATIONS**Please see also Section 15, Regulatory Information.****Waste management recommendations:**

If this resin becomes a waste, it would not be a hazardous waste by RCRA criteria (40CFR 261). Dispose of according to applicable federal, state, and local regulations. Incineration is the preferred method of disposal.

14. TRANSPORT INFORMATION

Proper shipping name: Non-regulated
Technical name : N/A
Hazard class : N/A
UN number: N/A
Packing group: N/A
Emergency Response Guide no.: N/A
IMDG page number: N/A
Other: N/A

15. REGULATORY INFORMATION**U.S. Federal Regulations****TSCA**

All ingredients of this product are listed, or are exempt from listing, on the TSCA inventory.

The following RCRA code(s) applies to this material if it becomes waste:

None

Regulatory status of hazardous chemical constituents of this product:

Constituent	Extremely Hazardous*	Toxic Chemical**	CERCLA RQ (lbs)	TSCA 12B Export Notification
1,4- Cyclohexanedimethanol diglycidyl Ether	No	No	0.0	Required
2-Ethylhexyl glycidyl ether	No	No	0.0	Required
Bisphenol A diglycidyl ether resin	No	No	0.0	Not required

*Consult the appropriate regulations for emergency planning and release reporting requirements for substances on the SARA Section 301 Extremely Hazardous Substance list.

**Substances for which the "Toxic Chemical" column is marked "Yes" are on the SARA Section 313 list of Toxic Chemicals, for which release reporting may be required. For specific requirements, consult the appropriate regulations.

For purposes of SARA Section 312 hazardous materials inventory reporting, the following hazard classes apply to this material: - Immediate health hazard -- Delayed health hazard -

Canadian regulations

WHMIS hazard class(es) : D2B

All components of this product are on the Domestic Substances List.

16. OTHER INFORMATION

**Hazardous Materials
Identification System (HMIS)
ratings:**

Health**2*****Flammability****1****Reactivity****1****Other information:**

Trade Secrecy Numbers: New Jersey: 80100094-5003P

The information and recommendations in this document are based on the best information available to us at the time of preparation, but we make no other warranty, express or implied, as to its correctness or completeness, or as to the results of reliance on this document.

IMPAX 5020 FLOOR RESURFACER PRIMER HARDENER

This product appears in the following stock number(s):

4011U 4014U 4024U 4056U 4059U

Last revised: 10/02/03

Printed: 2/7/2005

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**Tradename:** IMPAX 5020 FLOOR RESURFACER PRIMER HARDENER**General use:** This information applies to the hardener component of the two-part kit. After curing, the product is not hazardous.**Chemical family:** Epoxy Curing Agent Solution**MANUFACTURER**ITW Philadelphia Resins
130 Commerce Dr.
Montgomeryville, PA 18936**EMERGENCY INFORMATION****Emergency telephone number**
(CHEMTREC): (800) 424-9300
Other Calls: (215) 855-8450**2. COMPOSITION/INFORMATION ON INGREDIENTS****HAZARDOUS CONSTITUENTS****Exposure limits**

Constituent	Abbr.	CAS No.	Weight percent	ACGIH TLV	OSHA PEL	Other Limits
Ethyl benzene		100414	1-10	100 ppm	100 ppm	100 ppm (Canada)
Benzyl alcohol	BZOH	100516	< 25	n/e	n/e	10 ppm (AIHA)
Propylene glycol monomethyl ether		107982	30-60	100 ppm	100 ppm	100 ppm (Canada)
Phenol		108952	< 10	5 ppm	5ppm	5 ppm (Canada)
1,6-Diaminohexane		124094	< 10	0.5 ppm	n/e	5 mg/m3 (AIHA-WEEL)
Xylene		1330207	20-40	100 ppm	100 ppm	100 ppm (Canada)
2-methoxy-1-propanol		1589475	< 1	n/e	n/e	n/e
Reaction Product of Amine, Phenol and Formaldehyde		68479801	< 25	n/e	n/e	n/e
1,2-Cyclohexanediamine		694837	< 10	n/e	n/e	n/e

"TLV" means the Threshold Limit Value exposure (eight-hour, time-weighted average, unless otherwise noted) established by the American Conference of Governmental Industrial Hygienists. "STEL" indicates a short-term exposure limit. "PEL" indicates the OSHA Permissible Exposure Limit. "n/e" indicates that no exposure limit has been established. An asterisk (*) indicates a substance whose identity is a trade secret of our supplier and unknown to us.

3. HAZARDS IDENTIFICATION

Emergency Overview

Appearance, form, odor: Liquid with solvent odor.

WARNING! Flammable. Eye, skin and respiratory irritant. Potential skin and respiratory sensitizer. May cause central nervous system effects.

Potential health effects

Primary routes of exposure: Skin contact Skin absorption Eye contact Inhalation Ingestion

Symptoms of acute overexposure:

Skin: Moderate irritant. Contact at elevated temperatures can cause thermal burns. May cause skin sensitization (rashes, hives, defatting).

Eyes: Moderate irritant. Contact at elevated temperatures can cause thermal burns. High vapor concentrations may also be irritating.

Inhalation:

Vapors may irritate nose, throat, and respiratory tract. High vapor concentrations may cause central nervous system (CNS) depression (headache, nausea, giddiness, dizziness). Potential respiratory sensitizer.

Ingestion:

May cause gastric distress and aspiration (evidenced by coughing). May cause CNS depression.

Effects of chronic overexposure:

Prolonged or repeated skin contact may cause sensitization, with itching, swelling, or rashes on later exposure. Potential respiratory tract sensitizer. TARGET ORGANS: Eye, skin, liver or hepatic system, kidney, spleen, pancreas, respiratory systems & CNS.

Carcinogenicity -- OSHA regulated: No

ACGIH: No

National Toxicology Program: No

International Agency for Research on Cancer: Yes

Cancer-suspect constituent(s) : Ethyl benzene

Medical conditions which may be aggravated by exposure:

Asthma, chronic respiratory disease (e.g. bronchitis and emphysema), eye disease, kidney disorders, liver disorders, skin disorders and allergies.

Other effects:

Xylene: near fatal exposures may result in congestive effects to a wide variety of organs. May effect cardiac system, pulmonary system, nervous system, dermal system, liver and kidney. Also see section 11.

4. FIRST AID MEASURES

First aid for eyes:

Flush eye with clean water for at least 15 minutes while gently holding eyelids open. Get immediate medical attention.

First aid for skin:

Immediately remove contaminated clothing and excess contaminant. Flush skin with water. Wash thoroughly with soap and warm water. Consult a physician if irritation develops.

First aid for inhalation:

Remove patient to fresh air. Administer oxygen if breathing is difficult. Get medical attention if symptoms persist.

First aid for ingestion:

Do NOT induce vomiting. Give two glasses of water to dilute if patient is conscious. Get medical attention.

5. FIRE FIGHTING MEASURES**Extinguishing media:** Water Carbon dioxide Dry chemical Foam Alcohol foam**Flash Point (°F):** 80**Method:** TCC**Explosive limits in air (percent) -- Lower:** 1**Upper:** 7 (xylene)**Special firefighting procedures:**

Do not enter confined space without full bunker gear. Firefighters should wear self-contained breathing apparatus and protective clothing. Cool fire exposed containers with water.

Unusual fire and explosion hazards:

Contains flammable solvent. Do not use in area where sparks or open flames are present.

Hazardous products of combustion:

When heated to decomposition it emits fumes of carbon monoxide, other fumes and vapors varying in composition and toxicity.

6. ACCIDENTAL RELEASE MEASURES**Spill control:**

Avoid personal contact. Eliminate ignition sources. Ventilate area.

Containment:

Dike, contain and absorb with clay, sand or other suitable non-combustible material.

Cleanup:

For large spills, pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand, or other suitable material and dispose of properly (RCRA hazardous waste).

Special procedures:

Prevent spill from entering drainage/sewer systems, waterways, and surface waters. Use non-sparking tools

7. HANDLING AND STORAGE**Handling precautions:**

Flammable liquid. Keep away from heat, sparks and open flames. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after using and particularly before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Launder contaminated clothing and protective gear before reuse. Discard contaminated leather articles. Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against nuisance dust during sanding/grinding of cured product. Use bonding/grounding straps when transferring liquid.

Storage:

Store in a adequately ventilated, cool, dry area away from high temperatures and flames.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Engineering controls****Ventilation :**

General mechanical ventilation is normally sufficient. For prolonged use in confined areas, provide local exhaust (explosion-proof). Ventilation must, in any case, keep vapor concentrations below the TLVs.

Other engineering controls :

Have emergency shower and eye wash available.

Personal protective equipment**Eye and face protection:**

Safety glasses with side shields.

Skin protection:

Chemical-resistant gloves and other gear as required to prevent skin contact.

Respiratory protection:

None required at normal handling temperatures and conditions. Use NIOSH approved organic vapor cartridges for uncured resin and dust/particle respirators during grinding/sanding operations of cured resin as exposure levels dictate.

9. PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity:	0.94	Boiling point (°F):	n/d
Melting point (°F):	n/d	Vapor density (air = 1):	>1
Vapor pressure (mmHg):	n/d at 0 °F	Evaporation rate (butyl acetate = 1):	n/d
VOC (grams/liter):	640	Solubility in water:	Negligible
Percent volatile by volume:	68	pH (5% solution or slurry in water):	neutral
Percent solids by weight:	32		

10. STABILITY AND REACTIVITY

This material is chemically stable. Hazardous polymerization will not occur.

Conditions to avoid :

Open flame, sparks and extreme heat.

Incompatible materials:

Mineral and organic acids. Oxidizers. Reactive metals (sodium, calcium, zinc, etc). Peroxides. Sodium or Calcium hypochlorite.

Hazardous products of decomposition:

Oxides of carbon & nitrogen; aldehydes, acids and other organic substances may be formed during combustion or elevated temperature (>500 deg F) degradation.

Conditions under which hazardous polymerization may occur:

Heat is generated when resin is mixed with curing agents; Run-a-way cure reactions may char and decompose the resin, generating unidentified fumes and vapors which may be toxic.

11. TOXICOLOGICAL INFORMATION

Acute oral effects: LD50 (rat): n/d

No data available.

Acute dermal effects: LD50 (rabbit): n/d

Acute inhalation effects: LC50 (rat): n/d

Exposure: 8 hours.

Eye irritation:

No data available.

Subchronic effects:

Absorption of phenolic solutions through the skin may be very rapid and cause death. Lesser exposures can cause damage to the kidneys, liver, pancreas and spleen, and edema of the lungs.

Carcinogenicity, teratogenicity, and mutagenicity:

1) Phenol has been shown to produce fetotoxic effects in laboratory animals. Phenol has been shown to be a mutagenic in germ cells, in vivo. 2) Developmental toxicity studies with xylene have shown embryo-lethal/toxic and teratogenic effects with maternal toxicity. 3) This product contains ethyl benzene. A study conducted by the National Toxicity Program states that lifetime inhalation exposure of rats and mice to concentrations of ethyl benzene (750 ppm) resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations of ethyl benzene (75 ppm or 250 ppm). This study does not address the relevance of these results to humans.

Other chronic effects:

Laboratory animals exposed to xylene have shown hearing loss, and effects to liver, kidneys, lungs, spleen heart, blood and adrenals. Repeated overexposure to phenol can cause effects on the heart and nervous system including changes in heart rate, blood pressure, respiration, as well as tremors and lung disorders. Chronic exposures can cause death from liver and kidney damage.

Toxicological information on hazardous chemical constituents of this product:

Constituent	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 4hr, (rat)
Ethyl benzene	3500 mg/kg	17800 ppm	>4000 ppm
Benzyl alcohol	1230 mg/kg	2000 mg/kg	> 2000 ppm
Propylene glycol monomethyl ether	5660 mg/kg	13000 mg/kg	n/d
Phenol	317 mg/kg	630 mg/kg	> 3600 mg/m ³
1,6-Diaminohexane	750 mg/kg	1110 mg/kg	n/d
Xylene	4300 mg/kg	>1700 mg/kg	5000 ppm
2-methoxy-1-propanol	n/d	n/d	n/d
Reaction Product of Amine, Phenol and Formaldehyde	n/d	n/d	n/d
1,2-Cyclohexanediamine	1 g/kg	n/d	> 3200 mg/m ³

'n/d' = 'not determined'

12 ECOLOGICAL INFORMATION

Ecotoxicity:

No data available.

Mobility and persistence:

No data available.

Environmental fate:

No data available.

13. DISPOSAL CONSIDERATIONS

Please see also Section 15, Regulatory Information.

Waste management recommendations:

Do not dispose of in a landfill. Incineration is the preferred method of disposal. Dispose of in accordance with all applicable local, state and federal disposal regulations.

14. TRANSPORT INFORMATION

Proper shipping name: Resin solution
Technical name : N/A
Hazard class : 3
UN number: 1866
Packing group: III
Emergency Response Guide no.: 127
IMDG page number: N/A
Other:

15. REGULATORY INFORMATION**U.S. Federal Regulations****TSCA**

All ingredients of this product are listed, or are exempt from listing, on the TSCA inventory.

The following RCRA code(s) applies to this material if it becomes waste:

D001

Regulatory status of hazardous chemical constituents of this product:

Constituent	Extremely Hazardous*	Toxic Chemical**	CERCLA RQ (lbs)	TSCA 12B Export Notification
Ethyl benzene	No	Yes	1000.0	Required
Benzyl alcohol	No	No	0.0	Not required
Propylene glycol monomethyl ether	No	No	100.0	Not required
Phenol	Yes	Yes	1000.0	Required
1,6-Diaminohexane	No	No	0.0	Not required
Xylene	No	Yes	100.0	Not required
2-methoxy-1-propanol	No	No	0.0	Not required

Constituent	Extremely Hazardous*	Toxic Chemical**	CERCLA RQ (lbs)	TSCA 12B Export Notification
Reaction Product of Amine, Phenol and Formaldehyde	No	No	0.0	Not required
1,2-Cyclohexanediamine	No	No	0.0	Not required

*Consult the appropriate regulations for emergency planning and release reporting requirements for substances on the SARA Section 301 Extremely Hazardous Substance list.

**Substances for which the "Toxic Chemical" column is marked "Yes" are on the SARA Section 313 list of Toxic Chemicals, for which release reporting may be required. For specific requirements, consult the appropriate regulations.

For purposes of SARA Section 312 hazardous materials inventory reporting, the following hazard classes apply to this material: - Immediate health hazard -- Delayed health hazard -- Fire hazard -

Canadian regulations

WHMIS hazard class(es) : D2B; B2; D2A
All components of this product are on the Domestic Substances List.

16. OTHER INFORMATION

Hazardous Materials Identification System (HMIS) ratings:	Health	Flammability	Reactivity
	2*	3	1

Revisions for this issue:

MSDS section	Revisions
3	Ethyl benzene updated to IARC 2B

The information and recommendations in this document are based on the best information available to us at the time of preparation, but we make no other warranty, express or implied, as to its correctness or completeness, or as to the results of reliance on this document.

IMPAX 5020 FLOOR RESURFACER PRIMER RESIN

This product appears in the following stock number(s):

4011U 4014U 4024U 4056U 4059U

Last revised: 10/02/03

Printed: 2/7/2005

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**Tradename:** IMPAX 5020 FLOOR RESURFACER PRIMER RESIN**General use:** This information applies to the resin component of a two-part kit. After curing, the product is not hazardous.**Chemical family:** Epoxy resin**MANUFACTURER**ITW Philadelphia Resins
130 Commerce Dr.
Montgomeryville, PA 18936**EMERGENCY INFORMATION****Emergency telephone number**
(CHEMTREC): (800) 424-9300
Other Calls: (215) 855-8450**2. COMPOSITION/INFORMATION ON INGREDIENTS****HAZARDOUS CONSTITUENTS****Exposure limits**

Constituent	Abbr.	CAS No.	Weight percent	ACGIH TLV	OSHA PEL	Other Limits
Ethyl benzene		100414	1-5	100 ppm	100 ppm	100 ppm (Canada)
Xylene		1330207	10-20	100 ppm	100 ppm	100 ppm (Canada)
Bisphenol A diglycidyl ether resin	DGEBPA	25068386	> 60	n/e	n/e	n/e
Alkyl Glycidyl Ether		68609972	10-20	n/e	n/e	n/e

"TLV" means the Threshold Limit Value exposure (eight-hour, time-weighted average, unless otherwise noted) established by the American Conference of Governmental Industrial Hygienists. "STEL" indicates a short-term exposure limit. "PEL" indicates the OSHA Permissible Exposure Limit. "n/e" indicates that no exposure limit has been established. An asterisk (*) indicates a substance whose identity is a trade secret of our supplier and unknown to us.

3. HAZARDS IDENTIFICATION**Emergency Overview**

Appearance, form, odor: Liquid with solvent odor.

WARNING! Flammable. Eye, skin and respiratory irritant. Potential skin sensitizer. May cause central nervous system effects.

Potential health effects

Primary routes of exposure: Skin contact Skin absorption Eye contact Inhalation Ingestion

Symptoms of acute overexposure:

Skin: Moderate irritant. Contact at elevated temperatures can cause thermal burns. May cause skin sensitization (rashes, hives, defatting).

Eyes: Moderate irritant. Contact at elevated temperatures can cause thermal burns. High vapor concentrations may also be irritating.

Inhalation:

Vapors may irritate nose, throat, and respiratory tract. High vapor concentrations may cause central nervous system (CNS) depression (headache, nausea, giddiness, dizziness). May injure lung.

Ingestion:

May cause gastric distress and aspiration (evidenced by coughing). May cause CNS depression.

Effects of chronic overexposure:

Prolonged or repeated skin contact may cause sensitization, with itching, swelling, or rashes on later exposure.

Carcinogenicity -- OSHA regulated: No

ACGIH: No

National Toxicology Program: No

International Agency for Research on Cancer: Yes

Cancer-suspect constituent(s) : Ethyl benzene

Medical conditions which may be aggravated by exposure:

Preexisting eye and skin and respiratory disorders. Development of preexisting skin or lung allergy symptoms may increase.

Other effects:

Xylene: near fatal exposures may result in congestive effects to a wide variety of organs. May effect cardiac system, pulmonary system, nervous system, dermal system, liver and kidney. Also see section 11.

4. FIRST AID MEASURES**First aid for eyes:**

Flush eye with clean water for at least 15 minutes while gently holding eyelids open. Get immediate medical attention.

First aid for skin:

Immediately remove contaminated clothing and excess contaminant. Flush skin with water. Wash thoroughly with soap and warm water. Consult a physician if irritation develops.

First aid for inhalation:

Remove patient to fresh air. Administer oxygen if breathing is difficult. Get medical attention if symptoms persist.

First aid for ingestion:

Do NOT induce vomiting. Give two glasses of water to dilute if patient is conscious. Get medical attention.

5. FIRE FIGHTING MEASURES**Extinguishing media:**

Water

Carbon dioxide

Dry chemical

Foam

Alcohol foam

Flash Point (°F): 80

Method: TCC

Explosive limits in air (percent) -- Lower: 1

Upper: 7 (xylene)

Special firefighting procedures:

Do not enter confined space without full bunker gear. Firefighters should wear self-contained breathing apparatus and protective clothing. Cool fire exposed containers with water.

Unusual fire and explosion hazards:

Contains flammable solvent. Do not use in area where sparks or open flames are present.

Hazardous products of combustion:

When heated to decomposition it emits fumes of carbon monoxide, other fumes and vapors varying in composition and toxicity.

6. ACCIDENTAL RELEASE MEASURES**Spill control:**

Avoid personal contact. Eliminate ignition sources. Ventilate area.

Containment:

Dike, contain and absorb with clay, sand or other suitable non-combustible material.

Cleanup:

For large spills, pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand, or other suitable material and dispose of properly (RCRA hazardous waste).

Special procedures:

Prevent spill from entering drainage/sewer systems, waterways, and surface waters. Use non-sparking tools

7. HANDLING AND STORAGE**Handling precautions:**

Flammable liquid. Keep away from heat, sparks and open flames. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after using and particularly before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Launder contaminated clothing and protective gear before reuse. Discard contaminated leather articles. Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against nuisance dust during sanding/grinding of cured product. Use bonding/grounding straps when transferring liquid.

Storage:

Store in a adequately ventilated, cool, dry area away from high temperatures and flames.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Engineering controls****Ventilation :**

General mechanical ventilation is normally sufficient. For prolonged use in confined areas, provide local exhaust (explosion-proof). Ventilation must, in any case, keep vapor concentrations below the TLVs.

Other engineering controls :

Have emergency shower and eye wash available.

Personal protective equipment**Eye and face protection:**

Safety glasses with side shields.

Skin protection:

Chemical-resistant gloves and other gear as required to prevent skin contact.

Respiratory protection:

None required at normal handling temperatures and conditions. Use NIOSH approved organic vapor cartridges for uncured resin and dust/particle respirators during grinding/sanding operations of cured resin as exposure levels

dictate.

9. PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity:	1.0	Boiling point (°F):	n/d
Melting point (°F):	n/d	Vapor density (air = 1):	>1
Vapor pressure (mmHg):	n/d at 0 °F	Evaporation rate (butyl acetate = 1):	n/d
VOC (grams/liter):	190	Solubility in water:	Negligible
Percent volatile by volume:	19	pH (5% solution or slurry in water):	neutral
Percent solids by weight:	81		

10. STABILITY AND REACTIVITY

This material is chemically stable. Hazardous polymerization will not occur.

Conditions to avoid :

Open flame, sparks and extreme heat.

Incompatible materials:

Strong Lewis or mineral acids, strong oxidizing agents, strong mineral and organic bases (especially primary and secondary aliphatic amines).

Hazardous products of decomposition:

Oxides of carbon; aldehydes, acids and other organic substances may be formed during combustion or elevated temperature (>500 deg F) degradation.

Conditions under which hazardous polymerization may occur:

Heat is generated when resin is mixed with curing agents; Run-a-way cure reactions may char and decompose the resin, generating unidentified fumes and vapors which may be toxic.

11. TOXICOLOGICAL INFORMATION

Acute oral effects: LD50 (rat): n/d

No data available.

Acute dermal effects: LD50 (rabbit): n/d

Acute inhalation effects: LC50 (rat): n/d

Exposure: 8 hours.

Eye irritation:

No data available.

Subchronic effects:

No data available.

Carcinogenicity, teratogenicity, and mutagenicity:

1) Developmental toxicity studies with xylene have shown embryo-lethal/toxic and teratogenic effects with maternal

toxicity. 2) This product contains ethyl benzene. A study conducted by the National Toxicity Program states that lifetime inhalation exposure of rats and mice to concentrations of ethyl benzene (750 ppm) resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations of ethyl benzene (75 ppm or 250 ppm). This study does not address the relevance of these results to humans.

Other chronic effects:

Laboratory animals exposed to xylene have shown hearing loss, and effects to liver, kidneys, lungs, spleen heart, blood and adrenals. Prolonged or repeated skin contact may cause sensitization, with itching, swelling, or rashes on later exposure. Studies have shown bisphenol A diglycidyl ether resin to cause allergic contact dermatitis.

Toxicological information on hazardous chemical constituents of this product:

Constituent	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 4hr, (rat)
Ethyl benzene	3500 mg/kg	17800 ppm	>4000 ppm
Xylene	4300 mg/kg	>1700 mg/kg	5000 ppm
Bisphenol A diglycidyl ether resin	11.4 g/kg	>20 ml/kg	no deaths
Alkyl Glycidyl Ether	>19.2 g/kg	> 4.5 g/kg	n/d

'n/d' = 'not determined'

12 ECOLOGICAL INFORMATION**Ecotoxicity:**

No data available.

Mobility and persistence:

No data available.

Environmental fate:

No data available.

13. DISPOSAL CONSIDERATIONS

Please see also Section 15, Regulatory Information.

Waste management recommendations:

Do not dispose of in a landfill. Incineration is the preferred method of disposal. Dispose of in accordance with all applicable local, state and federal disposal regulations.

14. TRANSPORT INFORMATION

Proper shipping name: Resin solution
Technical name : N/A
Hazard class : 3
UN number: 1866
Packing group: III
Emergency Response Guide no.: 127
IMDG page number: N/A
Other:

15. REGULATORY INFORMATION**U.S. Federal Regulations****TSCA**

All ingredients of this product are listed, or are exempt from listing, on the TSCA inventory.

The following RCRA code(s) applies to this material if it becomes waste:

D001

Regulatory status of hazardous chemical constituents of this product:

Constituent	Extremely Hazardous*	Toxic Chemical**	CERCLA RQ (lbs)	TSCA 12B Export Notification
Ethyl benzene	No	Yes	1000.0	Required
Xylene	No	Yes	100.0	Not required
Bisphenol A diglycidyl ether resin	No	No	0.0	Not required
Alkyl Glycidyl Ether	No	No	0.0	Required

*Consult the appropriate regulations for emergency planning and release reporting requirements for substances on the SARA Section 301 Extremely Hazardous Substance list.

**Substances for which the "Toxic Chemical" column is marked "Yes" are on the SARA Section 313 list of Toxic Chemicals, for which release reporting may be required. For specific requirements, consult the appropriate regulations.

For purposes of SARA Section 312 hazardous materials inventory reporting, the following hazard classes apply to this material: - Immediate health hazard -- Delayed health hazard -- Fire hazard -

Canadian regulations

WHMIS hazard class(es) : D2B; B2; D2A

16. OTHER INFORMATION

**Hazardous Materials
Identification System (HMIS)
ratings:**

Health
2*

Flammability
3

Reactivity
1

Revisions for this issue:

MSDS section	Revisions
3	Ethyl benzene updated to IARC 2B

The information and recommendations in this document are based on the best information available to us at the time of preparation, but we make no other warranty, express or implied, as to its correctness or completeness, or as to the results of reliance on this document.