

**ACID RESISTANT TROWELABLE FLOOR RESURFACER
HARDENER**

Last revised: 05/09/01

Printed: 09/19/01

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Chemical family Modified cycloaliphatic amine

General information: The information below applies only to the hardener component.. After proper mixing and curing with resin, this product is not hazardous.

MANUFACTURERITW 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	Constituent	Abbr.	CAS No.	Weight percent	Exposure limits		
					ACGIH TLV	OSHA PEL	Other Limits
	Benzyl alcohol	BZOH	100516	40-50	n/e	n/e	10 (AIHA)
	Isophorone diamine		2855132	> 40	n/e	n/e	n/e
	Salicylic acid		69727	< 15	n/e	n/e	n/e

"TLV" means the Threshold Limit Value exposure (eight-hour, time-weighted average, unless otherwise noted) as 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, physical form, odor: Amber liquid with amine odor.

DANGER! Corrosive. 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:**

May cause severe irritation or burns.

Eyes:

Will cause severe irritation and burns; may cause permanent eye damage.

Inhalation:

High vapor concentrations can cause irritation of respiratory tract with coughing, shallow breathing, choking sensation.

Ingestion:

Can cause chemical burns to mouth, throat, and gastrointestinal tract.

Effects of chronic overexposure:

Prolonged or repeated overexposure may cause skin sensitization, with itching, swelling, or rashes on further exposure.

Medical conditions which may be aggravated by exposure:

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

Carcinogenicity -- OSHA regulated: No **ACGIH:** No **National Toxicology Program:** No
International Agency for Research on Cancer: No
Cancer-suspect constituent(s): None

Other effects:

None known.

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

Immediately flush with large amounts of clean water for at least 15 minutes, lifting lids occasionally. Get immediate medical help!

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 effects persist.

First aid for ingestion:

Corrosive--do not induce vomiting. Dilute with milk or water if patient is conscious. Get immediate medical attention.

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

Water Carbon dioxide Dry chemical Foam Alcohol foam

Flash Point (°F): >230

Method: PMCC

Explosive limits in air -- Lower: n/d

Upper: n/d

Special firefighting procedures:

Cool fire-exposed containers with water. Firefighters should wear self-contained breathing apparatus and full protective gear.

Unusual fire and explosion hazards:

Toxic fumes will be evolved when this material is involved in a fire.

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.

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.

Containment:

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

Special procedures:

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

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 nuisance dust during sanding/grinding of cured product.

Storage precautions:

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

Ventilation:

Local exhaust is recommended for confined areas. General mechanical ventilation is adequate for normal use.

Other engineering controls:

Keep container tightly closed. Observe label precautions. Have emergency eye wash and safety shower present.

Personal protective equipment

Eye and face protection:

Safety glasses with side shields or splashproof goggles

Skin Protection:

Chemical-resistant rubber gloves and other impervious protective gear as required to prevent skin contact. Neoprene, nitrile or cuffed butyl rubber are acceptable materials.

Respiratory protection:

None needed in normal use; in poorly ventilated areas, use NIOSH-approved organic vapor respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity:	1.0	Boiling point (°F):	392
Melting point (°F):	< -0.4	Vapor density (air = 1):	>1
Vapor pressure (mmHg):	< 10	at 0 °F	Evaporation rate (butyl acetate = 1): <<1
VOC (grams/liter):	0	Solubility in water:	1.6 %
Percent volatile by volume:	0	pH (5% solution or slurry in water):	Alkaline
Percent solids by weight:	100		0

10. STABILITY AND REACTIVITY

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

Conditions to avoid:

None

Incompatible materials:

Strong oxididants, strong acids (such as sulfuric or hydrochloric acids).

Hazardous decomposition products:

Oxides of carbon and nitrogen; amines, ammonia, and phenols from incomplete burning

Conditions of hazardous polymerization:

Heat is released when this hardener reacts with epoxy resins; use caution when mixing large quantities.

11. TOXICOLOGICAL INFORMATION**Acute oral effects:**

LD50 (rat): No data available.

No data available.

Acute dermal effects

LD50 (rabbit): No data available.

No data available.

Acute inhalation effects:

LC50 (rat): No data available. in 0 hours

No data available.

Eye irritation:

No data available.

Subchronic effects

None known.

Chronic effects

None known.

Carcinogenicity, teratogenicity, and mutagenicity:

A component has been shown to cause reproductive/teratogenic effects in laboratory animals.

Toxicological information on hazardous chemical constituents of this product:

Constituent	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 (rat, 4 hours)
Benzyl alcohol	1230 mg/kg	2000 mg/kg	> 2000 ppm
Isophorone diamine	n/d	n/d	n/d
Salicylic acid	891 mg/kg	>10gm/kg	n/d

12. ECOLOGICAL INFORMATION**Ecotoxicity:**

No data available.

Mobility and persistence:

No data available.

Environmental fate:

No data available.

13. DISPOSAL CONSIDERATIONS**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:** Isophoronediamine solution**Technical name:** N/A**Hazard class:** 8**UN number:** 2289**Packing group:** III**IMDG Page no.:** N/A**Emergency Response Guide no.:** 153**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
Benzyl alcohol	No	No	No	Not required
Isophorone diamine	No	No	No	Not required
Salicylic acid	No	No	No	Not required

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

Classification of this material for SARA Section 312 hazardous materials inventory reporting:

Immediate health hazard Delayed health hazard

Canadian regulations

WHMIS hazard class(es): E

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

16. OTHER INFORMATION

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

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.

ACID RESISTANT TROWELABLE FLOOR RESURFACER RESIN

Last revised: 07/26/00

Printed: 09/19/01

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Chemical family Epoxy resin

General information: 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.

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
Epoxy Novolac resin		TRADE SECRET		n/e	n/e	n/e

"TLV" means the Threshold Limit Value exposure (eight-hour, time-weighted average, unless otherwise noted) as 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, physical form, odor: Clear liquid with slight odor.

Eye and skin irritant. Potential skin sensitizer. Avoid contact with eyes. Avoid prolonged or repeated skin contact. Do not take internally. Wash thoroughly after handling.

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).

Eyes:

Moderate irritant. Contact at elevated temperatures can cause thermal burns.

Inhalation:

The low vapor pressure of the resin makes inhalation unlikely in normal use.

Ingestion:

Acute oral toxicity is low. May cause gastric distress.

Effects of chronic overexposure:

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

Medical conditions which may be aggravated by exposure:

Preexisting eye and skin disorders (allergies, eczema). Development of preexisting skin or lung allergy symptoms may increase.

Carcinogenicity -- OSHA regulated: No **ACGIH:** No **National Toxicology Program:** No

International Agency for Research on Cancer: No

Cancer-suspect constituent(s): None

Other effects:

None known.

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): > 200

Method: PMCC

Explosive limits in air -- 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:

Heating above 300 deg F in the presence of air may cause slow oxidative decomposition and above 500 deg F may cause polymerization.

Hazardous products of combustion:

When heated to decomposition it emits fumes of carbon monoxide and 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.

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 nuisance dust during sanding/grinding of cured product.

Storage precautions:

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

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

Local exhaust ventilation is preferred although good general mechanical ventilation is usually adequate for most industrial applications. Local exhaust is recommended for confined areas.

Other engineering controls:

Have emergency shower and eye wash available.

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

Wear splash-proof chemical goggles.

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:	1.2	Boiling point (°F):	> 200 deg C
Melting point (°F):	n/d	Vapor density (air = 1):	>1
Vapor pressure (mmHg):	< 0.001	at 171 °F	Evaporation rate (butyl acetate = 1): <<1
VOC (grams/liter):	n/d	Solubility in water:	Negligible
Percent volatile by volume:	n/d	pH (5% solution or slurry in water):	neutral
Percent solids by weight:	n/d		0

10. STABILITY AND REACTIVITY

This product 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 and organic bases (especially primary and secondary aliphatic amines).

Hazardous decomposition products:

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

Conditions of hazardous polymerization:

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): > 5000 mg/kg

Acute dermal effects

LD50 (rabbit): > 6000 mg/kg

Moderate irritant (rabbits). Moderate sensitizer.

Acute inhalation effects:

LC50 (rat): > 1.7 mg/L (aerosol) in 4 hours

Eye irritation:

Slight irritant (rabbits)

Subchronic effects

No data available.

Chronic effects

No data available

Carcinogenicity, teratogenicity, and mutagenicity:

Positive Ames test with and without microsomal activation. This material did not cause cancer in laboratory animals when applied to the skin for two years.

Toxicological information on hazardous chemical constituents of this product:

Constituent	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 (rat, 4 hours)
Epoxy Novolac resin	> 5000 mg/kg	> 6000 mg/kg	> 1.7 mg/L

12. ECOLOGICAL INFORMATION**Ecotoxicity:**

No data available.

Mobility and persistence:

No data available.

Environmental fate:

No data available.

13. DISPOSAL CONSIDERATIONS**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.

14. TRANSPORT INFORMATION

Proper shipping name: Non-regulated

Technical name: N/A

Hazard class: N/A

UN number: N/A

Packing group: N/A

IMDG Page no.: N/A

Emergency Response Guide no.: 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
Epoxy Novolac resin	No	No	No	Not required

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

Classification of this material for SARA Section 312 hazardous materials inventory reporting:

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 Information System (HMIS) ratings:		
Health	Flammability	Reactivity
2*	1	1

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.