1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Tradename: FLOOR PATCH (FAST CURE) RESIN
Product Identifier: EPOXY 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

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Abbr.</th>
<th>CAS No.</th>
<th>Weight percent</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A diglycidyl ether resin</td>
<td>DGEBA</td>
<td>25068386</td>
<td>60-90</td>
<td>n/e</td>
<td>n/e</td>
<td>n/e</td>
</tr>
<tr>
<td>Alkyl Glycidyl Ether</td>
<td></td>
<td>68609972</td>
<td>10-30</td>
<td>n/e</td>
<td>n/e</td>
<td>n/e</td>
</tr>
</tbody>
</table>

"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: viscous liquid with little odor.

WARNING! Eye and skin irritant. Potential skin sensitizer.

Potential health effects

Primary routes of exposure: [ ] Skin contact [ ] Skin absorption [X] Eye contact [ ] Inhalation [ ] Ingestion

Symptoms of acute overexposure:

Skin: Moderate irritant. Contact at elevated temperatures can cause thermal burns which may result in permanent damage. May cause skin sensitization (itching, redness, rashes, hives, burning, swelling).

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.
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. 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.

Extinguishing media:
- Water
- Carbon dioxide
- Dry chemical
- Foam
- Alcohol foam

Flash Point (°F): > 300

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:
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.

Medical conditions which may be aggravated by exposure:
Preexisting eye and skin disorders (e.g. eczema). Development of preexisting skin or lung allergy symptoms may increase.

Other effects:
See section 11.
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: 1.1-1.3
Melting point (°F): n/d
Boiling point (°F): >500
Vapor pressure (mmHg): 0.03 mm Hg at 171 °F
Vapor density (air = 1): >1
Evaporation rate (butyl acetate = 1): <<1
Vapor pressure (mmHg): 0.03 mm Hg at 171 °F
Solubility in water: Negligible
Evaporation rate (butyl acetate = 1): <<1
Specific gravity:
1.1-1.3
Melting point (°F):
Vapor pressure (mmHg):
Evaporation rate (butyl acetate = 1):
Solubility in water:
Evaporation rate (butyl acetate = 1):
Specific gravity:
Melting point (°F):
Vapor pressure (mmHg):
Vapor density (air = 1):
Evaporation rate (butyl acetate = 1):
Solubility in water:

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 and organic bases (esp. primary and secondary aliphatic amines). Sodium or calcium hypochlorite. Peroxides.

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): > 10 g/kg

Acute dermal effects: LD50 (rabbit): > 4.5 g/kg

Acute inhalation effects: LC50 (rat): Not available.

Eye irritation:
Not available.

Subchronic effects:
Alkyl Glycidyl Ether: a 20 day exposure to rabbit skin to 2 ml of 5% solution/kg/day showed no histological evidence of toxicity.

Carcinogenicity, teratogenicity, and mutagenicity:
1) MUTAGENICITY: Liquid resins based on diglycidyl ether of Bisphenol A (DGEBA), 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 dermititis. Alkyl Glycidyl Ether: Sensitization has occurred in laboratory animals after repeated exposures.

Toxicological information on hazardous chemical constituents of this product:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Oral LD50 (rat)</th>
<th>Dermal LD50 (rabbit)</th>
<th>Inhalation LC50 4hr, (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A diglycidyl ether resin</td>
<td>11.4 g/kg</td>
<td>&gt;20 ml/kg</td>
<td>no deaths</td>
</tr>
<tr>
<td>Alkyl Glycidyl Ether</td>
<td>&gt;19.2 g/kg</td>
<td>&gt; 4.5 g/kg</td>
<td>n/d</td>
</tr>
</tbody>
</table>

'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:**

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Extremely Hazardous*</th>
<th>Toxic Chemical**</th>
<th>CERCLA RQ (lbs)</th>
<th>TSCA 12B Export Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A diglycidyl ether resin</td>
<td>No</td>
<td>No</td>
<td>0.0</td>
<td>Not required</td>
</tr>
<tr>
<td>Alkyl Glycidyl Ether</td>
<td>No</td>
<td>No</td>
<td>0.0</td>
<td>Required</td>
</tr>
</tbody>
</table>

*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 or the Non-Domestic Substances List.
16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>Hazardous Materials Identification System (HMIS) ratings:</th>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2*</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

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.
FLOOR PATCH PRIMER RESIN

This product appears in the following stock number(s):
13110

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Tradename: FLOOR PATCH PRIMER 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

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Abbr.</th>
<th>CAS No.</th>
<th>Weight percent</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A diglycidyl ether resin</td>
<td>DGEBPA</td>
<td>25068386</td>
<td>50-75</td>
<td>n/e</td>
<td>n/e</td>
<td>n/e</td>
</tr>
<tr>
<td>Phenol, polymer with formaldehyde, glycidyl ether</td>
<td></td>
<td>28064144</td>
<td>10-20</td>
<td>n/e</td>
<td>n/e</td>
<td>n/e</td>
</tr>
<tr>
<td>Alkyl Glycidyl Ether</td>
<td></td>
<td>68609972</td>
<td>15-30</td>
<td>n/e</td>
<td>n/e</td>
<td>n/e</td>
</tr>
</tbody>
</table>

"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: viscous liquid with little odor.

WARNING! Eye and skin 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. Contact at elevated temperatures can cause thermal burns which may result in permanent damage. May cause skin sensitization (itching, redness, rashes, hives, burning, swelling).

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:
The low vapor pressure of the resin makes inhalation unlikely in normal use. In applications where vapors (caused by high temperature) or mists (caused by mixing) are created, breathing may cause a mild burning sensation in the nose, throat and lungs.

Ingestion:
Acute oral toxicity is low. May cause gastric distress (nausea, vomiting, diarrhea).

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:No Cancer-suspect constituent(s) : None

Medical conditions which may be aggravated by exposure:
Preexisting eye and skin disorders (e.g. eczema). Development of preexisting skin or lung allergy symptoms may increase.

Other effects:
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
Extinguishing media:
 Water ☒ Carbon dioxide ☒ Dry chemical ☒ Foam ☒ Alcohol foam

Flash Point (°F): > 300 Method: estimate

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:
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:
9. PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity: 1.1-1.3
Melting point (°F): n/d
Vapor pressure (mmHg): 0.03 mm Hg at 171 °F
VOC (grams/liter): 0
Percent volatile by volume: 0
Percent solids by weight: 100
Boiling point (°F): >500
Vapor density (air = 1): >1
Evaporation rate (butyl acetate = 1): <<1
Solubility in water: Negligible
pH (5% solution or slurry in water): neutral

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 and organic bases (esp. primary and secondary aliphatic amines). Sodium or calcium hypochlorite. Peroxides.

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): > 10 g/kg

Acute dermal effects: LD50 (rabbit): > 4.5 g/kg

Acute inhalation effects: LC50 (rat): No data available.

Eye irritation:
Not available.

Subchronic effects:
Alkyl Glycidyl Ether: a 20 day exposure to rabbit skin to 2 ml of 5% solution/kg/day showed no histological evidence of toxicity.

Carcinogenicity, teratogenicity, and mutagenicity:
1) MUTAGENICITY: Liquid resins based on diglycidyl ether of Bisphenol A (DGEBA), 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 DGEBA 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 DGEBA is not classifiable as a carcinogen (IARC group 3), that is human and animal evidence of carcinogenicity is inadequate.

Other chronic effects:
DGEBA: 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 dermititis. Alkyl Glycidyl Ether: Sensitization has occurred in laboratory animals after repeated exposures.

Toxicological information on hazardous chemical constituents of this product:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Oral LD50 (rat)</th>
<th>Dermal LD50 (rabbit)</th>
<th>Inhalation LC50 4hr, (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A diglycidyl ether resin</td>
<td>11.4 g/kg</td>
<td>&gt;20 ml/kg</td>
<td>no deaths</td>
</tr>
<tr>
<td>Phenol, polymer with formaldehyde, glycidyl ether</td>
<td>&gt; 5000 mg/kg</td>
<td>&gt; 6000 mg/kg</td>
<td>&gt; 1.7 mg/L</td>
</tr>
<tr>
<td>Alkyl Glycidyl Ether</td>
<td>&gt;19.2 g/kg</td>
<td>&gt; 4.5 g/kg</td>
<td>n/d</td>
</tr>
</tbody>
</table>

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

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.

Please see also Section 15, Regulatory Information.
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:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Extremely Hazardous*</th>
<th>Toxic Chemical**</th>
<th>CERCLA RQ (lbs)</th>
<th>TSCA 12B Export Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A diglycidyl ether resin</td>
<td>No</td>
<td>No</td>
<td>0.0</td>
<td>Not required</td>
</tr>
<tr>
<td>Phenol, polymer with formaldehyde, glycidyl ether</td>
<td>No</td>
<td>No</td>
<td>0.0</td>
<td>Not required</td>
</tr>
<tr>
<td>Alkyl Glycidyl Ether</td>
<td>No</td>
<td>No</td>
<td>0.0</td>
<td>Required</td>
</tr>
</tbody>
</table>

*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

<table>
<thead>
<tr>
<th>Hazardous Materials Identification System (HMIS) ratings:</th>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2*</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

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.
1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Tradename: 10 LB FLOOR PATCH (FC) AGGREGATE

General use: This information applies to the sand component of the concrete patching compound kit. After mixing, handle uncured material as for the hardener; after curing, product is not hazardous.

Chemical family: Silica

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Abbr.</th>
<th>CAS No.</th>
<th>Weight percent</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline silica</td>
<td></td>
<td>14808607</td>
<td>60-100</td>
<td>0.05 mg/m³</td>
<td>0.10 mg/m³</td>
<td>(Canada)</td>
</tr>
</tbody>
</table>

“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: Tan granules with no odor.

[CAUTION! Mechanical irritant. Dusts may cause respiratory irritation.]

Potential health effects

Primary routes of exposure: [ ] Skin contact [ ] Skin absorption [ ] Eye contact [x] Inhalation [ ] Ingestion

Symptoms of acute overexposure:

Skin: Abrasive, but not otherwise hazardous on skin contact.

Eyes: Mechanical irritant which may cause abrasion of the cornea.

Inhalation:

If dust is produced, high concentrations are respiratory irritants. The product has no respirable dust as shipped.

Ingestion:

No data.
4. FIRST AID MEASURES

First aid for eyes:
Avoid rubbing particles into the eyes. Flush eye with clean water for at least 20 minutes while gently holding eyelids open, lifting upper and lower lids. Contact a physician if irritation persists.

First aid for skin:
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:
Consult a physician.

5. FIRE FIGHTING MEASURES

General fire and explosion characteristics:
Crystalline silica (quartz) is non-flammable and non-explosive.

Extinguishing media:
- Water
- Carbon dioxide
- Dry chemical
- Foam
- Alcohol foam

Flash Point (°F): None
Method: not applicable

Explosive limits in air (percent) --
Lower: none
Upper: none

Special firefighting procedures:
- Does not support combustion with oxygen. Use extinguishing media appropriate to the surrounding fire.

Unusual fire and explosion hazards:
None

Hazardous products of combustion:
None

6. ACCIDENTAL RELEASE MEASURES

Spill control:
Avoid inhalation of dusts, if any are raised use an appropriate respirator.

Containment:
Not applicable

Cleanup:
Shovel up for reuse or disposal, do not dry sweep.

Special procedures:
None.
7. HANDLING AND STORAGE

Handling precautions:
Avoid creating and inhaling dusts of this product. 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 clean protective gear before reuse.

Storage:
Store in closed containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

Ventilation:
Mechanical ventilation as required to keep dust concentration below the TLV.

Other engineering controls:
Have emergency shower and eye wash available.

Personal protective equipment

Eye and face protection:
Safety glasses with side shields or dust-tight goggles.

Skin protection:
Long-sleeved clothing.

Respiratory protection:
Should dust be raised in handling (unlikely), wear NIOSH-approved dust respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific gravity</td>
<td>2.65</td>
</tr>
<tr>
<td>Melting point (°F)</td>
<td>2930</td>
</tr>
<tr>
<td>Vapor pressure (mmHg)</td>
<td>None at 78 °F</td>
</tr>
<tr>
<td>VOC (grams/liter)</td>
<td>0</td>
</tr>
<tr>
<td>Percent volatile by volume</td>
<td>0</td>
</tr>
<tr>
<td>Percent solids by weight</td>
<td>100</td>
</tr>
<tr>
<td>Boiling point (°F)</td>
<td>4046</td>
</tr>
<tr>
<td>Vapor density (air = 1)</td>
<td>No vapor</td>
</tr>
<tr>
<td>Evaporation rate (butyl acetate = 1)</td>
<td>None</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Negligible</td>
</tr>
<tr>
<td>pH (5% solution or slurry in water)</td>
<td>Neutral</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

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

Conditions to avoid:
None

Incompatible materials:
Extremely powerful oxidizers (e.g., fluorine, oxygen difluoride, manganese trioxide, chlorine trifluoride). Silica will dissolve in hydrofluoric acid & produce silicon tetrafluoride.
Hazardous products of decomposition:  
None

Conditions under which hazardous polymerization may occur:  
None

11. TOXICOLOGICAL INFORMATION

Acute oral effects:  LD50 (rat): No data available.

Acute dermal effects:  LD50 (rabbit): No data available.

Acute inhalation effects:  LC50 (rat): No data available.  Exposure: hours.

Eye irritation:  
No data available.

Subchronic effects:  
No data available.

Carcinogenicity, teratogenicity, and mutagenicity:  
No data available.

Other chronic effects:  
Respirable crystalline quartz may cause chronic lung injury (silicosis). Acute or rapid silicosis may occur in a short period of time in heavy exposure in certain occupations such as sandblasters. Silicosis is a form of disabling pulmonary fibrosis which can be progressive and may lead to death. Pulmonary function may be reduced by inhalation of respirable crystalline silica. It may produce lung scarring which may lead to a progressive massive fibrosis, increasing susceptibility to pulmonary tuberculosis. Progressive massive fibrosis may be accompanied by right heart enlargement, heart failure, and pulmonary failure. Smoking aggravates the effects of exposure.

Carcinogenicity, teratogenicity, and mutagenicity:  
No data available.

Other chronic effects:  
Respirable crystalline quartz may cause chronic lung injury (silicosis). Acute or rapid silicosis may occur in a short period of time in heavy exposure in certain occupations such as sandblasters. Silicosis is a form of disabling pulmonary fibrosis which can be progressive and may lead to death. Pulmonary function may be reduced by inhalation of respirable crystalline silica. It may produce lung scarring which may lead to a progressive massive fibrosis, increasing susceptibility to pulmonary tuberculosis. Progressive massive fibrosis may be accompanied by right heart enlargement, heart failure, and pulmonary failure. Smoking aggravates the effects of exposure.

Toxicological information on hazardous chemical constituents of this product:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Oral LD50 (rat)</th>
<th>Dermal LD50 (rabbit)</th>
<th>Inhalation LC50 4hr, (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline silica</td>
<td>n/d</td>
<td>n/d</td>
<td>n/d</td>
</tr>
</tbody>
</table>

'\text{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

Waste management recommendations:
The aggregate may be discarded in landfills as non-hazardous waste.

14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>Proper shipping name:</th>
<th>Non-regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical name:</td>
<td>N/A</td>
</tr>
<tr>
<td>Hazard class:</td>
<td>N/A</td>
</tr>
<tr>
<td>UN number:</td>
<td>N/A</td>
</tr>
<tr>
<td>Packing group:</td>
<td>N/A</td>
</tr>
<tr>
<td>Emergency Response Guide no.:</td>
<td>N/A</td>
</tr>
<tr>
<td>IMDG page number:</td>
<td>N/A</td>
</tr>
<tr>
<td>Other:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

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:**

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Extremely Hazardous*</th>
<th>Toxic Chemical**</th>
<th>CERCLA RQ (lbs)</th>
<th>TSCA 12B Export Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline silica</td>
<td>No</td>
<td>No</td>
<td>0.0</td>
<td>Not required</td>
</tr>
</tbody>
</table>

*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:  - Delayed health hazard -

**Canadian regulations**

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

Hazardous Materials Identification System (HMIS) ratings:

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1*</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Revisions for this issue:

<table>
<thead>
<tr>
<th>MSDS section</th>
<th>Revisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Chronic health effects</td>
</tr>
</tbody>
</table>

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.
1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Tradename: 10 LB FLOOR PATCH (FC) HARDENER

General use: The following health hazard data pertain to the hardener only. When fully cured, the mixed product is non-hazardous.

Chemical family: Epoxy Hardener

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Abbr.</th>
<th>CAS No.</th>
<th>Weight percent</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl alcohol</td>
<td>BZOH</td>
<td>100516</td>
<td>&gt;5</td>
<td>n/e</td>
<td>n/e</td>
<td>10 ppm (AIHA)</td>
</tr>
<tr>
<td>Benzylidimethylamine</td>
<td></td>
<td>103833</td>
<td>&lt;5</td>
<td>n/e</td>
<td>n/e</td>
<td></td>
</tr>
<tr>
<td>Aminoethylpiperazine</td>
<td>AEP</td>
<td>140318</td>
<td>&lt;40</td>
<td>n/e</td>
<td>n/e</td>
<td>n/e</td>
</tr>
<tr>
<td>Nonylphenol</td>
<td></td>
<td>25154523</td>
<td>&gt;20</td>
<td>n/e</td>
<td>n/e</td>
<td>n/e</td>
</tr>
<tr>
<td>Bisphenol A</td>
<td></td>
<td>80057</td>
<td>&gt;30</td>
<td>n/e</td>
<td>n/e</td>
<td>5 mg/m3 (DFG-MAK)</td>
</tr>
</tbody>
</table>

*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 yellow Liquid with ammoniacal odor.

DANGER! Corrosive. Eye, skin and respiratory irritant. Toxic by skin absorption. May cause skin or respiratory sensitization.
Potential health effects

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

Symptoms of acute overexposure:

Skin: Causes severe irritation, burns, necrosis, and permanent injury. Toxic by skin absorption. Possible sensitization.

Eyes: Corrosive to eyes. Severe irritant. May cause lacrimation, conjunctivitis, corneal edema, irritation, burning, necrosis and permanent injury (blindness).

Inhalation:  
May cause irritation in respiratory tract, coughing, and chest pains. May cause respiratory sensitization

Ingestion:  
May cause death if not treated properly. May cause malaise, headache, and discomfort unless treated promptly.

Effects of chronic overexposure:

- Defatting, rash, irritation, corrosion of skin. Conjunctivitis or corneal damage of the eye. Coughing, tightness of chest, or shortness of breath. Nonyphenol has caused allergic sensitization in humans. This product may cause respiratory sensitization and lung toxicity.

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 diseases; skin disorders and allergies; chronic respiratory diseases; asthma.

Other effects:  
- Corneal edema may give rise to a perception of 'blue haze' around lights. It is transient and has no known residual effect.

4. FIRST AID MEASURES

First aid for eyes:  
While holding eyelids apart immediately flush with large amounts of water for at least 15 minutes. Seek medical attention.

First aid for skin:  
Remove contaminated clothing and wash affected area with water for 15 minutes. Get medical attention if irritation persists.

First aid for inhalation:  
If affected, move to fresh air and call a physician immediately. Prevent aspiration of vomit.

First aid for ingestion:  
Do NOT induce vomiting. Immediately drink two large glasses of water. Call a physician (Physician see precautions)

Note to physician :  
This product is highly injurious to all tissues, similar to that of ammonia or ammonia gas. Chemical pneumonitis, pulmonary edema, laryngeal edema, and delayed scarring of the airway or other affected tissues may occur following exposure. Clinical management is based on supportive treatment, which is similar to that of thermal burns.

5. FIRE FIGHTING MEASURES

Extinguishing media:  
- Water  
- Carbon dioxide  
- Dry chemical  
- Foam  
- Alcohol foam
Unusual fire and explosion hazards:
May generate toxic or irritating combustion products.

Hazardous products of combustion:
Carbon oxides, nitrogen oxides, ammonia. If oxygen starved-nitriles, cyanic acid, isocyanates, nitroseamines, amides.

Containment:
Use dike to prevent spreading, apply clay or other absorbent material.

Cleanup:
Cover small spills with bisulfate to neutralize vapors. Spray with water and place in metal containers for disposal. Clean-up personnel must wear self contained breathing apparatus and butyl clothing.

Special procedures:
Evacuate all personnel upwind from the spill. Carbon monoxide and nitrous oxides may be generated. Product is soluble in water. Notify health officials if drinking water contamination occurs.

6. ACCIDENTAL RELEASE MEASURES

Spill control:
Stop the leak. Ventilate the area. Remove ignition sources.

Containment:
Use dike to prevent spreading, apply clay or other absorbent material.

Cleanup:
Cover small spills with bisulfate to neutralize vapors. Spray with water and place in metal containers for disposal. Clean-up personnel must wear self contained breathing apparatus and butyl clothing.

Special procedures:
Evacuate all personnel upwind from the spill. Carbon monoxide and nitrous oxides may be generated. Product is soluble in water. Notify health officials if drinking water 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 dusts 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:
Provide sufficient ventilation to maintain exposure below level of overexposure, especially if handling heated material.

Other engineering controls:
Have emergency shower and eye wash stations available.

Personal protective equipment

Eye and face protection:
Chemical splash goggles in compliance with OSHA regulations and a full faceshield are advised.
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific gravity</td>
<td>1.05</td>
</tr>
<tr>
<td>Melting point (°F)</td>
<td>n/d</td>
</tr>
<tr>
<td>Boiling point (°F)</td>
<td>&gt; 392</td>
</tr>
<tr>
<td>Vapor pressure (mmHg)</td>
<td>&lt; 1 (est)</td>
</tr>
<tr>
<td>at 70 °F</td>
<td></td>
</tr>
<tr>
<td>Vapor density (air = 1)</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Evaporation rate (butyl acetate = 1)</td>
<td>n/d</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>slight</td>
</tr>
<tr>
<td>pH (5% solution or slurry in water)</td>
<td>alkaline</td>
</tr>
<tr>
<td>Percent volatile by volume</td>
<td>n/d</td>
</tr>
<tr>
<td>Percent solids by weight</td>
<td>n/d</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

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

Conditions to avoid:
High temperatures and/or open flames. Material slowly corrodes copper, aluminum, zinc & galvanized surfaces. N-nitrosoamines may form if in contact with nitrous acids, oxides, or nitrates.

Incompatible materials:

Hazardous products of decomposition:
Carbon oxides, nitrogen oxides, ammonia. If oxygen starved-nitriles, cyanic acid, isocyanates, nitroseamines, amides.

Conditions under which hazardous polymerization may occur:
None known.

11. TOXICOLOGICAL INFORMATION

Acute oral effects: LD50 (rat): > 500 mg/kg (estimate)

Acute dermal effects: LD50 (rabbit): > 880 mg/kg (estimate)
Severe irritant to the skin of a rabbit.

Acute inhalation effects: LC50 (rat): No data available

Eye irritation:
Severe irritant to the eyes of a rabbit.
Subchronic effects:
No data.

Carcinogenicity, teratogenicity, and mutagenicity:
Nonylphenol has caused allergic sensitization in humans.

Other chronic effects:
No data.

Toxicological information on hazardous chemical constituents of this product:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Oral LD50 (rat)</th>
<th>Dermal LD50 (rabbit)</th>
<th>Inhalation LC50 4hr, (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl alcohol</td>
<td>1230 mg/kg</td>
<td>2000 mg/kg</td>
<td>&gt; 2000 ppm</td>
</tr>
<tr>
<td>Benzylidimethylamine</td>
<td>265 mg/kg</td>
<td>1660 mg/kg</td>
<td>2062 mg/m3</td>
</tr>
<tr>
<td>Aminoethylpiperazine</td>
<td>2140 mg/kg</td>
<td>880 mg/kg</td>
<td>n/d</td>
</tr>
<tr>
<td>Nonylphenol</td>
<td>1620 mg/kg</td>
<td>2140 mg/kg</td>
<td>&gt;1 mg/L</td>
</tr>
<tr>
<td>Bisphenol A</td>
<td>3250 mg/kg</td>
<td>3 mL/kg</td>
<td>n/d</td>
</tr>
</tbody>
</table>

'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

Waste management recommendations:
Remove to a waste disposal facility operating in compliance with state and local regulations.

Please see also Section 15, Regulatory Information.
14. TRANSPORT INFORMATION

Proper shipping name: Corrosive liquid, basic, organic, n.o.s.
Technical name: N-Aminoethylpiperazine and Nonylphenol
Hazard class: 8
UN number: 3267
Packing group: III
Emergency Response Guide no.: 153
IMDG page number: N/A
Other: Marine Pollutant (Nonyl Phenol)

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:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Extremely Hazardous*</th>
<th>Toxic Chemical**</th>
<th>CERCLA RQ (lbs)</th>
<th>TSCA 12B Export Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl alcohol</td>
<td>No</td>
<td>No</td>
<td>0.0</td>
<td>Not required</td>
</tr>
<tr>
<td>Benzyldimethylamine</td>
<td>No</td>
<td>No</td>
<td>0.0</td>
<td>Not required</td>
</tr>
<tr>
<td>Aminoethylpiperazine</td>
<td>No</td>
<td>No</td>
<td>0.0</td>
<td>Not required</td>
</tr>
<tr>
<td>Nonylphenol</td>
<td>No</td>
<td>No</td>
<td>0.0</td>
<td>Not required</td>
</tr>
<tr>
<td>Bisphenol A</td>
<td>No</td>
<td>Yes</td>
<td>0.0</td>
<td>Required</td>
</tr>
</tbody>
</table>

*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): E;D1B;D2A;D2B
All components of this product are on the Domestic Substances List.
### Hazardous Materials Identification System (HMIS) ratings:

<table>
<thead>
<tr>
<th></th>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health</strong></td>
<td>3*</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

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.
1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Tradename: 10 # FLOOR PATCH FC PRIMER HARDENER

General use: The information below applies only to the primer hardener component of a kit. After proper mixing and curing, product is not hazardous.

Chemical family: Modified cycloaliphatic amine

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Abbr.</th>
<th>CAS No.</th>
<th>Weight percent</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl alcohol</td>
<td>BZOH</td>
<td>100516</td>
<td>&gt;40</td>
<td>n/e</td>
<td>n/e</td>
<td>10 ppm (AIHA)</td>
</tr>
<tr>
<td>Isophorone diamine</td>
<td></td>
<td>2855132</td>
<td>&lt;50</td>
<td>n/e</td>
<td>n/e</td>
<td>n/e</td>
</tr>
<tr>
<td>Salicylic acid</td>
<td></td>
<td>69727</td>
<td>&lt;15</td>
<td>n/e</td>
<td>n/e</td>
<td>n/e</td>
</tr>
</tbody>
</table>

"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: mobile, amber liquid with fishy odor.


Potential health effects

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

Symptoms of acute overexposure:

Skin: Corrosive. Can cause severe irritation, chemical burns, blistering, possible tissue destruction. Absorption may cause nausea, headache and general discomfort.

Eyes: Corrosive. Severe irritation or burns. May cause lacrimation, conjunctivitis, corneal damage and may cause...
5. FIRE FIGHTING MEASURES

General fire and explosion characteristics:
Class IIIB. Ignition will give rise to a class B fire.

Extinguishing media:
- □ Water
- ☑ Carbon dioxide
- ☑ Dry chemical
- □ Foam
- ☑ Alcohol foam
Unusual fire and explosion hazards:
Sudden reaction and fire may result if product is mixed with an oxidizing agent. Personnel in vicinity and downwind should be evacuated. Contact of liquid with skin must be prevented.

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. Evacuate area. 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. Clean-up waste water should be placed in appropriate containers for proper disposal.

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 nuisance dust during sanding/grinding of cured product.

Storage:
Keep away from acids, alkalis, oxidizers. Store in a cool, dry area away from high temperatures and flames. Keep cover closed and store in ventilated area. Do not store in reactive metal containers (i.e. iron).

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:
ITW Devcon
Material Safety Data Sheet
Part No.: 1573

Have emergency shower and eye wash available.

Personal protective equipment

Eye and face protection:
   Full face shield with goggles underneath.

Skin protection:
   Chemical-resistant rubber (e.g. neoprene, butyl rubber, nitrile) gloves and other protective gear as needed 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific gravity</td>
<td>1.00</td>
</tr>
<tr>
<td>Melting point (°F)</td>
<td>n/d</td>
</tr>
<tr>
<td>Vapor pressure (mmHg)</td>
<td>&lt; 10.34</td>
</tr>
<tr>
<td>Boiling point (°F)</td>
<td>401</td>
</tr>
<tr>
<td>Vapor density (air = 1)</td>
<td>n/d</td>
</tr>
<tr>
<td>Evaporation rate (butyl acetate = 1)</td>
<td>&lt;&lt;1</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>1.6 %</td>
</tr>
<tr>
<td>pH (5% solution or slurry in water)</td>
<td>alkaline</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

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

Conditions to avoid:
   Slowly corrodes copper, aluminum, zinc and galvanized surfaces.

Incompatible materials:

Hazardous products of decomposition:
   Oxides of carbon and nitrogen; amines, ammonia, nitric acid, aldehydes, organic acid vapors and other unknown toxic gases and vapors.

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): 1000 mg/kg (estimate)

Acute dermal effects: LD50 (rabbit): > 2800 mg/kg (estimate)
Acute inhalation effects: LC50 (rat): Not available.

Eye irritation:
Not available.

Subchronic effects:
Not available.

Carcinogenicity, teratogenicity, and mutagenicity:
A component has been shown to cause reproductive / teratogenic effects in laboratory animals.

Other chronic effects:
Not available.

Toxicological information on hazardous chemical constituents of this product:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Oral LD50 (rat)</th>
<th>Dermal LD50 (rabbit)</th>
<th>Inhalation LC50 4hr, (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl alcohol</td>
<td>1230 mg/kg</td>
<td>2000 mg/kg</td>
<td>&gt; 2000 ppm</td>
</tr>
<tr>
<td>Isophorone diamine</td>
<td>1030 mg/kg</td>
<td>n/d</td>
<td>n/d</td>
</tr>
<tr>
<td>Salicylic acid</td>
<td>891 mg/kg</td>
<td>&gt;10gm/kg</td>
<td>n/d</td>
</tr>
</tbody>
</table>

'\text{n/d}' = 'not determined'

12 ECOLOGICAL INFORMATION

Ecotoxicity:
No data available.

Mobility and persistence:
No data available.

Environmental fate:
Isophoronediamine is biodegradable.

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. Incineration is the preferred method of disposal.

Please see also Section 15, Regulatory Information.
14. TRANSPORT INFORMATION

Proper shipping name: Isophoronediamine solution *
Technical name : N/A
Hazard class : 8
UN number: 2289
Packing group: III
Emergency Response Guide no.: 153
IMDG page number: N/A
Other:

*Depending upon the size and type of container, this material may be reclassified as "Consumer Commodity, ORM-D" for shipments within the United States, or "Limited Quantity" elsewhere. Refer to the appropriate regulation.

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:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Extremely Hazardous*</th>
<th>Toxic Chemical**</th>
<th>CERCLA RQ (lbs)</th>
<th>TSCA 12B Export Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl alcohol</td>
<td>No</td>
<td>No</td>
<td>0.0</td>
<td>Not required</td>
</tr>
<tr>
<td>Isophorone diamine</td>
<td>No</td>
<td>No</td>
<td>0.0</td>
<td>Not required</td>
</tr>
<tr>
<td>Salicylic acid</td>
<td>No</td>
<td>No</td>
<td>0.0</td>
<td>Not required</td>
</tr>
</tbody>
</table>

*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; E
All components of this product are on the Domestic Substances List.
Hazardous Materials Identification System (HMIS) ratings:

Health: 3*
Flammability: 1
Reactivity: 0

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.