1. Identification

Product Identification

Product Identifier: CRACK-PAC®
Recommended Use: Crack-Pac® is a two component, low viscosity injection epoxy.
Use Restrictions: To ensure proper installation, use according to package directions. Complete application instructions can be found in Simpson Strong-Tie catalogs or online at strongtie.com.

Company Identification

Company: Simpson Strong-Tie Company Inc.
Address: 5956 W. Las Positas Blvd.
Pleasanton, CA 94588, USA
Phone: 1-800-999-5099
Website: www.strongtie.com
Emergency: 1-800-535-5053 (US/Canada)
1-352-323-3500 (International)

For most current SDS, please visit our website at www.strongtie.com/sds

2. Hazard Identification

General Information

CRACK-PAC® Injection Epoxy is an adhesive for use to repair concrete cracks of 1/64” to ¼” wide. Its viscosity and low surface tension allow it to repair fine to medium cracks in dry, damp, or wet conditions. Crack-Pac® is a two part (8A:1B) system, with the resin (Component A) contained in a cartridge and the hardener (Component B) in a nozzle. The two parts of this product have been individually assessed according to the Globally Harmonized System (GHS). The mixed product can be assumed to carry the hazards of each component until the product has fully hardened. The final cured product will be blue (which will fade to light amber over time) in color and can be considered nonhazardous. This Safety Data Sheet covers the hazards and responses for the safe use of this product.

Resin (Blue Side) GHS Classification

Classification according to HazCom2012 (GHS)

Physical Hazards: Not Classified.
Health Hazards:
- Skin Corrosion/Irritation Category 2 H315: Causes skin irritation
- Serious Eye Damage/Irritation Category 2 H319: Causes serious eye irritation
- Sensitization, Skin Category 1 H317: May cause an allergic skin reaction

Environmental Hazards: Chronic Aquatic Hazard Category 2 H411: Toxic to aquatic life with long lasting effects

Main Symptoms: Irritation of eyes and skin. Symptoms include redness, itching, burning, tearing, swelling, and blurred vision. May cause rash/allergic reaction to the skin.

GHS Label Elements

Contains: Bisphenol-A Based Epoxy Resin, Castor Oil Glycidyl Ether
Signal Word: WARNING!
Hazard Statements:
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H317: May cause an allergic skin reaction.
- H411: Toxic to aquatic life with long lasting effects.

Precautionary Statements:
Prevention:
- P102: Keep out of reach of children.
- P103: Read label before use.
- P202: Do not handle until all safety precautions have been read and understood.
- P261: Avoid breathing mist or vapor.
- P264: Wash thoroughly after handling.
- P272: Contaminated work clothing should not be allowed out of the workplace.
- P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P302+P352: IF ON SKIN: Wash with plenty of water.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P363: Wash contaminated clothing before reuse.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.
P391: Collect Spillage.

Storage:
P403: Store in a well-ventilated place.
P405: Store locked up.
P411: Store between 45-90°F (7-32°C).

Disposal:
P501: Dispose of contents/container in accordance with local/regional regulations.

Supplemental Label Information: None known.

Hardener (Clear Side) GHS Classification

Classification according to HazCom2012 (GHS)

Physical Hazards: Not Classified.

Health Hazards:
- Acute Toxicity, Oral Category 4 H302: Harmful if swallowed
- Acute Toxicity, Dermal Category 4 H312: Harmful in contact with skin
- Acute Toxicity, Inhalation Category 4 H332: Harmful if inhaled
- Skin Corrosion/Irritation Category 1 H314: Causes severe skin burns
- Serious Eye Damage/Irritation Category 1 H318: Causes serious eye damage
- Sensitization, Skin Category 1 H317: May cause an allergic skin reaction
- STOT, Single Exposure Category 1 EU H071: Corrosive to the respiratory tract

Environmental Hazards:
- Acute Aquatic Hazard Category 3 H402: Harmful to aquatic life
- Chronic Aquatic Hazard Category 3 H412: Harmful to aquatic life with long lasting effects

Main Symptoms: Damage to the eyes and skin. Symptoms include burns, redness, itching, tearing, swelling, and blurred vision. May cause rash/allergic reaction to the skin. May cause severe irritation or burns to the gastrointestinal tract and respiratory system. May cause shortness of breath, discomfort in chest, or coughing.

GHS Label Elements

Contains: Benzene-1,3-Dimethaneamine, Diethylenetriamine

Signal Word: DANGER!

Hazard Statements:
- H302: Harmful if swallowed.
- H312: Harmful in contact with skin.
- H332: Harmful if inhaled.
- H314: Causes severe skin burns and eye damage.
- H318: Causes serious eye damage.
- H317: May cause an allergic skin reaction.
- EU H071: Corrosive to the respiratory tract.
- H402: Harmful to aquatic life.
- H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements:
Prevention:
P102: Keep out of reach of children.
P103: Read label before use.
P202: Do not handle until all safety precautions have been read and understood.
P260: Do not breathe mist or vapor.
P264: Wash thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
CRACK-PAC® Injection Epoxy
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P271: Use only outdoors or in a well-ventilated area.
P272: Contaminated work clothing must not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310: Immediately call a poison center/doctor.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P363: Wash contaminated clothing before re-use.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.
P391: Collect Spillage.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310: Immediately call a poison center/doctor.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P363: Wash contaminated clothing before re-use.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.
P391: Collect Spillage.

Storage:
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store locked up.
P411: Store between 45-90°F (7-32°C).

Supplemental Label Information: None known.

Hazards Not Otherwise Classified (HNOC)
None known.

3. Composition Information

General Information
This product is a mixture. Hazardous ingredients for each component are listed below. May include other nonhazardous ingredients. May include other trace ingredients, see Section 15.

List of abbreviations and symbols:
Classification: Global Harmonized System Classifications
The full text for H-phrases is displayed in section 16. All concentrations are in percent by weight unless otherwise noted.

Resin (Blue Side)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Weight %</th>
<th>CAS Number</th>
<th>EC Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol-A Based Epoxy Resin</td>
<td>50-80</td>
<td>25068-38-6</td>
<td>500-033-5</td>
</tr>
<tr>
<td>Classifications: Skin Irrit. 2: H315, Eye Irrit. 2: H319, Skin Sens. 1: H317, Aquatic Chronic 2: H411</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Castor Oil Glycidyl Ether</td>
<td>10-20</td>
<td>74398-71-3</td>
<td>616-085-8</td>
</tr>
<tr>
<td>Oxirane, 2-[(4-nylonphenoxy)methyl]-, branched</td>
<td>10-20</td>
<td>147094-54-0</td>
<td>---</td>
</tr>
<tr>
<td>Naphtha (petroleum), aromatic-containing</td>
<td>1-5</td>
<td>68603-08-7</td>
<td>271-635-0</td>
</tr>
<tr>
<td>Classifications: Asp. Tox. 1: H304</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hardener (Clear Side)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Weight %</th>
<th>CAS Number</th>
<th>EC Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene-1,3-Dimethaneamine</td>
<td>70-90</td>
<td>1477-55-0</td>
<td>216-032-5</td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>10-30</td>
<td>111-40-0</td>
<td>203-865-4</td>
</tr>
</tbody>
</table>

4. First-Aid Measures

General Information
Provide general supportive measures and treat symptomatically. Symptoms may be delayed. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. If exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse.
CRACK-PAC® Injection Epoxy
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Routes of Exposure

**Eye Contact:** Immediately flush eyes with plenty of cool water for at least 15 minutes while holding the eyes open. Remove contact lenses if present and easy to do. If redness, burning, blurred vision, or swelling persists, consult a physician immediately.

**Skin Contact:** Remove contaminated clothing, immediately wash affected area with soap and water. Chemical burns must be treated by a physician.

**Ingestion:** Rinse mouth immediately. Give large amounts of milk or water, if person is conscious. Only induce vomiting at the instruction of medical personnel. Consult a physician immediately.

**Inhalation:** Remove patient to fresh air. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. Give oxygen or artificial respiration if needed. If patient continues to experience difficulty breathing, consult a physician.

Most Important Symptoms

Damage to the eyes and skin. Symptoms include burns, redness, itching, tearing, swelling, and blurred vision. Permanent eye damage, including blindness, may result. May cause rash/allergic reaction to the skin. May cause severe irritation or burns to the gastrointestinal tract and respiratory system. May cause shortness of breath, discomfort in chest, or coughing. May cause damage to mucous membranes in nose, throat, lungs and bronchial system. Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure.

5. Fire-Fighting Measures

**Suitable Extinguishing Media:** Extinguish with foam, carbon dioxide, dry powder, or water fog.

**Additional Information:** Do not use a solid water stream as it may scatter and spread fire.

**Hazards during Fire-Fighting:** Hazardous decomposition products may occur when materials polymerize at temperatures above 500 °F (260°C). Irritating and toxic gases/fumes may be released during a fire. Do not allow run-off from fire-fighting to enter drains or water courses.

**Fire-Fighting Procedures:** Use standard fire-fighting procedures and consider the hazards of other involved materials. In case of fire and/or explosion do not breathe fumes. Self-contained breathing apparatus and full protective clothing must be worn. Move containers from fire area if you can do so without risk. Cool containers with flooding quantities of water until well after fire is out. Prevent runoff from fire control into streams, sewers, or drinking water supply.

6. Accidental Release Measures

**Personal Precautions**

**Non-emergency personnel:** Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep unnecessary personnel away. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not inhale vapors or mists. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

**Emergency personnel:** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate personal protection.

**Clean-Up Methods**

**Small spills (uncured):** Wipe up with absorbent material (e.g. cloth, fleece). Place in leak-proof containers. Seal tightly for proper disposal. Clean surface thoroughly to remove residual contamination. If desired, approved solvents, such as ketones (MEK, acetone, etc.), lacquer thinner, or adhesive remover can be used. Do NOT use solvents to clean adhesives from skin. Take appropriate precautions when handling flammable solvents. Solvents may damage surfaces to which they are applied.

**Large spills (uncured):** Stop the flow of material, if this is without risk. Dike far ahead of spill to contain material. Use a non-combustible material like vermiculite, sand or earth to soak up the product. Place in leak-proof containers. Seal tightly for proper disposal. Following product recovery, flush area with water. Keep combustibles away from spilled material.

**Cured Material:** Chip or grind off surface. If you are grinding or cutting cured product, ensure good work practice and use of personal protective equipment as needed to control exposure to respirable dust. Take precautionary measures; do not allow dust to build up.

**Environmental Precautions**

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.
7. Handling and Storage

Handling
Mechanical ventilation or local exhaust ventilation is recommended. Keep away from open flames, hot surfaces and sources of ignition. Wear appropriate personal protective equipment. When using, do not eat, drink or smoke. Do not breathe mist or vapor. Use only in well-ventilated places. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices. To obtain optimal performance from Simpson Strong-Tie products and to achieve maximum allowable design load, the products must be properly installed and used in accordance with the installation instructions and design limits provided by Simpson Strong-Tie.

Storage

8. Exposure Controls / Personal Protection

Personal Protective Equipment
General Protection: Wear appropriate personal protective equipment.
Eye Protection: Wear chemical splash goggles or safety glasses with side shield.
Hand Protection: Wear chemical-resistant gloves such as: Nitrile, neoprene, butyl.
Skin and Body Protection: Wear long sleeve shirt/long pants and other clothing as required to minimize contact.
Respirator Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

General Hygiene: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Engineering Controls
Mechanical ventilation or local exhaust ventilation is recommended, ventilation rates should be matched to conditions to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and emergency shower.

Exposure Limits

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA (PEL)</th>
<th>ACGIH (TLV)</th>
<th>NIOSH Pocket Guide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene-1,3-Dimethaneamine (CAS 1477-55-0)</td>
<td>N/E</td>
<td>0.1 mg/m³ (ceiling, skin)</td>
<td>0.1 mg/m³ (ceiling, skin)</td>
</tr>
<tr>
<td>Diethylenetriamine (CAS 111-40-0)</td>
<td>4 mg/m³</td>
<td>4 mg/m³ (TWA)</td>
<td>4 mg/m³ (TWA)</td>
</tr>
</tbody>
</table>

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Resin</th>
<th>Hardener</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State:</td>
<td>Liquid</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color:</td>
<td>Blue</td>
<td>Clear</td>
</tr>
<tr>
<td>Odor:</td>
<td>Strong Acrid</td>
<td>Ammonia</td>
</tr>
<tr>
<td>pH:</td>
<td>No data</td>
<td>12</td>
</tr>
<tr>
<td>Flammability limit – lower %:</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Flammability limit – upper %:</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Solubility:</td>
<td>Insoluble in water</td>
<td>Slightly soluble in water</td>
</tr>
<tr>
<td>Freezing/Melting Point:</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>&gt;250 °F (121.1 °C) Open Cup</td>
<td>230 °F (110 °C) Closed Cup</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Decomposition Temperature:</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Specific Gravity:</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>VOC (after cure):</td>
<td>7 g/L</td>
<td>7 g/L</td>
</tr>
<tr>
<td>Kow:</td>
<td>No data</td>
<td>No data</td>
</tr>
</tbody>
</table>
CRACK-PAC® Injection Epoxy
SAFETY DATA SHEET

Viscosity: No data
Corrosiveness: Non-corrosive

10. Stability and Reactivity

Reactivity: This product is stable and non-reactive under normal conditions.
Chemical Stability: Stable under normal storage conditions.
Condition to Avoid: High heat and open flame.

Hazardous Reactions: Hazardous polymerization does not occur.
Decomposition Products: Carbon dioxide, carbon monoxide, oxides of nitrogen, and other organic compounds.

11. Toxicological Information

Likely Routes of Exposure
Ingestion: Harmful if swallowed. Corrosive material; may cause severe irritation or burns to the gastrointestinal tract or respiratory tract.
Inhalation: Harmful if inhaled. Corrosive to the respiratory tract.
Skin contact: Harmful in contact with skin. Causes severe skin burns. May cause an allergic skin reaction.
Eye contact: Causes serious eye damage.
Symptoms: Burns, redness, itching, tearing, swelling, and blurred vision. Rash/dermatitis. May cause severe irritation or burns to the gastrointestinal tract and respiratory system. May cause shortness of breath, discomfort in chest, or coughing.

Information on Toxicological Effects

Acute Effects
Toxicity: Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled.

<table>
<thead>
<tr>
<th>Component</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRACK-PAC® Resin Toxicity Estimate</td>
<td></td>
</tr>
<tr>
<td>Acute, Oral, LD50</td>
<td>&gt; 9000</td>
</tr>
<tr>
<td>Acute, Dermal, LD50</td>
<td>2000</td>
</tr>
<tr>
<td>CRACK-PAC® Hardener Toxicity Estimate</td>
<td></td>
</tr>
<tr>
<td>Acute, Oral, LD50</td>
<td>1000</td>
</tr>
<tr>
<td>Acute, Dermal, LD50</td>
<td>1700-1800</td>
</tr>
<tr>
<td>Acute, Inhalation, LC50</td>
<td>&lt; 5</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Causes severe skin irritation and burns.
Eye damage/eye irritation: Causes serious eye irritation and damage.
Respiratory sensitization: No data available.
Skin sensitization: May cause an allergic skin reaction.
Aspiration hazard: No data available.
Specific target organ toxicity
Single exposure: Corrosive to the respiratory tract.

Chronic Effects
Germ cell mutagenicity: No data available.
Carcinogenicity: This product is not considered a carcinogen by IARC, NTP, ACGIH, or OSHA.
Reproductive toxicity: No data available.
Specific target organ toxicity
Repeated exposure: No data available.

Further Information
Toxicological, ecotoxicological, physical, and chemical properties may not have been fully investigated. Hazard data above is estimated based on best available information. Some workers with pre-existing medical conditions such as: asthma, allergies, or impaired pulmonary and/or liver functions, or who may be particularly susceptible to this material, may be affected by exposure to this material.

12. Ecological Information

General Information
Information given is based on data on the components and the ecotoxicology of similar products. CRACK-PAC Resin is classified as toxic to aquatic life with long lasting effects. CRACK-PAC Hardener is classified as harmful to aquatic life with long lasting effects. Avoid release to the environment.
Supporting Data

<table>
<thead>
<tr>
<th>Component</th>
<th>Test Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRACK-PAC® Resin Estimate</td>
<td></td>
</tr>
<tr>
<td><em>Aquatic</em>, Fish, LC50</td>
<td>1-5 mg/l, 96 hours</td>
</tr>
<tr>
<td><em>Aquatic</em>, Crustacea, EC50</td>
<td>1-5 mg/l, 48 hours</td>
</tr>
<tr>
<td><em>Aquatic</em>, Algae, EC50</td>
<td>10-50 mg/l, 72 hours</td>
</tr>
<tr>
<td>CRACK-PAC® Hardener Estimate</td>
<td></td>
</tr>
<tr>
<td><em>Aquatic</em>, Fish, LC50</td>
<td>200-300 mg/l, 96 hours</td>
</tr>
<tr>
<td><em>Aquatic</em>, Crustacea, EC50</td>
<td>10-50 mg/l, 48 hours</td>
</tr>
<tr>
<td><em>Aquatic</em>, Algae, EC50</td>
<td>10-50 mg/l, 72 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability: This product is not expected to be readily biodegradable.
Bioaccumulative potential: No data available for this product.
Mobility in soil: No data available.

Further Information
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product.

13. Disposal Consideration

Waste Disposal of Substance: Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national regulations.

Container Disposal: Empty containers or liners may retain some product residues; follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Disposal of Cured Product: Chip or grind off surface. Solid material does not need special disposal consideration.

14. Transportation Information
This information does not cover all specific regulatory or operational requirements of this product. The classifications for transportation may vary by container volume or different regional or national regulations.

<table>
<thead>
<tr>
<th>Resin (Blue Side)</th>
<th>Hardener (Clear Side)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number:</td>
<td>UN3082</td>
</tr>
<tr>
<td>UN proper shipping name:</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-A-Epichlorohydrin), 9, III, Marine Pollutant</td>
</tr>
<tr>
<td>Precautions:</td>
<td>Marine Pollutant</td>
</tr>
<tr>
<td>Required Labels:</td>
<td>9</td>
</tr>
<tr>
<td>ERG Code (IATA):</td>
<td>9L</td>
</tr>
<tr>
<td>EmS (IMDG):</td>
<td>F-A, S-F</td>
</tr>
<tr>
<td>Special Precautions for Users:</td>
<td>Read safety instructions, SDS and emergency procedures before handling.</td>
</tr>
</tbody>
</table>

UN number: UN2735
UN proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (Benzene-1,3-dimethaneamine(MXDA)), 8, II
Precautions: Corrosive
Required Labels: 8
ERG Code (IATA): 8L
EmS (IMDG): F-A, S-B
Special Precautions for Users: Read safety instructions, SDS and emergency procedures before handling.

Based on packaging size, Limited Quantity exemptions may apply. Please consult the 49 CFR HMR, IATA DGR, and IMDG Code to ensure that shipments comply with these regulations.

15. Regulatory Information

United States

Federal Regulations: This product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
CERCLA Hazardous Substance List (40 CFR 302.4): Acetic Acid (CAS 64-19-7) LISTED
Phosphoric Acid (CAS 7664-38-2) LISTED
Naphthalene (CAS 91-20-3) LISTED

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Superfund Amendments and Reauthorization Act of 1986 (SARA):

<table>
<thead>
<tr>
<th>Hazard Categories</th>
<th>Immediate</th>
<th>Delayed</th>
<th>Fire</th>
<th>Pressure</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resin</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Hardener</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

SARA 302 Extremely hazardous substance: No
SARA 311/312 Hazardous chemical: Yes
SARA 313 (TRI reporting):

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
<th>% In Blend (approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>&lt; 0.1</td>
</tr>
</tbody>
</table>

California Proposition 65:
WARNING: This product can expose you to chemicals which are known to the State of California to cause cancer, reproductive harm, or other birth defects. For more information, go to www.P65Warnings.ca.gov.

Carcinogen / Reproductive Toxin / Mutagen Information

<table>
<thead>
<tr>
<th>Component</th>
<th>% In Blend (approx.)</th>
<th>IARC Monographs</th>
<th>NTP</th>
<th>ACGIH</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene (91-20-3)</td>
<td>&lt; 0.1</td>
<td>2B</td>
<td>ANTICIPATED</td>
<td>---</td>
<td>CA65 (Carcinogenic)</td>
</tr>
</tbody>
</table>

IARC: 1 - Carcinogenic  2 - Possibly carcinogenic  3 – Not classifiable as to carcinogenicity  4 – Probably not carcinogenic
NTP: Known to be human carcinogen or Reasonably anticipated to be a human carcinogen
ACGIH – A1 – Confirmed carcinogen  A2 – Suspected carcinogen  A3 – Animal carcinogen  A4 – Not classified A5 – Not suspected
CA65 – California Prop 65

Canada
This product has been classified according to the hazard criteria of the HPR and the SDS contains all of the information required by the HPR.

International
The product is classified in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

This product is not subject to or not applicable for any of the following International Regulations; Stockholm Convention, Rotterdam Convention, Kyoto Protocol, Montreal Protocol, Basel Convention.

International Inventories

<table>
<thead>
<tr>
<th>Country</th>
<th>Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>One or more components of this product are not listed on the Australian Inventory of Chemical Substances (AICS).</td>
</tr>
<tr>
<td>Canada</td>
<td>All components of this product are included on the Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL).</td>
</tr>
<tr>
<td>China</td>
<td>One or more components of this product are not listed on the Inventory of Existing Chemical Substances in China (IECSC).</td>
</tr>
<tr>
<td>Europe</td>
<td>One or more components of this product are not included on the European Inventory of Existing Commercial Chemical Substances (EINECS) or are not exempt from listing.</td>
</tr>
<tr>
<td>Japan</td>
<td>One or more components in this product are not listed on the Inventory of Existing and New Chemical Substances (ENCS).</td>
</tr>
<tr>
<td>Korea</td>
<td>One or more components of this product are not included on the Existing Chemicals List (ECL)</td>
</tr>
<tr>
<td>New Zealand</td>
<td>One or more components of this product are not included on the New Zealand Inventory.</td>
</tr>
<tr>
<td>Philippines</td>
<td>One or more components in this product are not listed in the Philippine Inventory of Chemicals and Chemical Substances (PICCS).</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>All components of this product are listed on the Toxic Substances Control Act (TSCA) Inventory or are not required to be listed.</td>
</tr>
</tbody>
</table>

16. Other Information

Date Prepared or Revised: October 2019
Supersedes: September 2016
Abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists
CAS No.: Chemical Abstract Service Registry Number
CERCLA: Comprehensive Environmental Response, Compensation and Liability Act (U.S. EPA)
HPR: Hazardous Product Regulations (Canada)
DOT: Department of Transportation (U.S.)
EPA: Environmental Protection Agency (U.S.)
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
HEPA: High-Efficiency Particulate Air
HMIS: Hazardous Materials Identification System
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods code
NIOSH: National Institute of Occupational Safety and Health (U.S.)
NFPA: National Fire Protection Association (US)
NTP: National Toxicology Program (US)
OSHA: Occupational Safety and Health Administration (U.S.)
PEL: Permissible Exposure Limit
SARA: Superfund Amendments and Reauthorization Act (U.S. EPA)
SDS: Safety Data Sheet
STEL: Short Term Exposure Limit (15 minute Time Weighted Average)
STOT: Specific Target Organ Toxicity (GHS Classification)
TLV: Threshold Limit Value
TSCA: Toxic Substances Control Act (U.S.)
TWA: Time Weighted Average (exposure for 8-hour workday)
VOC: Volatile Organic Compounds
WHMIS: Canadian Workplace Hazardous Materials Information System

Full Text of H – Phrases Under Section 3

H304: May be fatal if swallowed and enters airways.
H320: Causes eye irritation.
H335: May cause respiratory irritation.

Disclaimer

This Safety Data Sheet (SDS) is prepared by Simpson Strong-Tie Co. in compliance with the requirements of OSHA 29 CFR Part 1910.1200. The information it contains is offered in good faith as accurate as of the date of this SDS. This SDS is provided solely for the purpose of conveying health, safety, and environmental information. No warranty, expressed or implied, is given. Health and Safety precautions may not be adequate for all individuals and/or situations. It is the user’s obligation to evaluate and use this product safely and to comply with all applicable laws and regulations.

Internal

FOR INTERNAL USE ONLY

<table>
<thead>
<tr>
<th>CRACK-PAC Resin:</th>
<th>CRACK-PAC Hardener:</th>
</tr>
</thead>
<tbody>
<tr>
<td>XCOM3B – 90% Cartridge</td>
<td>XCOM3B – 10% Cartridge</td>
</tr>
<tr>
<td>XCORR – 10% Cartridge</td>
<td></td>
</tr>
</tbody>
</table>