1. **Identification**

**Product Identification**

Product Identifier: SET

Recommended Use: SET Epoxy Adhesive is a high-strength, anchoring adhesive.

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

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**

SET Epoxy Adhesive is a high-strength, non-shrink, epoxy adhesive for anchoring doweling threaded rod and rebar. It is a two-part (1:1) system packaged as a single unit in a dual cartridge. The two parts of this product have been individually assessed according to the Globally Harmonized System (GHS). Exposure to the individual components will only occur with improper use. The resin and hardener are dispensed and mixed simultaneously through the mixing nozzle. 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 uniformly light gray in color and can be considered nonhazardous. Some hazards may apply upon grinding or cutting through hardened product. This Safety Data Sheet covers the hazards and responses for the safe use of this product.

**Resin (White Side) GHS Classification**

**Classification according to HazCom2012 (GHS)**

<table>
<thead>
<tr>
<th>Physical Hazards:</th>
<th>Not Classified.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Hazards:</td>
<td>Skin Corrosion/Irritation Category 2 H315: Causes skin irritation</td>
</tr>
<tr>
<td></td>
<td>Serious Eye Damage/Irritation Category 2 H319: Causes serious eye irritation</td>
</tr>
<tr>
<td></td>
<td>Sensitization, Skin Category 1 H317: May cause an allergic skin reaction</td>
</tr>
<tr>
<td></td>
<td>Germ Cell Mutagenicity Category 2 H341: Suspected of causing genetic defects</td>
</tr>
<tr>
<td></td>
<td>Carcinogenicity Category 2 H351: Suspected of causing cancer</td>
</tr>
<tr>
<td>Environmental Hazards:</td>
<td>Chronic Aquatic Hazard Category 2 H411: Toxic to aquatic life with long lasting effects</td>
</tr>
</tbody>
</table>

**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. Long term exposure may cause chronic effects.

**GHS Label Elements**

- Contains: Resins, Butyl Glycidyl Ether, Titanium Dioxide
- Signal Word: WARNING!
- Hazard Statements:
  - H315: Causes skin irritation.
  - H319: Causes serious eye irritation.
  - H317: May cause an allergic skin reaction.
  - H341: Suspected of causing genetic defects.
  - H351: Suspected of causing cancer.
  - 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 dust, mist, or vapors.
P264: Wash thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to 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.
P362+P364: Take off contaminated clothing and wash 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.
P308+P313: If exposed or concerned: Call a poison center/doctor.
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 (Black Side) GHS Classification

Classification according to HazCom2012 (GHS)

Physical Hazards: Not Classified.
Health Hazards: Acute Toxicity, Dermal Category 4 H312: Harmful in contact with skin
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
Carcinogenicity Category 2 H351: Suspected of causing cancer
Reproductive Toxicity Category 2 H361: Suspected of damaging fertility
STOT, Repeated Exposure Category 2 H373: May cause damage to organs through prolonged or repeated exposure

Environmental Hazards: Acute Aquatic Hazard Category 1 H400: Very toxic to aquatic life
Chronic Aquatic Hazard Category 1 H410: Very toxic 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. Long term exposure may cause chronic effects.

GHS Label Elements

Contains: Ground Limestone, Benzyl Alcohol, 2-piperazin-1-ylethylamine, Bisphenol-A
Signal Word: DANGER!
Hazard Statements:
H312: Harmful in contact with skin.
H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.
H317: May cause an allergic skin reaction.
H351: Suspected of causing cancer.
H361: Suspected of damaging fertility or the unborn child.
H373: May cause damage to organs (nasal cavity) through prolonged or repeated exposure.
H400: Very toxic to aquatic life.
H410: Very 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.
P210: Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
P260: Do not breathe dust, mist, or vapor.
P264: Wash thoroughly after handling.
P270: Do not eat, drink, or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P272: Contaminated clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves/protection 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 reuse.
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 occurs: Get medical advice/attention.
P308+P313: If exposed or concerned: 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.

Hazard Not Otherwise Classified (HNOC)
The above hazards are for the uncured component of SET. Upon combination of the two components, an innocuous solid which does not present any immediate hazards is formed. Upon grinding or cutting the cured product, the following hazards may apply. Ensure good work practice and use of personal protective equipment as needed to control exposure to processing dust.

Health Hazard: Carcinogenicity Category 1A
OSHA Hazard: STOT, Repeated Exposure Category 1
Combustible Dust

Hazard Statement:
May cause cancer.
Can form explosive air-dust mixtures, avoid creating dust.

Precautionary Statement:
Do not breathe dust.
Do not allow dust to build up on surfaces.

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
**SET Epoxy Adhesive**  
SAFETY DATA SHEET

The full text for H-phrases is displayed in section 16. All concentrations are in percent by weight unless otherwise noted.

### Resin (White 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>30-50</td>
<td>25068-38-6</td>
<td>500-033-5</td>
</tr>
<tr>
<td><strong>Classifications:</strong> 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>Phenolic Novolac Resin</td>
<td>40-70</td>
<td>28064-14-4</td>
<td>608-164-0</td>
</tr>
<tr>
<td><strong>Classifications:</strong> 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>Butyl Glycidyl Ether</td>
<td>1-5</td>
<td>2426-08-6</td>
<td>219-376-4</td>
</tr>
<tr>
<td>Titanium Dioxide</td>
<td>1-5</td>
<td>13463-67-7</td>
<td>236-675-5</td>
</tr>
<tr>
<td><strong>Classifications:</strong> Carc. 2: H351</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Hardener (Black Side)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Weight %</th>
<th>CAS Number</th>
<th>EC Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Limestone</td>
<td>20-40</td>
<td>1317-65-3</td>
<td>215-279-6</td>
</tr>
<tr>
<td><strong>Classifications:</strong> Skin Irrit. 2: H315</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benzyl Alcohol</td>
<td>1-15</td>
<td>100-51-6</td>
<td>202-859-9</td>
</tr>
<tr>
<td><strong>Classifications:</strong> Acute Tox. 4: H302+H332, Eye Irrit. 2: H319</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-Piperazin-1-ylethylamine</td>
<td>1-15</td>
<td>140-31-8</td>
<td>205-411-0</td>
</tr>
<tr>
<td><strong>Classifications:</strong> Acute Tox. 4: H302+H312, Skin Corr. 1: H314, Skin Sens. 1: H317, Aquatic 3: H402+H412</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bisphenol-A</td>
<td>1-10</td>
<td>80-05-7</td>
<td>201-245-8</td>
</tr>
<tr>
<td>Nonyl Phenol</td>
<td>1-5</td>
<td>84852-15-3</td>
<td>284-325-5</td>
</tr>
<tr>
<td><strong>Classifications:</strong> Acute Tox. 4: H302, Skin Corr. 1: H314, Repr. 2: H361, Aquatic 1: H400+H410</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furfuryl Alcohol</td>
<td>1-5</td>
<td>98-00-0</td>
<td>202-626-1</td>
</tr>
<tr>
<td><strong>Classifications:</strong> Acute Tox. 3: H301+H311+H331, Eye Irrit. 2: H319, Carc. 2: H351, STOT SE 3: H335, STOT RE 2: H373</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benzylidimethylamine</td>
<td>1-5</td>
<td>103-83-3</td>
<td>203-149-1</td>
</tr>
<tr>
<td>Triethyleneetetramine</td>
<td>&lt; 5</td>
<td>112-24-3</td>
<td>203-950-6</td>
</tr>
<tr>
<td><strong>Classifications:</strong> Acute Tox. 4: H312, Skin Corr. 1: H314, Skin Sens. 1: H317, Aquatic Chronic 3: H412</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-tert-butylphenol</td>
<td>&lt; 5</td>
<td>98-54-4</td>
<td>202-679-0</td>
</tr>
<tr>
<td><strong>Classifications:</strong> Skin Irrit. 2: H315, Eye Corr. 1: H318, Repr. 2: H361, STOT SE 3: H335, Aquatic Chronic 2: H411</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crystalline Silica, Quartz</td>
<td>&lt; 5</td>
<td>14808-60-7</td>
<td>238-878-4</td>
</tr>
<tr>
<td><strong>Classifications:</strong> Carc. 1A: H350, STOT RE 1: H372</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon Black</td>
<td>&lt; 1</td>
<td>1333-86-4</td>
<td>215-609-9</td>
</tr>
<tr>
<td><strong>Classifications:</strong> Carc. 2: H351</td>
<td></td>
<td></td>
<td></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.

#### 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 and product; immediately wash affected area with soap and water. Do not apply greases or ointments. Chemical burns must be treated by a **physician**.

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

**Inhalation:** Remove patient to fresh air. Give oxygen or artificial respiration if needed. If patient continues to experience difficulty breathing, **consult a physician**.

#### Most Important Symptoms
SET Epoxy Adhesive

SAFETY DATA SHEET

Damage to the eyes and skin. Symptoms include burns, redness, itching, tearing, swelling, and blurred vision. Permanent eye damage, including blindness, may result. Rash/dermatitis. May cause severe irritation or burns to the gastrointestinal tract and respiratory system.

5. Fire-Fighting Measures

| Suitable Extinguishing Media: | Extinguish with foam, carbon dioxide, dry powder, or water fog. |
| Additional Information:       | 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. Water run-off can cause environmental damage. Do not allow run-off from fire-fighting to enter drains or water courses. |
| Hazards during Fire-Fighting: | 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 by flooding quantities of water until well after fire is out. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. |
| Fire-Fighting Procedures:     | |

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. Avoid inhalation of 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.
- **Cured Material:** Chip or grind off surface. The product contains components that are carcinogenic in respirable form. 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 inhale dust, mist, or vapor. Use only in well-ventilated places. Avoid contact with eyes, skin, and clothing. Pregnant women should not work with this product if there is risk of exposure. 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**

- **Full Unused Cartridges:** Store away from incompatible materials (See Section 10 of the SDS). Keep in original container. Keep container tightly closed. Store in a dry, well-ventilated place out of direct sunlight between 45-90°F (7-32°C). Keep away from heat and sources of ignition. Protect container from physical damage. Keep out of reach of children.
- **Partially Used Cartridges:** To store partially used cartridge, temporarily replace cap or leave hardened nozzle in place. To re-use, attach new nozzle. Do not try to dispense after adhesive hardens in nozzle. CAUTION: Adhesive will start to gel in the nozzle. Adhesive will gel
faster at higher temperatures. Material under pressure can blowout the back of the cartridge if the adhesive in the nozzle hardens. Use only an appropriate Simpson Strong-Tie® mixing nozzle in accordance with Simpson Strong-Tie® instructions. Modification or improper use of mixing nozzle may impair adhesive performance. Keep out of reach of children.

8. Exposure Controls / Personal Protection

Personal Protective Equipment

Protective Measure: 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: The use of a respirator is not required during normal use of this product. If grinding or cutting cured product, the use of an approved respirator is recommended.

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>Triethylenetetramine* (CAS 112-24-3)</td>
<td>N/E</td>
<td>N/E</td>
<td>6 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 ppm</td>
</tr>
<tr>
<td>Quartz (CAS 14808-60-7)</td>
<td>10% SiO₂ + 2 mg/m³</td>
<td>0.025 mg/m³ (respirable)</td>
<td>0.05 mg/m³ (respirable)</td>
</tr>
<tr>
<td>Limestone (CAS 1317-65-3)</td>
<td>5 mg/m³ (Respirable)</td>
<td>N/E</td>
<td>5 mg/m³ (respirable)</td>
</tr>
<tr>
<td></td>
<td>15 mg/m³ (Total dust)</td>
<td></td>
<td>10 mg/m³ (total dust)</td>
</tr>
<tr>
<td>Benzyl Alcohol (CAS 100-51-6)</td>
<td>5 mg/m³ (TWA)</td>
<td>N/E</td>
<td>5 mg/m³ (STEL)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10 ppm</td>
</tr>
<tr>
<td>Furfuryl alcohol* (CAS 98-00-0)</td>
<td>200 mg/m³</td>
<td>40 mg/m³ (TWA)</td>
<td>40 mg/m³ (TWA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>60 mg/m³ (STEL)</td>
<td>60 mg/m³ (STEL)</td>
</tr>
<tr>
<td>Butyl Glycidyl Ether (CAS 2426-08-6)</td>
<td>270 mg/m³</td>
<td>3 ppm</td>
<td>30 mg/m³ (ceiling)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50 ppm</td>
<td>5.6 ppm (ceiling)</td>
</tr>
<tr>
<td>Titanium Dioxide (CAS 13463-67-7)</td>
<td>5 mg/m³ (respirable)</td>
<td>10 mg/m³</td>
<td>N/E</td>
</tr>
<tr>
<td>Carbon Black (CAS 1333-86-4)</td>
<td>3.5 mg/m³</td>
<td>3 mg/m³</td>
<td>0.1 mg/m³</td>
</tr>
</tbody>
</table>

*Skin Designation: Material can be absorbed through the skin.

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, Paste</td>
<td>Liquid, Paste</td>
</tr>
<tr>
<td>Color:</td>
<td>White</td>
<td>Black</td>
</tr>
<tr>
<td>Odor:</td>
<td>Sweet</td>
<td>Ammonia</td>
</tr>
<tr>
<td>pH:</td>
<td>6.9</td>
<td>10.6</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>Non-volatile</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>&gt; 500 °F (&gt;260 °C)</td>
<td>No data</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>250 °F (121 °C) Open Cup</td>
<td>198 °F (92.2 °C) Open Cup</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>No data</td>
<td>No data</td>
</tr>
</tbody>
</table>
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: Corrosive material; causes severe irritation or burns to the gastrointestinal tract and respiratory tract.

Inhalation: If this material is heated or misted, coughing and mild irritation may occur. Do not inhale dust from cutting/grinding cured product.

Skin contact: Causes severe skin burns. May cause an allergic skin reaction. Harmful in contact with skin.

Eye contact: Causes serious eye damage.

Symptoms: Burns, redness, itching, tearing, swelling, and blurred vision. Rash/dermatitis. Severe irritation or burns to the gastrointestinal tract and respiratory system. Shortness of breath, discomfort in chest, or coughing.

Information on Toxicological Effects

**Acute Effects**

Toxicity: Harmful in contact with skin.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>SET Resin Mixture</td>
<td>Acute, Oral, LD50</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td>Acute, Dermal, LD50</td>
<td>Rabbit</td>
</tr>
<tr>
<td>SET Hardener Mixture</td>
<td>Acute, Oral, LD50</td>
<td>Rat</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Causes skin irritation and severe skin 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: No data available.

**Chronic Effects**

Germ cell mutagenicity: SET Resin contains a component that is suspected of causing genetic defects.

Carcinogenicity: This product contains components that are suspected of being carcinogenic. The product also contains components which are considered carcinogens only in their respirable form. Due to the nature of this product, exposure to respirable particles is likely only when grinding or cutting cured product. Ensure good work practice and use of personal protective equipment as needed to control exposure.

Reproductive toxicity: SET Hardener contains components which are suspected of damaging fertility or the unborn child.

Specific target organ toxicity

- Repeated exposure: May cause damage to organs (nasal cavity) through prolonged or repeated exposure.
**SET Epoxy Adhesive**

**SAFETY DATA SHEET**

**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>Quartz (CAS 14808-60-7)</td>
<td>&lt; 1</td>
<td>3</td>
<td>KNOWN</td>
<td>A2</td>
<td>CA65</td>
</tr>
<tr>
<td>Titanium Dioxide (CAS 13463-67-7)</td>
<td>1-5</td>
<td>2B</td>
<td>---</td>
<td>---</td>
<td>CA65</td>
</tr>
<tr>
<td>Carbon Black (CAS 1333-86-4)</td>
<td>&lt; 1</td>
<td>2B</td>
<td>---</td>
<td>---</td>
<td>CA65</td>
</tr>
<tr>
<td>Bisphenol-A (CAS 80-05-7)</td>
<td>1-10</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>CA65</td>
</tr>
<tr>
<td>Nonyl Phenol (CAS 84852-15-3)</td>
<td>1-5</td>
<td>---</td>
<td>---</td>
<td>Limited evidence of reproductive toxicity (NOAEL &gt;2000 ppm)</td>
<td></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

**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. SET Resin is classified as toxic to aquatic life with long lasting effects. SET Hardener is classified as very toxic to aquatic life with long lasting effects. Avoid release to the environment.

**Supporting Data**

<table>
<thead>
<tr>
<th>Component</th>
<th>Species</th>
<th>Test Result</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aquatic Acute, Fish, LC50</strong></td>
<td>Fish</td>
<td>707.11 mg/l, 96 hours</td>
</tr>
<tr>
<td><strong>Aquatic Acute, Crustacea, EC50</strong></td>
<td>Daphnia magna</td>
<td>324.87 mg/l, 48 hours</td>
</tr>
<tr>
<td><strong>Aquatic Acute, Algae, EC50</strong></td>
<td>Algae</td>
<td>&gt;1000 mg/l, 72 hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aquatic, Fish, LC50</strong></td>
<td>500-600 mg/l, 96 hours</td>
</tr>
<tr>
<td><strong>Aquatic, Crustacea, EC50</strong></td>
<td>20-40 mg/l, 48 hours</td>
</tr>
<tr>
<td><strong>Aquatic, Algae, EC50</strong></td>
<td>&gt; 850 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:** This product is non-volatile.

**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.
SET Epoxy Adhesive
SAFETY DATA SHEET

UN number: UN3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-A-Epichlorohydrin), 9, III, Marine Pollutant
Recipient (White Side)

UN number: UN2735
UN proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (Aminoethylpiperazine, Nonylphenol), 8, III, Marine Pollutant
Hardener (Black Side)

Precautions:
Marine Pollutant
Marine Pollutant

Required Labels:
9
8

ERG Code (IATA):
9L
8L

EmS (IMDG):
F-A, S
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.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D):
Nonyl Phenol (CAS 84852-15-3) LISTED

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4):
Not listed.

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>Nonyl Phenol</td>
<td>84852-15-3</td>
<td>1-5</td>
</tr>
<tr>
<td>Bisphenol A</td>
<td>80-05-7</td>
<td>1-10</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>Quartz (CAS 14808-60-7)</td>
<td>&lt; 1</td>
<td>1</td>
<td>KNOWN</td>
<td>A2</td>
<td>CA65 (Carcinogenic)</td>
</tr>
<tr>
<td>Titanium Dioxide (CAS 13463-67-7)</td>
<td>1-5</td>
<td>2B</td>
<td>---</td>
<td>---</td>
<td>CA65 (Carcinogenic)</td>
</tr>
<tr>
<td>Carbon Black (CAS 1333-86-4)</td>
<td>&lt; 1</td>
<td>2B</td>
<td>---</td>
<td>---</td>
<td>CA65 (Carcinogenic)</td>
</tr>
<tr>
<td>Bisphenol-A (CAS 80-05-7)</td>
<td>1-10</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>CA65 (Reproductive)</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

©2019 Simpson Strong-Tie Company Inc.  Page 9 of 11
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>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>One or more components of this product are not included 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).</td>
</tr>
<tr>
<td>China</td>
<td>One or more components of this product are not included 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 of this product are not included on the Inventory of Existing and New Chemical Substances (ENCS).</td>
</tr>
<tr>
<td>Korea</td>
<td>All components of this product are included on the Existing Chemicals List (ECL).</td>
</tr>
<tr>
<td>New Zealand</td>
<td>All components of this product are listed on the New Zealand Inventory.</td>
</tr>
<tr>
<td>Philippines</td>
<td>All components in this product are 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: August 2016
Contact Simpson Strong-Tie Environmental Health and Safety at EHS@strongtie.com

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.)
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
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)
STEL: Short Term Exposure Limit (15 minute Time Weighted Average)
STOT: Specific Target Organ Toxicity (GHS Classification)
Full Text of H – Phrases Under Section 3
H226: Flammable liquid and vapor.
H301: Toxic if swallowed.
H302: Harmful if swallowed.
H311: Toxic in contact with skin.
H331: Toxic if inhaled.
H332: Harmful if inhaled.
H335: May cause respiratory irritation.
H350: May cause cancer.
H372: Causes damage to organs through prolonged or repeated exposure.
H402: Harmful to aquatic life.
H412: Harmful to aquatic life with long lasting effects.

Disclaimer
This Safety Data Sheet (SDS) is prepared by Simpson Strong-Tie Company Inc. 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.

© 2019 Simpson Strong-Tie Company Inc.

FOR INTERNAL USE ONLY
SET Epoxy Adhesive

<table>
<thead>
<tr>
<th>SET Resin:</th>
<th>SET Hardener:</th>
</tr>
</thead>
<tbody>
<tr>
<td>XCOM3B – 50% Cartridge</td>
<td>XCOM3A – 50% Cartridge</td>
</tr>
<tr>
<td>XCOM3B – 50% Cartridge</td>
<td>XCORR – 50% Cartridge</td>
</tr>
</tbody>
</table>