1. Identification

Product Identification

Product Identifier: FX-70 JACKET
Recommended Use: FX-70 Jacket is a protective, fiberglass shell for use in marine environments as part of the FX-70® Structural Repair and Protection System.
Use Restrictions: None known.

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

FX-70 Jacket is a corrosion resistant, fiberglass shell for use to protect structures in marine environments, as part of the FX-70® Structural Repair and Protection System. As defined in the OSHA Hazard Communication Standard, 29 CFR 1910.1200, this product is considered an article and does not require an SDS. Although these products are not subject to the OSHA Standard or GHS labeling elements, Simpson Strong-Tie would like to disclose as much health and safety information as possible to ensure that this product is handled and used properly. This SDS contains valuable information critical to the safe handling and proper use of the product. In its manufactured and shipped state this product is considered to present a low hazard. However, on site processing, such as grinding or cutting, may generate fiberglass and polyester resin dust and particles that may present the following hazards.

GHS Classification

As manufactured and shipped, this product is not expected to pose any health or safety hazards and does not meet the criteria for GHS Classification. However, on-site processes such as grinding or cutting may result in the formation of dust and particles that pose health and safety hazards. Additionally, the product is large and may be heavy and awkward to lift, posing a potential injury risk. Ensure that good work practice and the necessary precautionary measures are taken to maintain safe use of the product.

Hazards Not Otherwise Classified (HNOC)

Possible health and safety hazards associated with processing dust potentially created during use of this product.

- **Physical Hazards:** Not Classified.
- **Health Hazards:** Skin Corrosion/Irritation Category 3 H316: Causes mild skin irritation
  Serious Eye Damage/Irritation Category 2 H319: Causes serious eye irritation
  Sensitization, Skin Category 1 H317: May cause an allergic skin reaction
  STOT, Single Exposure Category 3 H335: May cause respiratory irritation

- **Environmental Hazards:** Not Classified.
- **OSHA Hazards:** Combustible Dust Can form explosive air-dust mixtures; avoid creating dust.

- **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. May cause shortness of breath or other respiratory distress/irritation.

Contains: Cured Polyester Resin, Fiberglass
Signal Word: WARNING!
Precautionary Statements:

Prevention:
- P261: Avoid breathing dust.
- P264: Wash hands thoroughly after handling.
- P272: Contaminated clothing should not be allowed out of the workplace.
- P280: Wear protective gloves/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.
- 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.
- P314: Get medical advice/attention if you feel unwell.

Storage:
- P403: Store in a well-ventilated place.
- P405: Store locked up.
- P420: Store away from incompatible materials.

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

Supplemental Label Information: 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: Globally Harmonized System Classifications.
The full text for H-phrases is displayed in section 16. All concentrations are in percent by weight unless otherwise noted.

Composition – All concentrations are in percent by weight unless otherwise indicated.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Weight %</th>
<th>CAS Number</th>
<th>EC Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cured Polyester Resin</td>
<td>&gt; 70</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Classifications: N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fiberglass</td>
<td>20-40</td>
<td>65997-17-3</td>
<td>266-046-0</td>
</tr>
<tr>
<td>Classifications: None.</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: 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 you experience redness, burning, blurred vision, or swelling, consult a physician.

Skin Contact: Wash affected area with soap and water. Do not apply greases or ointments. If rash or irritation occurs, consult a physician.

Ingestion: Ingestion is unlikely. If swallowed, rinse mouth immediately. Do not induce vomiting. Consult a physician.

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
Irritant effects. Rash. Symptoms include redness, itching, burning, tearing, swelling, and blurred vision. May cause shortness of breath or coughing.

5. Fire-Fighting Measures


Additional Information: This material is not expected to burn in a fire. If this product is present in a fire, fight fire based on the packaging material, surrounding material, etc.
6. Accidental Release Measures

Personal Precautions

Keep unnecessary personnel away. Wear appropriate personal protective equipment. Avoid inhalation of dusts.

Clean-Up Methods

This product is not expected to present a spill hazard. Avoid processes that result in the creation of dust. In the case of the creation or spill of process dust, avoid dry sweeping. Use water spraying/flushing or ventilated or HEPA filtered vacuum cleaning system. If not possible, gently moisten dust before collection with shovel or broom. Dispose of in closed containers.

Environmental Precautions

Avoid release of dust to the environment. Avoid discharge into drains, water courses or onto the ground.

7. Handling and Storage

Handling

Large molded articles may be heavy and awkward to lift. Use proper lifting and handling techniques to reduce chance of injury. Wear appropriate personal protective equipment. If grinding or cutting use work methods which minimize dust production. Avoid inhalation of dust. Ensure adequate ventilation. Avoid contact with eyes, skin, and clothing. When in use do not eat, drink, or smoke. Wash thoroughly after handling. Use good housekeeping and observe good industrial hygiene practices.

Storage

Keep away from: heat, spark, or flames. Store in a cool, dry place out of direct sunlight.

8. Exposure Controls / Personal Protection

Personal Protective Equipment

- Protective Measure: Wear appropriate personal protective equipment.
- Eye Protection: Wear goggles or safety glasses.
- Hand Protection: Protective gloves recommended.
- 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. An approved NIOSH particulate filter respirator should be used to control exposures when processing, grinding or cutting, or when other controls are inadequate or discomfort or irritation is experienced.

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

When using indoors good general ventilation should be used. Ventilation rates should be matched to conditions. Provide eyewash station.

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>General Nuisance Dust</td>
<td>5 mg/m³ (respirable)</td>
<td>3 mg/m³ (respirable)</td>
<td>N/E</td>
</tr>
<tr>
<td></td>
<td>15 mg/m³ (total dust)</td>
<td>10 mg/m³ (total dust)</td>
<td></td>
</tr>
</tbody>
</table>

*Under certain conditions this substance may be a nuisance dust.

9. Physical and Chemical Properties

- Physical State: Solid
- Form: Solid
- Color: Gray/Various Colors
- Odor: None
- Odor Threshold: N/A
- pH: N/A
- Freezing/Melting Point: N/A
- Boiling Point: N/A
- Flash Point: N/A
- Evaporation Rate: N/A
- Specific Gravity: N/A
- VOC: N/A
FX-70 JACKET Jacket for the FX-70 System.

SAFETY DATA SHEET

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>N/A</td>
</tr>
<tr>
<td>U/L Flammability</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility</td>
<td>N/A</td>
</tr>
<tr>
<td>Kow</td>
<td>N/A</td>
</tr>
<tr>
<td>Decomposition</td>
<td>N/A</td>
</tr>
<tr>
<td>Viscosity</td>
<td>N/A</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: None known.
Substances to Avoid: None known.
Hazardous Reactions: Hazardous polymerization will not occur.
Decomposition Products: Carbon dioxide, carbon monoxide, oxides of nitrogen and other organic compounds.

11. Toxicological Information

Likely Routes of Exposure

Ingestion: Not expected to be an ingestion hazard.
Inhalation: May cause respiratory tract irritation if dust is inhaled.
Skin contact: May cause mild skin irritation or sensitization.
Eye contact: May cause eye irritation. Particles can cause corneal abrasion.
Symptoms: Rash, redness, itching, burning, tearing, swelling, and blurred vision. May cause shortness of breath or coughing.

Information on Toxicological Effects

Acute Effects

Toxicity: Not expected to be acutely toxic.
Skin corrosion/irritation: Prolonged contact may cause temporary irritation.
Eye damage/eye irritation: Direct eye contact may cause temporary irritation.
Respiratory sensitization: No data available.
Skin sensitization: May cause an allergic skin reaction.
Aspiration hazard: No data available.
Specific target organ toxicity
  Single exposure: May cause respiratory irritation.

Chronic Effects

Germ cell mutagenicity: No data available
Carcinogenicity: This product contains synthetic fibers. While OSHA does not classify fiberglass as a carcinogen, some mineral fibers are considered to be potentially carcinogenic. Only certain mineral fibers, such as biopersistent fibers, show evidence for possible carcinogenicity. They are only considered carcinogenic in their respirable form through prolonged and excessive exposure. These mineral fibers are not expected to be present in this product. Ensure good work practice and the use of personal protective equipment to minimize exposure to processing dust.
Reproductive toxicity: No data available.
Specific target organ toxicity
  Repeated exposure: No data available.

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>Synthetic Mineral Fibers</td>
<td>20-40</td>
<td>3</td>
<td>ANTICIPATED</td>
<td>---</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 certain 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. This material is not classified as environmentally hazardous.

**Supporting Data**

- Persistence and degradability: No data available.
- Bioaccumulative potential: No data available.
- Mobility in soil: No data available.

**Other Adverse Effects**

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 Considerations

**Waste Disposal of Substance:**

Do not allow material into sewers/water supplies. Do not contaminate ponds, waterways or ditches with processing dust. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Container Disposal:**

Empty containers or liners may retain some product residues; follow label warnings even after container is emptied. Empty containers should be disposed of in accordance with local/regional/national/international regulations.

14. Transportation Information

**DOT:**

FX-70 JACKET is not regulated for transport.

**IMDG/IATA:**

FX-70 JACKET is not regulated for transport.

**Additional Information**

- Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.
- Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

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.

15. Regulatory Information

**United States**

**Federal Regulations:**

This product is an “Article” as defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D):**

Not regulated.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

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></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

- SARA 302 Extremely hazardous substance: No
- SARA 311/312 Hazardous chemical: No
- SARA 313 (TRI reporting): Not regulated.
US. California Proposition 65: WARNING*: This product contains a chemical listed by the State of California as known to cause cancer, birth defects, or reproductive harm.

<table>
<thead>
<tr>
<th>Carcinogen / Reproductive Toxin / Mutagen Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>Benzene (CAS 71-43-2)</td>
</tr>
<tr>
<td>Ethylene Oxide (CAS 75-21-8)</td>
</tr>
<tr>
<td>1,4-Dioxane (CAS 123-91-1)</td>
</tr>
<tr>
<td>1,3 Butadiene (CAS 106-99-0)</td>
</tr>
<tr>
<td>Toluene (CAS 108-88-3)</td>
</tr>
<tr>
<td>Methanol (CAS 67-56-1)</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

*Components of the uncured polyester resin used in the manufacture of this article are on the Prop 65 List of Chemicals known to cause Cancer or Reproductive Harm. The nature of this product makes exposure to these chemicals very unlikely.

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 and labeled 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>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>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: August 2016
Supersedes: October 2014

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
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.)
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFPA</td>
<td>National Fire Protection Association (US)</td>
</tr>
<tr>
<td>NTP</td>
<td>National Toxicology Program (US)</td>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration (U.S.)</td>
</tr>
<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
</tr>
<tr>
<td>SARA</td>
<td>Superfund Amendments and Reauthorization Act (U.S. EPA)</td>
</tr>
<tr>
<td>STEL</td>
<td>Short Term Exposure Limit (15 minute Time Weighted Average)</td>
</tr>
<tr>
<td>STOT</td>
<td>Specific Target Organ Toxicity (GHS Classification)</td>
</tr>
<tr>
<td>TLV</td>
<td>Threshold Limit Value</td>
</tr>
<tr>
<td>TSCA</td>
<td>Toxic Substances Control Act (U.S.)</td>
</tr>
<tr>
<td>TWA</td>
<td>Time Weighted Average (exposure for 8-hour workday)</td>
</tr>
<tr>
<td>VOC</td>
<td>Volatile Organic Compounds</td>
</tr>
<tr>
<td>WHMIS</td>
<td>Canadian Workplace Hazardous Materials Information System</td>
</tr>
</tbody>
</table>

**Disclaimer**

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.

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