I. PRODUCT AND COMPANY IDENTIFICATION

Company: Simpson Strong-Tie Company, Inc.
Address: 5956 W. Las Positas Blvd.
Pleasanton, CA 94588

Product Name: A Component FX-408
Product Description: Zinc-Rich Epoxy Primer
Emergency Contact No.: Chemtrec: 1-800-424-9300 (US/CANADA)
1-703-527-3887 (International)

Date Prepared or Revised: September 2013
Supersedes: May 2013

For most current MSDS, please visit our website at www.strongtie.com/msds

II. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Names</th>
<th>CAS Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly(BisPhenolA-cp-Epichlorhydrin) Glycidyl End-Capped</td>
<td>25036-25-3</td>
</tr>
<tr>
<td>Zinc Dust</td>
<td>7440-66-6</td>
</tr>
<tr>
<td>Xylene, Mixed Isomers</td>
<td>1330-20-7</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>100-41-4</td>
</tr>
<tr>
<td>Methyl Isobutyl Ketone</td>
<td>108-10-1</td>
</tr>
</tbody>
</table>

III. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW
Flammable Liquid
May cause eye and skin irritation.
May cause skin sensitization.

POTENTIAL HEALTH EFFECTS

ACUTE
Eye Contact: May cause eye irritation, swelling, tearing, redness or cornea damage.
Skin Contact: Moderate irritation. May cause skin sensitization, evidenced by rashes and hives.
Inhalation: Moderate irritation to the nose and respiratory tract. May cause Central Nervous System depression, evidenced by headache, dizziness, and nausea.
Ingestion: May cause irritation to the gastrointestinal tract. May cause Central Nervous System depression or other systemic effects.
Systemic Effects: Lungs, eyes, and skin.

IV. FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of cool water for at least 15 minutes while holding the eyes open. If redness, burning, blurred vision, or swelling persists, CONSULT A PHYSICIAN.
Skin Contact: Remove product and immediately wash affected area with soap and water. Do not apply greases or ointments. Remove contaminated clothing. Wash clothing with soap and water before reuse. If redness, burning, or swelling persists, CONSULT A PHYSICIAN.
Ingestion: DO NOT INDUCE VOMITING. Never administer anything by mouth to an unconscious person. Rinse out mouth with water, then drink sips of water to remove taste from mouth. CONSULT A PHYSICIAN if vomiting occurs spontaneously, keep head below hips to prevent aspiration.

V. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Water fog, carbon dioxide or dry chemical, aqueous foam.
Fire And Explosion Hazard: Hazardous decomposition products may occur when materials polymerize at temperatures above 500°F (260°C). Do not allow run-off from fire fighting to enter drains or water courses.
ZINC-RICH EPOXY PRIMER FX-408
MATERIAL SAFETY DATA SHEET

Fire Fighting Equipment and Procedures:
Wear full protective clothing and self-contained breathing apparatus for fire fighting.
Isolate fuel supply from fire. Clear fire area of all non-emergency personnel. Use water spray to cool fire-exposed surfaces and containers.

VI. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use cautious judgment when cleaning up spill. Shut off leaks, if possible without personal risk. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.

Environmental Precautions: Construct a dike to prevent spreading. Keep out of sewers, storm drains, surface waters, and soils.

Clean-up Methods: Small spills: Soak up with absorbent material such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal. Large spills: Approach suspected leak areas with caution. Create a dike or trench to contain material. Soak up with absorbent material such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal.

Additional Information: Notify authorities if any exposures to the general public or environment occur or are likely to occur. Dispose in accordance with federal, state, and local regulations.

VII. STORAGE AND HANDLING

Storage: Keep away from: acids, oxidizers, heat, or flames. Keep in cool, dry, well-ventilated area in closed containers. Protect containers from physical damage.

Handling: To prevent skin and eye contact under the foreseeable conditions of use, wear appropriate protective clothing and safety eyewear. When handling, do not eat, drink, or smoke. Wash thoroughly after handling. Avoid breathing fumes. Handle in a well-ventilated work area.

VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

Protective Measure: Wear appropriate personal protective equipment.

Eye Protection: Avoid contact with eyes. 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 chemical-resistant gloves and other clothing as required to minimize contact.

Respirator Protection: Not required for properly ventilated areas.

Exposure Limits:

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>ACGIH (TLV)</th>
<th>OSHA (PEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly(BisPhenolA-co-Epichlorohydrin) Glycidyl End-Capped</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>Zinc Dust (Fume)</td>
<td>5 mg/m³</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td>Xylene, Mixed Isomers</td>
<td>20 ppm</td>
<td>100 ppm</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>100 ppm</td>
<td>100 ppm</td>
</tr>
<tr>
<td>Methyl Isobutyl Ketone</td>
<td>100 ppm</td>
<td>150 ppm</td>
</tr>
</tbody>
</table>

IX. PHYSICAL AND CHEMICAL PROPERTIES

Form: Paste
Color: Gray
Odor: Sweet
Vapor Pressure: N/E
Boiling Point: N/E
Freezing Point: N/E
Flash Point: 80°F (26°C)
Specific Gravity: 3.9
Solubility In Water: Insoluble
VOC: 350 g/L (A + B)

X. REACTIVITY DATA

Stability: Stable under normal storage conditions.
Conditions To Avoid: Incompatible chemicals, high heat and open flame.
Materials To Avoid: Oxidizing agents, acids, organic bases, and amines. May form phosphine and hydrogen gas on contact with strong acids.
Hazardous Decomposition Products: Combustion may produce carbon monoxide, carbon dioxide, aldehydes, acids, oxides of phosphorus, and other organic substances.

Hazardous Polymerization: Will not occur.

XI. TOXICOLOGICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Oral (LD₅₀, Rat)</td>
<td>N/E</td>
<td></td>
</tr>
<tr>
<td>Acute Dermal (LD₅₀, Rabbit)</td>
<td>N/E</td>
<td></td>
</tr>
<tr>
<td>Acute Inhalation (LC₅₀, Rat)</td>
<td>N/E</td>
<td></td>
</tr>
<tr>
<td>Chronic Health Hazard:</td>
<td></td>
<td>The Diglycidyl Ether of Bisphenol A has shown weak carcinogenicity in 2-year mice bioassays. This material has shown activity in-vitro microbial mutagenicity screening and has produced chromosomal aberrations in cultured rat liver cells. No activity when tested by vivo mutagenicity assays.</td>
</tr>
</tbody>
</table>

XII. DISPOSAL CONSIDERATIONS

Waste From Residues / Unused Products: Dispose of container and unused contents in accordance with federal, state, and local requirements.

XIII. TRANSPORTATION

<table>
<thead>
<tr>
<th>Mode</th>
<th>UN Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>UN1866</td>
<td>Resin Solution, 3, III</td>
</tr>
<tr>
<td>IATA</td>
<td>UN1866</td>
<td>Resin Solution, 3, III</td>
</tr>
<tr>
<td>IMDG</td>
<td>UN1866</td>
<td>Resin Solution, 3, III, Marine Pollutant</td>
</tr>
</tbody>
</table>

XIV. REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>Country</th>
<th>Regulatory List</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>TSCA</td>
</tr>
</tbody>
</table>

EPA SARA Title III Section 312 (40 CFR 370) Hazardous Classification: Acute/Chronic Health Hazard.

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above ‘de minimus’ level:

- Lead compounds; Ethylbenzene; Xylene, Mixed Isomers; Methyl Isobutyl Ketone

US. California “Safe Drinking Water and Toxic Enforcement Act” (Proposition 65): This product contains small traces of the following chemicals that are known to the State of California to cause cancer and/or reproductive toxicity and other harm:

<table>
<thead>
<tr>
<th>Component</th>
<th>Regulation</th>
<th>Concentration</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylbenzene</td>
<td>ACGIH</td>
<td>&lt;0.15%</td>
<td>Carcinogenic</td>
</tr>
<tr>
<td>Toluene</td>
<td>ACGIH</td>
<td>Trace</td>
<td>Developmental Harm</td>
</tr>
<tr>
<td>Benzene</td>
<td>ACGIH</td>
<td>Trace</td>
<td>Carcinogenic, Developmental Harm</td>
</tr>
<tr>
<td>Cadmium and Cadmium Compounds</td>
<td>ACGIH</td>
<td>Trace</td>
<td>Carcinogenic, Reproductive Harm</td>
</tr>
<tr>
<td>Lead and Lead Compounds</td>
<td>ACGIH</td>
<td>Trace</td>
<td>Carcinogenic</td>
</tr>
<tr>
<td>Phenylglycidyl ether*</td>
<td>ACGIH</td>
<td>Trace</td>
<td>Carcinogenic</td>
</tr>
<tr>
<td>Epichlorohydrin*</td>
<td>ACGIH</td>
<td>Trace</td>
<td>Carcinogenic</td>
</tr>
</tbody>
</table>

* May be absorbed through skin.

XV. OTHER INFORMATION

HMIS RATING

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

N/E – Not Established

This Material Safety Data Sheet (MSDS) 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 MSDS. This MSDS 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.

© Copyright 2013 Simpson Strong-Tie Company Inc.
I. PRODUCT AND COMPANY IDENTIFICATION

Company: Simpson Strong-Tie Company, Inc.
Address: 5956 W. Las Positas Blvd.
Pleasanton, CA 94588

Product Name: B Component FX-408
Product Description: Zinc-Rich Epoxy Primer
Emergency Contact No.: Chemtrec: 1-800-424-9300 (US/CANADA)
1-703-527-3887 (International)
Date Prepared or Revised: September 2013
Supersedes: May 2013
For most current MSDS, please visit our website at www.strongtie.com/msds

II. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Names</th>
<th>CAS Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyamide Resin</td>
<td>68410-23-1</td>
</tr>
<tr>
<td>Xylene, Mixed Isomers</td>
<td>1330-20-7</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>100-41-4</td>
</tr>
<tr>
<td>Methyl Isobutyl Ketone</td>
<td>108-10-1</td>
</tr>
</tbody>
</table>

III. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW
Flammable
Severe irritation to eyes and skin.
May cause skin sensitization.
Components of the product may affect the nervous system.

POTENTIAL HEALTH EFFECTS

ACUTE
Eye Contact: Severe irritation, swelling, tearing, redness or cornea damage. May cause burns and tissue damage.
Skin Contact: Severe irritation. May cause burns and tissue damage. May cause skin sensitization evidenced by rashes and hives.
Inhalation: Moderate irritation to the nose and respiratory tract.
Ingestion: May cause irritation to the gastrointestinal tract. May cause headache nausea.
Systemic Effects: Lungs, eyes, and skin.

IV. FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of cool water for at least 15 minutes while holding the eyes open. If redness, burning, blurred vision, or swelling persists, CONSULT A PHYSICIAN.

Skin Contact: Remove product and immediately wash affected area with soap and water. Do not apply greases or ointments. Remove contaminated clothing. Wash clothing with soap and water before reuse. If redness, burning, or swelling persists, CONSULT A PHYSICIAN.

Ingestion: DO NOT INDUCE VOMITING. Never administer anything by mouth to an unconscious person. Rinse out mouth with water, then drink sips of water to remove taste from mouth. CONSULT A PHYSICIAN if vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Inhalation: Remove patient to fresh air. If patient continues to experience difficulty breathing, CONSULT A PHYSICIAN.

V. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Water spray, fog or foam, carbon dioxide, dry chemical, limestone powder.
ZINC-RICH EPOXY PRIMER FX-408  
MATERIAL SAFETY DATA SHEET

Fire And Explosion Hazard:  
Irritating and toxic fumes may be produced at high temperature. In a fire, may produce carbon monoxide, toxic nitrogen oxide, ammonia, and carbon dioxide. Use of water may result in the formation of very toxic aqueous solution. Do not allow run-off from fire fighting to enter drains or water courses.

Fire Fighting Equipment and Procedures:  
Wear full protective clothing and self-contained breathing apparatus for fire fighting. Isolate fuel supply from fire. Clear fire area of all non-emergency personnel.

VI. ACCIDENTAL RELEASE MEASURES

Personal Precautions:  
Use cautious judgment when cleaning up spill. Shut off leaks, if possible without personal risk. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.

Environmental Precautions:  
Construct a dike to prevent spreading. Keep out of sewers, storm drains, surface waters, and soils.

Clean-up Methods:  
Small spills: Soak up with absorbent material such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal.

Additional Information:  
Notify authorities if any exposures to the general public or environment occur or are likely to occur. Dispose in accordance with federal, state, and local regulations.

VII. STORAGE AND HANDLING

Storage:  
Keep away from: acids, oxidizers, heat, or flames. Keep in cool, dry, well-ventilated area in closed containers. Protect containers from physical damage.

Handling:  
To prevent skin and eye contact under the foreseeable conditions of use, wear appropriate protective clothing and safety eyewear. When handling, do not eat, drink, or smoke. Wash thoroughly after handling. Avoid breathing fumes. Handle in a well ventilated work area.

VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

Protective Measure:  
Wear appropriate personal protective equipment.

Eye Protection:  
Avoid contact with eyes. 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 chemical-resistant gloves and other clothing as required to minimize contact.

Respirator Protection:  
Not required for properly ventilated areas.

Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Names</th>
<th>ACGIH (TLV)</th>
<th>OSHA (PEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyamide Resin</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>Xylene, Mixed Isomers</td>
<td>20 ppm</td>
<td>100 ppm</td>
</tr>
<tr>
<td>Ethylbenzene</td>
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<td>100 ppm</td>
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<tr>
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<td>100 ppm</td>
<td>150 ppm</td>
</tr>
</tbody>
</table>

IX. PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>Form:</th>
<th>Liquid</th>
<th>Freezing Point:</th>
<th>N/E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>Tan</td>
<td>Vapor Pressure:</td>
<td>N/E</td>
</tr>
<tr>
<td>Odor:</td>
<td>Ammonia</td>
<td>Flash Point:</td>
<td>80°F (26°C)</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>N/E</td>
<td>Specific Gravity:</td>
<td>0.9</td>
</tr>
<tr>
<td>Solubility In Water:</td>
<td>Slight</td>
<td>VOC:</td>
<td>350 g/L (A + B)</td>
</tr>
</tbody>
</table>

X. REACTIVITY DATA

Stability:  
Stable under normal storage conditions.

Conditions To Avoid:  
Incompatible chemicals, high heat, and open flame.

Materials To Avoid:  
Oxidizing agents and acids.
Hazardous Decomposition: Combustion may produce carbon monoxide, carbon dioxide, and nitrogen oxide, and other organic substances.

Hazardous Polymerization: Will not occur.

XII. TOXICOLOGICAL PROPERTIES

Acute Oral (LD50, Rat): N/E
Acute Dermal (LD50, Rabbit): N/E
Acute Inhalation (LC50, Rat): N/E
Chronic Health Hazard: Repeated or prolonged exposure may cause allergic reaction and/or limited sensitization.

XII. DISPOSAL CONSIDERATIONS

Waste From Residues / Unused Products: Dispose of container and unused contents in accordance with federal, state, and local requirements.

XIII. TRANSPORTATION

DOT: UN1263, PAINT RELATED MATERIAL, 3, III
IATA: UN1263, PAINT RELATED MATERIAL, 3, III
IMDG: UN1263, PAINT RELATED MATERIAL, 3, III, Marine Pollutant

XIV. REGULATORY INFORMATION

<table>
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EPA SARA Title III Section 312 (40 CFR 370) Hazardous Classification:
Acute/Chronic Health Hazard.
EPA SARA Title III Section 313 (40 CFR 372) Component(s) above ‘de minimus’ level:
Ethyl benzene; Xylene, Mixed Isomers; Methyl Isobutyl Ketone

US. California “Safe Drinking Water and Toxic Enforcement Act” (Proposition 65): This product contains small traces of the following chemicals that are known to the State of California to cause cancer and/or reproductive toxicity and other harm:

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<th>Concentration</th>
<th>Remarks</th>
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<td>Ethyl Benzene</td>
<td>ACGIH</td>
<td>&lt;0.15%</td>
<td>Carcinogenic</td>
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<tr>
<td>Toluene</td>
<td>ACGIH</td>
<td>Trace</td>
<td>Developmental Harm</td>
</tr>
<tr>
<td>Benzene</td>
<td>ACGIH</td>
<td>Trace</td>
<td>Carcinogenic, Developmental Harm</td>
</tr>
</tbody>
</table>

XV. OTHER INFORMATION

HMIS RATING

<table>
<thead>
<tr>
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<th>Flammability</th>
<th>Physical Hazard</th>
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</thead>
<tbody>
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<td>0</td>
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