Safety Data Sheet

Siplast Zonocel & ZIC Lightweight Insulating Concrete

Date Prepared: 08/11/2015
Supersedes: 05/24/2014

Section 1  Product Description

Product Name: Siplast Zonocel & ZIC Lightweight Insulating Concrete
Synonyms: ZCA
General Use: To provide a lightweight aggregate that when mixed with Portland cement provides a lightweight insulating concrete for new or replacement roof deck construction.
Product Description: A processed lightweight aggregate blended with performance enhancing admixtures.
Supplier: Siplast, Inc.
1111 Highway 67 South
Arkadelphia, AR 71923

Chemical Information: (800) 922-8800
Emergency Number: (800) 424-9300

Section 2  Hazards Identification

Classification of the product in accordance with paragraph (d) of §1910.1200:

Signal Word: Warning

GHS Classification:
Skin Corrosion/Irritation, Category 3
Serious Eye Damage/Eye Irritation, Category 2B
Specific Target Organ Toxicity: Single Exposure, Category 3
Specific Target Organ Toxicity: Repeat Exposure, Category 2

Hazard Statements:
Causes mild skin irritation.
Causes eye irritation.
May cause respiratory irritation.

Precautionary Statements:
Prevention:
Keep product sealed in original packaging. Store in a dry, well-ventilated place. Wash thoroughly after handling.
Wear protective gloves, clothing, and eye and face protection. Contaminated work clothing must not be allowed out of the workplace.
Obtain special instructions before use. Do not handle until all instructions have been read and understood.
Do not breathe dust, fumes, gases, mists, vapors, or sprays.
Use only outdoors or in a well-ventilated area. In case of inadequate ventilation wear respiratory protection.
Dispose of contents/container in accordance with local/regional/international regulations.

Response:
In case of inhalation, remove to well-ventilated place. If breathing difficulty occurs, administer oxygen. Seek medical help if coughing and other medical symptoms do not subside.
In case of eye contact, immediately flush eyes with copious amounts of water. Continue flushing for 15 minutes including under the lids to remove all particles. Call a physician immediately if irritation persists.
In case of skin contact, wash skin with pH-neutral soap and water. Apply moisture renewing lotions to heal dry, irritated skin. Seek medical attention in all cases of severe irritation or burns.
In case of ingestion, do NOT induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.
Section 3  Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Common Name</th>
<th>CAS #:</th>
<th>Weight %:*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exfoliated vermiculite</td>
<td>Exfoliated vermiculite</td>
<td>1318-00-9</td>
<td>&lt;100%</td>
</tr>
<tr>
<td>Crystalline silica</td>
<td>Quartz</td>
<td>14808-60-7</td>
<td>&lt;0.01%</td>
</tr>
<tr>
<td>Proprietary admixture blend</td>
<td>Proprietary admixture blend</td>
<td>Varies</td>
<td>&lt;1%</td>
</tr>
</tbody>
</table>

*Proprietary admixture blend and weight percentages are claimed as trade secrets of The Strong Company, Inc.

Section 4  First-Aid Measures

**Inhalation:** Remove to well-ventilated place. If breathing difficulty occurs, administer oxygen. Seek medical help if coughing and other medical symptoms do not subside.

**Eye Contact:** Immediately flush eyes with copious amounts of water. Continue flushing for 15 minutes including under the lids to remove all particles. Call a physician immediately if irritation persists.

**Skin Contact:** Wash skin with pH-neutral soap and water. Apply moisture renewing lotions to heal dry, irritated skin. Seek medical attention in all cases of severe irritation or burns.

**Ingestion:** Do NOT induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.

Section 5  Fire-Fighting Measures

**General Hazards:** Product is not hazardous during normal fire-fighting procedures and is not combustible.

**Extinguishing Media:** Carbon dioxide, water, dry chemical, or foam.

**Fire-Fighting Protection:** No special protection required.

**Fire and/or Explosion Hazards:** No fire or explosion hazards.

**Hazardous Combustion Products:** No hazardous combustion products.

Section 6  Accidental Release Measures

**Steps to Take in Case Material is Released or Spilled:** Product is not considered hazardous according to RCRA (40 CFR Part 261). Follow personal protective equipment recommendations found in Section 8 of this SDS at a minimum. Avoid creating dust and use adequate ventilation and/or dust collection during clean-up. Shovel or vacuum product into a sealed container pending a waste disposal evaluation. Do not discharge into lakes, ponds, streams, or waterways.

Section 7  Handling and Storage

**Handling:** Avoid creating and breathing dust. At a minimum, follow personal protective equipment recommendations found in Section 8 of this SDS.

**Storage:** Store product in a dry location. Keep packaging sealed until use.

Section 8  Exposure Controls/Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Total Dust</th>
<th>Respirable Fraction</th>
<th>TWA:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exfoliated vermiculite</td>
<td>15 mg/m³</td>
<td>5 mg/m³</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Crystalline silica</td>
<td>0.29 mg/m³</td>
<td>0.10 mg/m³</td>
<td>0.05 mg/m³</td>
</tr>
<tr>
<td>Proprietary admixture blend</td>
<td>15 mg/m³</td>
<td>5 mg/m³</td>
<td>10 mg/m³</td>
</tr>
</tbody>
</table>

**Control Parameters**

**Engineering Measures:** Use local exhaust ventilation or other engineering controls to reduce dust concentrations below overexposure levels. Refer to ACGIH publication “Industrial Ventilation” or similar publications for design of ventilation systems.

**Personal Protective Equipment (PPE)**

**Respiratory Protection:** Respirators are recommended during normal operation. When concentrations exceed PEL or TLV limits, respirator use is required.

**Respirator Type(s):** N95 filtering facepiece or P95 half facepiece respirators are adequate for use during normal operation.

**Eye Protection:** Wear tight fitting safety goggles to prevent contact with the eyes.

**Skin Protection:** Wear impervious gloves, closed-toe shoes or boots, and protective clothing to prevent contact with the skin.

**Glove Type(s):** Wear impervious gloves
Section 9  
**Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula:</td>
<td>See Section 3</td>
</tr>
<tr>
<td>Appearance:</td>
<td>Tan particles or dust</td>
</tr>
<tr>
<td>Odor:</td>
<td>Odorless</td>
</tr>
<tr>
<td>Lower Flammability Limit:</td>
<td>Not combustible</td>
</tr>
<tr>
<td>pH:</td>
<td>8 – 10 (10% slurry in water)</td>
</tr>
<tr>
<td>Melting Point:</td>
<td>2426°F</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>N/A</td>
</tr>
<tr>
<td>Specific Gravity:</td>
<td>2.6</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>N/A (solid)</td>
</tr>
<tr>
<td>Evaporation Rate (BuAc = 1):</td>
<td>N/A (solid)</td>
</tr>
<tr>
<td>Solubility in Water:</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>N/A (solid)</td>
</tr>
<tr>
<td>Volatile Organic Compounds:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Section 10  
**Stability and Reactivity**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity:</td>
<td>Not reactive under normal conditions.</td>
</tr>
<tr>
<td>Stability:</td>
<td>Stable under normal conditions.</td>
</tr>
<tr>
<td>Conditions to Avoid:</td>
<td>Unintentional contact with strong acids or reducing agents.</td>
</tr>
<tr>
<td>Incompatible Materials:</td>
<td>Product is incompatible with hydrofluoric acid, strong acids, and reducing agents.</td>
</tr>
<tr>
<td>Hazardous Decomposition Products:</td>
<td>None known.</td>
</tr>
<tr>
<td>Hazardous Polymerization:</td>
<td>Will not occur.</td>
</tr>
</tbody>
</table>

Section 11  
**Toxicological Information**

<table>
<thead>
<tr>
<th>Route(s) of Entry</th>
<th>Inhalation, eye contact, skin contact, ingestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Organs:</td>
<td>Acute: Eyes, Respiratory System, Skin, Stomach</td>
</tr>
<tr>
<td></td>
<td>Chronic: Respiratory System, Immune System, Kidneys</td>
</tr>
<tr>
<td>Acute Symptoms:</td>
<td>Inhalation of the product can irritate the nose and respiratory tract causing inflammation, sneezing, runny nose, and/or coughing. Contact with moist tissue areas such as the eyes and nose can cause mild irritation. Skin contact can cause dryness and aggravate existing dermatitis in sensitive individuals. Ingestion of small amounts is not known to be harmful but may cause nausea.</td>
</tr>
<tr>
<td>Delayed Symptoms:</td>
<td>None known.</td>
</tr>
<tr>
<td>Chronic Symptoms:</td>
<td>Crystalline silica is listed by the IARC as a known carcinogen and causes the chronic lung disease known as silicosis. Silicosis is known to increase the risk of contracting tuberculosis. Crystalline silica has also been shown to lead to autoimmune disorders and renal disorders.</td>
</tr>
</tbody>
</table>

**Acute Toxicity**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #:</th>
<th>Oral LD50:</th>
<th>Dermal LD50:</th>
<th>Inhalation LC50:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exfoliated vermiculite</td>
<td>1318-00-9</td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
<tr>
<td>Crystalline silica</td>
<td>14808-60-7</td>
<td>500 mg/kg (rat)</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
<tr>
<td>Proprietary admixture blend</td>
<td>Varies</td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

**Carcinogenicity**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #:</th>
<th>IARC:</th>
<th>NTP:</th>
<th>OSHA:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exfoliated vermiculite</td>
<td>1318-00-9</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Crystalline silica</td>
<td>14808-60-7</td>
<td>Listed, Group 1</td>
<td>Listed, Known</td>
<td>Not listed</td>
</tr>
<tr>
<td>Proprietary admixture blend</td>
<td>Varies</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>
Section 12  Ecological Information

Overview:  Product is not expected to present an ecological hazard.
Mobility:  Product is a solid and is expected to have low to zero mobility in soil.
Persistence:  Product is expected to persist in the environment for an extensive period of time.
Degradability:  Product is not biodegrade.
Other Adverse Effects:  None known

Section 13  Disposal Considerations

Overview:  Not considered a hazardous waste under RCRA 40 CFR Part 261.
Disposal Methods:  Dispose of in accordance with local, state, and federal regulations.  Always contact a permitted waste disposer to assure compliance.  Refer to Section 8 to minimize exposure.
Waste Disposal Code(s):  N/A

Section 14  Transport Information

Overview:  Not considered a hazardous substance under U.S. DOT regulations.
UN No.:  N/A  Hazard Class:  N/A
UN Shipping Name:  N/A  Packing Group No.:  N/A

Section 15  Regulatory Information

OSHA HCS:  The components of this product are considered hazardous chemicals under this regulation and should be included in an employer’s Hazard Communication Program.
TSCA Status:  All non-proprietary components in this product are on the TSCA Inventory.
FHSA:  Product is not subject to statutes promulgated under the act.

Reporting Requirements:  EPCRA (SARA Title III)
Chemical Name:  Exfoliated vermiculite  § 302:  No  § 304:  No  § 311:  Yes, 10,000 lb Yes, 10,000 lb
Crystalline silica  No  No  Yes, 10,000 lb Yes, 10,000 lb
Proprietary admixture blend  No  No  Yes, 10,000 lb Yes, 10,000 lb

California Prop. 65:  A component of this product, crystalline silica, is a substance known to the State of California as a carcinogen.  This product may also contain trace amounts of heavy metals or organic compounds known to the State of California to cause cancer, birth defects, or other reproductive toxins.

Section 16  Other Information

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to The Strong Company, Inc. that we believe to be accurate.  The Strong Company, Inc. makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in this (Material) Safety Data Sheet.  Users have the responsibility to comply with all health and safety laws, as well as environmental regulations when using this product, and should determine the suitability of the product for its intended use.

Glossary

ACGIH  American Conference of Governmental Industrial Hygienists
CAA  Clean Air Act
CAS  Chemical Abstract Service Number
CERCLA  Comprehensive Environmental Response, Compensation, and Liability Act
CFR  Code of Federal Regulations
DOT  U.S. Department of Transportation
EPCRA  Emergency Planning and Community Right-to-Know Act
FHSA  Federal Hazardous Substances Act
HCS  Hazard Communication Standard
IARC  International Agency for Research on Cancer
LD(C)50  Median Lethal Dose (Concentration)
OSHA  Occupational Safety and Health Administration
PEL  Permissible Exposure Limit
N/A  Not Available or Not Applicable
NTP  National Toxicology Program
RCRA  Resource Conservation and Recovery Act
SARA  Superfund Amendments and Reauthorization Act
TLV  Threshold Limit Value
TSCA  Toxic Substances Control Act
TWA  8-Hour Time Weighted Average