Section 1 – Chemical Product / Company Information

Product Name: CAFCO® HEAT-SHIELD®
Product Use/Class: Spray-Applied Fire Resistive Materials (SFRM)
Manufacturer: United States Mineral Products Company
dba Isolatek International
41 Furnace Street
Stanhope, NJ 07874 USA
(973)-347-1200

Effective Date: October 6, 2015
Preparer: R&D Department

In Case of Emergency Call: CHEMTREC
800.424.9300 (USA) +1 703.527.3887 (Int’l)

Supersedes: December 15, 2014

Section 2 – Hazards Identification

GHS Classification:
Hazard Class | Hazard Category | Route of Exposure
Skin Irritation | 2 | Skin
Skin Sensitizer | 1 | Skin
Eye Irritation | 2B | Eye
Inhalation Toxicity | 4 | Nose/Mouth

Global Harmonization Labeling and Classification:

Signal word: Warning

Hazard Symbol(s): GHS07

Overview: This product is not expected to produce any unusual hazards during normal use. Exposure to high dust levels may irritate the skin, eyes, nose, throat, or upper respiratory tract. As product may contain trace amount of crystalline silica, prolonged exposure to respirable crystalline silica may cause cancer.

Primary Route(s) of Entry: Skin Contact, Skin Absorption, Inhalation, Ingestion, Eye Contact

Medical Conditions Prone to Aggravation by Exposure: Sensitive skin; respiratory conditions

<table>
<thead>
<tr>
<th>Hazard Statements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>H303 May be harmful if swallowed.</td>
<td></td>
</tr>
<tr>
<td>H313 May be harmful in contact with skin.</td>
<td></td>
</tr>
<tr>
<td>H320 Causes eye irritation.</td>
<td></td>
</tr>
<tr>
<td>H335 May cause respiratory irritation.</td>
<td></td>
</tr>
<tr>
<td>H373 May cause damage to organs through prolonged or repeated exposure.</td>
<td></td>
</tr>
</tbody>
</table>
Precautionary Statements:

- P202: Do not handle until safety precautions have been read and understood.
- P261: Avoid breathing dust/ fumes/ gas/ mist/ vapours/ spray.
- P271: Use only outdoors or in a well ventilated area.
- P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.
- P284: Wear respiratory protection.
- P402+P403: Store in a dry place. Store in a well ventilated place.
- EUH401: To avoid risks to human health and the environment, comply with the instructions for use.

Response:

- P301+P330+P312: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/ physician if you feel unwell.
- P302+P352+P332+P313+P363: IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.
- P304+P340+P342+P313: IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Get medical advice/ attention.
- P305+P351+P338+P337+P313: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

Storage:

- P402+P403+P232: Store in a dry place. Store in a well ventilated place. Protect from moisture.

Disposal:

- P501: Dispose of contents/container in accordance with local/regional/national/international regulations (see section 13).

Section 3 – Composition / Information On Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Wt. % (Max.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slag Wool</td>
<td>65997-17-3</td>
<td>60 - 95</td>
</tr>
<tr>
<td>Portland Cement</td>
<td>65997-15-1</td>
<td>1 – 10</td>
</tr>
<tr>
<td>Crystalline Silica</td>
<td>14808-60-7</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

Section 4 – First Aid Measures

General – If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

First Aid – Skin Contact: Wash with soap and water. Remove contaminated clothing. If persistent irritation occurs, seek medical attention.

First Aid – Eye Contact: Flush eyes thoroughly with copious amounts of water. Seek medical attention if irritation persists.

First Aid – Inhalation: Remove to fresh air. Seek medical attention if irritation persists.

First Aid – Ingestion: Do not induce vomiting. Rinse mouth out with water. Seek medical attention if irritation persists.

Protection of first aid responders: Wear proper personal protective clothing and equipment.
Section 5 – Fire Fighting Measures

Extinguishing Media: Not Applicable. Product will not burn.

Unusual Fire & Explosion Hazards: None.

Special Firefighting Procedures: None.

Section 6 – Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Sweep up material and place in disposal containers. Avoid inhalation of dust. Dispose of material in accordance with all federal, state, and local regulations. Use personal protective equipment as necessary.

Section 7 – Handling And Storage

Precautions for safe handling: Avoid inhalation of dust. Avoid skin & eye contact. Wear skin and eye protection during use. Use normal personal hygiene to remove materials, contaminants; wash clothing separately before re-use.

Conditions for safe storage: Keep dry. Keep containers closed when not in use. Store in a cool, dry place with adequate ventilation.

Section 8 – Exposure Controls / Personal Protection

Permissible Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>NIOSH</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slag Wool</td>
<td>65997-17-3</td>
<td>15 mg/m³ TWA (Total Dust)</td>
<td>1 f/cc TWA</td>
<td>5 mg/m³ TWA (Total Dust)</td>
<td>N/E</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 mg/m³ (Respirable Fraction)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portland Cement</td>
<td>65997-15-1</td>
<td>15 mg/m³ TWA (Total Dust)</td>
<td>10 mg/m³ TWA (Chemical is a particulate matter containing no asbestos and &lt;1% crystalline silica.)</td>
<td>10 mg/m³ TWA (Total Dust)</td>
<td>N/E</td>
</tr>
<tr>
<td>Crystalline Silica</td>
<td>14808-60-7</td>
<td>30 mg/m³ %SiO₂ +2 (Total Dust)</td>
<td>0.025 mg/m³ TWA (Respirable Fraction)</td>
<td>0.05 mg/m³ TWA (Total Dust)</td>
<td>0.010 mg/m³ TWA (Total Dust)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>250 mppcf %SiO₂ +5 (Respirable)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg/m³ %SiO₂ +2 (Respirable Fraction)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Engineering Controls: Exhaust fans may be necessary when mixing in enclosed areas.

Respiratory Protection: Wear a proper disposable dust mask to prevent exposure above the limits specified.

Skin Protection: Wear gloves and use hand creams to prevent dry skin.

Eye Protection: Wear proper eye protection; at minimum, safety glasses with side shields.

Work / Hygienic Practices: Use bag opening procedures which minimize dust release. Use anti-slip surfaces on working platforms – material is slippery when wet.
Section 9 – Physical And Chemical Properties

- **Appearance:** White to grey
- **Odor:** Low odor
- **pH:** 10-13
- **Melting Point (°F):** >1800°F (981°C)
- **Boiling Point (°F):** Not Applicable
- **Flash Point:** Not Applicable
- **Evaporation Rate:** Not Applicable
- **Flammability:** Not Applicable
- **Lower Explosive Limit:** Not Applicable
- **Upper Explosive Limit:** Not Applicable
- **Vapor Pressure (mm Hg):** Not Applicable
- **Bulk Density (kg/mm3):** Not Applicable
- **Solubility in Water:** Low
- **Specific Gravity (H₂O=1):** Not Applicable
- **Physical State:** Solid
- **% Volatiles:** Not Applicable
- **Viscosity:** Not Applicable
- **Auto ignition temperature:** Not Applicable

Section 10 – Stability And Reactivity

- **Chemical Stability (under normal conditions):** Stable
- **Possibility of Hazardous Reactions:** No
- **Conditions to Avoid:** Contact with strong acids
- **Incompatibility:** Strong Acids
- **Hazardous Decomposition Products:** Stable under normal conditions. Trace amounts of carbon and nitrogen oxide compounds may release under fire.
- **Hazardous Polymerization:** No polymerization will occur.

Section 11 – Toxicological Information

<table>
<thead>
<tr>
<th>Carcinogenicity</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
<th>LD50/LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Name</td>
<td>Group 1</td>
<td>Group 2</td>
<td>Group 3</td>
<td>Known</td>
</tr>
<tr>
<td>Slag Wool</td>
<td>No</td>
<td>No</td>
<td>Yes (not classifiable as to human carcinogenicity)</td>
<td>No</td>
</tr>
<tr>
<td>Portland Cement</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Crystalline Silica</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Section 12 – Ecological Information

Ecological Information: No data available.

Section 13 – Disposal Considerations

Disposal Information: For waste disposal purposes, this product is not known to be designated as hazardous by current provisions under RCRA. Dispose of in accordance with federal, state and local regulations.
Section 14 – Transportation Information

Proper Shipping Name: Not Applicable
Technical Name: Not Applicable
Hazard Class: Non-Hazardous
UN/NA Number: Not Applicable
Additional Notes: None

Section 15 – Regulatory Information

<table>
<thead>
<tr>
<th>U.S. Federal Regulations SARA 311/312</th>
<th>Immediate Health (Acute)</th>
<th>Delayed Health (Chronic)</th>
<th>FIRE</th>
<th>PRESSURE</th>
<th>REACTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>U.S. State Regulations</th>
<th>State Hazardous Substance List</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS Number</td>
<td>CA</td>
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<tr>
<td>65997-17-3</td>
<td>No</td>
</tr>
<tr>
<td>65997-15-1</td>
<td>No</td>
</tr>
<tr>
<td>14808-60-7</td>
<td>Yes</td>
</tr>
</tbody>
</table>

International Regulations as Follows:

Chemical Inventory Status

All chemicals in this product are listed or exempt from listing in the following countries:

<table>
<thead>
<tr>
<th>U.S.</th>
<th>Canada</th>
<th>Europe</th>
<th>Australia</th>
<th>Korea</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>DSL</td>
<td>EINECS</td>
<td>AICS</td>
<td>ECL</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

CANADIAN WHIMIS

This SDS has been prepared in compliance with Controlled Product Regulations and contains all information required.

CANADIAN WHMIS CLASS: D2A

HMIS Rating

- HEALTH: 1
- FLAMMABILITY: 0
- REACTIVITY: 0
- PERSONAL PROTECTION: 6
NFPA:

Prepared By: Research Department, U.S.A.
Telephone: (973) 347-1200

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