Safety Data Sheet
In accordance with OSHA Hazard Communication Standard, 29 Code (CFR) 1910.1200, Safety Data Sheet

SECTION 1: IDENTIFICATION

1.1. Product Identifier
Product Series Name: Logic
Product Form: Mixture. Glazed Ceramic Tile

1.2. Intended Use of the Product
Use of the substance/mixture: Wall covering.

1.3. Name, Address, and Telephone of the Responsible Party
Company Information
Emser Tile & Natural Stone
8431 Santa Monica Blvd
Los Angeles, CA 90069
Phone #: 323.650.2000
Website: www.emser.com

1.4. Emergency Telephone Number
Emergency Number: 323.650.2000

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture
GHS-US classification
Carcinogenicity Category 1A (H350)
Respiratory Tract Irritation Category 3 (H335)
Organ Toxicity Category 1A (H372)

2.2. Label Elements
GHS-US Labeling
For Crystalline Silica: Carcinogenicity (H372) Respiratory Irritation (H335)

2.3. Other Hazards
In its solid form, tile is not hazardous. However, dust released from finishing processes such as cutting, grinding, or polishing may pose a health hazard when inhaled. Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Mixture
Name | Product Identifier | %
Crystalline Silica as Quartz | (CAS No) 14808-60-7 | 0-35
Clays | (CAS No) 1332-58-7 | 20-50
Nepheline Syenite | (CAS No) 37244-96-5 | 0-50
Feldspar | (CAS No) 68476-25-5 | 0-15
Biotite | (CAS No) 12001-26-2 | 0-5

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures
First-aid Measures General:
Handle with care, tile edges may be sharp when cut. No symptoms expected under normal conditions of use. If exposed or concerned, get medical advice and attention. If medical advice is needed, have SDS at hand.

First-aid Measures After Inhalation:
If negative symptoms from inhalation occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists. Repeated or prolonged inhalation of dust particles may cause effects on the lungs.

First-aid Measures After Skin Contact:
Gently wash with plenty of soap and water. Obtain medical attention if irritation develops or persists.

First-aid Measures After Eye Contact:
Remove contact lenses. Rinse cautiously with water for several minutes. Obtain medical attention if irritation persists.

First-aid Measures After Ingestion:
Not applicable to tiles in stable format. Rinse mouth and seek medical attention if swallowed. Do not induce vomiting.
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SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media
Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire. Tiles will not contribute to flame spread or generation of smoke. No special instructions related to this product in terms of extinguishing media.

5.2. Special Hazards Arising From the Substance or Mixture
Fire Hazard: Not flammable.
Explosion Hazard: Product is not explosive.
Reactivity: Hazardous reactions will not occur under normal conditions.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures
General Measures: Use wet cutting methods in a well ventilated space to reduce dust and mitigate against airborne particles. Use a damp mop during clean up, or vacuum instead of sweeping. Use a shovel to pick up cut pieces as they may be sharp.

6.2. For Non-emergency Responders and Personnel
Protective Equipment: None related to this product
Emergency Procedures: None related to this product

6.3. Environmental Precautions
Avoid unnecessary release of silica dust into the environment.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling
Precautions for Safe Handling: Do not handle until all safety precautions have been read and understood. Do not breathe in dust.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities
Technical Measures: Comply with applicable regulations.
Storage Conditions: Keep container closed when not in use. Store in dry, cool area. Store away from incompatible materials.
Incompatible Products: Acids, Muratic, Hydrochloric, Sulfamic Acid Crystals and the like

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters
For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL). For complete information regarding limits please contact the appropriate agency. The information provided herein is for general safety purposes only. Where special conditions exist, assistance from an industrial hygienist or qualified professional may be necessary.

Particulates not otherwise classified (PNOC) (RR-00072-6)

<table>
<thead>
<tr>
<th>USA ACGIH</th>
<th>ACGIHTWA (mg/m3)</th>
<th>3mg/M3 Respirable Fraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m3)</td>
<td>10mg/m3 Total Dust</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m3)</td>
<td>5mg/m3 Respirable Fraction</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m3)</td>
<td>15mg/m3 Total Dust</td>
</tr>
</tbody>
</table>

8.2. Exposure Controls
Appropriate Engineering Controls: Emergency eye wash station or equivalent should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all local regulations are observed.

Hand Protection: Wear protective gloves to protect against sharp edges. Use shovel to pick up sharp pieces.
Eye Protection: In case of dust production: protective goggles.
Skin and Body Protection: Wear suitable protective clothing to cover exposed skin.
Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory mask
Other Information: When working with material, do not eat or drink

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Stable solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Solid, varying sizes texture and color</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>None. No VOC’s.</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not Applicable &gt;2000 F</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Solubility</td>
<td>Not soluble in water</td>
</tr>
<tr>
<td>Volatility</td>
<td>0 g/L Volatile Organic Compounds</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.6-2.1</td>
</tr>
</tbody>
</table>

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hazardous reactions will not occur under normal conditions.
Chemical Stability: Stable under recommended handling and storage conditions (sec. 7).
Conditions to Avoid: Incompatible materials.
Incompatible Materials: Acids, Muriatic, Hydrochloric, Sulfamic Acid Crystals and the like (Sec. 7.2)
Hazardous Decomposition Products: None known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

<table>
<thead>
<tr>
<th>Toxicity (Single Exposure)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline Silica - Quartz (14808-60-7) IARC Group 1</td>
<td></td>
</tr>
<tr>
<td>LD50 Oral Rat</td>
<td>&gt; 22,500 mg/kg</td>
</tr>
<tr>
<td>LD50 Oral Mouse</td>
<td>&gt; 15,000 mg/kg</td>
</tr>
<tr>
<td>LC50 Carp</td>
<td>&gt;10,000 mg/l (per 72 hour)</td>
</tr>
</tbody>
</table>

Acute Toxicity: No effects from exposure to stable tile
Skin Corrosion/Irritation: No effects from exposure to stable tile
Serious Eye Damage/Irritation: No effects from exposure to stable tile
Respiratory or Skin Sensitization: No effects from exposure to stable tile
Germ Cell Mutagenicity: No effects from exposure to stable tile
Carcinogenicity: No effects from exposure to stable tile
Reproductive Toxicity: No effects from exposure to stable tile
Specific Target Organ Toxicity (Single Exposure): No effects from exposure to stable tile
Specific Target Organ Toxicity (Repeated Exposure): No effects from exposure to stable tile

<table>
<thead>
<tr>
<th>Toxicity (Repeated Exposure)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms/Injuries After Inhalation:</td>
<td>Prolonged inhalation of dust may cause respiratory irritation.</td>
</tr>
<tr>
<td>Symptoms/Injuries After Skin Contact:</td>
<td>Prolonged contact with large amounts of dust may cause mechanical irritation.</td>
</tr>
<tr>
<td>Symptoms/Injuries After Eye Contact:</td>
<td>Eye contact with dust may cause mechanical irritation.</td>
</tr>
<tr>
<td>Symptoms/Injuries After Ingestion:</td>
<td>Adverse effects not expected from this product.</td>
</tr>
</tbody>
</table>

Chronic Symptoms: Repeated or prolonged inhalation of dust particles may cause effects on the lungs. This may result in pneumoconiosis, silicosis, NPF, pulmonary tuberculosis, bronchitis, emphysema, auto immune disorders, chronic renal disease.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity
Avoid release to the environment. Non-hazardous Class III regulated materials.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations. Non-hazardous Class III regulated materials.

SECTION 14: TRANSPORT INFORMATION

14.1 Shipping Description
D.O.T. Shipping Name: Not applicable
Labels: None
Packaging References: None
SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

<table>
<thead>
<tr>
<th>Specular</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SARA Section 311/312 Hazard Classes</td>
<td>Delayed (chronic) health hazard</td>
</tr>
<tr>
<td>Crystalline Silica Quartz (14808-60-7)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
<tr>
<td>Aluminum oxide (1344-28-1)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
<tr>
<td>Subject to reporting requirements of United States SARA Section 313</td>
<td></td>
</tr>
<tr>
<td>SARA Section 313 - Emission Reporting</td>
<td>1.0 % (fibrous forms)</td>
</tr>
<tr>
<td>Niobium potassium oxide (NbKO3) (12030-85-2)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
<tr>
<td>Calcium titanium oxide (CaTiO3) (12049-50-2)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
</tbody>
</table>

15.2 US State Regulations

<table>
<thead>
<tr>
<th>Quartz (14808-60-7)</th>
<th>WARNING: This product contains chemicals known to the State of California to cause cancer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - California - Proposition 65 - Carcinogens List</td>
<td></td>
</tr>
<tr>
<td>U.S. - Massachusetts - Right To Know List</td>
<td></td>
</tr>
<tr>
<td>U.S. - New Jersey - Right to Know Hazardous Substance List</td>
<td></td>
</tr>
<tr>
<td>U.S. - Pennsylvania - RTK (Right to Know) List</td>
<td></td>
</tr>
<tr>
<td>Aluminum oxide (1344-28-1)</td>
<td></td>
</tr>
<tr>
<td>U.S. - Massachusetts - Right To Know List</td>
<td></td>
</tr>
<tr>
<td>U.S. - New Jersey - Right to Know Hazardous Substance List</td>
<td></td>
</tr>
<tr>
<td>U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List</td>
<td></td>
</tr>
<tr>
<td>U.S. - Pennsylvania - RTK (Right to Know) List</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date: 01/01/2017
Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)