SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

Product Identifier:
- Material Name: Brick
- Trade Name: Clay and/or Shale Brick; Face Brick; Pavers; Red Shale/Fireclay Chemical Resistant Brick
- Chemical Family: Predominately Aluminum Silicates
- Formula: Mixture

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against
- Intended Use: Building material used for structural support.

Details of the Supplier of the Safety Data Sheet

Redland Brick Inc.
15718 Clear Spring Road, P O Box 160
Williamsport, MD 21795

Product Support/ Technical Services Phone: 301-223-7700
Emergency Phone number: (24 hrs.): 301-223-7700
Contact E-Mail: info@redlandbrick.com

SECTION 2 - HAZARD(S) IDENTIFICATION

Appearance: Granular brick-shaped solid; comes in wide range of colors

Hazard Classification of the Substance or Mixture:
- Skin irritation: 2
- Carcinogenicity: 1A

Substance or Mixture:
- Eye irritation: 2A Specific target organ toxicity-Single exposure 3
- Skin sensitization: 1B Specific target organ toxicity-Repeated exposure 1

Signal Word: DANGER

Hazard Statement: Brick dust may contain crystalline silica, a chemical that has been determined by certain agencies to cause cancer. See Section 11 for more information on health hazards.

Pictograms:

Precautionary Statement: Limit inhalation of clay dust. Do not eat, drink, or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/ face protection. Use only outdoors or in well ventilated area.

Response: If exposed or concerned: Get medical advice/attention. If skin rash occurs: Get medical advice/attention. 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.

If brick dust is inhaled: Remove person to fresh air and keep comfortable for breathing. Call poison center/doctor if you feel unwell.

Storage: Not Applicable

Disposal: Dispose of unused or unwanted brick products in accordance with all local, regional, national and international regulations.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>CAS NO.</th>
<th>% WEIGHT</th>
<th>ADDITIONAL INFORMATION:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum Silicates</td>
<td>Various</td>
<td>75-85</td>
<td>The listed chemistries are provided for industrial hygiene and environmental purposes and are not intended to represent product specification. This information has been compiled from data believed to be reliable. Elements such as aluminum, arsenic, boron, barium, chromium, cobalt, copper, lead, nickel, molybdenum, tin, titanium, vanadium and zirconium may be present in trace amounts. Brick products as shipped to not present an exposure hazard.</td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>Varies</td>
<td></td>
</tr>
<tr>
<td>Iron Compounds</td>
<td>Various</td>
<td>0-5</td>
<td></td>
</tr>
<tr>
<td>Calcium Compounds</td>
<td>Various</td>
<td>0-12</td>
<td></td>
</tr>
<tr>
<td>Manganese Compounds</td>
<td>Various</td>
<td>0-3</td>
<td></td>
</tr>
<tr>
<td>Magnesium Compounds</td>
<td>Various</td>
<td>0-3</td>
<td></td>
</tr>
<tr>
<td>Zinc Compounds</td>
<td>1314-13-2</td>
<td>0-10</td>
<td></td>
</tr>
<tr>
<td>Iron Chromite</td>
<td>1308-31-2</td>
<td>0-3</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 4 - FIRST AID MEASURES

Eye Contact: Flush with running water. Obtain medical assistance if irritation continues.

Skin Contact: Wash with soap and water. If allergic reaction causes a rash that does not heal within a few days consult a physician. Treat abrasions as any other scrape or cut with disinfectants and bandages.
SECTION 4 - FIRST AID MEASURES

Ingestion: None (no known acute effects).
Inhalation: Remove from exposure to airborne particulates. Consult a physician if breathing does not return to normal.

Most Important Symptoms and Effects, Both Acute and Delayed
Symptoms and Effects: For information on potential signs and symptoms of exposure. See Section 2 - Hazards of Exposure: Excessive dust exposure may aggravate any existing respiratory disorders or diseases.
Medical Conditions: Excessive dust exposure may aggravate any existing respiratory disorders or diseases.
Aggravated by Exposure: Possible complications or allergies resulting in irritation to skin, eyes, and respiratory tract may occur from excessive exposure to dusts.

Recommendations for Immediate Medical Attention and Special Treatment Needed
Notes to Physician: Symptoms may not appear immediately.

SECTION 5 - FIRE-FIGHTING MEASURES

Extinguishing Media: Not Applicable
Special Hazards Arising from the Substance or Mixture
Hazardous Combustion Products: No Data Available
Fire/Explosion Hazards: Bricks as shipped do not pose a fire or explosion hazard.
Advice for Fire-Fighters: None

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions and Protective Equipment: Use personal protection recommended in Section 8
Emergency Procedures: Not Applicable
Methods and Materials for Containment and Cleaning Up: Not Applicable
Cleanup Procedure: Not Applicable

SECTION 7 - HANDLING AND STORAGE

Precautions for Safe Handling: Minimize dust generation and accumulation. Avoid breathing dust.
Conditions for Safe Storage, including any incompatibilities: Always stack and store bricks in a stable manner to avoid falling hazards.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Substance</th>
<th>OSHA PEL (mg/m³)</th>
<th>ACGIH TLV (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum Silicates</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Quartz</td>
<td>0.05</td>
<td>0.25</td>
</tr>
<tr>
<td>Chromium Compounds</td>
<td>not available</td>
<td>not available</td>
</tr>
</tbody>
</table>

Exposure Controls:
- Engineering Controls: Provide adequate ventilation to maintain exposures below the OSHA PEL and ACGIH TLV for quartz and other substances.
- Personal Protective Equipment: Refer to applicable national standards and regulations in the selection and use of personal protective equipment (PPE).
  - Feet: Use of steel toe shoes is recommended when handling brick.
  - Eyes and Face: Face shields should be used when sawing brick.
  - Skin: Use gloves and or protective clothing if abrasions or allergic reactions are experienced.
- Respiratory Protection: For airborne concentration exceeding the OSHA PEL or ACGIH TLV use a NIOSH and/or MSHA approved respirator.
- OTHER: Use of wet sawing methods is recommended anytime that bricks must be cut.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Granular Solid</td>
</tr>
<tr>
<td>Odor</td>
<td>Essentially odorless</td>
</tr>
<tr>
<td>Molecular Formula</td>
<td>Mixture</td>
</tr>
<tr>
<td>Solvent Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Negligible</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting/Freezing Point (°C)</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point (°C)</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition Coefficient (Method, pH, Endpoint, Value)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability</td>
<td></td>
</tr>
</tbody>
</table>

Flammability:
- Autoignition Temperature (Solid) (°C): No data available
- Flammability (Solids): No data available
- Flash Point (Liquid) (°C): No data available
SECTION 10 - STABILITY AND REACTIVITY

Reactivity: Brick as shipped are not reactive Chemical Stability: Stable under normal conditions of use
Possibility of Hazardous Reactions: No data available Incompatible Materials: No data available
Oxidizing Properties: No data available Hazardous Decomposition Products: No data available

SECTION 11 - TOXICOLOGICAL INFORMATION

Effects of Short Term Exposure:
Bricks as shipped do not present an inhalation, ingestion or contact hazard. However operations such as sawing and grinding may result in the following effects.

Eyes: May cause irritation by abrasion with dust chips.
Skin: Brick dust or chips may cause allergic reactions in hypersensitive individuals; may cause cuts and skin abrasions.
Inhalation: Brick dust or chips may cause congestion and irritation in nasal and respiratory passages
Ingestion: No known acute effects.

Effects of Long Term Exposure:
Excessive exposures to reparable particulates (dust) over an extended period of time may result in the development of pulmonary diseases such as silicosis.

Information on Toxicological Effects:
General Information: Toxicological properties of the formulation have not been investigated. The information in this section describes the potential hazards of crystalline silica. Brick dust may contain crystalline silica, a chemical that has been determined by certain agencies to cause cancer and other chemicals known to cause cancer, birth defects and other reproductive harm. Inhalation of brick dust above established or recommended exposure levels should be avoided by use of wet sawing or shaping and/or use of a NIOSH and/or MSHA approved respirator.

Carcinogen Status: The following carcinogenicity classifications for crystalline silica have been established by the following agencies:
OSHA: Not regulated as a carcinogen
NIOSH: Carcinogen, with no further categorization
IARC: Group 1 carcinogen in humans
NTP: Known carcinogen

SECTION 12 - ECOLOGICAL INFORMATION

There are no known environmental impacts.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Treatment Methods: Dispose of waste in accordance with all applicable laws and regulations. State specific and community specific provisions must be considered. It is recommended that waste minimization be practiced.

SECTION 14 - TRANSPORT INFORMATION

This material is not regulated for transportation as a hazardous material/dangerous good.

DOT: Bricks as shipped are not hazardous materials per DOT regulations.

SECTION 15 - REGULATORY INFORMATION

Safety, Health and Environmental Regulations/Legislation Specific for Substance or Mixture:

RCRA: Brick in its solid form is typically considered a non-hazardous waste for disposal, but local regulation may vary, therefore all waste must be disposed/recycled/reclaimed in accordance with federal, state, and local environmental control regulations. Water containing brick solids, such as from wet sawing operations, should also be disposed of in accordance with federal, state and local environmental regulation. Brick waste should not be used as a blasting agent.

EPCRA Section 311/312: Bricks as shipped are not a Section 311/312 reportable product.
EPCRA Section 313: Bricks as shipped are not subject to the Section 313, Toxic Chemical Release Inventory reporting requirements.
DOT: Bricks as shipped are not hazardous materials per DOT regulations.

SECTION 16 - OTHER INFORMATION

Redland Brick Inc. considers our product an "article" as defined in 29 CFR 1910.1200 (b)(6)(v) and 40 CFR 372.38. As an article, an SDS is not required and the product is exempt from all other requirements for the hazard communication standard. OSHA requires an SDS for brick because it is occasionally dry sawed. We recommend only wet sawing of brick.

Data Sources: The data contained in this SDS may have been gathered from confidential internal sources, raw material suppliers, or from the published literature.

Reasons for Revision: Converted MSDS to SDS. Prepared by: Redland Brick Inc.

This SDS was prepared with information believed accurate at the time of preparation and was prepared and provided in good faith. However, Redland Brick, Inc. assumes no responsibility as to the accuracy or suitability of such information and no warranty expressed or implied is made.