Ceramic (Clay) Roof Tile
Safety Data Sheet
Revision Date: 01/01/2015  Date of Issue: 01/01/2015  Supersedes Date: 01/01/2000  Version 1.0

SECTION 1: IDENTIFICATION

1.1 Product Identifier
   Product Name: Clay Roof Tile

1.2 Intended User of the Product
   Building Material

1.3 Name, Address, and Telephone Number of the Responsible Party
   Company
   MCA Clay Roof Tile
   1985 Sampson Ave
   Corona, CA 92879
   1-800-736-6221
   951-736-9590
   Fax: 951-736-6052
   Email: sales@mca-tile.com

1.4 Emergency Telephone Number
   1-800-736-6221

SECTION 2: HAZARD(S) IDENTIFICATION

2.1 Classification of the Substance or Mixture
   This product is an article as defined in the OSHA Hazard Communication Standard [29 CFR 1910.1200(c)] and, therefore, is exempt from regulatory requirements when handled as a manufactured item. This SDS contains additional health hazard information related to dust generation during construction.
   Classification (GHS-US)
   Eye Irritation 2B
   Respiratory Irritation STOT Single Exposure 3
   Respiratory Illness STOT Repeated Exposure 2
   Carcinogen 1A

2.2 Label Elements
   GHS-US Labelling Hazard Pictograms (GHS-US):
   - Warning
   - May cause eye irritation (H320)
   - May cause respiratory irritation (H335)
   - May cause cancer (H350)
   - May cause damage to respiratory system through prolonged or repeated exposure (H372)

   Precautionary Statements (GHS-US):
   - Do not handle until all safety precautions have been read and understood (P202)
   - Avoid breathing dust; in case of inadequate ventilation, wear respiratory protection (P264) (P284)
   - Cut/grind/chip product in a well-ventilated area or use a wet saw (P271)
   - Wear protective gloves, protective clothing, and eye protection (P280)
   - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing (P304) (P340)
   - IF IN EYES: Rinse cautiously with water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing until pain or irritation subsides. (P305) (P351) (P338)
   - If symptoms persist: Get medical advice/attention (P308) (P313)

2.3 Other Hazards
   Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.
2.4 Unknown Acute Toxicity (GHS-US)
No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Description of Product
Ceramic (clay) article.

3.2 Mixture
Substances and hazard classification based on dust composition.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Product Identifier (CAS No.)</th>
<th>% (w/w)</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum oxide</td>
<td>12141-46-7</td>
<td>75 – 80</td>
<td>• Respiratory Irritation,</td>
</tr>
<tr>
<td>silicate</td>
<td></td>
<td></td>
<td>STOT 3, H335</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Eye Irritation 2B, H320</td>
</tr>
<tr>
<td>Iron oxide</td>
<td>1309-37-1</td>
<td>5 – 6</td>
<td>• Not classified</td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>&lt; 11</td>
<td>• Carc. 1A, H350</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• STOT Respiratory 2, H372</td>
</tr>
<tr>
<td>Magnesium oxide</td>
<td>1309-48-4</td>
<td>1.5 – 2</td>
<td>• Not classified</td>
</tr>
<tr>
<td>Sodium monoxide</td>
<td>12401-86-4</td>
<td>2 – 3.5</td>
<td>• Not classified in this matrix product</td>
</tr>
</tbody>
</table>

Note: This product contains additional not classified substances at low concentrations that do not contribute to the hazards of this product.

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures
General: Never give anything by mouth to an unconscious person. Any person who is experiencing symptoms of injury or illness should be moved to a comfortable area with fresh air, and the label or SDS of this product reviewed.

Inhalation: If symptoms of dust exposure (respiratory irritation) occur, move the person to fresh air. Provide drinking water, if conscious, to flush mouth and irrigate upper respiratory tract. Seek medical attention for discomfort or if coughing or other symptoms do not subside.

Eye Contact: If injury is due to a projectile, seek immediate medical attention. If the person’s symptom is eye irritation due to dust exposure, careful flushing with clean water should continue for at least 15 minutes. If contact lenses are present, they should be removed after flushing. Flushing should continue until irritation subsides. Medical attention should be obtained if irritation persists.

Skin: Injuries to skin due to abrasion, laceration, or crushing should be treated by flushing with clean water, followed by first aid (application of disinfectant and bandage). If the injury is more extensive or irritation and pain persists, medical attention should be sought.

4.2 Most Important Symptoms and Effects—Both Acute and Delayed
General: The most important symptoms and effects from exposure to this product’s dust is respiratory irritation and respiratory system chronic illness if significant exposures occur repeatedly.

Inhalation: The immediate acute response to dust inhalation is respiratory system irritation. Upon repeated high levels of dust exposure, crystalline silica content of the dust may cause delayed or chronic respiratory illnesses, including silicosis and cancer.

Eye Contact: Exposures of the eyes to particles and dust may result in irritation, pain, redness, and blurred vision, which is usually temporary.

Skin Contact: Other than abrasion and irritation, skin contact does not cause delayed or chronic symptoms.

4.3 Indication of Immediate Medical Attention and Special Treatment
Any time symptoms of eye irritation or respiratory irritation persist, medical attention should be obtained.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media
Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire. Finished product is not combustible.
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5.2 Special Hazards Arising from the Substance or Mixture
Fire Hazard: Not combustible.
Explosion Hazard: Product is not explosive.
Reactivity: Hazardous reactions are not expected to occur under normal conditions.

5.3 Advice for Firefighters
Not applicable.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment, and Emergency Procedures
General Measures: Do not breathe dust. Do not get in eyes, on skin, or on clothing.
6.1.1. For Non-Emergency Personnel
Protective Equipment: Use appropriate personal protective equipment (PPE).
6.1.2. For Emergency Personnel
Protective Equipment: Equip clean-up crew with proper protection.
Emergency Procedures: Ventilate area if dust is generated.

6.2 Environmental Precautions
Reuse product as appropriate to avoid disposal.

6.3 Methods and Material for Containment and Clean-Up
Containment: Contain and collect as any solid. Avoid actions that cause dust to become airborne. Do not breathe dust, and do not allow large quantities of dust to contact skin.

6.4 Reference to Other Sections
See Section 8. Exposure Controls and Personal Protection. For further information, refer to Section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling
Additional Hazards when Processed: Cutting, crushing, or grinding crystalline silica-bearing materials will release respirable crystalline silica. Use all appropriate measures of dust control or suppression and Personal Protective Equipment (PPE) described in Section 8.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking, and again when leaving work.

7.2 Conditions for Safe Storage, Including any Incompatibilities
Not applicable.

7.3 Specific End-Use(s)
Not applicable.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure Limits
The following exposure limits are based on a time-weighted full-shift exposure, unless otherwise noted.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicate</td>
<td>15 mg/m³ (total dust); 5 mg/m³ (respirable fraction)&lt;sup&gt;[1]&lt;/sup&gt;</td>
<td>10 mg/m³ (total dust); 3 mg/m³ (respirable fraction)&lt;sup&gt;[2]&lt;/sup&gt;</td>
<td>NIOSH REL = 5 mg/m³ (total dust)</td>
</tr>
<tr>
<td>Aluminum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron oxide</td>
<td>Fume: 10 mg/m³ (total dust); Particulate: 15 mg/m³ (total dust); 5 mg/m³ (respirable fraction)</td>
<td>5 mg/m³ (respirable fraction)</td>
<td></td>
</tr>
</tbody>
</table>
8.2 Exposure Controls

**Appropriate Engineering Controls:** Power equipment should be equipped with wet dust suppression or dust collection devices if cutting/grinding/chipping product. Emergency eyewash equipment should be available in the immediate vicinity of any potential exposure. Use local exhaust or general dilution ventilation, or other suppression methods to maintain dust levels below exposure limits.

**Personal Protective Equipment:** Protective goggles or safety glasses, and gloves. Wear respiratory protection if dust is present when cutting/grinding/chipping product.

**Hand Protection:** Protective gloves as appropriate to prevent abrasion and hand injuries.

**Eye and/or Face Protection:** Approved safety glasses, goggles, and/or face-shield.

**Skin and Body Protection:** Appropriate work clothing and footwear should be worn.

**Respiratory Protection:** If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on Basic Physical and Chemical Properties**

**Physical State:** Solid.

**Appearance:** Solid. Tiles come in a wide range of colors.

**Odor:** Essentially odorless.

**Odor Threshold:** Not available.

**pH:** Not available.

**Evaporation Rate:** Not available.

**Melting Point:** Not available.

**Freezing Point:** Not available.

**Boiling Point:** Not available.

**Flashpoint:** Not available.

**Auto-Ignition Temperature:** Not available.

**Decomposition Temperature:** Not available.

**Flammability (solid, gas):** Not available.

**Lower Flammable Limit:** Not available.

**Upper Flammable Limit:** Not available.
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<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>Vapor Pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative Vapor Density at 20° C</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative Density</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>2.6</td>
</tr>
<tr>
<td>Solubility</td>
<td>Negligible in water</td>
</tr>
<tr>
<td>Partition Coefficient—N-Octanol/Water</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosion Data—Sensitivity to Mechanical Impact</td>
<td>Not expected to present an explosion hazard due to mechanical impact.</td>
</tr>
<tr>
<td>Explosion Data—Sensitivity to Static Discharge</td>
<td>Not expected to present an explosion hazard due to static discharge.</td>
</tr>
</tbody>
</table>

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
Hazardous reactions are not expected to occur under normal conditions.

10.2 Chemical Stability
Stable.

10.3 Possibility of Hazardous Reactions
Not applicable.

10.4 Conditions to Avoid
Not applicable.

10.5 Incompatible Materials
Not applicable.

10.6 Hazardous Decomposition Products
Not applicable.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Likely Routes of Exposure
- **Skin Contact**: Product is abrasive and may irritate unprotected skin.
- **Eye Contact**: When product is shaped or cut, chips or dust may enter unprotected eyes and cause injury or irritation.
- **Inhalation**: When product is shaped or cut, respirable dust may be generated that, when inhaled, can cause respiratory system irritation. Prolonged or repeated inhalation exposure may cause chronic illness.
- **Ingestion**: Not expected to be an exposure route of concern.

11.2 Symptoms Related to Physical, Chemical, and Toxological Characteristics
- **Immediate Effects**: Irritation of skin, eyes, and respiratory tract due to abrasion or dust inhalation will produce immediate discomfort, and first aid provided.
- **Delayed and Chronic Effects**: Inhalation of dust on a prolonged or repeated basis may result in chronic lung disease or silicosis, and may also result in lung cancer, in particular among tobacco smokers.

11.3 Numerical Measures of Toxicity
The acute and chronic effects of exposure to this product's dust have not been quantified.

11.4 Carcinogenicity
The ingredient quartz, also known as crystalline silica, has been determined to be carcinogenic by the International Agency for Research on Cancer (IARC) and the National Toxicology Program (NTP).

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity
No additional information available.

12.2 Persistence and Degradability
Not available.

12.3 Bioaccumulative Potential
Not available.
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<table>
<thead>
<tr>
<th>Section</th>
<th>Topic</th>
<th>Details</th>
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<tbody>
<tr>
<td>12.4</td>
<td>Mobility in Soil</td>
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</tr>
<tr>
<td>12.5</td>
<td>Other Adverse Effects</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Waste Treatment Methods**

*Waste Disposal Recommendations:* Scrap material should be reused or recycled. Waste is not a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) (40 CFR 261). Dispose of waste material in accordance with all local, regional, national, provincial, territorial, and international regulations.

**SECTION 14: TRANSPORT INFORMATION**

14.1 *In Accordance with DOT*

Not regulated for transport

14.2 *In Accordance with IMDG*

Not regulated for transport

14.3 *In Accordance with IATA*

Not regulated for transport

14.4 *In Accordance with TDG*

Not regulated for transport

**SECTION 15: REGULATORY INFORMATION**

15.1 *U.S. Federal Regulations*

**Roof Tile**

*SARA Section 313 Emission Reporting*

This product may contain constituents listed under SARA (Title III) Section 313, but not in amounts requiring supplier notification under 40 CFR Part 372, Subpart C.

*TSCA inventory*

All constituents are included on the Toxic Substances Control Act Chemical Inventory (40 CFR 720)

15.2 *U.S. State Regulations*

**State Right-to-Know Laws**

This product, as an article, is exempt from hazardous substance inventory reporting under the Massachusetts, New Jersey, and Pennsylvania right-to-know laws.

**California Proposition 65—Warning Required**

*WARNING:* This product contains crystalline silica and other chemicals known to the State of California to cause cancer, birth defects, and other reproductive harm.

15.3 *Canadian Regulations*

**DSL**

All ingredients are listed or exempt from inclusion on the Canadian Domestic Substances List (DSL).

**WHMIS**

Class D, Division 2. Subdivision A — Material causing other toxic effects. Very Toxic—Chronic.

![T] This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all of the information required by the CPR.
15.4 Other: HMIS and NFPA

HMIS:

NFPA:

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

Party Responsible for Preparation of this Document
MCA Clay Roof Tile
1-800-736-9221
951-736-9590

Limitations
The information and recommendations set forth herein are based on data we have in our possession, and we have reason to believe is accurate. It is, however, the user's responsibility to determine the safety, toxicity, or suitability for his/her own use of the herein described product. Because the actions by others is beyond our control, Boral Roofing, LLC makes no warranty expressed or implied regarding accuracy of the data or the results to be obtained from the use thereof.