Brick Safety Data Sheet (GHS-US)  
Revision Date: 07/15/2019  
Replaces Date: 01/29/2019  
Version 1.0

SECTION 1: IDENTIFICATION

1.1 Product Identifier
   Product Name: Brick
   Product Description: Clay brick, various colors

1.2 Intended Use of the Product
   Building material used for structural support

1.3 Name, Address, and Telephone Number of the Responsible Party
   Acme Brick Company
   3024 Acme Brick Plaza
   Fort Worth, TX 76109
   Corporate Office: (817) 332-4101

1.4 Emergency Telephone Number
   EH&S Director: (817) 390-1501
   EH&S Specialist: (817) 870-8367

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the Substance or Mixture (GHS-US)
This product is considered an article under 29 CFR 1910.1200 during use and handling as a manufactured item. Users of the product may be exposed to dust during cutting or shaping that contains hazardous substances. This SDS contains health hazard information related to dust generation during construction.

   Skin Irritation 2
   Eye Irritation 2B
   STOT-SE (Single Exposure) 3 (Respiratory)
   STOT-RE (Repeated Exposure) 2 (Respiratory)
   Carcinogenicity 1A

2.2 Label Elements (GHS-US)

   Hazard Pictograms:
   \[\text{Pictogram:} ~ \text{Danger}\]

   Signal Word:
   - Danger

   Hazard Statements:
   - Causes skin irritation (H315)
   - Causes eye irritation (H320)
   - May cause respiratory irritation (H335)
   - May cause cancer (H350)
   - May cause damage to respiratory system through prolonged or repeated exposure (H373)

   Precautionary and Response Statements:
   - Do not handle until all safety precautions have been read and understood (P202)
   - Do not breathe dust; in case of inadequate ventilation, wear respiratory protection (P260) (P284)
   - Wash hands and exposed skin thoroughly after handling (P264)
   - Use only outdoors or in a well-ventilated area (P271). Cut/grind/chip product using dust collection or water suppression to control exposures, as required
   - Wear protective gloves, protective clothing, and eye protection (P280)
   - IF ON SKIN: Wash with plenty of water (P302) (P352)
   - 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)
• Call a doctor if you feel unwell. (P312)
• If skin irritation occurs or if eye irritation or other symptoms persist: Get medical advice/attention (P332, P313)
• Take off contaminated clothing with dust and wash it before reuse (P362, P364)

2.3 Other Hazards
Excessive dust exposure may aggravate any existing respiratory disorders or diseases. Possible complications or allergies resulting in irritation to skin, eyes and respiratory tract may occur from excessive exposure to dusts. See Section 11 for more information on health hazards.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixture*
Substances and hazard classification based on dust composition

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No.</th>
<th>% (w/w)</th>
<th>Hazard Classification (GHS-US)</th>
</tr>
</thead>
</table>
| Aluminum silicates (kaolins)           | 12141-46-7 | 50 - 85 | • Skin Irritation 2, H315
|                                         |          |         | • Eye Irritation 2B, H320
|                                         |          |         | • STOT-SE3 (Respiratory), H335 |
| Quartz (silica, crystalline)           | 14808-60-7 | 15 – 40 | • STOT-SE 3 (Respiratory), H335 |
|                                         |          |         | • Carcinogenicity 1A, H350 |
|                                         |          |         | • STOT-RE 2 (Respiratory), H372 |
| Chromium oxide compounds               | 1308-38-9 | 0 – 3   | • Not classified in this matrix product |
| Manganese compounds                    | 1344-43-0 | 0 – 3   | • Not classified in this matrix product |
| Calcium carbonate (lime)               | 471-34-1  | 0 – 3   | • Not classified in this matrix product |
| Iron oxide compounds                   | 1309-37-1 | 0 – 3   | • Not classified in this matrix product |

fn [1] Specific Target Organ Toxicity – Single Exposure
fn [2] Specific Target Organ Toxicity – Repeated Exposure
*This product may contain elements such as aluminum, arsenic, boron, calcium, chromium, cobalt, copper, lead, molybdenum, nickel, tin, titanium, vanadium and zirconium in trace amounts 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. If feeling unwell, seek medical advice.

After Inhalation: If symptoms occur, move the person to fresh air and ventilate suspected area. 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.

After 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.

After Skin Contact: 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, seek medical attention.

After Ingestion: Rinse mouth. Do NOT induce vomiting. Get medical advice and attention if you feel unwell.

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 are 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.

5.2 Special Hazards Arising from the Substance or Mixture
Fire Hazard: Not combustible. Brick as shipped do not pose a fire hazard.
Explosion Hazard: Brick as shipped do not pose an explosion hazard.
Reactivity: Hazardous reactions will not occur under normal conditions.

5.3 Advice for Firefighters
Precautionary Measures: Exercise caution when fighting any chemical fire.
Firefighting Instructions: Do not allow run-off from firefighting to enter drains or water sources. Do not breathe fumes or vapors from fire.
Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.
Other Information: Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment, and Emergency Procedures
General Measures: Handle in accordance with good industrial hygiene and safety practice. Avoid generation of dust during clean-up of spills.
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 personal protective equipment (PPE).
Emergency Procedures: Ventilate area. Avoid creating or spreading dust.

6.2 Environmental Precautions
Prevent entry to sewers and public waters.

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. Avoid inhalation of dust. Wear appropriate protective equipment as described in Section 8. Do not wash product down sewage and drainage systems or into bodies of water (e.g., streams).
Clean-up: Dispose of waste material safely and in accordance with all local, regional, national, provincial, territorial, and international solid waste regulations.

6.4 Reference to Other Sections
See Section 8.2. Exposure Controls and Personal Protection. For disposal 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. Avoid dust production that exceeds Permissible Exposure Limits.
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. Do not eat, drink or smoke when handling this product.

7.2 Conditions for Safe Storage, Including any Incompatibilities
Storage Conditions: Product does not require special storage conditions.

7.3 Specific End-Use(s)
Building material used for structural support.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure Limits (US)
For substances listed in Section 3 not listed here, there are no established exposure limits from the manufacturer, supplier, importer or the appropriate advisory agency, including ACGIH (TLV), NIOSH (REL) or OSHA (PEL).
### Aluminum silicates (kaolins) (CAS No. 12141-46-7)

<table>
<thead>
<tr>
<th>Source</th>
<th>TLV TWA</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH(1)</td>
<td>(mg/m³)</td>
<td>10 (total) 3 (respirable)</td>
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<tr>
<td>NIOSH(4)</td>
<td>(mg/m³)</td>
<td>None Established</td>
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<tr>
<td>OSHA(7)</td>
<td>(mg/m³)</td>
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Silica, crystalline (CAS No. 14808-60-7)

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</tr>
<tr>
<td>OSHA</td>
<td>(mg/m³)</td>
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Chromium (CAS No. 1308-38-9)

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<td>ACGIH</td>
<td>(mg/m³)</td>
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<td>NIOSH</td>
<td>(mg/m³)</td>
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<tr>
<td>OSHA</td>
<td>(mg/m³)</td>
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Manganese (CAS No. 1344-43-0)

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<td>ACGIH</td>
<td>(mg/m³)</td>
<td>0.02 (respirable) 0.1 (inhalable)</td>
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<tr>
<td>NIOSH</td>
<td>(mg/m³)</td>
<td>1 (fume) 3 (STEL)(9)</td>
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<tr>
<td>OSHA</td>
<td>(mg/m³)</td>
<td>500</td>
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Calcium Carbonate (CAS No. 471-34-1)

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<td>(mg/m³)</td>
<td>10 (total)</td>
</tr>
<tr>
<td>NIOSH</td>
<td>(mg/m³)</td>
<td>10 (total) 5 (respirable)</td>
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<tr>
<td>OSHA</td>
<td>(mg/m³)</td>
<td>5 (respirable)</td>
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</table>

Iron Oxide (CAS No. 1309-37-1)

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<th>Source</th>
<th>TLV TWA</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
<td>ACGIH</td>
<td>(mg/m³)</td>
<td>5 (respirable)</td>
</tr>
<tr>
<td>NIOSH</td>
<td>(mg/m³)</td>
<td>5 (dust, fume) 2500 Fe/mg</td>
</tr>
<tr>
<td>OSHA</td>
<td>(mg/m³)</td>
<td>10 (fume)</td>
</tr>
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**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. References: OSHA Respirable Crystalline Silica Standard for Construction [29 CFR 1926.1153] and General Industry [1910.1053].
**Personal Protective Equipment:** Protective goggles or safety glasses, gloves, protective clothing. Wear dust mask/respiratory protection if dust is present when cutting/grinding/chipping product in accordance with the OSHA Respiratory Protection Standard [29 CFR 1910.134].

**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. Wear suitable protective clothing.

**Respiratory Protection:** NIOSH-approved respiratory protection should be worn in accordance with the OSHA Respiratory Protection Standard [29 CFR 1910.134] if exposure limits are exceeded or irritation is experienced.

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### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

- **Physical State:** Solid
- **Appearance:** Granular, brick-shaped solid; comes in a wide range of colors
- **Odor:** Essentially odorless
- **Odor Threshold:** No data available
- **Evaporation Rate:** No data available
- **Melting Point:** No data available
- **Freezing Point:** No data available
- **Boiling Point:** No data available
- **Auto-Ignition Temperature:** No data available
- **Decomposition Temperature:** No data available
- **Flammability (solid, gas):** No data available
- **Vapor Pressure:** No data available
- **Relative Vapor Density at 20° C:** No data available
- **Specific Gravity:** No data available
- **Solubility:** Water: Negligible
- **Partition Coefficient: N-Octanol/Water:** No data available
- **Viscosity:** No data available

#### 9.2 Other Information

No additional information available.

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### SECTION 10: STABILITY AND REACTIVITY

#### 10.1 Reactivity

Hazardous reactions will not occur under normal conditions.

#### 10.2 Chemical Stability

Stable under normal ambient conditions.

#### 10.3 Possibility of Hazardous Reactions

Hazardous reactions will not occur.

#### 10.4 Conditions to Avoid

Not applicable.

#### 10.5 Incompatible Materials

Strong acids, strong bases, strong oxidizers to protect product quality/appearance.

#### 10.6 Hazardous Decomposition Products

None.

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### 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 Toxicological Characteristics

**Immediate Effects:** Irritation of skin, eyes, and respiratory tract due to abrasion or dust inhalation will produce immediate discomfort.

**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.

### 11.3 Numerical Measures of Toxicity

The acute and chronic effects of exposure to this product’s dust have not been quantified.

**Acute Toxicity:** Not classified.

**Germ Cell Mutagenicity:** Not classified.

**Reproductive Toxicity:** Not classified.

<table>
<thead>
<tr>
<th>Silica, crystalline (CAS No. 14808-60-7)</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>LD&lt;sub&gt;50&lt;/sub&gt; (oral, rat)</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>LD&lt;sub&gt;50&lt;/sub&gt; (dermal, rat)</td>
<td>&gt; 5000 mg/kg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chromium (CAS No. 1308-38-9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD&lt;sub&gt;50&lt;/sub&gt; (oral, rat)</td>
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<table>
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<th>Manganese (CAS No. 1344-43-0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD&lt;sub&gt;50&lt;/sub&gt; (oral, rat)</td>
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<table>
<thead>
<tr>
<th>Iron Oxide (CAS No. 1309-37-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD&lt;sub&gt;50&lt;/sub&gt; (oral, rat)</td>
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### 11.4 Carcinogenicity

<table>
<thead>
<tr>
<th>Silica, crystalline (CAS No. 14808-60-7)</th>
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<tbody>
<tr>
<td>IARC&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>Group 1, carcinogenic to humans</td>
</tr>
<tr>
<td>NTP&lt;sup&gt;(2)&lt;/sup&gt;</td>
<td>Known to be a human carcinogen</td>
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<tr>
<td>OSHA&lt;sup&gt;(3)&lt;/sup&gt;</td>
<td>Regulated as a carcinogen</td>
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<th>Chromium (CAS No. 1308-38-9)</th>
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<td>IARC</td>
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<td>NTP</td>
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<td>OSHA</td>
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</table>

<sup>(1)</sup> International Agency for Research on Cancer  
<sup>(2)</sup> National Toxicology Program  
<sup>(3)</sup> OSHA Subpart Z – Toxic and Hazardous Substances [29 CFR 1910.1000]

### SECTION 12: ECOLOGICAL INFORMATION

#### 12.1 Toxicity

<table>
<thead>
<tr>
<th>Manganese (CAS No. 1344-43-0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOEC&lt;sup&gt;(1)&lt;/sup&gt; (fish)</td>
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</tbody>
</table>

<sup>(1)</sup> No Observed Effect Concentration (long-term)

#### 12.2 Persistence and Degradability

Not established (brick).

#### 12.3 Bioaccumulative Potential

Not established (brick).

#### 12.4 Mobility in Soil

No additional information available.

#### 12.5 Other Adverse Effects

No additional information available.

### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1 Waste Treatment Methods

**Sewage Disposal Recommendations:** Not applicable.

**Waste Disposal Recommendations:** Scrap material should be re-used 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 solid waste 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 (Canada)
Not regulated for transport.

SECTION 15: REGULATORY INFORMATION

15.1 U.S. Federal Regulations
Brick
SARA Section 311/312 Hazard Classes
Exempt article [40 CFR 370.13(b)].
SARA Section 313 Emission Reporting
This product contains constituents listed under SARA (Title III) Section 313 and 40 CFR Part 372:
Manganese compounds (CAS No. 1344-43-0)
Chromium compounds (CAS No. 1308-38-9)
TSCA Inventory
All constituents are included on the Toxic Substances Control Act Chemical Inventory or exempt (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 [California Health and Safety Code § 25249.6]
Warning required—Silica, crystalline

WARNING: Cancer and reproductive harm—
www.P65Warnings.ca.gov

SECTION 16: OTHER INFORMATION

Party Responsible for Preparation of this Document
ACME BRICK
(817) 332-4101
www.brick.com

Revision Date
July 15, 2019

Other Information
This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Limitations
The information set forth herein 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.