MATERIAL SAFETY DATA SHEET
CONCRETE MASONRY UNIT (CMU)

I. MANUFACTURER:
Bilco Brick Corporation
P.O. Box 430
Lancaster, Texas 75146
(972) 227-3380 – Information phone number
(800) 487-3380 – Emergency phone number

II. PRODUCT INFORMATION:
Product Name: Concrete Masonry Unit (CMU)
Chemical Name: Mixture
Chemical Family: Majority Crystalline Silica
Formula: Mixture

III. PRINCIPAL INGREDIENTS:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>%</th>
<th>OSHA PEL mg/m³</th>
<th>ACGIH TLV mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Cement</td>
<td>65997-15-1</td>
<td>8-12</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Crystalline Silica (Quartz)</td>
<td>14808-60-7</td>
<td>Varies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respirable</td>
<td></td>
<td></td>
<td>10/%SiO₂ +2</td>
<td>.05</td>
</tr>
<tr>
<td>Total Dust</td>
<td></td>
<td></td>
<td>30/%SiO₂ +3</td>
<td></td>
</tr>
<tr>
<td>Aggregate</td>
<td>68334-37-2</td>
<td>Varies</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>471-34-1</td>
<td>0-10</td>
<td>15</td>
<td>10</td>
</tr>
</tbody>
</table>

NOTE: PEL: Permissible Exposure Limits set by OSHA
TLV: Threshold Limit Values set by ACGIH

The percentage of crystalline silica in the formula is the amount determined from airborne samples. Respirable crystalline silica dust may be created through cutting, grinding, crushing or breaking the CMU.

IV. PHYSICAL PROPERTIES:
Physical Form: Rectangular
Color: Gray
Odor: Odorless
Solubility in Water: Negligible
Specific Gravity: 1.85
Reactivity in Water: None
Bulk Density: N/A
Vapor Pressure: N/A
Percent Volatile By Volume: N/A
Vapor Density: N/A
Evaporation Rate: N/A
P.H.: N/A
V. **FIRE AND EXPLOSION PROPERTIES:**

Flash Point: Non Combustible/Explosive  
Flammable or Explosive Limits: N/A  
Extinguishing Media: N/A  
Special Fire Fighting Procedures: N/A  
Unusual Fire and Explosion Hazards: None  
Lower Explosive Limit: N/A  
Upper Explosive Limit: N/A

VI. **HEALTH HAZARD INFORMATION:**

Primary Routes of Entry: Dust from sawing CMU can enter the body through the eyes and nasal passages.

Potential Health Effects:

**Acute Exposure:** Breathing dust caused by cutting the CMU with a saw blade may cause nose, throat, respiratory, or lung irritation and choking. The dust may cause mild to severe irritation to the eyes by abrasion with dust or chips. The dust or chips may cause allergic reactions or abrasions if it comes into contact with skin. The described effect depends on the degree of exposure.

**Chronic Exposure:** Prolonged or repeated exposure may cause lung injury. This dust contains Portland cement that can cause inflammation of the lining tissue of the interior of the nose and inflammation of the cornea. Individuals who are allergic to chromium may develop an allergic dermatitis. This dust also contains crystalline silica. Prolonged exposure to crystalline silica has caused cancer in laboratory animals. Some human studies indicate potential lung cancer from crystalline silica exposure. Risk of injury depends on duration and level of exposure.

Medical Conditions Aggravated by Exposure:

Prolonged CMU dust exposure may aggravate any existing respiratory disorders or diseases. Possible complications of allergies resulting in irritation to skin, eyes and respiratory passages may occur from excessive exposure to brick dusts.

VII. **EMERGENCY FIRST AID PROCEDURES:**

Irrigate (flood) eyes immediately and repeatedly with clear water. Wash exposed skin areas with soap and water. If the product is swallowed, seek medical attention immediately. If inhalation causes irritation or breathing problems, remove from exposure to airborne particulate. If the irritation to eyes, skin and/or respiratory systems continues, consult a physician.
VIII. PERSONAL PROTECTION RECOMMENDATIONS:

Eye Protection Requirement:
Tight fitting ANSI approved safety goggles to prevent contact with eyes.

Skin Protection Requirement:
Impervious gloves, clothes and shoes to protect the skin.

Respirator Protection Requirements:
When concentrations from sawing CMU exceed the OSHA PEL or ACGIH TLV, a NIOSH/MSHA approved dust respirator should be worn.

Ventilation Protection Requirements:
Use adequate ventilation to maintain exposure below the OSHA PEL and ACGIH TLV when sawing CMU.

Other Protection Requirements:
Wear safety shoes with steel toes.
A wet saw is recommended for cutting CMU.

IX. STABILITY AND REACTIVITY:

General: Product is stable
Incompatible Materials and Conditions to Avoid: None
Hazardous Decomposition: None, solid
Reactivity: Materials are considered inert

X. CARCINOGENICITY:

NTP and OSHA do not include this material, or its components, in their carcinogen listings.
IARC has classed crystalline silica (quartz) as a probable human carcinogen.