

MANGUM BRICK

Safety Data Sheet	Issue Date: 14 May 2015
	Revision Date: 14 May 2015

Brick & Structural Clay Units

SECTION 1 – Company and Product Identification

PRODUCT IDENTIFIER

Product name: Brick & Structural Clay Units
Manufacturing Plant Locations:

INTENDED USE OF THE PRODUCT

Fired clay non-structural material used in masonry construction.

NAME, ADDRESS AND TELEPHONE OF THE RESPONSIBLE PARTY

Mangum Brick Company
2316 N Louis Tittle Ave.
Mangum, Oklahoma 73554
Corporate Office (580)782-2324

EMERGENCY TELEPHONE NUMBER

SECTION 2 – Hazards Identification

CLASSIFICATION OF THE PRODUCT

Brick and clay structural units are not considered hazardous as shipped. Dust generated from crushing, cutting, grinding or drilling brick may contain amounts of crystalline silica considered hazardous under the U.S. OSHA Hazard Communication Standard and Canadian WHMIS Standards.

GHS-US CLASSIFICATION

- H313: May be harmful in contact with skin
- H320: Causes eye Irritation (Eye Irrit. 2B)
- H372: Causes damage to respiratory system (silicosis) through prolonged or repeated exposure to inhaled dust

LABEL ELEMENTS

GHS-US LABELING

Hazard Pictograms (GHS-US):



Signal Word:

Warning

Hazard Statements:

- H313 – May be harmful in contact with skin
- H320 – Causes eye irritation
- H372 – Causes damage to respiratory system (silicosis) through prolonged or repeated exposure to inhaled dust

Precautionary Statements:

BASED ON CRYSTALLINE SILICA CONTENT

- P260 – Do not breathe dusts
- P270 – Do not eat, drink or smoke when using this product

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P280 – Wear eye protection

BASED ON BRICK DUST CONTACT

P280 – Wear skin and eye protection

P264 – Wash any exposed skin thoroughly after handling material

P305+P351+P338 – If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

P310 – Immediately call a doctor if any eye irritation or discomfort develops

P302+P352 – If on skin, wash with plenty of water

No additional information available.

Other Hazards:

Acute Toxicity:

A rare "acute" form of silicosis may develop from inhalation of extremely high concentrations of crystalline silica over a period of several months to five years.

Chronic Toxicity:

Repeated or prolonged inhalation of high concentrations of very small dust particles (respirable) may cause changes to the fibrous tissues of the lungs.

Repeated or prolonged inhalation of high concentrations of respirable particles which contain crystalline silica may cause silicosis, an incurable lung disease. Silicosis is a scarring of the lungs which generally develops gradually over a period of years and may progress even after exposure has stopped. Early symptoms may be so mild that they are not noticed. In advanced cases, lung capacity is severely reduced and the risk of infectious diseases such as tuberculosis increases. Early symptoms of silicosis include coughing and shortness of breath on exercising; symptoms may progress to pain in the chest, loss of appetite, fatigue, weakness, inability to work. Complications may lead to respiratory or heart failure. Chronic silicosis generally occurs after 10 or more years of overexposure.

Studies indicate that people with silicosis have an increased risk of lung cancer; however, many of the studies do not take into account additive factors such as smoking.

SECTION 3 – Composition / Information on Ingredients

SUBSTANCES

Hazardous Component	CAS Number	% by weight	GHS-US Classification
Crystalline silica (quartz)	14808-60-7	25-55	H313, H320, H372
Crystalline silica (cristobalite)	14464-46-1	0-8	H313, H320, H372

Full text of H-phrases: see section 16

SECTION 4 – First Aid Measures

DESCRIPTION OF FIRST AID MEASURES

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First-aid measures after inhalation:	Move exposed individual to fresh air. Dust in throat and nasal passages should clear naturally by coughing, sneezing and nasal discharge. Obtain medical attention if symptoms persist or develop later.
First-aid measures after skin contact:	If irritation occurs, flush gently with water until dust is removed. If irritation persists or develops later, obtain medical attention.
First-aid measures after eye contact:	Do not allow individual to rub eyes. Flush gently under running water for 15 minutes or longer, making sure that the eyelids are held open. Other than washing with water, do not attempt to remove material from eyes. If pain or irritation persists or develops later, obtain medical attention.
First-aid measures after ingestion:	Ingestion is not a common route of occupational exposure for this product.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Symptoms/injuries after inhalation:	Breathing dust may cause coughing or sore throat. Repeat exposure to the dust can cause a runny nose, chronic coughing and impaired lung function. Long term exposure to respirable crystalline silica in the dust can cause silicosis (lung scarring).
Symptoms/injuries after eye contact:	Eye irritation from mechanical effect.

SECTION 5 – Firefighting Measures

Extinguishing media:	Appropriate for surrounding flammable materials. Product is not flammable.
Special firefighting procedures:	None
Unusual fire and explosion hazards:	None
Hazardous combustion products:	None expected

SECTION 6 – Accidental Release Measures

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

General measures:	If large amounts of dust have been generated, eye protection and appropriate respiratory protection should be used to protect cleanup personnel against dust. Do not dry sweep broken or dusty material. Use water spray to minimize dust or vacuum with HEPA filters.
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SECTION 7 – Handling and Storage

PRECAUTIONS FOR SAFE HANDLING

Additional hazards when processed:	Brick and clay structural units themselves pose no health hazards; however, brick dust or chips containing crystalline silica may be generated during dry cutting, grinding, or crushing.
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Precautions for safe handling:

Activities which generate dust should take place in well-ventilated areas. Use good housekeeping methods to prevent the accumulation of dust in the workplace.

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 before leaving work.

Conditions for safe storage, including any incompatibilities

Storage conditions:

Store brick and clay units with secure footing to reduce the possibility of overturning.

Incompatible products:

N/A

SECTION 8 – Exposure Controls/Personal Protection

Control parameters

Component		Cal/OSHA PEL (mg/m ³)	OSHA PEL (mg/m ³)	ACGIH TLV (mg/m ³)	NIOSH REL (mg/m ³)
Crystalline silica	CAS #14808-60-7				
Respirable		0.1	----	----	----
Total		0.3	----	.025	0.05
Respirable Dust	0-19% crys. silica	----	10 (%SiO ₂ +2)	----	----
Total Dust	0-19% crys. Silica	----	30 (%SiO ₂ +2)	----	----
<i>For cristobalite, use ½ the PEL for quartz</i>					

Exposure controls

Appropriate engineering controls:

When crushing, cutting, grinding or drilling brick and structural clay units, use general ventilation, local exhaust and/or wet suppression methods to maintain exposures below allowable exposure limits.

Eye protection:

Safety glasses with side shields should be worn as minimum protection. Dust goggles or full face protection should be worn when conditions with high dust concentrations exist or are anticipated.

Skin and body protection:

Use gloves to provide hand protection from abrasion. Contaminated clothing should be washed after use. Safety shoes are recommended to provide foot protection when working with brick or clay units.

Respiratory protection:

Usually not required when working with finished product, but take measures to minimize dust exposure; however, may be required for crushing, grinding, cutting or drilling material. In those cases, the need for respiratory protection should be

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Other information:

evaluated by a qualified professional. The use of respirators for controlling exposures in excess of PEL must comply with OSHA and MSHA requirements for medical surveillance, respirator fit testing, repair and cleaning, and user training.

Air monitoring for respirable dust containing quartz should be conducted regularly. Airborne dust levels in excess of appropriate exposure limits should be reduced by all feasible engineering controls, including (but not limited to) wet suppression, ventilation, process enclose, and enclosed employee workstations.

SECTION 9 - Physical and Chemical Properties

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid
Appearance:	Solid blocks in various shapes
Color:	Various colors
Odor:	None
Odor threshold:	N/A
pH:	N/A
Relative evaporation rate:	N/A
Melting point:	N/A
Freezing point:	N/A
Boiling point:	N/A
Flash point:	N/A
Auto-ignition temperature:	N/A
Decomposition temperature:	N/A
Flammability (solid, gas):	N/A
Vapor pressure:	N/A
Relative vapor density at 20°C:	N/A
Density:	2.6 (Approx)
Solubility:	Negligible
Explosive properties:	N/A
Oxidizing properties:	N/A

SECTION 10 - Stability and Reactivity

Reactivity:	Stable
Chemical stability:	Stable

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Possibility of hazardous reactions:	None known
Conditions to avoid:	None known
Incompatible materials:	N/A
Hazardous decomposition products:	None known

SECTION 11 – Toxicological Information

INFORMATION ON TOXICOLOGICAL EFFECTS

Acute toxicity:

Not considered acutely toxic. Standard animal toxicity data (LD50, LC50) are not available for quartz. Epidemiologic studies of workers indicate an increased risk of lung cancer from chronic exposure to respirable crystalline silica; this effect was more pronounced in those with silicosis. However, many of the studies did not account for effects of smoking or other confounding exposures.

Epidemiologic studies have linked crystalline silica exposure with autoimmune diseases and kidney disorders. Individuals with silicosis show a higher incidence of scleroderma, a thickening of the skin. Current data have not shown a definite causal effect between these effects and exposure to respirable crystalline silica.

In laboratory animal tests, dust containing newly broken particles of respirable silica particles caused greater lung injury than equal exposures to particles aged for sixty days or more.

Skin corrosion/irritation:	Not classified.
Serious eye damage/irritation:	Not classified.
Respiratory or skin sensitisation:	Not classified.
Germ cell mutagenicity:	Not classified.
Carcinogenicity:	Brick and structural clay units are not listed as carcinogens by IARC, the NTP, or OSHA. Crystalline silica is listed as a carcinogenic (Group 1) according to IARC. ACGIH classified crystalline silica as a suspected human carcinogen.
Reproductive toxicity:	Not classified.
Symptoms/injuries after inhalation:	Coughing, sneezing. Individuals with respiratory disorders may find these conditions aggravated by exposure to brick dust.
Symptoms/injuries after eye contact:	Causes eye irritation.
Symptoms/injuries after ingestion:	No symptoms expected.

SECTION 12 – Ecological Information

TOXICITY:	Generally considered chemically inert in the environment.
Persistence and degradability:	Not likely to biodegrade.
Bioaccumulative potential:	Based on ingredients, not likely to bioaccumulate.
Mobility in soil:	Not established. Not likely to have leaching potential.

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SECTION 13 - Disposal Considerations

WASTE TREATMENT METHODS

Regional legislation (waste):

Dispose of waste product and unused product in compliance with federal, state, and local requirements. Used material which has become contaminated by other products or substances may have significantly different characteristics based on the contaminant and should be evaluated accordingly.

Waste disposal recommendations:

Where possible, recycling is preferable to disposal.

Additional information:

Dust formation from residues in packaging should be avoided and suitable worker protection assured. Store used packaging in enclosed receptacles.

SECTION 14 - Transport Information

IN ACCORDANCE WITH ICAO/IATA/DOT/TDG

UN Number: N/A

UN-NO. (DOT): N/A

DDOT NA no.: N/A

UN proper shipping name

Department of Transportation (DOT): N/A

ADDITIONAL INFORMATION

Other information:

Not a DOT-regulated hazardous material. Not classified as dangerous goods for ICAO, DOT, IATA, IMDG, TDG

SECTION 15 - Regulatory Information

US Federal regulations: N/A. Neither SARA 313 nor CERCLA 103 applies. Product is not hazardous per 40 CFR 261.

US State regulations:

This product contains 0.1% or more of crystalline silica, regulated under California Proposition 65 as a chemical known to the state of California to cause cancer or reproductive effects. Crystalline silica, iron oxide and cobalt are on the New Jersey Right to Know Hazardous Substance List.

Component	State Regulatory Lists
Crystalline Silica, Quartz (CAS #14808-60-7)	CA, FL, MA, MN, NJ, PA
Crystalline Silica, Quartz (CAS #14808-60-7)	Canadian WHMIS Ingredient Disclosure List
Crystalline Silica, Cristobalite (CAS #14464-46-1)	Canadian WHMIS Ingredient Disclosure List

SECTION 16 - Other Information

Indication of changes:

05/14/2015

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Other information:

This document has been prepared in accordance with the SDS requirement of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Eye Irritant 2B	Causes eye irritation Category 2B
H313	May be harmful in contact with skin
H320	Causes eye irritation
H372	Causes damage to respiratory system (silicosis) through prolonged or repeated exposure to inhaled dust

NFPA health hazard:

1 – Exposure could cause irritation but only minor residual injury even if no treatment is given

NFPA fire hazard:

0 – Not combustible

NFPA reactivity:

0 – Stable – not reactive

HMIS III RATING

Health:

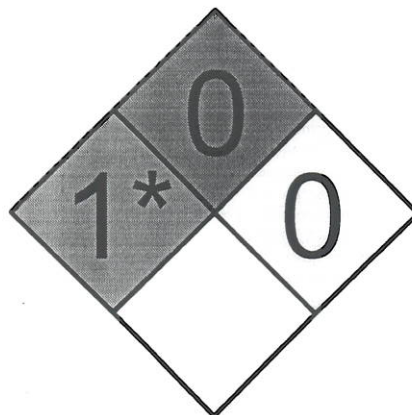
1* - Slight hazard, irritation or minor reversible injury possible. Chronic (long-term) health effects may result from repeated overexposure.

Flammability:

0 – Materials that will not burn

Physical:

0 – Minimal hazard – materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-explosive.



Notice: believes that the information contained in this Safety Data Sheet is accurate. The information is based on our current knowledge and is intended to describe the product for the purposes

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of health, safety, and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, OR MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE.