Redland BRICK
An ISO 9001 Compliant Quality System

SAFETY DATA SHEET

Latest Revision: 05-15-2015

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
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

INGREDIENTS	CAS NO.	% WEIGHT	ADDITIONAL INFORMATION:
Aluminum Silicates	Various	75-85	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.
Quartz	14808-60-7	Varies	
Iron Compounds	Various	0-5	
Calcium Compounds	Various	0-12	
Manganese Compounds	Various	0-3	
Magnesium Compounds	Various	0-3	
Zinc Compounds	1314-13-2	0-10	
Iron Chromite	1308-31-2	0-3	

SECTION 4 - FIRST AID MEASURES

Description of 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 of Exposure: For information on potential signs and symptoms of exposure. See Section 2 - Hazards Identification and/or Section 11 - Toxicological Information.

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

	EXPOSURE LIMITS			EXPOSURE LIMITS	
	OSHA PEL	ACGIH TLV		OSHA PEL	ACGIH TLV
Aluminum Silicates	15 mg/m^3	10 mg/m^3	Manganese Compounds	not available	not available
Quartz	10/%SiO_2+2mg/m3	.025 mg/m^3	Calcium Compounds	not available	not available
Chromium Compounds	not available	not available	Iron Compounds as granular body additives	not available	not available

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 person 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

Physical State:	Granular Solid	Color:	Bricks come in a wide range of colors
Odor:	Essentially odorless	Odor Threshold:	No data available
Molecular Formula:	Mixture	Molecular Weight:	Mixture

Solvent Solubility:	No data available	Decomposition Temperature (°C)	No data available
Water Solubility:	Negligible	Evaporation Rate (Gram/s):	No data available
pH:	No data available	Vapor Pressure (kPa):	No data available
Melting/Freezing Point (°C)	No data available	Vapor Density (g/ml):	No data available
Boiling Point (°C)	No data available	Relativity Density:	No data available
Partition Coefficient: Method, pH, Endpoint, Value)	No data available	Viscosity:	No data available

Flammability:

Autoignition Temperature (Solid) (°C)	No data available	Upper Explosive Limits (Liquid) (% by Vol.):	No data available
Flammability (Solids):	No data available	Lower Explosive Limits (Liquid) (% by Vol.):	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:			
Oxidizing Properties:	No data available	Incompatible Materials:	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 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 an no warranty expressed or implied is made.