

SAFETY DATA SHEET

Date Completed: December 1, 2015

Latest Revision: December 1, 2015

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name: Firebrick
Product Code: KK0156
Trade Name: Firebrick
Chemical Family: Predominately Aluminum Silicates
Formula: Mixture

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against Intended Use: Residential fireplaces and stoves

Details of the Supplier of the Safety Data Sheet

Kel Kem Ltd.
1333 Cornwall Road
Oakville, Ontario, Canada
L6J 7T5
(905) 829-5888

Emergency phone number (24 hours) Canutec (613) 996-6666 (Collect)

2. HAZARDS IDENTIFICATION

Appearance: Granular brick-shaped solid; buff color

Hazard Classification of the Substance or Mixture: N/A

Signal Word: None.

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: Not applicable.

Precautionary Statements: None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	% Weight
Aluminum Silicates	1344-28-1	50 – 85
Quartz	14808-60-7	Varies
Barium compounds	Various	0 – 3
Iron compounds	Various	0 –15

The above chemistries are provided for industrial hygiene and environmental purposes and are not intended to represent product specifications. This information has been compiled from data believed to be reliable. Elements such as aluminum, arsenic, boron, calcium, chromium, cobalt, copper, lead, molybdenum, nickel, tin, titanium, vanadium, and zirconium may be present in trace amounts. Pavers as shipped do not present an exposure hazard.

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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 an 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.
Ingestion:	None (no known acute effects).
Inhalation:	Remove from exposure to airborne particulates. Consult a physician if breathing does not return to normal.
Medical Conditions Aggravated by Exposure:	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.

5. FIRE-FIGHTING MEASURES

Fire / Explosion Hazards: Bricks as shipped do not pose a fire or explosion hazard.

6. ACCIDENTAL RELEASE MEASURES

Cleanup Procedures Bricks as shipped do not present a human or environmental hazard that requires special clean-up measures

7. HANDLING AND STORAGE

Precautions for Safe Handling

Minimize dust generation and accumulation. Avoid breathing dust. Always wet saw or vacuum. Provide adequate ventilation to maintain exposures below OSHA PEL and ACGIH TLV for quartz and other substances.

Conditions for Safe Storage

Always stack and store bricks in a stable manner to avoid falling hazards.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Aluminum Silicates

OSHA PEL	15 mg/m ³
ACGIH TLV	10 mg/m ³

Quartz

OSHA PEL	10 / %SiO ₂ + 2 mg/m ³ (respirable)
ACGIH TLV	0.025 mg/m ³ (respirable)

Iron Compounds as granular body additives

OSHA PEL	Not available
ACGIH TLV	Not available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Barium Compounds

OSHA PEL
ACGIH TLV

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 personal 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 or vacuum methods is recommended anytime that bricks must be cut.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Granular solid	Color:	Buff or Red
Odor:	Essentially odorless	Odor Threshold:	No data available
Molecular Formula:	Mixture	Molecular Weight:	Mixture
Solvent Solubility:	No data available		
Water Solubility:	Negligible		
Boiling Point:	No data available		
Melting Point:	1500 C		
Specific Gravity:	2.7		
Vapor Pressure (kPa):	No data available		
Vapor Density (g/ml):	No data available		

10. STABILITY AND REACTIVITY

Reactivity: Bricks as shipped are stable and not reactive.

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11. TOXICOLOGICAL INFORMATION

Effects of Short Term and Long Term Exposure:

Short Term

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:

Eye:	May cause irritation by abrasion with dust or 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.

Long Term

Excessive exposures to respirable 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 approved respirator.

Carcinogen Status:

The following carcinogenicity classifications for crystalline silica have been established by the following agencies:

OSHA:	Not regulated as a carcinogen
IARC:	Group 1 carcinogenic in humans
NIOSH:	Carcinogen, with no further categorization
NTP:	Known carcinogen

12. ECOLOGICAL INFORMATION

There are no known environmental impacts.

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.

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.

15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

RCRA	Pavers 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, and 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 be 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.

16. OTHER INFORMATION

Kel Kem Ltd. considers our product an "article" as defined in 30 CFR 1200(b)(g)(iv) and 40 CFR 372.38. As an article, an SDS is not required and the product is exempt from all other requirements of the hazard communication standard. OSHA requires an SDS for brick because it is occasionally dry sawed. We recommend only wet sawing of brick.

Notice to the Reader: The information is provided in good faith and is correct to the best of Kel Kem Ltd.'s knowledge as of the date hereof and is designed to assist our customers; however Kel Kem Ltd. makes no representation as to its completeness or accuracy. Final determination of suitability of any material is the sole responsibility of the user. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Kel Kem Ltd. disclaims all expressed or implied warranties or representations.