



SAFETY DATA SHEET (SDS)

CLAY MASONRY UNITS

Section 1: IDENTIFICATION

1.1 PRODUCT IDENTIFIER

Product Name: Brick
Facing Brick
Fire Brick
Paving Brick
Structural Brick
Thin Brick
Veneer Brick

1.2 RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE

Use: Construction material used in building and hardscape applications.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Name/Address: Mutual Materials Co, 605 - 119th Avenue NE, Bellevue, Washington 98005
www.mutualmaterials.com

Telephone Number: (425)452-2300 / (800) 477-3008

1.4 EMERGENCY TELEPHONE NUMBER

Emergency Telephone Number: (425)452-2300 / (800) 477-3008

Date of Preparation: 6/1/2015 **Version #:** 1.0

Section 2: HAZARD(S) IDENTIFICATION

2.1 CLASSIFICATION OF THE CHEMICAL ACCORDING TO OSHA HAZCOM 2012

Hazard class

Skin irritation 2
Eye irritation 2A
Skin sensitization 1B
Carcinogenicity 1A
Specific target organ toxicity - Single exposure 3
Specific target organ toxicity - Repeated exposure 1

2.2 LABEL ELEMENTS ACCORDING TO OSHA HAZCOM 2012

Hazard Pictogram:



Signal Word: Danger

Hazard Statement: Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. Respirable dust may contain crystalline silica,



SAFETY DATA SHEET (SDS)

known to cause cancer. May cause respiratory irritation. Causes damage to lungs through prolonged or repeated exposure.

Prevention:

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 a well-ventilated area. Do not breathe dust.

Response:

If exposed or concerned: Get medical advice/attention. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or 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 inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

Storage:

Not applicable.

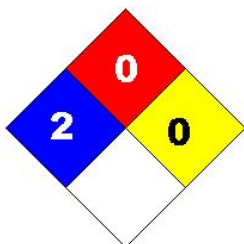
Disposal:

Dispose of unused or unwanted concrete products in accordance with all local, regional, national and international regulations.

2.3 ADDITIONAL INFORMATION

Hazards not otherwise classified: Not applicable.

Mexico Classification:



Blue = Health Red = Flammability Yellow = Reactivity White = Special

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

WHMIS Classification(s):

- Class D2A - Carcinogenicity
- Class D2A - Chronic Toxic Effects
- Class D2B - Skin/Eye Irritant

WHMIS Hazard Symbols:





SAFETY DATA SHEET (SDS)

WHMIS Signal Word: WARNING

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 MIXTURES

Ingredient	UN #	H / F / R / *	CAS No	Wt. %
Aluminum Silicates	Not available.	Not available.	Various	50 - 85
Quartz	Not available.	1/0/0	14808-60-7	15 - 40
Chromium compounds	Not available.	Not available.	Various	0 - 3
Manganese compounds	Not available.	Not available.	Various	0 - 3
Iron compounds as granular body additives	Not available.	Not available.	Various	0 - 3
Silica, crystalline, quartz	Not available.	Not available.	14808-60-7	0 - 3
Calcium compounds	Not available.	Not available.	Various	0 - 3

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200. Elements such as aluminum, arsenic, boron, calcium, chromium, cobalt, copper, lead, molybdenum, nickel, tin, titanium, vanadium, and zirconium may be present in trace amounts. Brick products as shipped do not present an exposure hazard.

* Per NOM-018-STPS-2000

Section 4: FIRST-AID MEASURES

4.1 DESCRIPTION OF THE FIRST AID MEASURE

Eye:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If eye irritation persists: Get medical advice/attention.
Skin:	If irritation occurs, flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
Inhalation:	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis.
Ingestion:	Not a normal route of exposure. If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Eye:	Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Skin:	Causes skin irritation. Wear gloves when handling product to avoid drying and mechanical abrasion of the skin. May cause sensitization by skin contact.



SAFETY DATA SHEET (SDS)

Inhalation: Dust may cause respiratory tract irritation. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis.

Ingestion: Not a normal route of exposure. May result in obstruction and temporary irritation of the digestive tract.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENTS NEEDED

Note to Physicians: Symptoms may not appear immediately.

Specific Treatments: In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

Section 5: FIRE-FIGHTING MEASURES

5.1 FLAMMABILITY

Flammability: Not flammable by WHMIS/OSHA/NOM-018-STPS-2000 criteria.

5.2 EXTINGUISHING MEDIA

Suitable Extinguishing Media: Treat for surrounding material.

Unsuitable Extinguishing Media: Not available.

5.3 SPECIAL HAZARDS ARISING FROM THE CHEMICAL

Products of Combustion: May include, and are not limited to: oxides of carbon.

Explosion Data:

Sensitivity to Mechanical Impact: Not available.

Sensitivity to Static Discharge: Not available.

5.4 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS

Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING - UP

Methods for Containment: Pick up large pieces, then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for Cleaning-Up: Vacuum or sweep material and place in a disposal container. Use wet methods, if appropriate, to reduce the generation of dust. Provide ventilation if dust is generated. Do not breathe dust.



SAFETY DATA SHEET (SDS)

Section 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

- Handling:** Avoid contact with skin and eyes. Good housekeeping is important to prevent accumulation of dust. Avoid generating and breathing dust. Use wet methods, if appropriate, to reduce the generation of dust. The use of compressed air for cleaning clothing, equipment, etc, is not recommended. Handle with care. When using do not eat or drink. (See section 8)
- General Hygiene Advice:** Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

- Storage:** Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. (See section 10) Always stack and store clay masonry units in a stable manner to avoid falling hazards.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

Exposure Guidelines

Ingredient	Occupational Exposure Limits	
	OSHA-PEL	ACGIH-TLV
Aluminum Silicates	15 mg/m ³	10 mg/m ³
Quartz	10 / %SiO ₂ + 2 mg/m ³	0.025 mg/m ³ (respirable)
Chromium compounds	Not available.	Not available.
Manganese compounds	Not available.	Not available.
Iron compounds as granular body additives	Not available.	Not available.
Silica, crystalline, quartz	((10 mg/m ³)/(%SiO ₂ +2) (resp)) ((30 mg/m ³)/(%SiO ₂ +2) (total)) ((250)/(%SiO ₂ +5) mppcf (resp))	0.025 mg/m ³
Calcium compounds	Not available.	Not available.

8.2 EXPOSURE CONTROLS

- Engineering Controls:** When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust.

8.3 INDIVIDUAL PROTECTIVE MEASURES

Personal Protective Equipment:

- Eye/Face Protection:** Safety glasses or goggles are recommended when using product.

Skin Protection:

- Hand Protection:** Wear suitable gloves.
- Body Protection:** Wear suitable protective clothing.



SAFETY DATA SHEET (SDS)

Respiratory Protection: A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

General Health and Safety Measures: Handle according to established industrial hygiene and safety practices. Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Granular solid.

Color: Various.

Odor: Odorless.

Odor Threshold: Not available.

Physical State: Solid.

pH: Not available.

Melting Point/Freezing Point: Not available.

Initial Boiling Point and Boiling Range: Not available.

Flash Point: Not available.

Evaporation Rate: Not available.

Flammability: Not flammable.

Lower Flammability/Explosive Limit: Not available.

Upper Flammability/Explosive Limit: Not available.

Vapor Pressure: Not available.

Vapor Density: Not available.

Relative Density/Specific Gravity: Not available.

Solubility: Insoluble.

Partition coefficient: n-octanol/water: Not available.

Auto-ignition Temperature: Not available.

Decomposition Temperature: Not available.

Viscosity: Not available.

Oxidizing Properties: Not available.

Explosive Properties: Not available.



SAFETY DATA SHEET (SDS)

Section 10: STABILITY AND REACTIVITY

10.1 REACTIVITY

No dangerous reaction known under conditions of normal use.

10.2 CHEMICAL STABILITY

Stable under normal conditions of use.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reaction known under conditions of normal use.

10.4 CONDITIONS TO AVOID

None known.

10.5 INCOMPATIBLE MATERIALS

None known.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

None known.

Section 11: TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

Likely Routes of Exposure: Skin contact, eye contact, and inhalation.

Symptoms related to physical/chemical/toxicological characteristics:

Eye: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Skin: Causes skin irritation. Wear gloves when handling product to avoid drying and mechanical abrasion of the skin. May cause sensitization by skin contact.

Ingestion: Not a normal route of exposure. May result in obstruction and temporary irritation of the digestive tract.

Inhalation: Dust may cause respiratory tract irritation.

Acute Toxicity: Not Classified

Ingredient	IDLH	LC50	LD50
Aluminum Silicates	Not available.	Not available.	Not available.
Quartz	5000 mg/m ³	> 5000 mg/kg	> 5000 mg/kg
Chromium compounds	Not available.	> 2000 mg/kg	Oral > 5000 mg/kg, rat
Manganese compounds	Not available.	Not available.	Oral > 2000 mg/kg, rat
Iron compounds as granular body additives	Not available.	Not available.	Not available.
Silica, crystalline, quartz	Ca [25 mg/m ³ (cristobalite, tridymite); 50 mg/m ³ (quartz, tripoli)]	Not available.	Oral 500 mg/kg, rat
Calcium compounds	Not available.	Not available.	Not available.



SAFETY DATA SHEET (SDS)

Calculated overall Chemical Acute Toxicity Values		
LC50 (inhalation)	LD50 (oral)	LD50 (dermal)
> 5 mg/l/4h, rat	> 2000 mg/kg, rat	> 2000 mg/kg, rabbit

Ingredient	Chemical Listed as Carcinogen or Potential Carcinogen (NTP, IARC, OSHA, ACGIH, CP65)*
Aluminum Silicates	Not available.
Quartz	Group 1
Chromium compounds	Group 3
Manganese compounds	Not available.
Iron compounds as granular additives	Not available.
Silica, crystalline, quartz	G-A2, I-1, N-1, O, CP65
Calcium compounds	Not available.

* See Section 15 for more information.

11.2 DELAYED, IMMEDIATE, AND CHRONIC EFFECTS OF SHORT- AND LONG-TERM EXPOSURE

- Skin Corrosion/Irritation:** Causes skin irritation.
- Serious Eye Damage/Irritation:** Causes serious eye irritation.
- Respiratory Sensitization:** Not available.
- Skin Sensitization:** May cause an allergic skin reaction.
- STOT-Single Exposure:** Dust may cause respiratory tract irritation.
- Chronic Health Effects:** Not available.
- Carcinogenicity:** Respirable dust may contain crystalline silica, known to cause cancer.
- Germ Cell Mutagenicity:** Not available.
- Reproductive Toxicity:** Not available.
- Developmental:** Not available.
- Teratogenicity:** Not available.
- Embryotoxicity:** Not available.
- Fertility:** Not available.
- STOT-Repeated Exposure:** Causes damage to lungs through prolonged or repeated exposure. Respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by the International Agency for Research on Cancer (IARC) and National Toxicology Program (NTP) as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of dust exposure and the length of time (usually years) of exposure.
- Aspiration Hazard:** Based on available data, the classification criteria are not met.



SAFETY DATA SHEET (SDS)

Toxicologically Synergistic Materials: Not available.

Other Information: Not available.

Section 12: ECOLOGICAL INFORMATION

12.1 ECOTOXICITY

Acute/Chronic Toxicity: (General) May cause long-term adverse effects in the aquatic environment.

Manganese (7439-96-5)	
NOEC chronic fish	3.6 mg/l (Exposure time: 96th; Species: Oncorhynchus mykiss)

12.2 PERSISTENCE AND DEGRADABILITY

Not available.

12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: Not available.

12.4 MOBILITY IN SOIL

Not available.

12.5 OTHER ADVERSE EFFECTS

Not available.

Section 13: DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Disposal Method: This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

Other disposal recommendations: Not available.

Section 14: TRANSPORT INFORMATION

14.1 UN NUMBER

DOT	TDG	NOM-004-SCT2-1994
Not regulated.	Not regulated.	Not regulated.

14.2 UN PROPER SHIPPING NAME

DOT	TDG	NOM-004-SCT2-1994
Not applicable.	Not applicable.	Not applicable.

14.3 TRANSPORT HAZARD CLASS (ES)

DOT	TDG	NOM-004-SCT2-1994
Not applicable.	Not applicable.	Not applicable.

14.4 PACKING GROUP

DOT	TDG	NOM-004-SCT2-1994
------------	------------	--------------------------



SAFETY DATA SHEET (SDS)

Not applicable.

Not applicable.

Not applicable.

14.5 ENVIRONMENTAL HAZARDS

Not available.

14.6 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

Not available.

14.7 SPECIAL PRECAUTIONS FOR USER

Do not handle until all safety precautions have been read and understood.

Section 15: REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/ LEGISLATIONS SPECIFIC FOR THE CHEMICAL

Canada: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

US: SDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Mexico: SDS prepared pursuant to NOM-018-STPS-2000.

Brick	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 Emission Reporting	This product may contain constituents listed under SARA (Title III) Section 313, but not in amounts requiring supplier notification under 40 CFR Part 372 Subpart C.
Aluminum Silicates (1327-36-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Quartz (14808-60-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
Chromium (7440-47-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on United States SARA Section 313	
SARA Section 313 Emissions Reporting	1.0%
Manganese (7439-96-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on United States SARA Section 313	
SARA Section 313 Emissions Reporting	1.0%
Iron (7439-89-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Calcium (7440-70-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	



SAFETY DATA SHEET (SDS)

State Regulations

California Proposition 65:

This product contains Crystalline Silica, Quartz and may also contain trace amounts of other chemicals known to the State of California to cause cancer, birth defects or other reproductive harm which may be released upon sanding/cutting/grinding/drilling.

Global Inventories:

Ingredient	Canada DSL/NDSL	USA TSCA
Aluminum Silicate	NDSL	Yes
Quartz	DSL	Yes
Chromium compounds	DSL	Yes
Manganese compounds	DSL	Yes
Iron compounds as granular body additives	NDSL	Yes
Silica, crystalline, quartz	DSL	Yes
Calcium compounds	NDSL	Yes

NFPA-National Fire Protection Association:

Health:	2
Fire:	0
Reactivity:	0

HMIS-Hazardous Materials Identification System:

Health:	2*
Fire:	0
Physical Hazard:	0

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

CP65 California Proposition 65

OSHA (O) Occupational Safety and Health Administration.

ACGIH (G) American Conference of Governmental Industrial Hygienists.

- A1 - Confirmed human carcinogen.
- A2 - Suspected human carcinogen.
- A3 - Animal carcinogen.
- A4 - Not classifiable as a human carcinogen.
- A5 - Not suspected as a human carcinogen.

IARC (I) International Agency for Research on Cancer.

- 1 - The agent (mixture) is carcinogenic to humans.
- 2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.
- 2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.
- 3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.
- 4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

NTP (N) National Toxicology Program.

- 1 - Known to be carcinogens.
- 2 - Reasonably anticipated to be carcinogens.



SAFETY DATA SHEET (SDS)

Section 16: OTHER INFORMATION

Date of Preparation: 6/1/2015

Version: 1.0

Revision Date: 6/1/2015

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

End of Safety Data Sheet