



Safety Data Sheet for Concrete Masonry Units

Section 1 - Identification

Material: Concrete Masonry Units
Manufacturer: Boxley Materials Company
Address: PO Box 13527, Roanoke, VA 24035
For Information Call: 434-846-2766

In Case of Emergency Call: 540-815-8982

Recommended use: Basic Construction Material, Construction Material, Masonry Construction, Pavement Material

Other Names: Concrete Block, Split Faced Block, Retaining Wall Block

Section 2 – Hazard Identification

HAZARD NOTES: Dry sawing or grinding of concrete masonry products may result in the release of Respirable Crystalline Quartz. Prolonged exposure to Respirable Crystalline Quartz may cause delayed (chronic) lung injury (silicosis). Acute or rapidly developing silicosis may occur in a short period of time in heavy exposure. Silicosis is a form of disabling pulmonary fibrosis which can be progressive and may lead to death. May cause skin irritation, serious eye irritation, or an allergic skin reaction. Respirable dust may contain crystalline silica, 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.

Section 3 – Information on Ingredients

Ingredient	UN#	HI FIR/*	CAS No	Wt.%
Coarse aggregate	Not available.	Not available.	Not available.	15-60
Portland cement	Not available.	1/0/0	65997-15-1	10-30
Ashes (residues)	Not available.	Not available.	68131-74-8	0.1 - 30
Slags, ferrous metal, blast furnace				
Water	Not available.	Not available.	7732-18-5	10-30
Silica, crystalline, quartz	Not available.	Not available.	14808-60-7	3-7
Ferric oxide	UN1376	1/0/0	1309-37-1	1 - 5
Calcium carbonate	Not available.	11010	1317-65-3	1 - 5
Calcium hydroxide	Not available.	3/0/0	1305-62-0	1 - 5
Silica, amorphous, fumed	Not available.	Not available.	7631-86-9	1 - 5
Admixtures (organic and inorganic)	Not available.	Not available.	Not available.	0.1 - 1

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

*Per NOM-018-STPS-2000

Section 4 – First Aid

Eye Contact – Rinse eyes with fresh clean water for at least 15 minutes, including under eyelids, to remove all particles. Seek medical attention for abrasions.

Skin Contact – Wash with soap and water.

Inhalation – Move person to fresh air. Seek medical attention for discomfort or if coughing or other symptoms do not subside.

Ingestion – Due to product form and application, ingestion is considered unlikely. Do not induce vomiting. If symptoms persist, seek medical attention.

Section 5 – Firefighting Measures

Flash Point: Not Combustible

Flammable Limits: Not Flammable

LEL: N/A

UEL: N/A

Extinguishing Media: This material is noncombustible. Use extinguishing media suitable for surrounding fire.

Unusual Fire and Explosion Hazards: None reported.

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.

Section 6 – Accidental Release Measures

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.

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.

Section 7 – Handling and Storage

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.

Storage: Conditions for safe storage, including any incompatibilities - Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. (See section 10)

Section 8 – Exposure Controls and Personal Protective Equipment

Exposure Guidelines

Occupational Exposure Limits		
Ingredient	OSHA – PEL	ACGIH - TLV
Coarse aggregate	Not available	Not available
Portland cement	15 mg/m ³ (total); 5 mg/m ³ (resp)	1 mg/m ³ (no asbestos and <1% crystalline silica, respirable fraction)
Ashes (residues)	Not available	Not available
Slags, ferrous metal, blast furnace	Not available.	Not available.
Water	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
Ferric oxide	10 mg/m ³	5 mg/m ³ (iron oxide fume; dust as Fe)
Calcium carbonate	15 mg/m ³ (total); 5 mg/m ³ (resp)	10 mg/m ³
Calcium hydroxide	15 mg/m ³ (total); 5 mg/m ³ (resp)	5 mg/m ³
Silica, amorphous, fumed	80 mg/m ³ /%SiO ₂	10 mg/m ³
Admixtures (organic and inorganic)	Not available.	Not available.

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.

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.

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

Appearance:	Fully cured and hydrated concrete.
Color:	Not available.
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 available.
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.

Section 10 – Stability and Reactivity

REACTIVITY - No dangerous reaction known under conditions of normal use.

CHEMICAL STABILITY - Stable under normal conditions of use.

POSSIBILITY OF HAZARDOUS REACTIONS - No dangerous reaction known under conditions of normal use.

CONDITIONS TO A VOID - None known.

INCOMPATIBLE MATERIALS - None known.

HAZARDOUS DECOMPOSITION PRODUCTS - None known.

Section 11 – Toxicological Information

INFORMATION ON TOXICOLOGICAL EFFECTS

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

Symptoms related to physical/chemical/toxicological characteristics:

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

Skin: May cause 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:

Ingredient	IDLH	LC50	LDSO
Coarse aggregate	Not available.	Not available.	Not available.
Portland cement	5000mg/m ³	Not available.	Not available.
Ashes (residues)	Not available.	Not available.	Oral > 2000 mg/kg, rat
Slags, ferrous metal,blast furnace	Not available.	Not available.	Not available.
Water	Not available.	Inhalation 90000 mg/m ³ /4h, rat	Oral >90000 mg/kg, rat Dermal >90000 mg/kg, rabbit
Silica, crystalline, quartz	Ca [(25 mg/m ³ (<.Tistobalite, tridymite); 50 mg/m ³ (quartz, tripoli)]	Not available.	Oral 500 mg/kg, rat
Ferric oxide	2500 mg Fe/m ³	Not available.	Oral >10000 mg/kg, rat
Calcium carbonate	Not available.	Not available.	Oral 6450 mg/kg, rat
Calcium hydroxide	Not available.	Not available.	Oral 7340 mg/kg, rat
Silica, amorphous, fumed	Not available	Inhalation ≥58.8 mg/l/1h, rat	Oral >5000 mg/kg, rat Dermal > 2000 mg/kg, rabbit
Admixtures (organic and inorganic)	Not available	Not available	Not available

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) *
Coarse aggregate	Not listed.
Portland cement	G-A4
Ashes (residues)	Not listed.
Slags, ferrous metal, blast furnace	Not listed.
Water	Not listed.
Silica, crystalline, quartz	G-A2, I-1, N-1, O, CP65
Ferric oxide	G-A4, 1-3
Calcium carbonate	Not listed.
Calcium hydroxide	Not listed.
Silica, amorphous, fumed	1-3
Admixtures (organic and inorganic)	Not listed.

* See Section 15 for more information.

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:	Based on available data, the classification criteria are not met.
Skin Sensitization:	May cause an allergic skin reaction.
STOT-Single Exposure:	Dust may cause respiratory tract irritation.
Chronic Health Effects:	
Carcinogenicity:	Respirable dust may contain crystalline silica, known to cause cancer.
Germ Cell Mutagenicity:	Based on available data, the classification criteria are not met.
Reproductive Toxicity:	
Developmental:	Based on available data, the classification criteria are not met.
Teratogenicity:	Based on available data, the classification criteria are not met.
Embryotoxicity:	Based on available data, the classification criteria are not met.
Fertility:	Based on available data, the classification criteria are not met.
STOT-Repeated Exposure:	May cause 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.
Toxicologically Synergistic Materials:	Not available.
Other Information:	Not available.

Section 12 – Ecological Information

Acute/Chronic Toxicity:	No ecological consideration when used according to directions
Persistence and Degradability:	Not available
Bioaccumulation:	Not available
Mobility in Soil:	Not available
Other Adverse Effects:	Not available.

Section 13 – Disposal Considerations

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

	DOT	TDG	NO<-004-SCT2-1994
UN Number	Not regulated	Not regulated	Not regulated
UN Proper Shipping Name	Not applicable	Not applicable	Not applicable
Transport Hazard Class (ES)	Not applicable	Not applicable	Not applicable
Packing Group	Not applicable	Not applicable	Not applicable

ENVIRONMENTAL HAZARDS: Not available

TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE: Not available.

SPECIAL PRECAUTIONS FOR USER: Do not handle until all safety precautions have been read and understood.

Section 15 – Regulatory Information

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.

SARA Title III				
Ingredient	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
Coarse aggregate	Not listed	Not listed.	Not listed.	Not listed.
Portland cement	Not listed	Not listed.	Not listed.	Not listed.
Ashes (residues)	Not listed	Not listed.	Not listed.	Not listed.
Slags, ferrous metal, blast furnace	Not listed	Not listed.	Not listed.	Not listed.
Water.	Not listed	Not listed.	Not listed.	Not listed.
Silica, crystalline, quartz	Not listed	Not listed.	Not listed.	Not listed.
Ferric oxide	Not listed	Not listed.	Not listed.	Not listed.
Calcium carbonate	Not listed	Not listed.	Not listed.	Not listed.
Calcium hydroxide.	Not listed	Not listed.	Not listed.	Not listed.
Silica, amorphous, fumed	Not listed	Not listed.	Not listed.	Not listed.
Admixtures (organic and inorganic)	Not listed	Not listed.	Not listed.	Not listed.

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
Coarse aggregate	Not available	Not available
Portland cement	DSL	Yes
Ashes (residues)	DSL	Yes
Slags, ferrous metal, blast furnace	DSL	Yes
Water.	DSL	Yes
Silica, crystalline, quartz	DSL	Yes
Ferric oxide	DSL	Yes
Calcium carbonate	NDSL	Yes
Calcium hydroxide.	DSL	Yes
Silica, amorphous, fumed	DSL	Yes
Admixtures (organic and inorganic)	Not available	Not available

Section 16 – Other Information

Date of Preparation: 11-21-14
Version: 1.2
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End of Safety Data Sheet