

# **CONCRETE MASONRY UNITS**

### **Section 1: IDENTIFICATION**

### 1.1 PRODUCT IDENTIFIER

Product Name: Concrete Architectural Slabs

Concrete Block Concrete Pavers Concrete Paving Slabs

Concrete Segmental Retaining Wall Units

### 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 1 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, 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

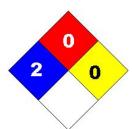
with all local, regional, national and international regulations.

### 2.3 ADDITIONAL INFORMATION

Hazards not otherwise classified: Not applicable.

47 % of the mixture consists of ingredient(s) of unknown acute toxicity.

### **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:**



WHMIS Signal Word: WARNING



### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 MIXTURES

Ingredient	UN#	H/F/R/*	CAS No	Wt. %
	T			
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	Not available.	Not available.	65996-69-2	0.1 - 30
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.	1/0/0	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.

### **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

vou feel unwell.

**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.

**Inhalation:** Dust may cause respiratory tract irritation.

<sup>\*</sup> Per NOM-018-STPS-2000



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.



### 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**

Occupational Exposure Limits			
Ingredient	OSHA-PEL	ACGIH-TLV	
Coarse aggregate	Not available.	Not available.	
		1 mg/m³ (no asbestos and <1%	
Portland cement	15 mg/m³ (total); 5 mg/m³ (resp)	crystalline silica, respirable fraction)	
Ashes (residues)	Not available.	Not available.	
Slags, ferrous metal,			
blast furnace	Not available.	Not available.	
Water	Not available.	Not available.	
	((10 mg/m <sup>3</sup> )/(%SiO <sub>2</sub> +2) (resp))		
	((30 mg/m <sup>3</sup> )/(%SiO <sub>2</sub> +2) (total))		
Silica, crystalline, quartz	((250)/(%SiO <sub>2</sub> +5) mppcf (resp))	0.025 mg/m³	
Ferric oxide	10 mg/m³	5 mg/m³ (iron oxide fume; dust as Fe)	
Calcium carbonate	15 mg/m³ (total); 5 mg/m³ (resp)	10 mg/m³	
Calcium hydroxide	15 mg/m³ (total); 5 mg/m³ (resp)	5 mg/m³	
Silica, amorphous, fumed	80 mg/m³/%SiO <sub>2</sub>	10 mg/m³	
Admixtures (organic and	-		
inorganic)	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.

**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:** Fully cured and hydrated concrete.

Color: Not available.

Odor: Odorless.

Odor Threshold: Not available.

Physical State: Solid.

Not available. pH: **Melting Point/Freezing Point:** Not available. **Initial Boiling Point and Boiling Range:** Not available. Flash Point: Not available. **Evaporation Rate:** Not available. Not flammable. Flammability: 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:

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**

### **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:**

Ingredient	IDLH	LC50	LD50
Coarse aggregate	Not available.	Not available.	Not available.
Portland cement	5000 mg/m <sup>3</sup>	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.
		Inhalation 90000	Oral >90000 mg/kg, rat
Water	Not available.	mg/m³/4h, rat	Dermal >90000 mg/kg, rabbit
	Ca [25 mg/m³ (cristobalite, tridymite); 50 mg/m³		
Silica, crystalline, quartz	(quartz, tripoli)]	Not available.	Oral 500 mg/kg, rat
Ferric oxide	2500 mg Fe /m <sup>3</sup>	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
		Inhalation	Oral >5000 mg/kg, rat
Silica, amorphous, fumed	Not available.	≥58.8 mg/l/1h, 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			

	Chemical Listed as Carcinogen or Potential Carcinogen
Ingredient	(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, I-3
Calcium carbonate	Not listed.
Calcium hydroxide	Not listed.
Silica, amorphous, fumed	I-3
Admixtures (organic and inorganic)	Not listed.

<sup>\*</sup> 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.

**Toxicologically Synergistic** 

Materials: Not available.

Other Information: Not available.

# **Section 12: ECOLOGICAL INFORMATION**

### 12.1 ECOTOXICITY

**Acute/Chronic Toxicity:** No ecological consideration when used according to directions.

### 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

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.

SARA Title III				
Ingredient	Section 302 (EHS) TPQ (Ibs.)	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.

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.

### **Section 16: OTHER INFORMATION**

**Date of Preparation:** 6/1/2015

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**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**