Material Safety Data Sheet

IDENTITY

Unilock Architectural Pavers and Retaining Walls

Section I

Manufacturer's Name and Address	Emergency Telephone Number
Unilock 401 The West Mall, Suite 610 Toronto, ON Canada M96 5J5	(905) 873-0312
	Telephone Number for Information (905) 873-0312 Fax (905) 873-2366
	Date Prepared May 31, 2011

Section II - Hazardous Ingredients/Identity Information

Hazardous Components

Name	CAS Number	OSHA PEL	ACGIH TLV	NIOSH REL	IDLH
Portland Cement	65997-15-1	5 mg/m^3 (respirable dust) 15 mg/m^3 (total dust)	10 mg/m^3 (total dust)	5 mg/m^3 (respirable dust) 10 mg/m^3 (total dust)	5000 mg/m^3
Quartz (Crystalline Silica)	14808-60-7	10mg/m^3/ %SiO2 +2 (respirable dust) 30 mg/m^3 %SiO2 +2 (total dust)	0.05 mg/m^3	0.05 mg/m^3	50 mg/m^3

Section III - Physical/Chemical Characteristics

Boiling Point	4046 °F	Specific Gravity (H_2O = 1)	N/A
Vapor Pressure (mm Hg)	N/A	Melting Point	3110 °F
Vapor Density (Air = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A
Solubility In Water	Insoluble		
Appearance and Odor	Concrete pavers or retaining walls with various colors and textures depending on application. No discernable odor.		

Section IV - Fire and Explosion Data

Flash Point (Method Used)	N/A	Flammable Limits	N/A	LEL	UEL
Extinguishing Media	N/A			
Special Fire Fighting Procedures	N/A			
Unusual Fire or Explosion Hazards	N/A			

Section V - Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	X	None

Incompatibility (Materials to Avoid)

Powerful oxidizers: fluorine, chlorine trifluoride, manganese trioxide, oxygen difluoride, hydrogen peroxide, etc.; acetylene; ammonia

Hazardous Decomposition or Byproducts

Sawing, drilling or other abrasion may produce dust. Employers should use appropriate industrial hygiene methods to determine magnitude of exposure and appropriate control methods.

Hazardous Polymerization	May Occur		Conditions to Avoid
			None
	Will Not Occur	X	

Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation?	yes	Skin?	unlikely	Ingestion?	unlikely

Health Hazards (Acute and Chronic)

Acute: Dust can produce mechanical abrasion in the eyes and on the skin. Dusts may irritate the nose, throat, and respiratory system. Prolonged contact to skin or eyes may produce inflammation or burns.

Chronic: Excessive exposure to particulates (dust) over an extended period of time may result in the development of silicosis and other pulmonary diseases.

Target Organs: Eyes, Respiratory System

Carcinogenicity:	NTP?	YES	IARC Monographs?	YES	OSHA Regulated	NO

California Proposition 65 Warning: Dry cutting, sanding or grinding of concrete block products will expose you to respirable crystalline silica which is "known in the State of California to cause cancer and to other substances which are known to the State of California to cause cancer, birth defects and other reproductive harm."

Signs and Symptoms of Exposure

Cough, dyspnea (breathing difficulty), wheezing; decreased pulmonary function, progressive respiratory symptoms (silicosis); irritation eyes; [potential occupational carcinogen]

Medical Conditions Generally Aggravated by Exposure.

Excessive dust exposure may aggravate any existing respiratory disorders or diseases. Possible complications of allergies resulting in irritation to skin, eyes and respiratory passage may occur from excessive exposure to dusts.

Emergency and First Aid Procedures

Eyes: Flush with clean water for at least 15 minutes. Seek medical attention for abrasion.

Skin: Wash with soap and water. Seek medical attention for persistent dermatitis.

Inhalation: Remove to fresh air. Seek Medical attention.

Ingestion: Seek medical attention for gross ingestion.

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Handling and Storing

Pavers and retaining wall products have no special storage requirements. The weight of individual and bundles products must be considered for handling, transport and storage. Establish an industrial hygiene monitoring program to ensure that processes do not produce working environments outside the limits described herein.

Other Precautions

The installation of pavers and retaining walls involves the use of other products and other safety hazards. Consult all product MSDSs and OSHA standards to establish and maintain a safe and healthy working environment.

Precautions to take if

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Section VIII - Control Measures

Respiratory Protection (Specify Type)

Respirator Recommendations (NIOSH)

Up to 0.5 mg/m^3: (APF = 10) Any air-purifying respirator with a high-efficiency particulate filter

Up to 1.25 mg/m^3: (APF = 25) Any powered, air-purifying respirator with a high-efficiency particulate filter/(APF = 25) Any supplied-air respirator operated in a continuous-flow mode

Up to 2.5 mg/m^3: (APF = 50) Any air-purifying, full-facepiece respirator with a high-efficiency particulate filter/(APF = 50) Any powered, air-purifying respirator with a tight-fitting facepiece and a high-efficiency particulate filter

Up to 25 mg/m^3: (APF = 1000) Any supplied-air respirator operated in a pressure-demand or other positive-pressure mode

Emergency or planned entry into unknown concentrations or IDLH conditions: (APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode/(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape: (APF = 50) Any air-purifying, full-facepiece respirator with a high-efficiency particulate filter/Any appropriate escape-type, self-contained breathing apparatus

Ventilation

Use local exhaust ventilation when dry sawing or drilling products to reduce dust to acceptable levels.

Protective Gloves	Eye Protection
Work gloves are recommended for handling pavers to protect against the abrasive surface of the products.	Wear ANSI approved safety glasses to minimize eye contact.

Other Protective Clothing or Equipment

Users of pavers and retaining wall products must determine through representative sampling, the conditions created by the particular end use. From this assessment, engineering controls and personal protective equipment can be properly determined.

Work/Hygienic Practices

Use wet saw methods to minimize production of respirable dust.

Proper hygiene practices such as hand washing are advisable. Launder dirty clothing.

Minimize buildup of dust on work surfaces and use a filtered vacuum for cleanup.