

# Material Safety Data Sheet U.S. Department of Labor

May be used to comply with  
 OSHA's Hazard Communication Standard,  
 29 CFR 1910.1200. Standard must be  
 consulted for specific requirements.

Occupational Safety and Health Administration  
 (Non-Mandatory Form)  
 Form Approved  
 OMB No. 1218-0072

**IDENTITY (As Used on Label and List)**  
 Interlocking Concrete Pavers

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

## Section I

<b>Manufacturer's Name</b> Olsen Pavingstone, Inc.	<b>Emergency Telephone Number</b> 911
<b>Address (Number, Street, City, State, &amp; ZIP Code)</b>	<b>MFG Telephone Number</b> 949-728-0415
31511 Ortega Hwy San Juan Capistrano, CA 92675	<b>Date Prepared</b> June 11, 2010
	<b>Signature of Preparer</b> Pernille Hjorth-Olsen

## Section II – Product & Component Data

COMPOSITION	CAS NUMBER	% (percent)
Conc. Sand	Mixture	40% - 50%
Crushed Rock	Mixture	40% - 50%
Cement	65997-15-1	10% - 20%
Admix	Mixture	0 - 1%
Iron Oxide	1309-37-1	0 - 2%

Exposure Limits: Composition	CAS NUMBER	ACGIH TLV	OSHA PEL	IDLH
Crystalline Silica (quartz)	14808-60-7	0.10 mg/m <sup>3</sup> (resp)	*	** See Below
Crystalline Silica (cristabolite)	14464-46-1	0.05 mg/m <sup>3</sup>	*	** See Below
Crystalline Silica (tridymite)	15468-32-3	0.05 mg/m <sup>3</sup>	*	** See Below
Cement	65997-15-1	NA	50 mppcf (resp)	** See Below
Iron Oxide	1309-37-1	5 mg.m <sup>3</sup> as Fe	10 mg/m <sup>3</sup>	** See Below

\* OSHA for crystalline silica in the form of quartz is +mg/m<sup>3</sup> + (%S1 02+2) and 50% of this value for cristobalite and tridymite.

\*\*Portland cements are listed by OSHA in 29 CFR 1010.1000, table Z-1-A and require material safety data sheet (FR, January 19, 1989). MSHA (30 CFR 55.5-1, Ref2), ACGIH (TLV's for 1973, appendix E) and ACGIH (TLV's for 1984-85 appendix D) list Portland Cements as nuisance dusts. Portland Cements are not listed by NTP, IARC, or OSHA as carcinogens. However, since Portland Cement is mfg. From raw material mined from the earth (limestone, marl, sand, shale, clay, etc.) and process heat is provided by burning fossil fuels, trace, but detectable amounts of naturally occurring and possibly harmful elements may be found during chemical analysis. Under ASTM standards, Portland cement may contain .75% insoluble residue, which a fraction of these residues may be free crystalline silica.

### Section III - Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H2O = 1)	N/A
Vapor Pressure (mm Hg.)	N/A	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate=1)	N/A
% Volatile (vol.)	N/A	pH	N/A
API Gravity	N/A	Viscosity	N/A
Solubility in Water	Not Soluble		
Appearance and Odor	Vitrified solid, essentially odorless, wide range of colors		

### Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used)	N/A	Flammable Limits	N/A	LEL	N/A	UEL	N/A
Extinguishing Media	N/A						
Special Fire Fighting Procedures	None						
Unusual Fire and Explosion Hazards	None						
NFPA Ratings:	Health	1	Fire	0			

### Section V - Reactivity Data

Stability	Stable under normal conditions of storage and handling
Reactivity	None known
Incompatibility	None known
Hazardous Decomposition or Byproducts	None known
Polymerization Hazards	This material will not polymerize

### Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation? YES	Skin? NO	Ingestion? YES
<b>Health Hazards</b> ( <i>Acute &amp; Chronic</i> ) Sawing or grinding may result in release of dust particles which may be inhaled.			
<b>Acute:</b> Cause minor irritation of the eye or nose. <b>Chronic:</b> Result in lung disease (Silicosis) if exposed to excessive amounts for prolonged periods.			
See Also ASTM E1 132-86	NTP? NO	IARC Monographs? NO	OSHA Regulated? NO
<b>Carcinogenicity</b> IARC has classified respirable crystalline silica (quartz) as a known carcinogen in humans.			
<b>Signs and Symptoms of Exposure</b> Irritation of eyes and nose or shortness of breath.			
<b>Medical Conditions Generally Aggravated by Exposure</b> Pre-existing lung disease such as Emphysema or Asthma. Possible complications of allergies resulting in irritation to skin, eyes, and respiratory passage may occur from excessive exposure to dust.			
<b>See Also</b> ASTM E1 132-86 Standard Practice for Health Requirements relating to occupation exposure to quartz dust.			
<b>Emergency &amp; First Aid Procedure</b> Flush eyes generously with water for 15 min., and contact a physician.			
<b>California Prop 65 Warning</b> This product contains a chemical known to the State of California to cause cancer. Dry cutting, sanding, or grinding of interlocking pavers will expose you to crystalline silica which is known to cause cancer.			

## Section VII - Precautions for Safe Handling and Use

<b>Steps to Be Taken in Case Material is Released or Spilled</b> Use adequate ventilation, dustless vacuum and clean up materials, so as not to exceed the PEL.	
<b>Waste Disposal Method</b> Dispose of as common/proper waste container	<b>Precautions to Be taken in Handling and Storing</b> None
<b>Other Precautions</b> Wear NIOSH approved respirator and tight fitting goggles when sawing or grinding.	
<b>Transportation: DOT Hazard Classification:</b> Not Required <b>Placard Required:</b> None	<b>UN/NA CODE:</b> None <b>Labeling Requirement:</b> None

## Section VIII - Control Measures

<b>Respiratory Protection</b> To minimize exposure to dust and/or crystalline silica, cutting or grinding should be conducted with wet saw/grinder and with sufficient ventilation. When such controls are not feasible, NIOSH approved particulate respirators must be worn.	
<b>Skin Protection</b> Use gloves and/or protective clothing if abrasion or allergic reactions are experienced.	
<b>Eye Protection</b> Use safety glasses with side shields. Face shields should also be used when dry sawing pavers. Dust goggles should be worn when excessively (visible) dusty conditions are present or are anticipated.	
<b>Safety Measure</b> Wear a hard hat and/or steel-toed safety shoes if pavers may fall from an elevation or be dropped during handling.	
<b>Local Exhaust</b> When dry sawing or grinding pavers, use sufficient local exhaust to reduce the level of respirable dust to the applicable standards set forth in Section III. See ACGIH "Industrial Ventilation, A Manual of Recommended Practice," latest edition.	
<b>Work/Hygienic Practices</b> Avoid creating and breathing dust.	
<b>Other Control Measures</b> Respirable dust and quartz levels should be monitored regularly. Dust and quartz levels in excess of appropriate exposure limits should be reduced by feasible engineering controls, including (but not limited to) wet sanding, wet suppression, ventilation, and process enclosures. Respirators must be worn when such controls are not feasible or do not completely control dust generation.	
<b>Mechanical (General)</b> In confined area	<b>Other</b> N/A
<b>Protective Gloves</b> When Required	<b>Eye Protection</b> Tight fitting goggles
<b>Other Protective Clothing or Equipment</b> None	<b>Work/Hygienic Practices</b> N/A

The information and recommendations contained herein are based upon the data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful health effects that may be caused by exposure to airborne dust particles created by dry sawing or grinding of our products. Customers/Users of interlocking concrete pavers and or slabs and/or garden walls must comply with all applicable health and safety laws, regulations and orders.