SAFETY DATA SHEET

Polymeric Paver Finishing Sand

R3 (April 2012)

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1. PRODUCT IDENTIFICATION

Product	ITEM CODES (Unit Weight):	Manufacturing Location (s)
JOINT LOCK SAND (BROWNSTONE)	98570 (70 lb.)	USA: Stormville, NY
JOINT LOCK SAND (GRAYSTONE)	R98473 (70 lb.)	Ravena, NY
JOINT LOCK SAND (SANDSTONE)	98557 (70 lb.)	Canada: None
HP STONE DUST	98550 (70 lb)	

Synonyms: Joint Lock, Jointing Sand, Polymeric Sand, Polymer Sand, Paver Finishing Sand, Paver Locking Sand, High Performance Joint Lock Stone Dust, Stone Dust, HP Blue Stone

Product Description: Joint-Lock Sand® is a polymer enhanced graded paver sand used in the joints of paving stone installations. It is used to mitigate the effects of insect mining, erosion due to wind and rain, and weed growth between the paver joints.

2. HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

Name	CAS no.	Agency	Exposure Limits	Comments
Aggregate	Various	n/a	n/a	
Portland Cement	65997-15-1	OSHA OSHA NIOSH NIOSH	PEL-TWA 15 mg/m^3 PEL-TWA 5 mg/m^3 REL-TWA 10 mg/m^3 REL-TWA 5 mg/m^3	Total dust (50 mppcf) Respirable fraction Total dust Respirable fraction
Crushed Limestone	1317-65-3	OSHA OSHA NIOSH NIOSH	PEL-TWA 15 mg/m^3 PEL-TWA 5 mg/m^3 REL-TWA 10 mg/m^3 REL-TWA 5 mg/m^3	Total dust Respirable fraction Total dust Respirable fraction
Crystalline Silica (as alpha-Quartz)	14808-60-7	OSHA OSHA ACGIH	PEL-TWA [30 mg/m^3]/% SiO_2 + 2 PEL-TWA [10 mg/m^3]/% SiO_2 + 2 or [250 mppcf]/ % SiO_2 + 5 TLV-TWA 0.025R mg/m^3	Total dust Respirable dust Respirable dust Respirable dust
Amorphous Silica	61790-53-2	OSHA	PEL-TWA [80 mg/m^3]/% SiO_2 + 2	
Proprietary Admixture	n/a			

Note - Chemical admixtures may be present in quantities less than 1%. Information on specific admixtures will be provided by the supplier upon request.

3. HAZARD IDENTIFICATION

Appearance and Odor: Joint Lock Sand® is light beige, brown, or grey colored granular solid with slight acrylic odor.
Primary Health Hazards: Prolonged or repeated skin contact can cause drying of the skin which may produce irritation or dermatitis. Airborne dust can cause immediate or delayed irritation or inflammation.
Primary Route(s) of Exposure:
Inhalation: Dust (irritant to respiratory tract).
Skin
Ingestion
Potential Health Effects: Eye Contact – with large amounts of the dry powder can cause moderate eye irritation, chemical burns and blindness. Eye exposures require immediate first aid and medical attention to prevent significant damage to the eyes. Particulates may scratch eye surfaces and cause mechanical irritation.
Potential Health Effects: Skin – Concrete dust, in association with sweat and friction, can lead to skin irritation and dermatitis. Skin affected by dermatitis may include symptoms such as redness, itching, rash, scaling, and cracking. Irritant dermatitis is caused by the physical properties of dust such as abrasion.
Potential Health Effects: Ingestion – Do not ingest; can cause burns to mouth, throat and stomach.
Medical Conditions Generally Aggravated by Exposure: Individuals with (e.g., bronchitis, emphysema, COPD, pulmonary disease) can be aggravated by exposure. Pre-existing skin conditions can be aggravated by exposure. Exposure to crystalline silica or the disease silicosis is associated with increased incidence of scleroderma, tuberculosis and possibly increased incidence of kidney lesions.
Signs and Symptoms of Exposure:
Acute Health Hazards (Inhalation): Product becomes alkaline when exposed to moisture. Exposure can dry the skin, cause alkali burns and affect the mucous membranes. Breathing dust may cause nose, throat, or lung irritation; including choking. Dust may be a mechanical irritant to the eyes. Symptoms of excessive exposure to dust include the shortness of breath and reduced pulmonary function. Excessive exposure to skin and eyes especially when mixed with water can cause caustic burns.
Chronic Health Hazards: Risk of injury depends on duration and level of exposure. Dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the cornea. Hypersensitive individuals may develop an allergic dermatitis.
Carcinogenicity Listings:

NTP:	Known carcinogen
OSHA:	Not listed as a carcinogen
IARC Monographs:	Group 1 Carcinogen
California Proposition 65:	Known carcinogen

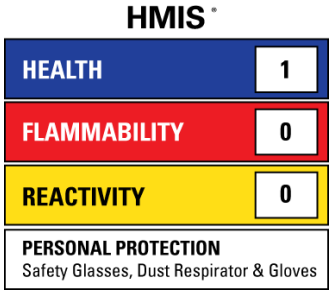
NTP: The National Toxicology Program, in its "Ninth Report on Carcinogens" released May 15, 2000, concluded that "Respirable Crystalline Silica" (RCS) primarily quartz dusts occurring in industrial and occupational settings, is known to be a human carcinogen, based on sufficient evidence of carcinogenicity from studies in humans indicating a casual relationship between exposure to RCS and increased lung cancer rates in workers exposed to crystalline silica dust (reviewed in IAC, 1997; Brown et al., 1997; Hind et al., 1997).

IARC:

The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms or quartz or cristobalite from occupational sources'" and that there is "sufficient evidence in experimental animals for the carcinogenicity of cristobalite." The overall IARC evaluation was that "crystalline silica inhaled in the form of quartz or cristobalite" from occupational sources is carcinogenic to humans (Group 1)." The IARC evaluation noted that "carcinogenicity was not detected in all industrial circumstances or studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affection its

biological activity or distribution of its "polymorphs." For further information on the IARC evaluation, see IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. Volume 68, "Silica, Some Silicates." (1997).

4. EMERGENCY AND FIRST AID PROCEDURES



Ingestion: Do not induce vomiting. If conscious, have the victim drink plenty of water And call a physician immediately.
Eye Contact: Check for and remove any contact lens. Immediately flush eye thoroughly with water. Continue flushing for at least 20 minutes, including under lids to remove all particles. Seek further medical help if irritation persists.
Skin Contact: Wash with cool water and pH-neutral soap. If a rash or persistent irritation or dermatitis occurs, get medical attention and advice. Seek medical treatment in the event of burns.

Inhalation: Dust is irritant to the respiratory tract. Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing and other symptoms do not subside. If breathing is difficult, give oxygen. Get medical attention immediately.

Note to Physician: No specific treatment. Treat symptomatically.

HMIS Rating: Health: 1 Fire: 0 Reactivity: 0

5. FIRE AND EXPLOSION DATA

Flash Point: Non-combustible; poses no fire related hazard.
Flammable Limits:
LEL: ND
UEL: ND
Extinguishing Media: Use extinguishing media appropriate for surrounding fire.
Autoignition Temperature: ND
Special Firefighting Procedures: Self-Contained Breathing apparatus required for enclosed areas. A SCBA is recommended to limit exposures to combustion products when fighting any fire.
Avoid breathing vapors for long periods.
Unusual Fire and Explosion Hazards: None know.

6. ACCIDENTAL RELEASE MEASURES

If spilled, use dustless methods, (vacuum) and place into covered container for disposal (if not contaminated or wet). Use adequate ventilation to keep exposure to airborne contaminants below the exposure limit.

7. HANDLING AND STORAGE

Do not allow water to contact product until time of use. Do not breathe dust. In dusty environments, the use of an OSHA, MSHA, or NIOSH approved respirator and tight fitting goggles is recommended. Do not get in eyes or on skin or clothing. Do not ingest. Use only with adequate ventilation.

8. EXPOSURE CONTROL MEASURES

Personal Protective Equipment (PPE): Wear ANSI approved glasses or Safety goggles when handling dust or wet sanded product to prevent contact with eyes. Wearing contact lenses when using sanded material, under dusty conditions, is not recommended.
Respiratory Protection: Always wear a NIOSH approved respirator. Ensure that it is properly fitted and is in good condition when exposed to dust above exposure limit.
Other Protective Clothing or Equipment: Outer garments may be desirable in extremely dusty areas.
Engineering Controls: Use only in well-ventilated areas. Local exhaust can be used, if necessary, to control airborne dust levels.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice. Avoid repeated or prolonged dust inhalation or contact with skin in accordance with above good practices. Always wear a NIOSH approved respirator. Wash thoroughly after handling and before eating or drinking. The use of barrier creams or impervious gloves, boots and clothing to protect the skin from contact is recommended. Following work, workers should shower with soap and water. Precautions must be observed because burns occur with little warning.

WARN EMPLOYEES AND/OR CUSTOMERS OF THE HAZARDS AND REQUIRED OSHA PRECAUTIONS ASSOCIATED WITH THE USE OF THIS PRODUCT.

Environmental Exposure: This product does not present any particular risk for the environment. Refer to applicable national, state and local regulations.

9. PHYSICAL / CHEMICAL PROPERTIES

Boiling Point (at 760mm Hg):	> 2700 deg. F.
Vapor Pressure (mm Hg):	N/A
Vapor Density (air = 1):	N/A
Specific Gravity (water = 1):	APPROX. 2.60 – 3.15
Melting Point:	>2700 deg. F.
Evaporation Rate (Butyl acetate = 1):	N/A
Solubility in Water (% by weight):	Slight
pH:	N/A
Freezing Point:	N/A
Physical State:	Light beige, mobile, granular solid

10. CHEMICAL STABILITY AND REACTIVITY

Chemical Stability: Stable
Conditions to Avoid: Contact of silica with powerful oxidizing agents such as fluorine, chlorine trifluoride, manganese trioxide, or oxygen difluoride may cause fire. Keep dry until used to preserve product utility.
Incompatibility: Strong oxidizers.
Hazardous Polymerization: Will not occur.
Hazardous Decomposition or By-Products: None known.

11. TOXICOLOGICAL INFORMATION

Routes of Entry: Inhalation, Ingestion
Toxicity to Animals:

- LD50: Not Available
- LC50: Not Available

Chronic Effects on Humans: Condition aggravated by exposure includes eye disease, skin disorders and Chronic Respiratory conditions. May cause burns to mouth, throat, stomach and eyes.
Special Remarks on Toxicity: Not Available

12. ECOLOGICAL INFORMATION

Ecotoxicity: Not available.
BOD_5 and COD: Not available.
Products of Biodegradation: Not available.
Potential to Bioaccumulate: The product has low potential for bioaccumulation
Toxicity of the Products of Biodegradation: Not available.
Special remarks on the Products of Biodegradation: Not available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of unusable material via licensed waste disposal company in accordance with local, state, and federal guidelines.

14. TRANSPORT INFORMATION

DOT/UN: Non-regulated
DOT Hazard Class: Non-regulated
Shipping Name: Non-regulated
Not regulated as a hazardous waste material by the U.S. Department of Transportation and TDG Regulations.

15. OTHER REGULATORY INFORMATION

US OSHA 29CFR 1910.1200: Considered hazardous under this regulation and should be included in the employer's hazard communication program.
SARA (Title III) Sections 311 and 312: This product has been reviewed according to the EPA Hazard Categories promulgated under sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 and is a hazardous chemical and a delayed health hazard.
SARA (Title III) Section 313: Not subject to reporting requirements.
TSCA (May 1997): Some substances are on the TSCA inventory list.
Federal Hazardous Substance Act: Is a hazardous substance subject to statues promulgated under the subject act.
Canadian Environmental Protection Act: Not Listed.
Canadian WHMIS: Considered to be a hazardous material under the Hazardous Products Act as defined by the Controlled Products Regulation (Class D2A, E-Corrosive Material) and subject to the requirements of Health Canada's Workplace Hazardous Material Information (WHMIS). This product has been classified according to the hazard criteria of the Controlled Products Regulation (CPR). This document complies with the WHMIS requirements of the Hazardous Products Act (HPA) and the CPR.

16. ADDITIONAL INFORMATION

Date Prepared: 5/11/2011
User's Responsibility: This information is compiled from sources believed to be accurate or otherwise technically correct. It is the user's responsibility to determine if this information is suitable for their application and to follow safety precautions as may be necessary.

Revision R3 supersedes all previous revisions.

Note: The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products.

HMIS-III:
Health:
0 = No significant health risk
1 = Irritation or minor reversible injury possible
2 = Temporary or minor injury possible
3 = Major injury possible unless prompt action is taken
4 = Life threatening, major or permanent damage possible
Flammability:
0 = Material will not burn
1 = Material must be preheated before ignition will occur
2 = Material must be exposed to high temperatures before ignition
3 = Material capable of ignition under normal temperatures
4 = Flammable gases or very volatile liquids; may ignite spontaneously
Reactivity:
0 = Material is normally stable, even under fire conditions
1 = Material normally stable but may become unstable at high temps
2 = Materials that are unstable and may undergo react at room temp
3 = Materials that may form explosive mixtures with water
4 = Materials that are readily capable of explosive water reaction