



SAFETY DATA SHEET

Polymeric Paver Finishing Sand & Stone

R5 (March 2015)

PACKAGE PAVEMENT COMPANY, INC. 675 Leetown Road P.O. Box 408 Stormville, NY 12582

Office Phone: 845.221.2224

Additional Phone Number: 800.724.8193 Hours: Monday–Friday EST (8am - 4:30pm)

www.packagepavement.com

1. IDENTIFICATION

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

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. HAZARD(S) IDENTIFICATION

Health

GHS CLASSIFICATIONS (US)

- Acute toxicity (Oral): 4
- Acute toxicity (Dermal): 4
- Acute toxicity (Inhalation): 3
- Skin Irritation: 2
- Serious Eye Damage: 2A
- Skin Sensitization: 1B
- Carcinogenicity: 1B
- Specific Target Organ Toxicity Single Exposure: 3
- Specific Target Organ Toxicity After Repeat Exposure: 2

GHS Label Symbols:





SKIN / EYE & LUNG IRRITANT

POTENTIAL CARCINOGEN



Hazard Statements: WARNING!

- May cause skin irritation.
- May be harmful if swallowed.
- May cause an allergic skin reaction.
- May cause respiratory irritation.
- May cause cancer through chronic inhalation (silica)
- May contain crystalline silica
- Less than 50% of the mixture consists of ingredients of unknown acute toxicity.

Prevention Statements: CAUTION:

- Do not eat, drink or use tobacco when using this product.
- Do not breathe dust
- Do not expose product to unprotected skin
- Wear respiratory protection, protective gloves, eye/face protection
- Use only in a well-ventilated area.
- Store container tightly closed in cool/well-ventilated place.
- Wash exposed areas of body thoroughly after handling.

Protective Gear Required (PPE):

Respiratory Protection

Safety Gloves



Eye Protection

3. COMPOSITION / INFORMATION ON INGREDIENTS

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

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



4. FIRST AID MEASURES

Primary Route(s) of Exposure:

- Inhalation: Dust
- Eye Contact
- Skin Contact
- Ingestion

Potential Health Effects:

Inhalation: With application of the product there will be dust which may create irritation to the eyes throat and lungs under prolonged exposure. Use only in well ventilated areas.

Eye Contact: During application this product may cause moderate eye irritation. If eyes are exposed immediately flush out eye thoroughly with water. Continue flushing for at least 20 minutes, including under eyelids to remove all sand and dust particles. Seek medical attention if irritation persists.

Skin Contact: Wash exposed skin with cool water and a PH-neutral soap. If a rash, persistent irritation or dermatitis occurs, seek medical attention and advice.

Ingestion: If ingested, DO NOT induce vomiting unless directed to do so by a medical professional. Immediately seek medical attention.

Medical Conditions Generally Aggravated by Exposure: Individuals with (e.g., bronchitis, emphysema, COPD, pulmonary disease) can be aggravated by exposure to dust. 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.

5. FIRE-FIGHTING MEASURES

Flash Point: Non-combustible this product poses no fire related hazard.

Flammable Limits: Non Flammable

LEL: N/A UEL: N/A

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

Unusual Fire & Explosion Hazards: None known

6. ACCIDENTAL RELEASE MEASURES

Spillage Measures: If the product is 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.

Waste Disposal Methods: Follow all applicable local, state and federal regulations for disposal.

7. HANDLING AND STORAGE

Do not allow water to contact product until time of use. Do not breathe dust. The use of an OSHA, MSHA, or NIOSH approved respirator and properly fitted safety goggles is recommended. Avoid exposure of the product to eyes or skin. The product shall be stored in a cool and dry place without exposure to standing water.

KEEP OUT OF REACH OF CHILDREN



8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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 proper protective gear and handling procedures will limit exposure levels.

Personal Protective Equipment (PPE): Wear a dust mask during the application of the product. Wear ANSI approved glasses or Safety goggles when handling both the packaging and when applying the product. (Wearing contact lenses when using polymeric sand is not recommended.) The use of waterproof gloves is highly recommended to prevent exposure to skin and body.

Respiratory Protection: Use a NIOSH approved respirator when applying this product is highly recommended when exposed to dust above the exposure limit.

Other Protective Clothing or Equipment: Protective outer garments including long sleeve shirts, workpants, boots and gloves should be used to prevent exposure when applying this product.

Engineering Controls: Use only in well-ventilated areas to ensure dust is below exposure levels. 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. 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 and clean clothing to before reuse. Precautions must be observed because burns occur with little warning.

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

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

9. PHYSICAL & CHEMICAL PROPERTIES

Physical State: Uniformly Graded Granular Solid with Tan or Gray Appearance

Boiling Point (at 760mm Hg): N/A
Vapor Pressure (mm Hg): N/A
Vapor Density (air = 1): N/A

Specific Gravity (water = 1): APPROX. 2.6 – 3.15

Melting / Freezing Point:

Evaporation Rate (Butyl acetate = 1):

Solubility in Water (% by weight):

PH:

N/A

Freezing Point:

N/A

N/A

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: Avoid contact with water and 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 Exposure: Inhalation, Skin Contact, Eye Contact and Ingestion

- Skin Contact: Skin contact of this product may cause slight irritation. Prolonged or frequent contact can cause irritation to the dermatitis.
- Inhalation Exposure: Under prolonged exposure airborne dust can cause immediate or delayed irritation.
- Eye Contact: If in contact with the eyes, can cause irritation to the eyelids, cornea (conjunctivitis) and lesions to the eyeball.
- *Ingestion:* If swallowed it can cause burns to the mouth, esophagus and stomach.

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.

Special Remarks on Toxicity: Not Available

12. ECOLOGICAL INFORMATION

Eco-Toxicity: This product under normal working conditions presents no detectable harm to the environment.

BOD₅ and COD: Not available.

Products of Biodegradation: Not available. **Potential to Bioaccumulate:** Not available

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 quidelines.

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.

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).

16. ADDITIONAL INFORMATION

GHS Safety Standards Guide:

The new UN Global Harmonization System (GHS) of safety and hazard identification standards were adopted by OSHA in 2012 and will be implemented in June 1st 2015. This includes standardized pictograms to identify the hazards that are present in manufactured, blended or distributed products for use in the workplace. The GHS standards feature a new numerical system to identify the levels of toxicity of the product. The risk levels associated with this product are listed in section #2 of the 16 sections included in this guide. The new numbers are arranged on a scale of 1-5 with 1 being a severe hazard and 5 presenting minimal hazard when used under the product's instruction and when in compliance with applicable, local, state and federal guidelines.

- 1 = Severe Hazard
- 2 = Serious Hazard
- 3 = Moderate Hazard
- 4 = Slight Hazard
- 5 = Minimal Hazard

Health Hazards are further defined in categories for all routes of exposure including, pulmonary(inhalation), oral (mouth), dermal (skin), and ocular (eyes).

These Hazard Categories and the corresponding warning classifications are:

Acute Toxicity (Oral) - [1,2,3,4,5]
Acute Toxicity (Dermal) - [1,2,3,4,5]
Acute Toxicity (Inhalation) - [1,2,3,4,5]
Skin Corrosion/Irritant - [1A, 1B - Corrosion 2,3 - Irritant]
Eye Corrosion/Irritant - [1, 2A, 2B]
Respirator Sensitization - [1, 2A, 2B]
Skin Sensitization - [1A, 1B, 2]
Germ Cell Mutagenicity - [1A, 1B, 2]
Carcinogenicity - [1A, 1B, 2]

Reproductive Toxicity - Fertility - [1A,1B, 2] Reproductive Toxicity - Development - [1A,1B, 2] Specific Target Organ Toxicity - Single Exposure [1, 2, 3] Specific Target Organ Toxicity - Repeat Exposure [1, 2]



For more information visit the OSHA website: www.osha.gov

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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 R5, supersedes all previous revisions.

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