

SAFETY DATA SHEET

SECTION 1 – COMPANY AND PRODUCT IDENTIFICATION

Product name : Hanover® Granite Pavers
Paving units for use in architectural and hardscape applications.

Recommended use : Hanover® Architectural Products
5000 Hanover Road

Manufacturer : Hanover, PA 17331
Phone: (717) 637-0500
Toll free: 1-800-426-4242
Fax: (717) 637-7145
Internet: www.hanoverpavers.com

Emergency phone : INFOTRAC 800-535-5035
(Outside the US, call collect 352-323-3500)

SECTION 2 – HAZARDS IDENTIFICATION

Classification (GHS-US) : Eye Irritant 2B
Target Organ Toxicity: Repeat Exposure 1
Carcinogen 1A

Hazard pictograms :



Signal word : Danger

Hazard statement(s) Causes eye irritation.
May cause cancer (lungs).
Causes damage to organs (lungs) through prolonged or repeated exposure

Precautionary Statement Prevention

: Do not breathe dust. Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Obtain special instructions before use. Do not use until all safety precautions have been read and understood.

Other Hazards : Exposure to dust may aggravate pre-existing eye, skin or respiratory conditions or illnesses.

SECTION 2 – HAZARDS IDENTIFICATION

Potential effects and symptoms of acute exposure

: Inhalation: Dust particles from sawing or grinding may result in minor nose irritation or respiratory tract irritation. Exposure to excessive amounts of dust for prolonged periods could result in lung damage.

Eye contact: Dust particles released by sawing or grinding may cause minor eye irritation. Eye protection with tight fitting goggles is recommended. Signs and symptoms may include pain, tears, swelling, and redness. Severity of symptoms will depends on the amount of dust contacted.

Skin contact: May cause localized redness due to mechanical abrasion by particles.

Ingestion: Practically non-toxic. Ingestion of large quantities may cause intestinal irritation.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Component/Ingredient	CAS#	Percent Present (Range)
Silicon dioxide (Crystalline silica-quartz)	14808-60-7	68-70
Aluminum oxide	1344-28-1	17-20
Iron Oxide	1309-37-1	1-1.5
Calcium oxide	1305-78-8	1-2.5
Alkalies	471-34-1	7-8
Loss on ignition	No CAS#	< 1

Other Components

Granite is a naturally occurring igneous rock comprised mainly of feldspar, quartz, mica, and amphibole minerals. Depending on the deposits from which it is mined, silicon dioxide (SiO₂) may be present in its amorphous form or its crystalline form (quartz), with varying percentages of both commonly being present. Up to 100% of the SiO₂ may be present as crystalline silica. Crystalline silica (quartz) respirable dust has been identified as a human carcinogen and may cause silicosis if inhaled in its respirable form. Refer to Section 16 for additional information.

SECTION 4 – FIRST AID MEASURES

Inhalation

: Dust may cause respiratory tract irritation. If breathing is difficult, remove victim to fresh air and keep in a position comfortable for breathing. If there are signs or symptoms of minor nose irritation that persist, contact a physician. If there are signs or symptoms of lung damage (dry or severe cough, fatigue or tiredness, changes in breathing pattern, loss of appetite, chest pain, fever, gradual dark shallow rifts in nails eventually leading to cracks), seek the care of a physician. Signs of chronic lung damage following prolonged exposure may not appear until years after exposure.

SECTION 4 – FIRST AID MEASURES

- Eye Contact** : Rinse eyes and under lids cautiously with clean water for at least 15 minutes. Take out contact lenses if present and easy to do. Continue rinsing. Get medical attention.
- Skin Contact** : Wash with plenty of water. If skin irritation or rash occurs, get medical advice/attention.
- Ingestion** : Rinse the mouth with water to remove any material and drink plenty of water to dilute any swallowed material. Do not give drink or attempt to force water to an unconscious person.
- Symptoms** : See Section 2

Recommendations for Immediate Medical Care or Special Treatment

Seek immediate medical attention for inhalation of large quantities of dust. Seek immediate medical attention if particles in eyes cannot be easily removed.

SECTION 5 – FIRE FIGHTING MEASURES

- Flammability** : Not flammable or combustible.
- Extinguishing Media** : Not applicable. Use extinguishing media appropriate for surrounding flammable materials.
- Unsuitable Extinguishing Media** : Not available.
- Personal Protective Equipment** : Not applicable. Use PPE appropriate for surrounding flammable materials.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- Precautions** : Avoid creating dust. Prevent material from entering sewers, drains, ditches or waterways.
- Personal Protective Equipment (PPE) Precautions** : Wear respiratory protection and protective eyewear/clothing to avoid eye or skin contact.
- Emergency Procedures** : Ventilate area and avoid creating dust. Remove unnecessary persons from area.
- Containment and Clean Up** : Barricade solid material to prevent additional spillage. Scoop or vacuum up spilled material while avoiding dust creation. Use wet suppression methods, if appropriate, to reduce the generation of dust. Provide ventilation if dust is generated. Dispose of waste at a disposal facility in accordance with all local, regional, national and international regulations.

SECTION 7 – HANDLING AND STORAGE

Storage : There are no specific precautions when storing or handling the product in its original state. Wear NIOSH (National Institute for Occupational Safety and Health) approved particulate respirator and tight fitting goggles when sawing or grinding. Allow proper ventilation when sawing or grinding in a confined area. Wear protective gloves when required. Protect from moisture.

General Hygiene Advice : Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with soap and water before eating, drinking or smoking, and again when leaving work.

SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls : When crushing, cutting, grinding or drilling concrete, use general ventilation, local exhaust and/or wet suppression methods to maintain exposures below allowable exposure limits.

Respiratory Protection : NIOSH Approved respirator and tight fitting goggles.

Feet Protection : Use of steel toe shoes is recommended when handling pavers.

Eye Protection : Safety glasses with side shields should be worn as minimum protection. Dust goggles or full face protection should be worn when conditions with high dust concentrations exist or are anticipated.

Skin Protection : Use gloves to provide hand protection from abrasion.

Body Protection : If working in dusty conditions, impervious over garments are recommended.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form : Solid

Color : Not applicable. (Color Varies)

Odor : Odorless

Molecular weight : Not available.

Melting point/range : Not applicable.

Boiling point/boiling range : Not applicable.

Flash point : Not applicable.

Flammability (solid, gas) : Product is not flammable.

Ignition temperature : Not applicable.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

- Auto-ignition temperature** : Not auto-flammable
- Oxidizing properties** : The substance or mixture is not classified as oxidizing.
- Lower explosion limit** : Not applicable.
- Upper explosion limit** : Not applicable.
- Vapour pressure** : Negligible.
- Density** : No data available.
- Bulk density** : Not available.
- Viscosity, dynamic** : Not applicable.
- Viscosity, kinematic** : Not applicable.
- pH** : No data available.
- Water solubility** : Insoluble
- Partition coefficient:
n-octanol/water** : Not applicable.

SECTION 10 – STABILITY AND REACTIVITY

- Reactivity** : No dangerous reaction known under conditions of normal use.
- Chemical Stability** : Stable under normal conditions of use.
- Possibility of Hazardous
Reactions** : No dangerous reaction known under conditions of normal use.
- Conditions to Avoid** : None known.
- Incompatible Materials** : Strong acids may etch granite.
- Hazardous Decomposition** : Not applicable.

SECTION 11 – TOXICOLOGICAL INFORMATION

- Acute Toxicity** : Not classified.
- LD50/LC50 Data** : Not classified.
- Skin Corrosion/Irritation** : Not classified.

SECTION 11 – TOXICOLOGICAL INFORMATION

- Critical Eye Damage/Irritation** : May cause eye injury due to mechanical irritation.
- Respiratory or Skin Sensitization** : Not classified.
- Germ Cell Mutagenicity** : Not reported/no data available.
- Teratogenicity** : Not reported/no data available.
- Carcinogenicity** : Material may contain trace amounts of respirable crystalline silica, which may cause lung cancer through repeated or prolonged exposure to respirable dust.
- Specific Organ Toxicity (Single Exposure)** : Not reported/no data available.
- Specific Organ Toxicity (Repeated Exposure)** : May cause damage/disease to lungs through repeated or prolonged exposure.
- Reproductive Toxicity** : Not reported/no data available.
- Aspiration Respiratory Hazard** : Not reported/no data available.
- Symptoms**
- Inhalation** : Irritation of nose and throat. Coughing, sneezing, dyspnea and mucous discharge. Extended contact with respirable dust may lead to silicosis (see Section 16).
- Skin Contact** : May cause redness to skin due to mechanical abrasion.
- Eye Contact** : Redness and itching. Extended contact may lead to corneal abrasion.
- Ingestion** : Practically non-toxic. Ingestion of large amounts may cause intestinal irritation.
- Other Toxicological Information** : No additional data available.

SECTION 12 – ECOLOGICAL INFORMATION

- General Ecotoxicity** : Not classified.
- Persistence and Degradability** : Not reported/no data available.
- Bioaccumulation Potential** : Not reported/no data available.

SECTION 12 – ECOLOGICAL INFORMATION

Mobility in Soil to

Groundwater : Not reported/no data available.

Environmental Fate : Not reported/no data available.

Other Environmental

Precautions or Information : Prevent material from entering sewers, drains, ditches or waterways.

SECTION 13 – DISPOSAL INFORMATION

Not considered a hazardous waste under Federal RCRA regulations. Dispose of waste at a disposal facility in accordance with all local, regional, national and international regulations. Do not dry sweep spilled material. Wetting of spilled material where dust can be generated and/or use of respiratory protective equipment may be necessary.

Avoid creation or breathing dust during disposal. Avoid contact with skin and eyes. Refer to Section 8 for personal protection information.

Prevent material from entering sewers, drains, ditches or waterways.

SECTION 14 – TRANSPORT INFORMATION

Proper Shipping Name : N/A - not regulated.

Hazard Class : N/A - not regulated.

UN Shipping ID Number : N/A - not regulated.

Packing Group : N/A - not regulated.

Environmental/IMDG

Codes : N/A - not regulated.

SECTION 15 – REGULATORY INFORMATION

Federal

This product contains one or more chemical components or ingredients that may require identification and/or reporting under SARA Section 302, SARA Section 311/312/313, CERCLA and/or TSCA. An examination of the components of this product should be conducted by a qualified environmental professional to determine if such identification or reporting is required by federal law.

Components: Silica (Crystalline, Silica dioxide (Amorphous), Aluminum oxide, Calcium oxide, Ferrous (iron) oxide

SECTION 15 – REGULATORY INFORMATION**State**

This product contains one or more chemical components or ingredients that are included or listed on the hazardous substances lists for one or more of the following states: California, Maine, Minnesota, New Jersey, Pennsylvania and Rhode Island. An examination of the components of this product should be conducted by a qualified environmental or safety and health professional to determine the specific requirements for those states.

Components: Silica (Crystalline, Silica dioxide (Amorphous), Aluminum oxide, Calcium oxide, Ferrous (iron) oxide

The state of California requires the following statement (Proposition 65) in regards to this material: **WARNING!** This product contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

SECTION 16 – OTHER INFORMATION**Additional information regarding crystalline silica:**

The major concern in silicosis, caused by the inhalation and retention of respirable (extremely small) crystalline silica dust particles. Silicosis can exist in several forms. Chronic or ordinary silicosis (often referred to as simple silicosis) is the most common form of silicosis, and can occur after many years of exposure to relatively low concentration of airborne respirable crystalline silica dust. Complicated silicosis or progressive massive fibrosis (PMF) may be associated with decreased lung function and may be disabling. Advanced complicated silicosis or PMF may lead to death. Advanced complicated silicosis or PMF can result in heart disease secondary to the lung disease. Acute silicosis can occur with exposures to very high concentrations of respirable crystalline silica over a very short period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough and weight loss. Acute silicosis can be fatal.

IARC: 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 studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.”

NTP: The National Toxicology Program (NTP), in its Thirteenth Annual Report on Carcinogens, classified “silica, crystalline (respirable)” as a known human carcinogen.

OSHA: Crystalline silica (quartz) is not regulated as a human carcinogen by the Occupational Safety and Health Administration.

NOTE: Hanover® Architectural Products believes that the information contained in this Safety Data Sheet is reliable, but they are given without warranty or guarantee of any kind. They are not necessarily all-inclusive or fully adequate in every circumstance and 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. Also, the suggestions should not be confused with nor followed in violation of applicable laws, regulations, rules, or insurance requirements.

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