



## 1. Identification

**Product identifier: Granite**

**Other means of identification:**

Aggregate, Manufactured Sand, Natural Stone, Crushed Stone, and Granite aggregate may be used in the manufacture of bricks, mortar, cement, concrete, plasters, paving materials, and other construction materials. Granite aggregate may be distributed in bags, totes, and bulk shipments.

**Manufacturer/Importer/Supplier/Distributor information:**

Company: Pike Industries, Inc.

Address: 3 Eastgate Park Rd. Belmont, NH 03220

Telephone: 1-(603) 527-5100

Website: [www.pikeindustries.com](http://www.pikeindustries.com)

Contact person Emergency phone number (24 Hours): 1-800-424-9300 (Chemtrec)

## 2. Hazards Identification

<b>Physical hazards</b>	Not classified.	Carcinogenicity	Category 1A
<b>Health Hazards:</b>		Specific Target Organ Toxicity, Repeated Exposure	Category 2

**OSHA defined hazards:** Not classified.

### Label Elements

**Hazard Pictograms:**



**Signal Word: DANGER**

**Hazard Statements:** May cause cancer. May cause damage to organs (lung) through prolonged or repeated exposure. Causes Skin & Eye Irritation

**Precautionary statement Prevention:**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

**Response:** If exposed or concerned: Get medical advice/attention.

**Storage:** Restrict or control access to stockpile areas.

**Engulfment hazard:** To prevent burial or suffocation, do not enter a confined space, such as a silo, bulk truck or other storage container or vessel that stores or contains aggregates without an effective procedure for assuring safety.

**Disposal:** Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard(s) not otherwise classified (HNOC):** None known.

**Supplemental information:**

Respirable Crystalline Silica (RCS) may cause cancer. Granite is a naturally occurring mineral complex that contains varying quantities of quartz (crystalline silica). In its natural bulk state, granite is not a known health hazard. Granite may be subjected to various natural or mechanical forces that produce small particles (dust) which may contain respirable crystalline silica (particles less than 10 micrometers in aerodynamic diameter). Repeated inhalation of respirable crystalline silica (quartz) may cause lung cancer according to IARC and NTP; ACGIH states that it is a suspected cause of cancer. Other forms of RCS (e.g., tridymite and cristobalite) may also be present or formed under certain industrial processes.



### 3. Composition/information on ingredients

Mixtures Chemical name	CAS number:	None	> 99
		Crystalline Silica (Quartz)	14808-60-7 > 1

### 4. First Aid Measures

- Inhalation:** Granite dust: Move to fresh air. Call a physician if symptoms develop or persist. Inhaling dust may cause discomfort in the chest, shortness of breath, and coughing.
- Skin Contact:** Granite dust: Wash off with soap and water. Get medical attention if irritation develops and persists.
- Eye Contact:** Granite dust: Immediately flush with plenty of water for at least 15. Hold eyelids apart. Occasionally lift the eyelid(s) to ensure thorough rinsing. Beyond flushing, do not attempt to remove material from the eye(s). Get medical attention if irritation develops or persists.
- Ingestion:** Rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.

#### Most important symptoms/effects, acute and delayed:

Prolonged inhalation may cause chronic health effects. This product contains crystalline silica. Prolonged or repeated inhalation of respirable crystalline silica liberated from this product can cause silicosis, and may cause cancer.

#### Indication of immediate medical attention and special treatment needed:

- Notes to physician:** Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
- Specific treatments:** Not Applicable
- Protection of first-aiders:** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
- General information:** Pre-existing medical conditions that may be aggravated by exposure include disorders of the eye, skin and lung (including asthma and other breathing disorders). If addicted to tobacco, smoking will impair the ability of the lungs to clear themselves of dust.

*See toxicology information (Section 11)*

### 5. Fire-fighting Measures

- Suitable extinguishing media:** Granite is not flammable. Use fire-extinguishing media appropriate for surrounding materials. Unsuitable extinguishing media: None known.
- Specific hazards arising from the chemical:** No unusual fire or explosion hazards noted. Not a combustible dust.  
Special protective equipment and precautions for firefighters: Use protective equipment appropriate for surrounding materials.
- Firefighting equipment/instructions:** No specific precautions.
- Specific methods:** Contact with powerful oxidizing agents may cause fire and/or explosions (see section 10 of SDS).
- General fire hazards:** No unusual fire or explosion hazards noted.



## 6. Accidental Release Measures

### Personal precautions, and emergency procedures:

Wear appropriate protective equipment and clothing during clean-up of materials that contain or may liberate granite dust.

### Methods and materials for containment and cleaning up Environmental precautions:

Spilled material, where dust is generated, may overexpose cleanup personnel to respirable crystalline silica-containing dust. Do not dry sweep or use compressed air for clean-up. Wetting of spilled material and/or use of respiratory protective equipment may be necessary. Avoid discharge of fine particulate matter into drains or water courses.

## 7. Handling and Storage

**Precautions for safe handling:** Do not handle until all safety precautions have been read and understood. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage:** Avoid dust formation or accumulation.

## 8. Exposure Controls/Personal Protection

### Occupational exposure limits

- 1 – Value equivalent to OSHA formulas (29 CFR 1910.1000; 29 CFR 1917; 29 CFR 1918).
- 2 – Value also applies to MSHA Metal / Non-Metal (1973 TLVs at 30 CFR 56/57.5001).
- 3 – OSHA enforces 0.250 mg/m<sup>3</sup> in construction and shipyards (CPL-03-00-007).
- 4 – Value also applies to OSHA construction (29 CFR 1926.55 Appendix A) and shipyards (29 CFR 1915.1000, Table Z).
- 5 – MSHA limit = 10 mg/m<sup>3</sup>.U.S.

### OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Ingredient Name	Exposure Limits		
	Type	Value	Form
<i>Particulates not otherwise classified</i> (CAS SEQ250)	<b>ACGIH TLV (United States, 3/2012)</b>		
	TWA	3 mg/m <sup>3</sup>	Respirable particles (2)
	TWA	10 mg/m <sup>3</sup>	Inhalable particles (2)
	<b>OSHA PEL (United States, 6/2010)</b>		
	PEL	5 mg/m <sup>3</sup>	Respirable fraction
	PEL	15 mg/m <sup>3</sup>	Total Dust (4)
	TWA	5 mg/m <sup>3</sup>	Respirable fraction (1)
<i>Crystalline Silica (Quartz)</i> (CAS 14808-60-7)	<b>OSHA PEL (United States, 6/2010)</b>		
	TWA	0.3 mg/m <sup>3</sup>	Total Dust (1, 2)
	TWA	0.1 mg/m <sup>3</sup>	Respirable (1, 2, 3)
<i>Crystalline Silica (all forms; CAS mixture)</i>	<b>ACGIH TLV (United States, 3/2012)</b>		
	TWA	0.025 mg/m <sup>3</sup>	Respirable fraction
	<b>NIOSH REL (United States, 3/2012)</b>		
	TWA	0.05 mg/m <sup>3</sup>	Respirable Dust
<i>Tridymite and Cristobalite</i> (other forms of crystalline silica) (CAS SEQ250)	<b>OSHA PEL (United States, 6/2010)</b>		
	TWA	0.15 mg/m <sup>3</sup>	Total Dust (1)
	TWA	0.05 mg/m <sup>3</sup>	Respirable (1, 2)

### Appropriate engineering controls:

Good general ventilation (typically 10 air changes per hour indoors) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Exposure guidelines:**

OSHA PELs, MSHA PELs, and ACGIH TLVs are 8-hr TWA values. NIOSH RELs are for TWA exposures up to 10-hr/day and 40-hr/wk. Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Terms including "Particulates Not Otherwise Classified," "Particulates Not Otherwise Regulated," "Particulates Not Otherwise Specified," and "Inert or Nuisance Dust" are often used interchangeably; however, the user should review each agency's terminology for differences in meanings.

**Biological limit values:** No biological exposure limits noted for the ingredient(s).

**Individual protection measures, such as personal protective equipment**

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**Eye/face protection:** Wear safety glasses with side shields (or goggles).

**Skin protection:** Use personal protective equipment as required.

**Hand protection:** Use personal protective equipment as required.

**Other:** Use personal protective equipment as required.

**Respiratory protection:** When handling or performing work with granite that produces dust or respirable crystalline silica in excess of applicable exposure limits, wear a NIOSH-approved respirator that is properly fitted and is in good condition. Respirators must be used in accordance with all applicable workplace regulations.

**Thermal hazards:** Not anticipated. Wear appropriate thermal protective clothing, when necessary.

## 9. Physical and Chemical Properties

**Appearance**

<b>Physical state</b>	Solid. Solid, particles	<b>Upper/lower flammability or explosive limits</b>	Not applicable
<b>Form Color</b>	Various, salt and pepper	<b>Vapor pressure</b>	Not applicable
<b>Odor</b>	Not applicable	<b>Vapor density</b>	Not applicable
<b>Odor threshold</b>	Not applicable	<b>Relative density</b>	Not applicable
<b>pH</b>	Not applicable	<b>Solubility</b>	Not applicable
<b>Melting point/freezing point</b>	Not applicable	<b>Solubility (water)</b>	Insoluble
<b>boiling point and boiling range</b>	Not applicable	<b>Partition coefficient (n-octanol/water)</b>	Not applicable
<b>Flash point</b>	Non-combustible	<b>Auto-ignition temperature</b>	Not applicable
<b>Evaporation rate</b>	Not applicable	<b>Decomposition temperature</b>	Not applicable
<b>Flammability (solid, gas)</b>	Not applicable	<b>Viscosity</b>	Not applicable

## 10. Stability and Reactivity

**Reactivity:** The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical stability:** Material is stable under normal conditions.

**Possibility of hazardous reactions:** No dangerous reaction known under conditions of normal use.



## 11. Toxicological Information

### Information on toxicological effects

- Acute toxicity:** Not expected to be acutely toxic.
- Corrosion/irritation:** *Skin:* This product is not expected to be a skin hazard.  
*Serious eye damage/eye irritation:* Direct contact with eyes may cause temporary irritation.
- Inhalation:** Repeated inhalation of respirable crystalline silica (quartz) may cause silicosis, a fibrosis (scarring) of the lungs. Silicosis is irreversible and may be fatal. Silicosis increases the risk of contracting pulmonary tuberculosis. Some studies suggest that repeated inhalation of respirable crystalline silica may cause other adverse health effects including lung and kidney cancer.
- Ingestion:** Not likely, due to the form of the product. However, accidental ingestion of the content may cause discomfort.
- Sensitization:** *Skin:* Not known to be a dermal irritant or sensitizer  
*Respiratory:* No respiratory sensitizing effects known.
- Germ cell mutagenicity:** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic
- Reproductive toxicity:** Not expected to be a reproductive hazard.
- Aspiration hazard:** Not expected to an aspiration hazard.

### Symptoms related to physical, chemical and toxicological characteristics:

*Granite dust:* Discomfort in the chest. Shortness of breath. Coughing.

**Carcinogenicity:** Respirable crystalline silica has been classified by IARC and NTP as a known human carcinogen, and classified by ACGIH as a suspected human carcinogen.

Product/ingredient name	OSHA	IARC	ACGIH	NTP
Crystalline Silica (Quartz) CAS14808-60-7)	Not Listed	1 Carcinogenic to humans	A2	Known to be human Carcinogen
Respirable Tridymite and Cristobalite (Other forms of Crystalline) (CAS Mixture)	Not listed	1 Carcinogenic to humans	-	-

### Specific target organ toxicity – repeated exposure

Name	Category	Route Exposure	Target Organs
Crystalline Silica (Quartz) CAS14808-60-7)	-	Inhalation	Not reported to have effects
Respirable Tridymite and Cristobalite (Other forms of Crystalline) (CAS Mixture)	-	Inhalation	Not reported to have effects

### Specific target organ toxicity – Chronic effects

Name	Category	Route Exposure	Target Organs
Crystalline Silica (Quartz) CAS14808-60-7)	-	Inhalation	May cause damage to organs (lung) through prolonged or repeated exposure
Respirable Tridymite and Cristobalite (Other forms of Crystalline) (CAS Mixture)	-	Inhalation	May cause damage to organs (lung) through prolonged or repeated exposure

### Information on likely routes of exposure Inhalation:

Prolonged inhalation of respirable crystalline silica may be harmful. May cause damage to organs (lungs) through prolonged or repeated exposure. There are reports in the literature suggesting that excessive crystalline silica exposure may be associated with autoimmune disorders and other adverse health effects involving the kidney. In particular, the incidence of scleroderma (thickening of the skin caused by swelling and thickening of fibrous tissue) appears to be higher in silicotic individuals. To date, the evidence does not conclusively determine a causal relationship between silica exposure and these adverse health effects.



## 12. Ecological Information

### Eco-toxicity

Not expected to be harmful to aquatic organisms. Discharging granite dust and fines into waters may increase total suspended particulate (TSP) levels that can be harmful to certain aquatic organisms.

**Persistence and degradability:** Not applicable.

**Bio-accumulative potential:** Not applicable.

**Mobility in soil:** Not applicable.

**Other adverse effects:** No other adverse environmental effects (e.g., ozone depletion, photochemical ozone creation potential, and global warming potential) are expected from this component.

## 13. Disposal Considerations

**Disposal instructions:** Do not allow fine particulate matter to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with fine particulates. Dispose of contents in accordance with local/regional/national/international regulations.

**Hazardous waste code:** Not regulated.

**Waste from residues / unused products:** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging:** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty packaging materials should be recycled or disposed of in accordance with applicable regulations and practices.

## 14. Transportation Information

	DOT Classification	IMDG	IATA
UN Number	Not regulated as dangerous goods.	Not regulated as dangerous goods.	Not regulated as dangerous goods.
UN proper shipping name	-	-	-
Transportation hazard class(es)	-	-	-
Packing group	-	-	-
Environmental Hazards	-	-	-
Additional information	-	-	-

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code



## 15. Regulatory Information

### US Federal regulations

<b>OSHA Hazard Communication Standard 29 CFR 1910.1200:</b>	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D):</b>	Not regulated.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):</b>	Not listed.
<b>CERCLA Hazardous Substance List (40 CFR 302.4):</b>	Not listed.
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA):</b>	
<b>Hazard categories:</b>	
Immediate Hazard -No	Pressure Hazard -No
Delayed Hazard -Yes	Reactivity Hazard -No
Fire Hazard -No	

<b>SARA 302 Extremely hazardous substance:</b>	Not listed.
<b>SARA 311/312 Hazardous chemical:</b>	Yes
<b>SARA 313 (TRI reporting):</b>	Not regulated.
<b>Other federal regulations Clean Air Act (CAA) Section 112</b>	
<b>Hazardous Air Pollutants (HAPs) List:</b>	Not regulated.
<b>Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):</b>	
	Not regulated.
<b>Safe Drinking Water Act (SDWA):</b>	Not regulated.

### US state regulations

- **Massachusetts – RTK:** Substance List - Crystalline Silica (Quartz) (CAS 14808-60-7) - Respirable Tridymite and Cristobalite (other forms of crystalline silica) (CAS Mixture)
- **New Jersey - Worker and Community Right-to-Know Act:** Substance List - Crystalline Silica (Quartz) (CAS 14808-60-7) Respirable Tridymite and Cristobalite (other forms of crystalline silica) (CAS Mixture)
- **Pennsylvania - Worker and Community Right-to-Know Law:** Substance List - Crystalline Silica (Quartz) (CAS 14808-60-7) Respirable Tridymite and Cristobalite (other forms of crystalline silica) (CAS Mixture)
- **Rhode Island - RTK:** Not regulated.
- **California Proposition 65:**  
WARNING: This product contains a chemical known to the State of California to cause cancer. California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance: Crystalline Silica (Quartz) (CAS 14808-60-7)

### International Inventories Country(s) or region Inventory name On inventory (yes/no)\*

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory: Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).



## 16. Other Information

Date of issue: 04/28/2016

Version: 06/01/2015

Revised Section(s): N/Ap

### Notice to reader:

While the information provided in this safety data sheet is believed to provide a useful summary of the hazards of granite as it is commonly used, the sheet cannot anticipate and provide all of the information that might be needed in every situation. Inexperienced product users should obtain proper training before using this product. In particular, the data furnished in this sheet do not address hazards that may be posed by other materials mixed with granite to produce granite products. Users should review other relevant material safety data sheets before working with this granite or working on granite products.

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### Abbreviations

ACGIH — American Conference of Governmental Industrial Hygienists  
CAS — Chemical Abstract Service  
CERCLA — Comprehensive Emergency Response and Comprehensive Liability Act  
CFR — Code of Federal Regulations  
DOT — Department of Transportation  
GHS — Globally Harmonized System  
HEPA — High Efficiency Particulate Air  
IATA — International Air Transport Association  
IARC — International Agency for Research on Cancer  
IMDG — International Maritime Dangerous Goods  
NIOSH — National Institute of Occupational Safety and Health

NOEC — No Observed Effect Concentration  
NTP — National Toxicology Program  
OSHA — Occupational Safety and Health Administration  
PEL — Permissible Exposure Limit  
REL — Recommended Exposure Limit  
RQ — Reportable Quantity  
SARA — Superfund Amendments and Reauthorization Act  
SDS — Safety Data Sheet  
TLV — Threshold Limit Value  
TPQ — Threshold Planning Quantity  
TSCA — Toxic Substances Control Act  
TWA — Time-Weighted Average  
UN — United Nations