

Section 1: IDENTIFICATION

1.1 PRODUCT IDENTIFIER

Product Names: Fine #9 Joint Rock

Product Code: SR-F9LG60

1.2 RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE

Other means of identification: Granite aggregate

Recommended Use: Granite aggregate is a construction material. Product may be distributed in bags, totes, and bulk shipments.

Recommended Restrictions: None Known

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Name/Address: Calstone Company
426 E Grant Line Road Tracy, CA 95376

Telephone Number: (209) 833-7366

1.4 EMERGENCY TELEPHONE NUMBER

Emergency Telephone Number: (888) 762-5100

Section 2: HAZARD(S) IDENTIFICATION

2.1 PHYSICAL AND HEALTH HAZARDS

Physical Hazards	Not classified	
Health Hazards	Carcinogenicity	Category
	1A Specific Target Organ Toxicity, 2 Repeated Exposure	Category
OSHA Defined Hazard	Not classified	

2.2 LABEL ELEMENTS ACCORDING TO OSHA

Hazard Pictogram:



Signal Word: Danger

Hazard Statement: May cause cancer. May cause damage to organs (lung) through prolonged or repeated exposure.

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.

2.3 ADDITIONAL INFORMATION

Hazards Not Otherwise Classified: (HNOC) Not applicable.

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.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 MIXTURES

Ingredient	UN #	H / F / R / *	CAS No	Wt. %
Granite	Not Available	Not Available	None	>99
Crystalline Silica (Quartz)	Not Available	Not Available	14808-60-7	>1

Section 4: FIRST- AID MEASURES

4.1 DESCRIPTION OF THE FIRST AID MEASURE

Eye Contact: Granite dust: Immediately flush with plenty of water for at least 15 minutes. 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.

Skin: Granite dust: Wash off with soap and water. Get medical attention if irritation develops and persists.

Inhalation: Granite dust: Move to fresh air. Call a physician if symptoms develop or persist.

Ingestion: Granite dust: Rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Inhaling dust may cause discomfort in the chest, shortness of breath, and coughing. 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.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENTS NEEDED

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

4.4 GENERAL INFORMATION

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. 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.

Section 5: FIRE-FIGHTING MEASURES**5.1 FLAMMABILITY**

Flammability: Not flammable.

5.2 EXTINGUISHING MEDIA

Suitable Extinguishing Media: Granite is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable Extinguishing Media: None known.

5.3 SPECIAL HAZARDS ARISING FROM THE CHEMICAL

Products of Combustion: No unusual fire or explosion hazards noted. Not a combustible dust.

5.4 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS

Use protective equipment appropriate for surrounding materials.

5.5 GENERAL FIRE HAZARDS

No unusual fire or explosion hazards noted.

Section 6: ACCIDENTAL RELEASE MEASURES**6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**

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

6.2 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING - UP

Methods for Containment and Clean-Up: 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.

Environmental Precautions: Avoid discharge of fine particulate matter into drains or water courses.

Section 7: HANDLING AND STORAGE**7.1 PRECAUTIONS FOR SAFE HANDLING**

Handling: Do not handle until all safety precautions have been read and understood. Keep formation of airborne dusts to a minimum. Provide

SAFETY DATA SHEET

appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment.

General Hygiene Advice: Observe good industrial hygiene practices. Wash hands before eating, drinking, or smoking.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Safe Storage: Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. (See section 10)

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

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/m³ 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/m³.

U.S. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)			
Components	Type	Value	Form
Particulates not otherwise classified (CAS SEQ250)	PEL	5 mg/m ³	Respirable fraction
		15 mg/m ³	Total dust (4)

U.S. OSHA Table Z-3 (29 CFR 1910.1000)			
Components	Type	Value	Form
Crystalline Silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m ³	Total dust (1,2)
		0.1 mg/m ³	Respirable (1,2,3)
Tridymite and Cristobalite (other forms of crystalline silica) (CAS Mixture)	TWA	0.15 mg/m ³	Total dust (1)
		0.05 mg/m ³	Respirable (1,2)
Particulates not otherwise classified (CAS SEQ250)	TWA	5 mg/m ³	Respirable fraction (1)
		15 mg/m ³	Total dust (1,4,5)

U.S. ACGIH Threshold Limit Values®			
Components	Type	Value	Form
Crystalline Silica (all forms; CAS mixture)	TWA	0.025 mg/m ³	Respirable fraction
Particulates not otherwise classified (CAS SEQ 250)	TWA	3 mg/m ³	Respirable particles (2)
		10 mg/m ³	Inhalable particles (2)

U.S. NIOSH: Pocket Guide to Chemical Hazards			
Components	Type	Value	Form
Crystalline Silica (all forms; CAS mixture)	TWA	0.05 mg/m ³	Respirable dust

8.2 BIOLOGICAL LIMIT VALUES

No biological exposure limits noted for the ingredient(s).

8.3 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.

8.4 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.

8.5 INDIVIDUAL PROTECTIVE MEASURES

Personal Protective Equipment:

- 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.
- 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.
- General Hygiene Considerations:** 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.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

- Appearance**
- Physical State:** Solid
- Form:** Solid, particles
- Color:** Black and white
- Odor:** Not applicable
- Odor Threshold:** Not applicable
- pH** Not applicable
- Physical State:** Solid
- pH:** Not applicable
- Melting Point/Freezing Point:** 3100° F
- Initial Boiling Point and Boiling Range:** 4046° F
- Flash Point:** Non-combustible
- Evaporation Rate:** Not applicable
- Flammability:** Not applicable
- Lower Flammability/Explosive Limit:** Not applicable
- Upper Flammability/Explosive Limit:** Not applicable
- Vapor Pressure:** Not applicable

SAFETY DATA SHEET

Vapor Density:	Not applicable
Specific Gravity:	2.78
Relative Density/Specific Gravity:	Not applicable
Solubility	
Solubility (water):	Insoluble
Partition Coefficient (n-octanol/water):	Not applicable
Auto-ignition Temperature:	Not applicable
Decomposition Temperature:	Not applicable
Viscosity:	Not applicable
Oxidizing Properties:	Not applicable
Other Information	
Explosive properties:	Not applicable
Flammability:	Not applicable
How To Detect This Substance:	X-ray diffraction – NIOSH methods 7500 & 7501

Section 10: STABILITY AND REACTIVITY**10.1 REACTIVITY**

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

10.2 CHEMICAL STABILITY

Material is stable under normal conditions.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reaction known under conditions of normal use.

Section 11: TOXICOLOGICAL INFORMATION**11.1 INFORMATION ON TOXICOLOGICAL EFFECTS**

Likely Routes of Exposure: Skin contact, eye contact, ingestion and inhalation.

Symptoms related to physical/chemical/toxicological characteristics:

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

Eye: Granite dust: May cause irritation through mechanical abrasion.

Skin: Granite dust: May cause irritation through mechanical abrasion.

Ingestion: Not likely, due to the form of the product. However, accidental ingestion of the content may cause discomfort.

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.

11.2 TOXICOLOGICAL EFFECTS

- Acute Toxicity:** Not expected to be acutely toxic.
- Skin Corrosion/ Irritation:** This product is not expected to be a skin hazard.
- Serious Eye Damage/ Eye Irritation:** Direct contact with eyes may cause temporary irritation.
- Respiratory Sensitization:** No respiratory sensitizing effects known.
- Skin Sensitization:** Not known to be a dermal irritant or sensitizer.
- Germ Cell Mutagenicity:** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
- 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.

IARC Monographs. Overall Evaluation of Carcinogenicity

Crystalline Silica (Quartz) (CAS 14808-60-7)	1 Carcinogenic to humans. Respirable Tridymite and Cristobalite 1 Carcinogenic to humans. (other forms of Crystalline) (CAS Mixture)
--	---

NTP Report on Carcinogens

Crystalline Silica(Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.
---	-------------------------------

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Crystalline Silica(Quartz) (CAS 14808-60-7)	Not Listed
---	------------

- Reproductive Toxicity:** Not expected to be a reproductive hazard.
- Specific target Organ Toxicity**
 - Single Exposure Not classified.
 - Repeated Exposure Respirable crystalline silica: May cause damage to organs (lung) through prolonged or repeated exposure.
- Aspiration Hazard:** Due to the physical form of the product it is not an aspiration hazard.
- Chronic Effects:** 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.

Section 12: ECOLOGICAL INFORMATION

12.1 ECOTOXICITY

- Ecotoxicity:** 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.

12.2 PERSISTENCE AND DEGRADABILITY

Persistence and Degradability: Not available

12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: Not available.

12.4 MOBILITY IN SOIL

Mobility Not available.

12.5 OTHER ADVERSE EFFECTS

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

Section 13: DISPOSAL CONSIDERATIONS**13.1 WASTE TREATMENT METHODS**

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.

Hazard 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.

Section 14: TRANSPORT INFORMATION**14.1 TRANSPORT INFORMATION****DOT**

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

14.2 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

Not available.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

Section 16: OTHER INFORMATION**16.1 OTHER INFORMATION**

Crystalline silica is a naturally occurring substance found in soil and rock formations. Crystalline silica is present in trace amounts in the atmosphere air as particulate. Crystalline silica is one of several crystalline polymorphs (including trydimite, cristobalite) of silicon dioxide. When heated to 870°C, crystalline silica transforms to trydimite, and when heated to 1,470°C it can transform to cristobalite. The OSHA PEL for trydimite and cristobalite are one-half the PEL for crystalline silica. Chronic or ordinary silicosis is the most common form of silicosis which can occur after many years of exposure to relatively low levels of airborne respirable dust.

Crystalline silica is listed by the National Toxicology Program in a category which may reasonably be anticipated to be a carcinogen, and by the International Agency for Research on Cancer (IARC) as a Group 1 carcinogenic. After years of study, the non-governing IARC concluded in 1997 that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupation sources." The IARC noted that carcinogenicity was not detected in all industries, and that toxicity may depend on "external factors affecting its biological activity or distribution of its polymorphs."

Crystalline silica is listed by the Governor of the State of California, under Proposition 65, as requiring the following warning: "Detectable amounts of chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm may be found in this product."

Date of Preparation: October 1999 **Revision Date:** August 2015

16.2 DISCLAIMER

The information contained in this SDS is based on tests, experience and other information which Calstone Company believes reliable and is supplied for informational purposes only. Since conditions of use are outside of our control, Calstone Company disclaims any liability for damage or injury which results from use of the above information. Nothing contained herein shall constitute a guarantee, warranty (including warranty of merchantability) or representation (including freedom from patent liability) by Calstone Company with respect to the information, the material described, or its use for any specific purpose, even if that purpose is known to Calstone Company.

End of Safety Data Sheet