Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 07/16/2015 Date of issue: 07/16/2015

#### **SECTION 1: IDENTIFICATION**

**Product Identifier** 1.1.

Product Form: Mixture

Product Name: Recycled Base Rock Synonyms: Crushed Concrete and Asphalt

#### 1.2. **Intended Use of the Product**

Use of the Substance/Mixture: Building materials, construction

#### 1.3. Name, Address, and Telephone of the Responsible Party

#### Company

GRANITE CONSTRUCTION INCORPORATED P. O. BOX 50085 WATSONVILLE, CA 95077-5085 831-724-1011 **Emergency Telephone Number** 

1.4.

**Emergency Number** 

: 831-724-1011

## **SECTION 2: HAZARDS IDENTIFICATION**

#### **Classification of the Substance or Mixture** 2.1.

Classification (GHS-US)			
Skin Irrit. 2	H315		
Eye Dam. 1	H318		
Skin Sens. 1	H317		
Carc. 1A	H350		
STOT SE 3	H335		
STOT RE 1	H372		
Full text of H-phrases	: see section 16		
2.2. Label Eleme	ents		

## **GHS-US Labeling**

Hazard Pictograms (GHS-US)

Signal Word (GHS-US)	
Hazard Statements (GHS-US)	

**Precautionary Statements (GHS-US)** 

: Danger

GHS0

- : H315 Causes skin irritation.
  - H317 May cause an allergic skin reaction.
  - H318 Causes serious eye damage.
  - H335 May cause respiratory irritation.
  - H350 May cause cancer.
  - H372 Causes damage to organs through prolonged or repeated exposure.

: P202 - Do not handle until all safety precautions have been read and understood. P260 - Do not breathe dust.

Version: 1.0

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing must not be allowed out of the workplace.
- P280 Wear protective gloves, protective clothing, and eye protection.
- P302+P352 If on skin: Wash with plenty of water.

P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

- P308+P313 If exposed or concerned: Get medical advice/attention.
- P314 Get medical advice/attention if you feel unwell.

P321 - Specific treatment (see section 4 on this SDS).

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

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P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

#### 2.3. Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. Repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss.

#### 2.4. Unknown Acute Toxicity (GHS-US)

No data available

#### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product Identifier	%	Classification (GHS-US)
Cement, portland, chemicals	(CAS No) 65997-15-1	0 - 100	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335
Asphalt	(CAS No) 8052-42-4	0 - 100	Carc. 2, H351
Quartz	(CAS No) 14808-60-7	1 - 20	Carc. 1A, H350 STOT RE 1, H372
Silica, cristobalite	(CAS No) 14464-46-1	< 1	Carc. 1A, H350 STOT RE 1, H372
Tridymite	(CAS No) 15468-32-3	< 1	Carc. 1A, H350 STOT RE 1, H372

#### Full text of H-phrases: see section 16

#### **SECTION 4: FIRST AID MEASURES**

4.1. Description of First Aid Measures

**First-aid Measures General**: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

**First-aid Measures After Inhalation**: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

**First-aid Measures After Skin Contact**: Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.

**First-aid Measures After Eye Contact**: Rinse cautiously with water for at least 60 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid Measures After Ingestion: Do not induce vomiting. Rinse mouth. Obtain medical attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** Causes serious eye damage. Causes skin irritation. Causes damage to organs through prolonged or repeated exposure. May cause an allergic skin reaction.

**Symptoms/Injuries After Inhalation:** Repeated exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis.

**Symptoms/Injuries After Skin Contact:** May cause an allergic reaction in sensitive individuals. Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Injuries After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** May cause cancer. Causes damage to organs through prolonged or repeated exposure. Repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss.

# **4.3.** Indication of Any Immediate Medical Attention and Special Treatment Needed If you feel unwell, seek medical advice (show the label where possible).

## SECTION 5: FIRE-FIGHTING MEASURES

#### 5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

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Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

#### 5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

**Explosion Hazard:** Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

#### 5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Other Information: Refer to Section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

#### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Do not breathe dust.

#### 6.1.1. For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

#### 6.2. Environmental Precautions No additional information available

#### 6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid.

6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

### SECTION 7: HANDLING AND STORAGE

#### 7.1. Precautions for Safe Handling

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

#### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep/Store away from Incompatible materials.

Incompatible Products: Strong acids. Strong bases. Strong oxidizers.

#### 7.3. Specific End Use(s)

Building materials, construction.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer,

supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

Quartz (1480	8-60-7)	
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (respirable fraction)
USA ACGIH	ACGIH chemical category	A2 - Suspected Human Carcinogen
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.05 mg/m <sup>3</sup> (respirable dust)
USA IDLH	US IDLH (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup> (respirable dust)
USA OSHA	OSHA PEL (STEL) (mg/m <sup>3</sup> )	250 mppcf/%SiO <sub>2</sub> +5, 10mg/m <sup>3</sup> /%SiO <sub>2</sub> +2
Silica, cristob	alite (14464-46-1)	
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (respirable fraction)
USA ACGIH	ACGIH chemical category	Suspected Human Carcinogen
<b>USA NIOSH</b>	NIOSH REL (TWA) (mg/m <sup>3</sup> )	0.05 mg/m <sup>3</sup> (respirable dust)
USA IDLH	US IDLH (mg/m <sup>3</sup> )	25 mg/m <sup>3</sup> (respirable dust)
Tridymite (15	5468-32-3)	
<b>USA NIOSH</b>	NIOSH REL (TWA) (mg/m <sup>3</sup> )	0.05 mg/m <sup>3</sup> (respirable dust)
USA IDLH	US IDLH (mg/m <sup>3</sup> )	25 mg/m <sup>3</sup> (respirable dust)
Cement, port	tland, chemicals (65997-15-1)	
USA ACGIH	ACGIH TWA (mg/m³)	1 mg/m <sup>3</sup> (particulate matter containing no asbestos and <1%

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		crystalline silica, respirable fraction)	
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen	
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (total dust)	
		5 mg/m <sup>3</sup> (respirable dust)	
USA IDLH	US IDLH (mg/m <sup>3</sup> )	5000 mg/m³	
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m <sup>3</sup> (total dust)	
		5 mg/m <sup>3</sup> (respirable fraction)	
Asphalt (805	2-42-4)		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	0.5 mg/m <sup>3</sup> (fume, inhalable fraction)	
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen fume, coal tar-free	
USA NIOSH	NIOSH REL (ceiling) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (fume)	
8.2. Exp	osure Controls		
Appropriate	Engineering Controls	: Ensure adequate ventilation, especially in confined areas. Emergency eye wash	
		fountains and safety showers should be available in the immediate vicinity of any	
		potential exposure. Ensure all national/local regulations are observed.	
Personal Pro	tective Equipment	Protective goggles. Gloves. Protective clothing. Dust formation: dust mask.	
Materials for	or Protective Clothing : Chemically resistant materials and fabrics.		
Hand Protect	tion	: Wear chemically resistant protective gloves.	
Eye Protectio	on	: Chemical goggles or safety glasses.	
Skin and Bod	-	: Wear suitable protective clothing.	
<b>Respiratory</b>		: Use NIOSH-approved dust mask if dust has the potential to become airborne.	
	al Exposure Controls	: Do not allow the product to be released into the environment.	
	posure Controls	: Do not eat, drink or smoke during use.	
SECTION 9:	PHYSICAL AND CHEMICA	AL PROPERTIES	
9.1. Info	rmation on Basic Physical a	and Chemical Properties	
<b>Physical Stat</b>	tate : Solid		
Appearance	nce : Angular particles, light/salt and pepper colored, ranging in size from pebbles to boulders.		
Odor	: Odorless		
Odor Thresh	iold : No data available		
pН	: No data available		
Evaporation	Rate : No data available		

- : No data available
- : No data available
- **Melting Point Freezing Point** : No data available **Boiling Point** : No data available
- **Flash Point** : No data available **Auto-ignition Temperature** : No data available **Decomposition Temperature** : No data available Flammability (solid, gas) : No data available Vapor Pressure No data available : Relative Vapor Density at 20 °C : No data available **Relative Density** : No data available 2.6 - 2.8 **Specific Gravity** : Solubility : Insoluble in water : No data available
- Partition Coefficient: N-Octanol/Water : No data available

Viscosity

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**9.2. Other Information** No additional information available

### SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hazardous reactions will not occur under normal conditions.

**10.2.** Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

**10.4.** Conditions to Avoid: Incompatible materials.

**10.5.** Incompatible Materials: Strong acids, strong bases, strong oxidizers.

**10.6.** Hazardous Decomposition Products: Quartz (silica) will dissolve in hydroflouric acid producing a corrosive gas, silicon tetrafluoride.

#### SECTION 11: TOXICOLOGICAL INFORMATION

#### **11.1.** Information On Toxicological Effects

Acute Toxicity: Not classified

Quartz (14808-60-7)		
LD50 Oral Rat	> 5000 mg/kg	
LD50 Dermal Rat	> 5000 mg/kg	
Asphalt (8052-42-4)		
LD50 Oral Rat	> 5000 mg/kg	
LD50 Dermal Rabbit	> 2000 mg/kg	
LC50 Inhalation Rat	> 94.4 mg/m³	

Skin Corrosion/Irritation: Causes skin irritation.

Serious Eye Damage/Irritation: Causes serious eye damage.

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Carcinogenicity: May cause cancer.

Quartz (14808-60-7)

Quartz (14808-60-7)	
IARC group	1
National Toxicology Program (NTP) Status	Known Human Carcinogens.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
Silica, cristobalite (14464-46-1)	
IARC group	1
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
Tridymite (15468-32-3)	
IARC group	1
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
Asphalt (8052-42-4)	
IARC group	2B
National Toxicology Program (NTP) Status	Twelfth Report - Items under consideration.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Specific Target Organ Toxicity (Repeated Exposure): Causes damage to organs through prolonged or repeated exposure.

Aspiration Hazard: Not classified

**Symptoms/Injuries After Inhalation:** Repeated exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis.

**Symptoms/Injuries After Skin Contact:** May cause an allergic reaction in sensitive individuals. Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Injuries After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** May cause cancer. Causes damage to organs through prolonged or repeated exposure. Repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss.

#### SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity No additional information available

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#### 12.2. Persistence and Degradability No additional information available

#### **Bioaccumulative Potential** 12.3.

Asphalt (8052-42-4)	
BCF fish 1 (no bioaccumulation expected)	
Log Pow	> 6

: Avoid release to the environment.

#### 12.4. Mobility in Soil No additional information available

#### 12.5. **Other Adverse Effects**

**Other Information** 

#### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Ecology - Waste Materials: Avoid release to the environment.

### **SECTION 14: TRANSPORT INFORMATION**

14.1. In Accordance with DOT Not regulated for transport

14.2. In Accordance with IMDG Not regulated for transport

14.3. In Accordance with IATA Not regulated for transport

### **SECTION 15: REGULATORY INFORMATION**

#### 15.1 **US Federal Regulations**

Recycled Base Rock	
SARA Section 311/312 Hazard Classes Immediate (acute) health hazard	
	Delayed (chronic) health hazard
Quartz (14808-60-7)	

Quartz	(1480	8-60-7	)
Listad a	n tha	United	Ctat

Listed on the United States TSCA (Toxic Substances Control Act) inventory		
SARA Section 311/312 Hazard Classes Delayed (chronic) health hazard		
Silica, cristobalite (14464-46-1)		
Listed on the United States TSCA (Toxic Substances Con	trol Act) inventory	
SARA Section 311/312 Hazard Classes Delayed (chronic) health hazard		
Tridymite (15468-32-3)		
SARA Section 311/312 Hazard Classes Delayed (chronic) health hazard		
Cement, portland, chemicals (65997-15-1)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
SARA Section 311/312 Hazard Classes Immediate (acute) health hazard		
Asphalt (8052-42-4)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
SARA Section 311/312 Hazard Classes Delayed (chronic) health hazard		

#### 15.2 **US State Regulations**

Quartz (14808-60-7)	
U.S California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of
	California to cause cancer.
Quartz (14808-60-7)	
U.S Massachusetts - Right To Know List	
U.S New Jersey - Right to Know Hazardous Substance Lis	st
U.S Pennsylvania - RTK (Right to Know) List	
Silica, cristobalite (14464-46-1)	
U.S Massachusetts - Right To Know List	
U.S New Jersey - Right to Know Hazardous Substance Lis	st
U.S Pennsylvania - RTK (Right to Know) List	
Tridymite (15468-32-3)	
U.S Massachusetts - Right To Know List	
U.S New Jersey - Right to Know Hazardous Substance Lis	st
U.S Pennsylvania - RTK (Right to Know) List	

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Cement, portland, chemicals (65997-15-1) U.S Massachusetts - Right To Know List	
U.S Pennsylvania - RTK (Right to Know) List Asphalt (8052-42-4)	
U.S New Jersey - Right to Know Hazard	
U.S Pennsylvania - RTK (Right to Know) List SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION	
Other Information	: This document has been prepared in accordance with the SDS
	requirements of the OSHA Hazard Communication Standard 29 CFR
	1910.1200.
GHS Full Text Phrases:	
Carc. 1A	Carcinogenicity Category 1A
Carc. 2	Carcinogenicity Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H335	May cause respiratory irritation
H350	May cause cancer

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Suspected of causing cancer

Causes damage to organs through prolonged or repeated exposure

SDS US (GHS HazCom)

H350 H351

H372