

(Including Marble and Quartzite)

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Section 1 - Identification

Product Name

Granite, Marble, and Quartzite Other Means of Identification/Synonyms/Common Names:

Aggregate, Manufactured Sand, Natural Stone, Crushed Stone, Fine Filler, Kafka Granite Stone Products

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.

No known recommended restrictions.

Manufacturer/Contact Information

Kafka Granite LLC 550 East Highway 153 Mosinee, WI 54455

General Phone Number:

(800) 852-7415 or (715) 687-2423 Emergency Phone Number:

(800) 852-7415 or (715) 687-2423

www.kafkagranite.com

Section 2 - Hazard(s) Identification

Physical Hazard(s):

Health Hazard(s):

Not Classified Carcinogenicity – Category 1A

Specific Target Organ Toxicity, Repeated Exposure - Category 2

Skin Corrosion/Irritation - Category 2 Eye Damage/Irritation - Category 2A Signai Word:

Hazard Pictograms

Danger

May cause cancer

May cause damage to organs (lung) through prolonged or repeated exposure

Causes skin irritation

Causes serious eye irritation

Precautionary Statements:

Prevention:

Obtain special instructions before use. Do not handle until all safety precautions

have been read and understood. Wash any exposed body parts. Wear protective

clothing/eye protection/face protection.

Response: If exposed or concerned: Get medical advice/attention. If on skin: Wash with plenty

of water. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse continuously with water for several minutes. Remove contact lenses, if present and

easy to do.

Storage: Restrict or control access to stockpile areas (store locked up). 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.

Hazards not otherwise classified

(HNOC):

None known



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Supplemental Information:

Respirable Crystalline Silica (RCS) may cause cancer. Granite is a naturally occurring mineral complex that contains varying quantities of quarts (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 RCS (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

Chemical Name	CAS Number	%
Granite	None	> 99
Quartz (crystalline silica)	14808-60-7	> 1

Composition varies naturally, typically contains quartz. There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. These materials are mined from the earth. Trace amounts of naturally occurring elements might be detected during chemical analysis of these materials.

Occupational exposure limits, if available, are listed in Section 8.

Section 4 - First-Aid Measures	
Inhalation:	Dust: Move to fresh air. Dust from throat and nasal passages should clear spontaneously. Call a physician if symptoms develop or persist.
Eye Contact:	Dust: Immediately flush with plenty of water for at least 15 minutes. Hold eyelids apart. Remove contacts if present and easy to do. 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 Contact	Dust: Wash off with soap and water. Get medical attention if irritation develops and persists.
Ingestion	Dust: 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

Dust may irritate the eyes, skin, and respiratory tract. 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. Symptoms of silicosis may include (but are not limited to) shortness of breath, difficulty breathing with or without exertion; coughing, diminished work capacity; diminished chest expansion; reduction of lung volume; right heart enlargement and/or failure.

indication of infinediate Medical Attention and Special Treatment Needed, if	
necessary	
Notes to Physician	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
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.



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Section 5 - Fire-Fighting Measures

Suitable Extinguishing Media:

This product 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.

Hazardous Thermal Decomposition Products:

None known.

Special Protective Equipment for Fire-Fighters:

Use protective equipment appropriate for surrounding materials. No specific precautions. General Fire Hazards:

Contact with powerful oxidizing agents may cause fire and/or explosions (see section 10 of SDS). No unusual fire or explosion hazards.

Section 6 - Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

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

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

Methods and Materials for Containment and Cleaning 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 equipment may be necessary. Avoid discharge of fine particulate matter into drains or water courses.

Section 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. Observe good industrial hygiene practices. Wear appropriate personal protective equipment as identified in Section 8. Conditions for Safe Storage, Including Any Incompatibilities:

Avoid dust formation or accumulation. Do not store near food, beverages, or smoking materials.

Section 8 - Exposure Controls/Personal Protection

Occupational Exposure Limits:

- Value equivalent to OSHA formulas (29 CFR 1910.1000; 29 CFR 1917; 29 CFR 1918)
- Value also applies to MSHA metal/non-metal (1973 TLVs at 30 CFR 56/57.5001)
- OSHA enforces 0.250 mg/m³ in construction and shipyards (CPL-03-00-007)
- Value also applies to OSHA construction (29 CRF 1926.55 Appendix A) and shipyards (29 CFR 1915.1000 Table Z)
- MSHA limit 10 mg/m³

Ingredient Name	Exposure Limits
Particulates not Otherwise Regulated	OSHA PEL
	5 mg/m ³ . (Respirable Fraction)
	15 mg/m ³ . (Total Dust) ^{4, 5}
	ACGIH TLV
	3 mg/m ³ . (Respirable Particulates) ²
	10 mg/m ³ . (Inhalable Particulates) ²



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Ingredient Name	Exposure Limits
Silica, Crystalline – Quartz (CAS 14808-60-7)	OSHA PEL 0.3 mg/m³ (Total Dust) ^{1, 2} 0.1 mg/m³ (Respirable Fraction) ^{1, 2, 3}
Silica, Crystalline - Cristobalite and Tridymite	OSHA PEL 0.15 mg/m³. (Total Dust)¹ 0.05 mg/m³. (Respirable)¹,²
Silica, Crystalline (all forms)	ACGIH TLV 0.025 mg/m³ (Respirable Fraction) NIOSH REL 0.05 mg/m³ (Respirable Dust)

Exposure Guidelines

OSHA PELs, MSHA PELs, and ACGIH TLVs are 8-hour TWA values. NIOSH RELs are for TWA exposures up to 10 hours per day and 40 hours per week. 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 Due" are often used interchangeably; however, the user should review each agency's terminology for differences in meanings.

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. Avoid compressed air for cleaning surfaces.

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.

Wear safety glasses with side shields (or goggles).

Hand Protection:

Use personal protective equipment as required.

Use personal protective equipment as required. Other Skin Protection:

Use personal protective equipment as required.

When handling or performing work 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.

Not anticipated. Wear appropriate thermal protective clothing if necessary.

Section 9 - Physical and Chemical Properties Solid, angular particles or **Vapor Pressure:** Not Applicable Appearance: round Odor: Not Applicable Vapor Density: Not Applicable Odor Threshold: Not Applicable **Relative Density:** Not Applicable pH: Not Applicable Solubility: Not Applicable **Melting/Freezing Point:** Not Applicable Solubility in Water: Insoluble **Boiling Point:** Partition Coefficient: n-Not Applicable Not Applicable octanol/water:



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Flash Point:	Non-combustible	Auto-ignition Not Applicable	
		Temperature:	
Evaporation Rate:	Not Applicable	Decomposition Not Applicable	
		Temperature:	
Flammability (solid, gas):	Not Applicable	Viscosity: Not Applicable	
Lower and Upper	Not Applicable		
Explosive Flammable			
Limits:			
Section 10 – Stability and R	eactivity		
Reactivity:	The product is stable and nor	n-reactive under normal conditions of use, storage and	
	transport.		
Chemical Stability:	Material is stable under norm	al conditions.	
Possibility of Hazardous	No dangerous reaction know	n under conditions of normal use. Contact with powerful	
Reactions:		rine, boron trifluoride, chlorine trifludoride, manganese	
	trifluoride, and oxygen difluor	ide may cause possible fire and/or explosions. Silica	
	dissolves readily in hydrofluo	ric acid producing a corrosive gas – silicon tetrafluoride.	
Conditions to Avoid:	Avoid contact with incompatible materials, strong oxidizing agents.		
Incompatible Materials:	Crystalline silica may react violently with strong oxidizing agents, causing fire and		
	explosions.		
Hazardous Decomposition	Silica containing respirable dust particles may be generated. When heated, quartz is		
Products:	slowly transformed into tridymite (above 860° C/1580° C) and cristobalite (above 1470° C /		
	2678° F). Both tridymite and cristobalite are other forms of crystalline silica.		
Section 11 – Toxicological I	nformation		
Acute Toxicity:	Not expected to be acutely to	xic.	
Irritation/Corrosion:		on through mechanical abrasion. This product is not	
	expected to be a skin hazard	es may cause temporary irritation through mechanical	
	abrasion.	es may cause temporary irritation timough mechanical	
		tion of respirable crystalline silica (quartz) may cause	
		of the lungs. Silicosis is irreversible and may be fatal.	
		contracting pulmonary tuberculosis. Some studies suggest	
		spirable crystalline silica may cause other adverse health	
	effects including lung and kid		
		product form. However, accidental ingestion may cause	
	discomfort.	orodast form Tronovor, assidemar ingestion may sades	
Sensitization:	Respiratory: No respiratory	sensitizing effects known.	
	Skin: Not known to be a der		
Mutagenicity:		product or any components present at greater than 0.1% are	
	mutagenic or genotoxic.	Francis Francis Francis Gradier and 31170 die	
Carcinogenicity:	Respirable crystalline silica h	as been classified by IARC and NTP as a known human	
1 131 111,		ACGIH as a suspected human carcinogen.	
Reproductive Toxicity:	Not expected to be a reprodu		



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Specific Target Organ Toxicity:

Prolonged overexposure to respirable dusts in excess of allowable exposure limits can cause inflammation of the lungs leading to possible fibrotic changes, a medical condition known as pneumoconiosis.

Prolonged and repeated inhalation of respirable crystalline silica containing dust in excess of allowable exposure limits may cause a chronic form of silicosis, an incurable lung disease that may result in permanent lung damage or death.

Chronic silicosis generally occurs after ten years or more of overexposure; a more accelerated type of silicosis may occur between five and ten years of higher of higher levels of exposure. In early stages of silicosis, not all individuals will exhibit symptoms (signs) of the disease. However, silicosis can be progressive, and symptoms can appear at any time, even years after exposure has ceased.

Repeated overexposures to very high levels of respirable crystalline silica for periods as short as six months may cause acute silicosis. Acute silicosis is a rapidly progressive, incurable lung disease that is typically fatal. Symptoms include (but are not limited to): shortness of breath, cough, fever, weight loss, and chest pain.

Respirable dust containing newly broken silica particles has been shown to be more hazardous to animals in laboratory tests than respirable dust containing older silica particles of similar size. Respirable silica particles which had aged for 60 days or more showed less lung injury in animals than equal exposures of respirable dust containing newly broken particles of silica.

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 casual relationship between silica and these adverse health effects.

Aspiration Hazard:

Not expected to be an aspiration hazard.

Section 12 – Ecological Information	
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.
Persistence and Degradability:	Not applicable.
Bioaccumulative Potential:	Not applicable.
Mobility in Soil:	Not applicable.
Other Adverse Effects:	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, global warming potential) are expected from this component.
Section 13 – Disposal Considerations	
Disposal Methods:	Not classified as hazardous waste. 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. 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.



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Section 14 – Transportation Information		
UN Number	Not Availal	ole.
UN Proper Shipping Name	Not Available.	
Transport Hazard Class	Not Applica	able.
Packaging Group	Not Applica	able.
DOT Classification:	Not Applica	able.
ADR/RID Classification:	Not Applicable.	
ICAO/IATA Classification:	Not Applicable.	
IMO/IMDG Classification:	Not Applicable.	
Section 15 – Regulatory Information		
US Federal Regulations:		
OSHA Hazard Communication (29 CFR 1910.1200):	Standard	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200
TSCA Section 12(b) Export No (40 CFR 707, Subpart. D):	tification	Not regulated.
OSHA Specifically Regulated Substances (29 CFR 1910.100	1-1050):	Not listed.
CERCLA Hazardous Substanc CFR 302.4):		Not listed.
Clean Air Act Section 112 (b): Hazardous Air Pollutants (HAF	Ps)	Not regulated.
Clean Air Act Section 112 ® Act Release Prevention (40 CFR 6		Not regulated.
Safe Drinking Water Act (SWD		Not regulated.
SARA Title III		SARA 311/312 – Delayed (Chronic) Health Hazard

State Regulations: Each state may promulgate standards more stringent than the federal government. The user should review the components listed in Section 2 and consult state or local authorities for specific regulations that apply.

California Proposition 65: WARNING: This product contains crystalline silica and chemicals (trace metals) known to the State of California to cause cancer.

WHMIS Classification: D2A "Materials causing other toxic effects.





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Section 16 – Other Information

Date of Issue: 02/26/16

Revised Section(s): Not Applicable **Supersedes MSDS Dated:** 04/24/04

Notice to Reader: While the information provide 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
IATA	International Air Transport Association
IARC	International Agency for Research on Cancer
IBC	International Building Code
IMDG	International Maritime Dangerous Goods
MARPOL	Marine Pollution; MARPOL 73/78 is the International Convention for the Prevention of Pollution from
	Ships, 1973 as modified by the protocol of 1978.
mg m ³	Milligrams
m ³	Cubic Meter
MSHA	Mine Safety and Health Administration
NIOSH	National Institute of Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
REL	Recommended Exposure Limit
RTK	Right to Know
SARA	Superfund Amendments and Reauthorization Act
SDS	Safety Data Sheet
TLV	Threshold Limit Value
TRI	Toxics Release Inventory
TSCA	Toxic Substances Control Act
TWA	Time-Weighted Average



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UN	United Nations
WHMIS	Workplace Hazardous Materials Information System