

SAFETY DATA SHEET

Product: Crushed Stone

SECTION 1	PRODUCT AND COMPANY IDENTIFICATION
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PRODUCT NAME: Serpentinite
CHEMICAL FORMULA: Mixture
CHEMICAL FAMILY: Antigorite and Lizardite
RECOMMENDED USE: Concrete and Asphalt Aggregate

MANUFACTURER: Allan Myers Materials
Cedar Hill Quarry
219 Quarry Rd
Peach Bottom, PA 17563
(717) 548-2191

EMERGENCY TELEPHONE NUMBER: (717) 548-2191

SECTION 2	HAZARDS IDENTIFICATION
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SIGNAL WORD: Danger

GHS CLASSIFICATIONS: Carcinogenicity – Category 1
Specific target organ toxicity, repeated exposure – Category 2

GHS LABEL ELEMENTS:



POTENTIAL HEALTH EFFECTS:

Eye Contact: Dust may cause irritation to the eyes by abrasion.

Sensitization:

- a) Skin: Dust may cause irritation to the skin by abrasion.
- b) Oral (Ingestion): Small amounts of dust are not expected to cause injury. Large amount may cause stomach pain and blockage.
- c) Respiratory (Acute Inhalation): May cause significant irritation to the nose, throat, and respiratory tract.
- d) Respiratory (Chronic Inhalation): This product contains crystalline silica. Prolonged or repeated inhalation of respirable particulates may increase the risk of silicosis, a serious and potentially fatal lung disease, chronic obstructive pulmonary disease (COPD) and lung cancer.

PRECAUTIONARY STATEMENT: This substance is typically mottled with a green color, ranging in size from powder to boulders. It does not have an odor and is not flammable. OSHA includes chrysotile in the definition of asbestos and is subject to the permissible exposure limit (PEL) of 0.1 fiber/cm³ as defined in 29 CFR 1910.1001 (c)(1). Inhalation of excessive dust or particulate matter may cause respiratory problems. Repeated exposure to silica dust can cause pneumoconiosis (silicosis).

GHS Precautionary Codes:

- P201 – Obtain special instructions before use
- P202 – Do not handle until all safety precautions have been read and understood
- P260 – Do not breathe dust/fume/gas/mist/vapors/spray
- P261 – Avoid breathing dust/fume/gas/mist/vapors/spray
- P264 – Wash thoroughly after handling
- P271 – Use only outdoors or in a well-ventilated area
- P281 – Use personal protective equipment as required

GHS Hazard Statements:

- H316 – Causes mild skin irritation
- H320 – Causes eye irritation
- H335 – May cause respiratory irritation
- H350 – May cause cancer
- H373 – Cause damage to organs through prolonged or repeated exposure

SECTION 3	COMPOSITION / INFORMATION ON INGREDIENTS
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Serpentine rock has been shown to contain <0.25% chrysotile asbestos but is not classified as an asbestos-containing material (ACM) according to OSHA 29 CFR 1926.1101.

<u>Components Name</u>	<u>CAS/EC Number</u>	<u>% by weight (approximate)</u>
Magnesium and Silicon Oxide	1309-48-4, 99439-28-8	60 – 65
Silicon Dioxide	7631-86-9	35 - 40
Chrysotile	12001-29-5	0 - 0.25

SECTION 4	FIRST AID MEASURES
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- EYES:** Flush with warm water for 15 minutes. If irritation persists, seek medical attention.
- SKIN:** Wash with mild soap and water. If irritation persists, seek medical attention.
- INGESTION:** If conscious, induce vomiting and seek medical attention. Never induce an unconscious person to vomit.
- INHALATION:** Move to well-ventilated area. If irritation persists, seek medical attention.

SECTION 5	FIRE FIGHTING MEASURES
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|--------------------------|----------------|
| FLASHPOINT: | Not flammable |
| FLAMMABLE LIMITS IN AIR: | Not flammable |
| FIRE FIGHTING: | Not applicable |
| FLAMMABLE CLASS: | Nonflammable |

SECTION 6	ACCIDENTAL RELEASE MEASURES
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PERSONAL PRECAUTIONS: Avoid contact with eyes and mucous membranes. Be aware that respirable dust particles containing silicon oxides may be generated by handling serpentinite. Avoid breathing dust particles.

PERSONAL PROTECTIVE EQUIPMENT: A NIOSH-approved respirator will be offered as requested for clean-up staff.

EMERGENCY PROCEDURES: If dust is generated from spilled materials, wetting of the spilled material and/or the use of respiratory personal protective equipment may be required.

REPORTING: In the event of a spill, this material is not subject to notification requirements.

SECTION 7	HANDLING AND STORAGE
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PRECAUTIONS:

Do not climb or stand in piles of this product as it may be unstable.

Avoid contact with eyes and mucous membranes.

Respirable dust particles containing silicon dioxide may be generated by handling this product.

Avoid breathing dust particles.

SECTION 8	EXPOSURE CONTROLS / PERSONAL PROTECTION
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Control parameters

Occupational Exposure Limits

SUBSTANCE.	CAS No.	(8hr TWA)		(STEL)		Note:
		PEL (OSHA) *	TLV (ACGIH)	PEL (OSHA)	TLV (ACGIH)	
Crystalline Silica (respirable particulate)	-----	0.050 mg/m ³ ^(R) *	0.025 mg/m ³ ^	-----	-----	See below
Total Dust	-----	15 mg/m ³	10 mg/m ³	-----	-----	-----
Respirable Dust	-----	5 mg/m ³	3 mg/m ³	-----	-----	-----

^(R)Respirable fraction; * OSHA Carcinogen - employers must ensure compliance with OSHA 29 CFR 1926.1153 - Respirable Crystalline Silica, as applicable.; ^Suspected Human Carcinogen; 8hr TWA = 8 hour time-weighted average; OSHA Action Level = 25 µg/m³; STEL = Short Term Exposure Limit.

Recommended monitoring method

NIOSH 0500 (Total Dust), NIOSH 0600 (Respirable Dust); NIOSH 7500 (Crystalline Silica).

Exposure controls

Appropriate engineering controls

Use only outdoors or in a well-ventilated area.

Personal protection equipment

Eye/face protection



Wear eye protection meeting current ANSI Z87.1 standards.

Skin protection (Hand protection/Other)



Wear hand protection meeting current ANSI/ISEA 105 standards.

Respiratory protection



Inhalable size dust particles may be released under certain conditions of handling. Respiratory protection may be needed if occupational exposure limits are exceeded. Air purifying respirator with combination organic vapor cartridge / particulate filter may be sufficient. Check with protective equipment manufacturer's data.

Thermal hazards

Use gloves with insulation for thermal protection, when needed.

Environmental Exposure Controls

Not normally required.

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Solid
APPEARANCE:	Mottled green.
ODOR:	Odorless
pH:	Not applicable
MELTING/FREEZING POINT:	Not applicable
BOILING POINT:	Not applicable
FLASH POINT:	Not applicable
EVAPORATION RATE:	Not applicable
FLAMMABILITY:	Not applicable
VAPOR PRESSURE:	Not applicable
VAPOR DENSITY:	Not applicable
RELATIVE DENSITY:	Not applicable
SPECIFIC GRAVITY:	2.6 - 2.7
SOLUBILITY:	Not soluble
PARTIAL COEFFICIENT:	Not applicable
AUTO-IGNITION TEMPERATURE:	Not applicable
DECOMPOSITION TEMPERATURE:	Not applicable

SECTION 10

STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable
HAZARDOUS POLYMERIZATION:	None
POLYMERIZATION:	None
INCOMPATIBILITY:	Strong oxidizing agents such as hydrofluoric acid and nitric acid

SECTION 11

TOXICOLOGICAL INFORMATION

Primary route of exposure: Inhalation, Skin Contact, Eye Contact

EYE CONTACT:	Dust may cause irritation to the eyes by abrasion.
SKIN CONTACT:	Dust may cause irritation to the skin by abrasion.
INGESTION:	Ingestion of small amounts of dust is not expected to cause injury. Ingestion of large amounts may cause stomach pain and blockage.
INHALATION:	May cause significant irritation to the nose, throat, and respiratory tract and lung cancer.
SENSITIZATION:	Not to be expected.
MUTAGENICITY:	Not to be expected.
REPRODUCTIVE TOXICITY:	Not to be expected.

Crystalline Silica (quartz)

Acute toxicity	LD50 (rat): >5000 mg/kg bw LD50 (dermal): >2000 mg/kg bw LC50 (inhalation, fume): >94.4 mg/m ³ – Causes damage to organs: Lungs (silicosis)
Repeated dose toxicity	Causes damage to organs through prolonged or repeated exposure: Lungs (silicosis); respirable size only. Effects on the immune system and kidneys have also been reported.
Carcinogenicity	May cause cancer. Lungs; respirable size only.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity	
Short Term	LL50 (48 hour): >1000 mg/L (Fish) LL50 (48 hour): >1000 mg/L (Aquatic Invertebrates) LL50 (48 hour): >1000 mg/L (Aquatic Plants)
Long Term	No data
Persistence and degradability	The product is non-biodegradable.
Bio accumulative potential	The product has no potential for bioaccumulation.
Mobility in soil	The product has low mobility in soil.
Results of PBT and vPvB assessment	Not classified as PBT or vPvB.
Other adverse effects	None known.

SECTION 13 DISPOSAL CONSIDERATIONS

Clean material may be reused. Material contaminated with foreign substance should be disposed of in accordance with local, state, and federal laws and regulations.

SECTION 14 TRANSPORT INFORMATION

UN NUMBER:	Not applicable
UN PROPER SHIPPING NAME:	Not applicable
TRANSPORT HAZARD CLASS:	None
PACKING GROUP:	None
MARINE POLLUTANT:	No

SECTION 15 REGULATORY INFORMATION

No additional information.

SECTION 16 OTHER INFORMATION

Manufacturer Disclaimer: Information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product for particular uses are beyond our control; all risks of use of the product are therefore assumed by the user. Appropriate warnings and safe handling procedures should be provided to handlers and users.

Prepared 11/2007

Revised 6/2012, 5/2015, and 5/2022 to update Sections 2, 3, 7, 8, 10, 11, 15, and 16.