Product ID: Vermiculite P.1 Rev::6/17/19



SAFETY DATA SHEET

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

0112111107		200171112 0011	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•	
Product Identifier				[WHMIS CI	assification]	
Vermiculite				Not App	licable	
Product Use				•		
Insulating aggregate, Soil condi	tioner, Lov	v density filler, Absorb	ent			
Manufacturer's Name			Supplier's Name			
Therm-O-Rock East, Inc.						
Street Address			Street Address			
1 Pine Street						
City		Province	City			Province
New Eagle		PA				
Postal Code Emergency Telephone		ephone	Postal Code		Emergency Te	elephone
15067	724-258-3	670				
Date SDS Prepared SDS Prepared By		SDS Prepared By		Phone Num	nber	
6-17-2019 Sta		Stanley R. Slawek		(724) 25	8-3670	

SECTION 2 — HAZARDS IDENTIFICATION

SECTION 2 — I	IAZANDO IDENTII ICATION				
GHS Classification	Eye Irritant, Category 2	GHS Symbol			
Signal Word	Warning	(!)			
Hazard Statement	Causes eye irritation				
Precautionary Statements	Wear eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing. If eye irritation persists: Get medical attention.				
Other Hazards	Avoid breathing dust. Exposure to vermiculite causes no identified short- or long-term health effects, but nuisance dust may cause minor respiratory irritation.				

SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients (specific)	%	CAS Number	LD 50 of Ingredient (specify species and route)	LC 50 of Ingredient (specify species)	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)
Vermiculite (Magnesium, Aluminum Iron Silicate)	>98	1318-00-9	Not Available	Not Available	10	1
Silica	≈1	14808-60-7	Not Available	Not Available	Not Available	.05

SECTION 4 — FIRST AID MEASURES

Skin Contact

Wash thoroughly with mild soap and water. Seek medical attention if irritation develops. Remove any contaminated clothing and launder thoroughly before reuse.

Eye Contact

Flush with tepid water for at least 20 minutes holding the eyelids wide open. Seek medical attention if irritation develops.

Remove exposed person to fresh air. If breathing is difficult, oxygen may be administered. If breathing has stopped, artificial respiration should be started immediately. Seek medical attention.

Ingestion

Not expected to be an important route of entry into the body. If large amounts of the product are ingested, seek medical attention.

MSD-V416 NewPig

SECTION 5 — FIRE FIGHTING MEASURES

20110110 11112110111110111110						
Flammable	If yes, under which conditions?					
☐Yes ☐ No						
Means of Extinction						
Use extinguishing media appropriate for si	urrounding material.					
Flashpoint (° C) and Method	Upper Flammable Limit (% by volume)	Lower Flammable Limit (% by volume)				
Not Available	Not Available	Not Available				
Auto ignition Temperature (°C)	Explosion Data — Sensitivity to Impact	Explosion Data — Sensitivity to Static Discharge				
Not Available	Not Available	Not Available				
Hazardous Combustion Products						
Not Available						
NFPA						
Health: 1, Flammability: 0, Reactivity: 0, Other: None						

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Pick up released product with appropriate implements and return to original container if reusable. If not reusable, place in appropriate containers for disposal. Appropriate personal protective equipment cited in Section 8 should be worn during all clean up operations. Although the product itself is non-hazardous, material collected during clean up operations may be contaminated and should be treated as hazardous unless specific testing, including TCLP, shows the collected material to be non hazardous

SECTION 7 — HANDLING AND STORAGE

Handling Procedures and Equipment

Appropriate personal protective equipment cited in Section 8 should be worn during handling. Wet mopping or vacuuming with a unit that contains a HEPA filter is recommended to clean up any dusts that may be generated during handling and processing. See also section 6. Wash hands and face thoroughly before eating, drinking or smoking.

Storage Requirements

Do not store with or near incompatible materials cited in Section 10. Store in tightly closed containers out of contact with the elements.

Good housekeeping and engineering practices should be employed to prevent the generation and accumulation of dusts.

SECTION 8 — EXPOSURE CONTROL / PERSONAL PROTECTION

_	<u>-</u>	OSHA PEL	Other (specify)				
Local exhaust ventilation so of 10 mg/M^3 for total partice systems may be found in the ACGIH Committee on Industrial should be evaluated by a professional engineer.	hould be proviously and 3 ne latest editionstrial Ventilations	ded to maintain mg/M^3 for res n of "Industrial" on, P.O. Box 16	pirable particula Ventilation: A ma 3153 Lansing, M	tes. Design deta anual of Recomr I 48910. The nee	ills for local e mended Praced ed for local e	exhaust ventilation ctices" published by the exhaust ventilation	
	Gloves	Respirator	⊠ Eye	Footwear	Clothing	Other	
Gloves: Polymeric gloves a recommended. Respirator: If dusts or partiabove, use, as a minimum, an exposure limit of not les respiratory protective equipevaluation of the need for respiratory protective.	culates are ge a NIOSH app s than 0.05 mo nent supplier	nerated during roved1/2 face pg/M^3. If expos or a professior	handling or proc piece respirator v ures may excee nal industrial hyg	essing and expo with cartridges a d 10 times the lin ienist for selection	osures may opproved for mit cited in Son of the pro	exceed the limits cited particulate matter with Section 2, consult your oper equipment. The	1
Eye: Chemical protective g glasses with side shields a				possibility of eye	contact with	h the product. Safety	
Clothing: A polymeric coate clothing becoming contami thoroughly cleaned and reu	nated with the						

Product ID: Vermiculite P.3 Rev.:6/17/19

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Odor and Appearance	Odor Threshold (ppm)
Solid	Tan Flakes, Granules, or Powder.	None
Specific Gravity	Vapor Density (air = 1)	Vapor Pressure (mmHg)
(Bulk) 0.66-0.96 g/cc	N/A	N/A
Evaporation Rate	Boiling Point (° C)	Freezing Point (° C)
N/A	Not Determined	N/A
рН	Coefficient of Water/Oil Distribution	[Solubility in Water]
N/A	N/A	<1 %

SECTION	10 —	STABIL	ITY AND	REACTIVIT	ΓY
$O = O \cap O \cap A$	10	O I / \DIL			

Chemical Stability			If no, under which conditions?		
	⊠Yes	□No			
Incompatibility with Ot	her Substances		If yes, which ones?		
	⊠Y e s	□No	Do not store with strong acids, or reducing agents.		
Reactivity and under	r what conditions?				
Product will undergo an exfoliation reaction with a resultant large increase in volume at approximately 300°.					
Hazardous Decomposition Products					
None that are	None that are known. Product is stable to at least 2400° F.				

SECTION 11 — TOXICOLOGICAL INFORMATION

Effects of Acute Exposure

Eye contact may cause mechanical irritations if exposed to excessive amount of vermiculite. Skin contact may aggravate existing dermatitis. Inhalation from prolonged and continuous exposure may aggravate existing asthmatic or respiratory conditions.

Effects of chronic exposure

Prolonged inhalation of excessive levels vermiculite dust may cause a simple pneumoconiotic condition, not normally associated with a decrement in lung function. In cases of long-term exposure to extremely high levels of dust, complicated pneumoconiosis with lung function may occur.

pricamocoriiosis with lang function may occur.		
Irritancy of Product		
N/A		
Skin sensitization	Respiratory sensitization	
N/A	N/A	
Carcinogenicity-IARC	Carcinogenicity - ACGIH	
N/A	N/A	
Reproductive toxicity	Teratogenicity	
N/A	N/A	
Embrotoxicity	Mutagenicity	
N/A	N/A	
Name of synergistic products/effects		
N/A		

SECTION 12 — ECOLOGICAL INFORMATION

Aquatic Toxicit

In vitro ecotoxicity studies conducted on aqueous extracts of the product under the auspices of the South African Department of Water Affairs and Forestry in 1998 indicated that the product most probably is not toxic to the environment. In each of the ecotoxicity tests cited below, 50 grams of the product were extracted with a liter of distilled water. The resulting solution was used to derive the toxicity parameters. The 48 hour EC_0 and EC_{50} (Daphnia pulex lethality) were determined to be >50 milligrams of extract per liter (mg/l). The 72 hour EC_0 and EC_{50} (algal, Selenastrum capricornutum, growth inhibition) were determined to be >50 mg/l. The 72 hour EC_0 and EC_{50} (bacterial, Pseudomonas putida, growth inhibition) were determined to be >50 mg/l. The 48 hour EC_0 and EC_{50} (frog, Xenopus laevis, embryo lethality) were determined to be >50 mg/l.

SECTION 13 — DISPOSAL CONSIDERATIONS

Waste Disposa

As prepared, product is considered non-hazardous. It should be disposed of in and EPA approved landfill in accordance with all local, state and federal regulations. If used or waste product is disposed of testing, including TCLP, should be conducted to determine hazard characteristics. Empty containers will contain product residues. Observe proper safety and handling precautions. Do not allow empty containers or packaging to be used for any purpose except to store and ship original product.

SECTION 14 — TRANSPORT INFORMATION

Special Shipping Information						
Not currently regulated under Department of Transportation regulations.						
TDG	DOT	PIN				
N/A	N/A	N/A				
IMO	ICAO					
N/A	N/A					

SECTION 15 — REGULATORY INFORMATION

WHMIS Classification	OSHA
Not Controlled	Irritant, Lung Hazard, Skin Hazard, Eye Hazard.
SERA	TSC
Acute Hazard.	Not Listed

Status under CA Proposition 65

This product can expose you to chemicals including Quartz which is known to the state of California to cause cancer. California law requires the above warning in the absence of definitive testing to prove the defined risks do not exist. For more information go to: www.P65warnings.ca.gov

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

SECTION 16 — OTHER INFORMATION

Notice: This information relates only to the material designated and may not be valid for such material used in combination with any other materials or in any process. All statements, information and data provided are believed to be accurate and reliable, but are presented without any guarantee, representation, warranty or responsibility of any kind, expressed or implied. Any and all representations and/or warranties of merchantability of fitness for a particular purpose are specifically disclaimed. Users should make their own investigations as to the suitability of the information or product for their particular purpose. Nothing in this document is intended as permission, inducement or recommendation to violate any laws or practice any invention covered by existing patents, copyrights or inventions. Therm-O-Rock East, Inc. does not accept liability for any loss or damage that may occur from the use of this information.