



Crude Vermiculite

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 06/12/2015

Supersedes: 01/12/2010

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Crude Vermiculite
Other means of identification : Non- Exfoliated Vermiculite

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Horticulture, fire proofing insulation, pools

1.3. Details of the supplier of the safety data sheet

Palabora America Ltd.
1000 Cobb Place Boulevard
Building 200, Suite 250
Kennesaw, GA 30144
T 770-590-7970
www.palabora.us

1.4. Emergency telephone number

Chemtrec: 1800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. Label elements

GHS-US labelling

No labelling applicable

2.3. Other hazards

Other hazards not contributing to the classification : Contains trace amounts of Crystalline Silica (<0.01%).

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Hydrated Magnesium-Aluminum Iron Silicate (Vermiculite) (As particulate not otherwise regulated)	(CAS No) 1318-00-9	<= 100	Not classified

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 .

First-aid measures after inhalation : Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Immediately flush with large amounts of water, holding eyelids open, for at least 20 minutes. Repeat if necessary. Remove contact lenses, if present and easy to do. Seek medical assistance if irritation persists.

First-aid measures after ingestion : Not expected to be an important route of entry into the body. If large amounts of particulate matter are ingested, it may cause gastrointestinal distress. Seek medical attention.

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

Symptoms/injuries after inhalation : Dusts and particulate matter and fumes and vapors may cause irritation of the mouth, throat, mucous membranes, and respiratory tract.

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Symptoms/injuries after skin contact	: Dusts and particulate matter may cause irritation of the skin.
Symptoms/injuries after eye contact	: Dusts and particulate matter may cause irritation of the eyes.
Symptoms/injuries after ingestion	: Not expected to be an important route of entry into the body. Ingestion of large quantities of the product may cause gastric discomfort or distress.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Any. Use media appropriate for surrounding fire.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Product will not burn.

5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Any wastes generated during cleanup operations should be evaluated with respect to hazardous and solid waste regulations and disposed of in a properly permitted facility in accordance with all local, state, and federal regulations.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Pick up product and return to original packaging if reusable. If not reusable, place in appropriate containers for disposal. Any wastes generated during cleanup operations should be evaluated with respect to hazardous and solid waste regulations and disposed of in a properly permitted facility in accordance with all local, state, and federal regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Good housekeeping and engineering practices should be employed to prevent the generation and accumulation of dusts. 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.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking, smoking, being exposed to ignition sources and before leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in tightly closed containers out of contact with the elements.

Incompatible products : Strong acids. reducing agents.

7.3. Specific end use(s)

Use of the substance/mixture : Horticulture, fire proofing insulation, pools

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Crude Vermiculite		
ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ (total particulates); 3 mg/m ³ (respirable particulates)
OSHA	Not applicable	

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8.2. Exposure controls

Personal protective equipment	: A polymeric coated apron or other body covering, see above, is recommended where there is a possibility of regular work clothing becoming contaminated with the product. All soiled or dirty clothing and personal protective equipment should be thoroughly cleaned before reuse.
Hand protection	: Polymeric gloves are recommended to prevent possible irritation. PVC or similar construction materials are recommended.
Eye protection	: Avoid contact with eyes. Use chemical safety goggles and/or a full face shield where splashing is possible.
Respiratory protection	: Respiratory protection is not normally required. If appreciable dusts and/or particulate matter are generated during handling or processing, the operation should be evaluated by a professional industrial hygienist to determine the need for respiratory protection. If respiratory protection is deemed necessary, use, as a minimum, a respirator with NIOSH approvals for particulate matter. All provisions of OSHA's Respiratory Protection Standard (29 CFR 1910.134) should be followed.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Flakes, Granules or powder.
Color	: Tan
Odor	: None.
Odor threshold	: No data available
pH	: Not Available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 1300 °C (Approx 2426°F)
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	: Not Available
Relative vapor density at 20 °C	: No data available
Relative density	: (Bulk 0.66-0.96 g/cc)
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Product is stable. Hazardous polymerization will not occur.

10.3. Possibility of hazardous reactions

Product will undergo an exfoliation reaction with a resultant large increase in volume at approximately 300° F.

10.4. Conditions to avoid

Do not store with or near strong acids, or reducing agents.

10.5. Incompatible materials

No additional information available

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10.6. Hazardous decomposition products

None that are known. Product is stable to at least 2400 °F.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Crude Vermiculite	
Additional information	Epidemiology studies cited by the IOM indicate that there is little direct evidence of specific harmful effects from inhalation of vermiculite. These studies focused on miners and processors in South Carolina and in South Africa.
Skin corrosion/irritation	: Not classified pH: Not Available
Serious eye damage/irritation	: Not classified pH: Not Available
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified (In vitro toxicology 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 mutagenic. Not mutagenic to <i>Salmonella typhimurium</i> at concentrations of 2,000 g/l.)
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified (A known amount of product was extracted with a liter of distilled water. The resulting extract solution was used to derive the toxicity parameters. The extract was not teratogenic to frog (<i>Xenopus laevis</i>) embryos at extract concentrations of 1,000 grams per liter (g/l).
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: Dusts and particulate matter and fumes and vapors may cause irritation of the mouth, throat, mucous membranes, and respiratory tract.
Symptoms/injuries after skin contact	: Dusts and particulate matter may cause irritation of the skin.
Symptoms/injuries after eye contact	: Dusts and particulate matter may cause irritation of the eyes.
Symptoms/injuries after ingestion	: Not expected to be an important route of entry into the body. Ingestion of large quantities of the product may cause gastric discomfort or distress.

SECTION 12: Ecological information

12.1. Toxicity

Not expected to be acutely or chronically ecotoxic.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Additional information : The product is not considered hazardous under current EPA hazardous waste regulations. Recycling is the preferred method of disposal. Alternatively, the product may be disposed of in an approved landfill. All wastes should be evaluated in conjunction with applicable solid and hazardous waste regulations and disposed of as appropriate. Empty containers will contain product residues. Observe proper safety and handling precautions. Do not allow empty containers to be used for any purpose except to store and ship original product.

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Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT
Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Crude Vermiculite

Vermiculite is a naturally occurring chemical substance which is considered to be implicitly listed on the TSCA inventory per 40 CFR 710.4(b).

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Vermiculite is not reportable under Section 313 of the Superfund Amendments and Reauthorization Act of 1986

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

15.2.2. National regulations

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

Crystalline silica whose particle size is in the respirable range, <10 microns, has been classified by the State of California as a substance that is known to cause cancer. Crystalline silica has been listed as an Extraordinarily Hazardous Substance and Carcinogen by the State of Massachusetts

SECTION 16: Other information

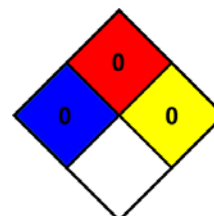
Revision date : 06/12/2015

Data sources : ChemADVISOR, Inc.[<https://www.chemadvisor.com>]. ChemIDplus [<http://chem.sis.nlm.nih.gov/chemidplus/rn/116094-23-6>].
GESTIS DNEL Database [[http://dnel-en.itrust.de/nxt/gateway.dll/dnel_en/000000.xml?f=templates\\$fn=default.htm\\$vid=dneleng:ddbeng\\$3.0](http://dnel-en.itrust.de/nxt/gateway.dll/dnel_en/000000.xml?f=templates$fn=default.htm$vid=dneleng:ddbeng$3.0)].

NFPA health hazard : 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



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HMIS III Rating

Health	: 1 Slight Hazard - Irritation or minor reversible injury possible
Flammability	: 0 Minimal Hazard
Physical	: 0 Minimal Hazard

SDS US (GHS HazCom 2012)

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