

Safety Data Sheet



Revision Date: 09/18/2018

Section 1: Product Identification

Product Name: Exfoliated Vermiculite (All grades)

Synonyms: Horticultural Vermiculite in Superfine, Fine, Medium, Large Grades, and Vermasorb Ultra Fine or Ultra Fine Blends.

Chemical Family: Hydro-Phlogopite

Manufacturer: Micronized Ultra Tech, Inc. DBA Ultra Tech Vermiculite

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Descriptions/Applications: A hydrous phyllosilicate mineral processed to provide a light-weight product, for industrial and commercial applications, including (but not limited to): horticulture, agriculture, environmental clean-up and containment, insulation, packaging, fire protection, and friction linings.

Section 2: Hazards Identification

Supplemental statement:

- Dusts may cause irritation of skin, eyes, mucous membranes and respiratory tract. Wear appropriate personal protective equipment.
 - Keep individuals not involved in cleanup out of the area.
 - Pick up released product with appropriate implements and return to original container of reusable. If not reusable, place in appropriate containers for disposal.
 - Dispose or product waste to approved waste disposal plant.
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- Product is quite inert and is not expected to present an environmental hazard.
 - Repeated or prolonged exposure is known to aggravate some medical conditions.

Supplemental Recommendations:

- Disposal of contents to approved waste disposal plant.
- Exposure control and personal protection:
 - Gloves: Rubber, leather or fabric to prevent mechanical irritation through friction. Be sure inside of gloves do not become contaminated with dust.
 - Ventilation: Local or general ventilation sufficient to maintain exposure below PEL.
 - Eyes: Wear protective tight-fitting goggles.

Respirator: Approved air purifying or air supplied dust respirator. Refer to ANSI Z88.2-1969 and 29 CFR 1910.134 if necessary to choose approved respirator.

Potential Health Effects:

Skin:

Repeated contact may cause mechanical irritation and drying of skin.

Eyes:

Eye contact may cause mechanical irritation and dust could damage eye surfaces.

Inhalation:

Repeated exposure to respirable dust above the TLV can result in reduced lung function, reduced work capacity and increased susceptibility to other lung diseases.

Prolonged over exposure to respirable crystalline silica (quartz) may cause a progressive, disabling lung disorder (silicosis).

Ingestion:

None known or anticipated.

Target Organ:

Respiratory System.

Section 3: Composition/Information on Ingredients

CAS Number: 1318-00-9

Vermiculite (Magnesium Aluminum Iron Silicate) > 0.99%

Quartz < 0.1%

CAS Number: 1318-00-9

CAS Number: 414808-60-7

Section 4: First Aid Measures

Skin:

Wash effected areas with soap and water. If irritation persists, seek medical attention.

Eyes:

Do not rub eyes. Flush with water for 15 minutes. Seek medical attention.

Inhalation:

If conditions should develop that require first aid, remove victim to fresh air. If necessary, begin artificial respiration or CPR by a trained person. Seek medical attention.

Ingestion:

If large amount is swallowed, seek medical attention.

Section 5: Fire Fighting Measures

NFPA Ratings:

Health: 1 Fire: 0 Reactivity: 0 Other: None

General Hazards: Negligible fire hazard when exposed to heat or flame. Non-combustible.

Special Fire-fighting procedures: Use procedures necessary to control the type of fires occurring in the area.

Section 6: Accidental Release Measures

Spill and Leak:

Avoid generating dust. Avoid inhalation of dust. Sweep up and transfer material to secure container. Clean up residue with a high efficiency HEPA vacuum.

Disposal:

Place any spillage in closed containers. Dispose of waste in accordance with all applicable regulations.

Section 7: Handling and Storage

Handling:

Avoid generating dust. Use the recommended personal protection.

Storage:

Store material in a dry, cool, and well ventilated environment. Keep all packaging sealed.

Section 8: Exposure Controls/Personal Protection

Adequate ventilation and appropriate local exhaust where needed to keep dust level below PEL. Local exhaust ventilation should be provided to maintain exposures below the limits recommended for nuisance particulates of 10 mg/M³ for total particulates and 3 mg/M³ for respirable particulates. Design details for local exhaust ventilation systems may be found in the latest edition of "Industrial Ventilation: A manual of Recommended Practices" published by the ACGIH Committee on Industrial Ventilation, P.O. Box 16153 Lansing, MI 48910. The need for local exhaust ventilation should be evaluated by a professional industrial hygienist. Local exhaust ventilation systems should be designed by a professional engineer.

Exposure Limits:

The Cal/OSHA PEL for respirable crystalline silica is *50 micrograms per cubic meter of air* (50 ug/M³) or *0.050 milligrams per cubic meter of air* (0.050 mg/M³).

Respiratory Protection:

Respirators fitted with filters certified to standard 42CFR84 under series N95 should be worn when dust is present. If the dust concentration is less than ten (10) times the Permissible Exposure Limit (PEL) use a quarter or half mask respirator. If dust concentration is greater than ten (10) times and less than fifty (50) times the PEL, a full-face piece respirator fitted with replaceable N95 filters is recommended. If dust concentration is greater than fifty (50) and less than two-hundred (200) times the PEL use a power air-purify (positive pressure) respirator with replaceable N95 filter. If dust concentration is greater than two-hundred (200) times the PEL use a type C, supplied air respirator (continuous flow, positive pressure), with full face piece, hood or helmet. Always consult your respiratory protective equipment supplier or a professional industrial hygienist for selection of the proper equipment. The evaluation of the need for respiratory protection should be made by a professional industrial hygienist. Always consult your respiratory protective equipment supplier or a professional industrial hygienist for selection of the proper equipment. The evaluation of the need for respiratory protection should be made by a professional industrial hygienist.

Eye Protection:

Wear Protective tight fitting safety goggles.

Skin Protection:

Wear rubber, leather or fabric gloves to prevent mechanical irritation through friction. Be sure inside of gloves do not become contaminated with dust. Wear appropriate and protective clothing.

Section 9: Physical and Chemical Properties

Melting point: 1320-1350C	Vapor Density: Not Applicable
Water Solubility: Insoluble	Specific Gravity: 0.7-1.1Kg/ml (H ₂ O=1)
PH: ~6-7	Evaporation: 6.71%
Appearance: Golden Dark; Yellow Flake	Odor: None
Heat Conductivity: 0.045-0.06Kc/m	Tensile Strength: 1000-1500Kg/cubic cm
Density: Not Available	Antibiotic: Good
Vapor Pressure: Not Applicable	Physical State: Solid

Section 10: Stability and Reactivity

Chemical Stability:

Stable under normal conditions.

Chemical Reactivity:

Not reactive under normal conditions.

Possibility of Hazardous Reactions:

Hydrofluoric acid, strong acids, reducing agents.

Section 11: Toxicological Information

Acute Toxicity LD/LC50:

No data available

Potential Acute Health Effects:**Skin:**

Skin contact may cause mechanical irritation and drying of skin.

Eyes:

Eye contact may cause mechanical irritation.

Inhalation:

May cause irritation of the mucous membranes, coughing, and sneezing.

Ingestion:

None known or anticipated.

Potential Chronic Health Effects:

Prolonged inhalation of excessive levels of vermiculite dust may cause a simple pneumoconiotic condition, not normally associated with a decrement in lung function. Repeated or prolonged exposure is known to aggravate some medical conditions. Prolonged exposure to respirable crystalline silica (quartz) may cause a progressive, disabling lung disorder (silicosis).

Component carcinogenicity (Quartz):

OSHA: Present (respirable size).

ACGIH: A2- suspected human carcinogen
IARC: 1

Section 12: Ecological Information

No known Ecotoxicity. Product is inert

Section 13: Disposal Considerations

Dispose of waste in accordance with all applicable regulations. Waste of this product (by itself) is non-hazardous.

Section 14: Transportation Information

No known shipping regulations.

Section 15: Regulatory Information

WHMIS Classification: Not controlled
OSHA: Irritant, Lung Hazard, Skin Hazard, Eye Hazard
SERA: Acute Hazard for minute contamination with Silica.
SERA Section 311/312 (40 CFR 370 Subparts B and C)
Acute Health: No; Chronic health: No; Fire: No; Pressure: No; Reactive: No

Section 16: Other Information

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