



RR ENTERPRISES

PLOT NO:126, THIRUMULLAIVOYAL WOMEN INDUSTRIAL PARK, SIDCO INDUSTRIAL ESTATE

KATTUR VELLANUR POST, , Tiruvallur, Tamil Nadu, 600062

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MATERIAL SAFETY DATA SHEET (MSDS)

Version: 3.0 dated 20-08-2025

Product

Crude Vermiculite/Exfoliated Vermiculite

Supplier

RR Enterprises, Chennai, Tamil Nadu, India

1. Product and Company Identification:

Product Name: Crude/Raw Vermiculite & Exfoliated Vermiculite

CAS NUMBER: 1318-00-9

Chemical Family: Hydrated Magnesium Iron Aluminium Silicate

Synonyms: Raw/Crude/Grounded Vermiculite; Expanded/Exfoliated Vermiculite

Recommended Use: Insulation, Horticulture, Friction Materials, Construction, Fillers, Fire Protection, Waterproofing etc.

Supplier Information: RR Enterprises (Proprietor Business)

Address of Supplier:

PLOT NO:126, Thirumullaivoyal Women Industrial Park, SIDCO Industrial Estate,
Kattur, Vellanur Post, Tiruvallur, Tamil Nadu, 600062.

Contact Phone: +91 6382001809

Emergency Contact: (Emergency/ After Hours Number) +91 6382001809

Email: rmineralspro@gmail.com

2. Hazards Identification

Hazard Pictogram: None

Signal Word: None required (Non hazardous)

Hazard Statement(s): May cause mechanical irritation

Precautionary Statement(s):

- Avoid breathing dust
- Wear suitable PPE when handling
- Use only in well-ventilated area

3. Composition and Information on Ingredients:

Vermiculite is mineralogical name given to hydrated laminar magnesium-aluminium-iron silicates which is 100% naturally occurring mineral, resembles mica in appearance. When subjected to heat, crude vermiculite has the unusual property of exfoliating or expanding.

4. First Aid Measures:

No serious adverse effects are anticipated. If seeking medical advice - show this SDS to the medical professional.

Following inhalation: If large amounts of dust are inhaled, remove exposed person to fresh air, keep warm and at rest. If breathing problems occur administer oxygen or CPR. Seek immediate medical attention.

Following skin contact: This material is considered harmless; however, if irritation occurs then wash affected skin with plenty of water. Get medical attention if irritation persists after washing.

Following eye contact: Immediately flush with clean water or eye wash solution, holding the eyelids apart. Seek medical attention, if redness, irritation or pain persists.

Following ingestion: There are no known adverse effects for small quantities and hence first aid measures are not usually required. For larger quantities, wash mouth out with water and give water to drink. Do not induce vomiting. If gastrointestinal symptoms occur, then seek medical advice.

Self-Protection of the first aider: Wear gloves to protect against skin irritation

Symptoms and effects: When dry, dust from this product may cause irritation to eyes, nose or throat.

Specific treatment: Treat symptomatically.

5. Firefighting Measures:

Extinguishing Media: General information: Non-combustible substance; however, packaging and surrounding materials may be combustible.

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media: No product-specific restrictions

No Special hazards arising from the substance or mixture

General information: Loose material may be a slip hazard.

Hazardous combustion products: Not applicable – non-combustible substance.

Advice for firefighters: No specific firefighting equipment is required. Personal precautions, Protective equipment and emergency procedures.

6. Accidental Release Measures:

- Avoid generating dust.
- Sweep or vacuum, spilled material using proper PPE into containers for reuse or disposal.
- Dispose of in accordance with local regulations.

7. Handling and Storage:

- Handle in ways that minimize dust generation.
 - Store in a cool, dry, ventilated area.
 - Avoid contact with acids.
 - Shelf life is indefinite.
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8. Exposure Controls/Personal Protection:

- Exposure Limits: Total nuisance dust – 10 mg/m³ (TWA).
 - PPE: Dust mask/respirator (P2 or N95 filter)
 - Safety goggles, Gloves
 - Use personal protective equipment to protect eyes, skin and clothing. Loose material may be a slip hazard.
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9. Physical and Chemical Properties:

Grade: 0.5 mm – 12 mm thickness; termed Micron, superfine, fine, medium, large etc.

Colour: Crude Vermiculite – Grey, Black, Light Brown

Exfoliated Vermiculite - Golden Brown/Yellow

State: Solid, Powdered, Crystal Granules

Odour : Odourless

Chemical Composition: Silica (SiO₂): 35-45%; Magnesium Oxide (MgO): 15-25%; Alumina (Al₂O₃): 8-20%;

Iron Oxide (Fe₂O₃): 5-20%; Potassium Oxide (K₂O): 2-8%; Calcium Oxide (CaO): 1-5%; Sodium Oxide (Na₂O): 0.5-3%; Titanium Dioxide (TiO₂): 0.5-1.5%; pH: 7-9% (due to its hydrated nature) Moisture Content: 2-6%;

Melting Point: >1300°C; Solubility: Insoluble in water; Bulk Density: 400–800 kg/m³ | 70–150 kg/m³

10. Stability and Reactivity:

Stability: Stable under normal conditions.

Reactivity: Inert; reacts with strong acids.

Hazardous Decomposition: None.

11. Toxicological Information:

Non-toxic, may cause mechanical irritation due to dust.

12. Ecological Information:

Inert and non-toxic to the environment. No known aquatic toxicity.

13. Disposal Considerations:

Dispose in compliance with local regulations. Not classified as hazardous waste.

14. Transport Information:

Not classified as hazardous for transport.

15. Regulatory Information:

Complies with BIS, GHS, REACH, OSHA. Not classified as hazardous.

16. Other Information:

Information is believed to be accurate but without warranty. Users must determine suitability for purpose.

Disclaimer: The information provided in this Material Safety Data Sheet (MSDS) is believed to be accurate and reliable as of the date of issue. However, RR Enterprises makes no warranties, express or implied, including but not limited to any warranty of merchantability or fitness for a particular purpose. Users are advised to make their own determination as to the suitability of this material for their intended use and to ensure proper handling, storage, and disposal in accordance with applicable laws and regulations. RR Enterprises shall not be held liable for any loss or damage resulting from the use of this product or the information herein.

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