1. Identification

In this section we give product name which will be listed on label as well as contact information of the manufacturer

Product Name: Exfoliated/Expanded Perlite
Class: Industrial grade
Synonyms: Not Applicable
MSDS Number: N/A Version : 1.0
Product Use Description: **Filter Aid, Cryogenic, Insulation, Construction, Building Materials, Textile, Agriculture, Horticulture, Industrial Uses (No specific uses advised against are identified)**
Company: Greenfield Eco Solutions Pvt. Ltd.
Main Telephone: 91-291-2711895
Website: www.greenfieldeco.com

Company Address:
11/895 CHB
Nandanvan
Jodhpur 342008, India

2. Hazard(s) Identification

This section identifies the hazards of the chemical presented on the MSDS and the appropriate warning information associated with those hazards. When looking at the different classifications of the numbering starts at 1 (most hazardous) and ends at 5 (Least hazardous). The lower the number or letter, the more severe the hazard.

CLASSIFICATIONS

- Flammable – Category 5
- Aspiration Hazard – Category 5
- Carcinogenicity – Category 5
- Specific Target Organ Toxicity (Repeated Exposure) – Category 4
- Specific Target Organ Toxicity (Single Exposure) – Category 5
- Skin Irritation – Category 5
- Eye Irritation – Category 5
- Chronic Aquatic Toxicity – Category 5

PICTOGRAMS

3. Composition/Information on Ingredients

This section identifies the ingredient(s) contained in the product indicated on the MSDS, including impurities and stabilizing additives. This section includes information on substances, mixtures, and all chemicals where a trade secret is claimed. The required information consists of:

MAIN INGREDIENT

Perlite

INGREDIENT	PERCENT (% Weight)
SiO_2	71-74
Al_2O_3	12-14
Fe_2O_3	0.5-1
CaO	0.8-1
MgO	0.1-0.2
Na_2O	3-4
K_2O	5-6
TiO_2	0.09-0.12
Loss of Ignition	3-4

Notes: Analysis may vary within batches and is quoted as % dry weight

4. First-Aid Measures

This section describes the initial care that should be given by untrained responders to an individual who has been exposed to the chemical

EFFECTS OF OVEREXPOSURE
Routes of Entry: INHALATION - EYE CONTACT - SKIN CONTACT - INGESTION
Carcinogenic Status: NONE
Target Organs: EYE - LUNG
EYES: Dust may cause slight irritation.
SKIN: Prolonged contact may cause dryness of the skin.
INGESTION: May cause discomfort, stomach pain and vomiting if swallowed.
INHALATION: Dust may irritate the respiratory system. Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.
Other Health Warnings: Not Applicable

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE
If an allergy such as dermatitis, asthma, or bronchitis develops it may be necessary to remove a sensitive worker from further exposure to perlite dust.

EMERGENCY AND FIRST AID PROCEDURES
EYES: Rinse eyes with large amount of water or normal saline solution. If irritation or redness develops, seek medical attention.
SKIN: Brush of loose particles from skin. Use common skin moisturizers to relieve dryness. If irritation or redness develops, seek medical attention. Broken skin can be cleansed with mild soap and water.
INGESTION: Considered to be relatively non-toxic due to non-absorption. Rinse mouth thoroughly with water.
INHALATION: Remove person from exposure to fresh air. If breathing has stopped, perform artificial respiration and get medical attention immediately. Keep person warm and at rest. Treat symptomatically and supportively.

Emergency Eye Wash: When there is a possibility that an employee's eyes may be exposed to bulk quantities or high concentrations of air borne dust of this substance the employer should provide an eye wash fountain within the immediate work area for emergency.

Use of appropriate PPE can limit contact as needed – long pants, sleeves, gloves, eye shields, p100 respirator.

5. Fire-Fighting Measures

This section provides recommendations for fighting a fire caused by the chemical

Extinguishing Media: Not flammable. Select extinguishing agent appropriate to other materials involved.
Special Hazards of Product: No specific measures necessary/required.
Hazardous Combustion Products: Harmful gases and vapors.
Protective Equipment for Fire Fighting: Avoid the formation of dust clouds.

6. Accidental Release Measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
No specific measures are required or necessary. Use vacuum cleaner or broom to collect spillage and reuse product.

WASTE DISPOSAL
Dispose in accordance with central, state and/or local regulations

7. Handling and Storage

This section provides guidance on the safe handling practices and conditions for safe storage of chemicals.

Handling: Preserve in sealed containers or bags to prevent dispersion of dust in air. Keep away from food, drink and animal feeding stuff. Wear protective clothing.
Storage: Store in original containers/bags. Storage area should be away from incompatible materials such as acids and in a cool, dry, well ventilated area.

8. Exposure Controls/Personal Protection

This section indicates the exposure limits, engineering controls, and personal protective measures that can be used to minimize worker exposure.

Engineering Control Measures: Engineering methods to prevent or control exposure are preferred. If they are not effective, then suitable personal protective methods should be used.
Respiratory Protection: The specific respirator selection must be based on the airborne concentration found in the work place and must not exceed the working limits of the respirator.
Hand Protection: Protective gloves are not required, but may be worn to prevent skin dryness or irritation.
Eye Protection: Dust tight goggles.
Body Protection: Normal work wear.
OES: 10 mg/m^3

Emergency Eye Wash: When there is a possibility that an employee's eyes may be exposed to bulk quantities or high concentrations of air borne dust of this substance the employer should provide an eye wash fountain within the immediate work area for emergency.

9. Physical and Chemical Properties

This section identifies physical and chemical properties associated with the substance or mixture

Physical State: Granules
Color: Snowy White to Grey
Odor: Odorless
pH: 7-8
Bulk Density: 35-65 kg/m^3
Flammability: Not flammable
Melting Temperature: > 1250^{O} C
Solubility: Insoluble in water
Explosive Properties: Non explosive

10. Stability and Reactivity

This section describes the reactivity hazards of the chemical and the chemical stability information.

Stability: Stable under normal temperatures and pressures.
Incompatibility: None.
Decomposition/By Products: Does not decompose.
Hazardous Polymerization: Should not occur under normal temperatures and pressures.

CONDITIONS TO AVOID
Provide ventilation sufficient to prevent exceeding recommended exposure limits.
Keep containers closed and in a cool, well-ventilated area

11. Toxicological Information

This section identifies toxicological and health effects information or indicates that such data are not available.

There are no substances of toxicological significance contained in this product.

12. Ecological Information (non-mandatory)

This section provides information to evaluate the environmental impact of the chemical(s) if it were released to the environment.

Not regarded as dangerous for the environment.

13. Disposal Considerations (non-mandatory)

This section provides guidance on proper disposal practices, recycling or reclamation of the chemical(s) or its container, and safe handling practices.

Product Disposal: Dispose of in accordance with all applicable local and national regulations.

14. Transport Information (non-mandatory)

This section provides guidance on classification information for shipping and transporting of hazardous chemical(s) by road, air, rail or sea.

UN NO.: NA, UN CLAUSE: NA
UN PACKAGES: As for transport, avoid direct sunlight, load not to cause container breakages, corrosion, leakages and prevent a collapse of cargo. Avoid overloading.
IATA: Not regulated, under dangerous goods ICAO as per IATA regulations.
ICAO: Not regulated, under dangerous goods as per IATA regulated.

15. Regulatory Information (non-mandatory)

This section identifies the safety, health, and environmental regulations specific for the product that is not indicated anywhere else on the MSDS.

Dangerous Substances Directive 67/548/EEC and Dangerous Preparation Directive 88/379/EEC. These regulations do not apply.

16. Other Information

This section indicates when the MSDS was prepared or when the last known revision was made. The MSDS may also state where the changes have been made to the previous version.

This MSDS is an overview at the date of issue about the chemical, physical and biological properties of this product, safety hazards of the material and general guidance on how to safely handle the material in the occupational and natural environment. When further technical information is required on this Material Safety Data Sheet (MSDS), please contact Greenfield Eco Solutions Pvt. Ltd.