



Vermiculite (all grades)

Safety Data Sheet

1. Identification of Substance & Company

Product

| | |
|-----------------------------|--------------------------|
| Product name | Vermiculite (all grades) |
| HSNO approval | Non hazardous |
| Approval description | NA |
| UN number | NA |
| Proper Shipping Name | NA |
| Packaging group | NA |
| Hazchem code | NA |
| Uses | Hydroponic media |

Company Details

| | |
|------------------|--|
| Company | EGMONT COMMERCIAL |
| Address | PO Box 37-326 Christchurch 8245 New Zealand |
| Website | www.egmontcommercial.co.nz |
| Telephone | Auckland (09) 838 2960 Christchurch (03) 349 5546 |
| Email | sales@egmontnz.com |

2. Hazard Identification

Approval

This product is not considered hazardous under the Hazardous Substances and New Organisms Act (HSNO), according to the criteria in the Hazardous substances (Hazard Classification) Notice 2020.

GHS Classes Hazard Statements

none

SYMBOLS

none

Other Classifications

No other classification are known to apply

Precautionary Statements

None

3. Composition / Information on Ingredients

| Component | CAS/ Identification | Conc (w/w %) |
|-----------------------------|---------------------|--------------|
| Perlite | 93763-70-3 | >99% |
| Quartz (crystalline silica) | 14808-60-7 | <0.1 |

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

4. First Aid

General Information

If medical advice is needed, have product container or label at hand. You should call the National Poisons Centre if you feel that you may have been harmed or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).

Recommended first aid facilities Ready access to running water is required. Accessible eyewash is required.



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Exposure

| | |
|---------------------|--|
| Swallowed | Do NOT induce vomiting. Give a glass of water to drink. Contact a doctor. |
| Eye contact | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Apply continuous irrigation with water for at least 15 minutes holding eyelids apart. If eye irritation occurs: Get medical advice. |
| Skin contact | Wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention. Take off contaminated clothing and wash before re-use. |
| Inhaled | If coughing, dizziness or shortness of breath is experienced, remove the patient to fresh air immediately. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor. |

Advice to Doctor

Treat symptomatically

5. Firefighting Measures

| | |
|---|---|
| Fire and explosion hazards: | There are no specific risks for fire/explosion for this chemical. It is non-flammable. |
| Suitable extinguishing substances: | Carbon dioxide, extinguishing powder or water jet. Fight larger fires with water jet or alcohol resistant foam. |
| Unsuitable extinguishing substances: | Unknown. |
| Products of combustion: | Product does not burn. Dust may form irritating atmosphere. |
| Protective equipment: | No special measures are required. |
| Hazchem code: | NA |

6. Accidental Release Measures

| | |
|-----------------------------|---|
| Containment | There is no current legal requirement for containment of this product. |
| Emergency procedures | In the event of large spillage alert the fire brigade to location and give brief description of hazard. Wear protective equipment to prevent skin, eye and respiratory exposure. Clear area of any unprotected personnel. Sweep up the solid. Avoid creating dust. If appropriate, use a gentle water spray to wet material to minimise dust generation. |
| Disposal | Sweep up and collect recoverable material into labelled containers for recycling or salvage. This material may be suitable for approved landfill. Dispose of only in accord with all regulations. |
| Precautions | Wear protective equipment to prevent skin and eye contamination and the inhalation of dusts. Work up wind or increase ventilation. |

7. Storage & Handling

| | |
|-----------------|---|
| Storage | Stable under normal use and storage conditions. |
| Handling | Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements. Do not breathe dust. |

8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 3mg/m³ for respirable particulates and 10mg/m³ for inhalable particulates when limits have not otherwise been established.

| NZ Workplace Exposure Stds | Ingredient | WES-TWA | WES-STEL |
|----------------------------|-------------------------------|----------------------|------------------|
| | Perlite | data unavailable | data unavailable |
| | Quartz (SiO ₂): | | |
| | quartz, respirable dust | 0.2mg/m ³ | data unavailable |
| | cristobalite, respirable dust | 0.1mg/m ³ | data unavailable |

Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety at Work Act (2015) and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.



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Personal Protective Equipment

| | |
|--------------------|---|
| Eyes | Protective eyewear is not normally necessary when using this product. However, it always prudent to use protective eyewear if dust is likely. |
| Skin | Avoid repeated or prolonged skin contact. Wear overalls, rubber boots and impervious gloves. Replace frequently. Gloves should be checked for tears or holes before use. Remove protective clothing and wash exposed areas with soap and water prior to eating, drinking or smoking. Wash contaminated clothing before re-use. |
| Respiratory | To prevent irritation a well fitted dust mask should be used (this is not recommended when exposure is close to the WES). Use of a P2 dust mask or fine particulate half or full face respirator with an effective seal is recommended when airborne concentrations approach the WES (section 8). Fit testing and clear guidelines and training for use and maintenance of PPE are necessary. |

WES Additional Information

Not applicable

9. Physical & Chemical Properties

| | |
|---|---|
| Appearance | White to golden brown granules |
| Odour | no odour |
| pH | 6-9 |
| Vapour pressure | NA |
| Particle characteristics | 1µm – 16mm |
| Boiling point | NA |
| Volatile materials | no data |
| Freezing / melting point | ~1200-1320°C |
| Solubility | not soluble in water, soluble in strong mineral acids Insoluble in organic solvents |
| Density | Bulk density: 64-160kg/m ³ Specific Gravity: 2.2-2.7 |
| Flash point | no data |
| Danger of explosion | NA |
| Auto-ignition temperature | NA |
| Upper & lower flammable limits | NA |
| Corrosiveness | non corrosive |

10. Stability & Reactivity

| | |
|---|---|
| Stability | Stable |
| Conditions to be avoided | Containers should be kept closed in order to avoid contamination. Avoid the creation of dust. |
| Incompatible groups | Strong acids and reducing agents. |
| Hazardous decomposition products | None known |
| Hazardous reactions | Perlite reacts with Hydrofluoric Acid to form toxic silicon tetra fluoride gas |

11. Toxicological Information

Summary

IF IN EYES: fine dust may cause irritation when in direct contact.
IF ON SKIN: fine dust from this material may cause drying out of skin.
IF INHALED: dust may cause respiratory irritation.
IF SWALLOWED: No adverse effects anticipated under normal use conditions.
CHRONIC EFFECTS: none known

Supporting Data

| | | |
|-------------------------------------|--------------------------------|--|
| Acute | Oral | Not considered acutely toxic if swallowed. |
| | Dermal | Not considered acutely toxic by dermal contact. |
| Chronic | Inhaled | The substance is not considered acutely toxic if inhaled, however there may be irritation of the respiratory tract if dust is inhaled. |
| | Eye | The mixture is not considered to be an eye irritant. Dust may be an eye irritant (mechanical irritation). |
| | Skin | The mixture is not considered to be a skin irritant. |
| | Sensitisation | No ingredient present at concentrations > 0.1% is considered a sensitizer. |
| | Mutagenicity | No ingredient present at concentrations > 0.1% is considered a mutagen. |
| | Carcinogenicity | No ingredient present at concentration >0.1% is considered a carcinogen. |
| Reproductive / Developmental | Reproductive / Systemic | No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation. |
| | Systemic | No ingredient present at concentration >1% is considered a systemic toxicant. |



Aggravation of existing conditions None known

12. Ecological Data

Summary

This product is not considered ecotoxic.

Supporting Data

| | |
|------------------------------------|---|
| Aquatic | Not ecotoxic in the aquatic environment. |
| Bioaccumulation | No data |
| Degradability | No data |
| Soil | No considered ecotoxic in the soil environment. |
| Terrestrial vertebrate | Not toxic towards terrestrial vertebrates |
| Terrestrial invertebrate | Not toxic towards terrestrial invertebrates |
| Biocidal | Not biocidal |
| Environmental effect levels | No EELs are available for this mixture or ingredients |

13. Disposal Considerations

| | |
|-------------------------------|---|
| Restrictions | There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents. |
| Disposal method | Disposal of this product must comply with the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. |
| Contaminated packaging | Rinse containers with water before disposal. Preferably re-cycle container, otherwise send to landfill or similar. |

14. Transport Information

There are no specific restrictions for this product (not a dangerous good).

| | | | |
|---------------------|-----------------|------------------------------|----|
| UN number: | NA | Proper shipping name: | NA |
| Class(es) | NA | Packing group: | NA |
| Precautions: | Not applicable. | Hazchem code: | NA |

15. Regulatory Information

This substance is not considered to be hazardous under HSNO.

All ingredients appear on the NZIoC.

Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

| | |
|---------------------------------|---|
| SDS | Not required (non hazardous), but best practice to have the SDS available. |
| Inventory | An inventory of all hazardous substances must be prepared and maintained. |
| Packaging | All hazardous substances should be appropriately packaged including substances that have been decanted, transferred or manufactured for own use or have been supplied |
| Labelling | Must comply with the Hazardous Substances (Labelling) Notice 2017. |
| Emergency plan | Not required. |
| Certified handler | Not required. |
| Tracking | Not required. |
| Bunding & secondary containment | Not required. |
| Signage | Not required. |
| Location compliance certificate | Not required. |
| Flammable zone | Not required. |
| Fire extinguisher | Not required. |

Note: The above workplace requirements apply if only this particular substance is present. The complete set of controls for a location will depend on the classification and total quantities of other substances present in that location.

Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health and Safety at Work Act 2015 and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, local Council Rules and Regional Council Plans.



16. Other Information

Abbreviations

| | |
|------------------------|--|
| Approval Code | not applicable – non hazardous. |
| CAS Number | Unique Chemical Abstracts Service Registry Number |
| EC₅₀ | Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species) |
| EPA | Environmental Protection Agency |
| HAZCHEM Code | Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters |
| HSNO | Hazardous Substances and New Organisms (Act and Regulations) |
| IARC | International Agency for Research on Cancer |
| LEL | Lower Explosive Limit |
| LD₅₀ | Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats). |
| LC₅₀ | Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats) |
| MSDS (SDS) | Material Safety Data Sheet (or Safety Data Sheet) |
| STEL | Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded |
| TWA | Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours) |
| UEL | Upper Explosive Limit |
| UN Number | United Nations Number |
| WES | Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed during work hours (usually 8 hours, 5 days a week). The WES relates to exposure that has been measured by personal monitoring using procedures that gather air samples in the worker's breathing zone. |

References

| | |
|--------------------------|---|
| Data | Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID). |
| EPA Notices | www.epa.govt.nz |
| WES | The latest NZ Workplace Exposure Standards, published by WorkSafe NZ and available on their web site – www.worksafe.govt.nz . |
| Other References: | Suppliers SDS |

Review

| Date | Reason for review |
|------------|-------------------|
| April 2017 | New SDS. |
| June 2021 | Update, GHS. |

Disclaimer

This SDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The SDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO and GHS classifications for this SDS have been estimated based on general information from the supplier (e.g., hazard, toxicological). This SDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the SDS author, email info@datachem.co.nz or phone: +64 9 940 30 80.

