

MATERIAL SAFETY DATA SHEET

VERMICULITE

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V928A

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Revision number

11

1 IDENTIFICATION OF SUBSTANCE AND COMPANY

Material Trade Name	Vermiculite
Reach Registration N°	Excepted according to article 2 §(7)
Substance Identification	Exfoliated Vermiculite
Product Name	
Product Trivia Name	VERMICULITE
CAS Number	
Company	William Sinclair Horticulture Ltd, Silvaperl Division,
Address	Albion Works Ropery Road Gainsborough Lincs. DN21 2QB
Tel No	01427 610160
Responsible person for SDS in EU	Lesley.joy@william-sinclair.co.uk
Emergency telephone No	Direct dial +44 (0) 1427 675092

Substance Use

Animal Feeds	Back fill for Firebacks.
Acoustic insulation.	Chimney Lining.
Pipe and duct insulation.	Fireproofing
Plasters and Mortars.	High Temperature Insulation
Friction Linings.	Lightweight concretes and screeds.
Packaging	Liquid wastes absorbent :- Oils, Acids, Alkalis,
Horticulture.	Nuclear Residues & Toxic chemicals .
Refractory Applications	Loose fill insulation.

2 HAZARD IDENTIFICATION

Not classified as dangerous or as defined in Directive 67/548 EEC and its amendments or hazardous under the CLP regulations EC No
Hazard symbols - none required.

3 COMPOSITION

The material is a complex magnesium aluminium iron silicate. A heat processed inorganic, inert material that does not constitute any known health hazard and is non-combustible.

Typical Chemical Analysis

SILICA	(as SiO ₂)	37-40%
MAGNESIUM	(as MgO)	21-29%
ALUMINUM	(as Al ₂ O ₃)	6-10%
FERRIC OXIDE	(as Fe ₂ O ₃)	4-8%
POTASSIUM	(as K ₂ O)	3-6%
CALCIUM	(as CaO)	1-4%
CARBON	(as CO ₂)	0-2%

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4 FIRST AID MEASURE

Inhalation	Move to fresh air and rest, induce coughing, if recovery is not rapid obtain prompt medical attention.
Skin Contact	Rinse contaminated area with water (non irritant).
Eye Contact	Rinse with soft water for at least 15 minutes.
Ingestion	Rinse mouth and drink water, not harmful. Exfoliated Vermiculite is used as a carrier in Animal Feedstuffs.

5 FIRE FIGHTING

Non-combustible	Will not give off noxious fumes. Fusion point 1330deg C. However, when used as an absorbent with flammable liquids, exfoliated Vermiculite <u>will not</u> render the fluids non-flammable and saturated absorbent containing flammable spillage should be removed and disposed of promptly.
Suitable Extinguishers	exfoliated Vermiculite is a non-combustible material.
Unsuitable Extinguishers	not applicable.
Hazardous Decomposition	not applicable
Special Procedures	not applicable.
Reaction to Fire	Vermiculite is classified for reaction to fire as Class A1 in decision 96/603/EC as amended by Decision 2000/605/EN

6 ACCIDENTAL RELEASE MEASURES (Spillage)

Sweep spilled substances into covered containers: if appropriate moisten first to prevent dusting (extra personal protection FFP2 dust mask for inert particles)

7 HANDLING AND STORAGE

Handling	Use suitable handling procedures to minimise nuisance dust. If dust levels become excessive wear goggles and dust masks FFP2. When wet exfoliated Vermiculite becomes slippery.
Storage	Under cover in a dry area.

8 EXPOSURE CONTROLS / PERSONNEL PROTECTION

Workplace Exposure Limit - WEL: 10 mg/M3 (Inh), 4 mg/M3 (Resp). 8 hr TWA. (Inh = Inhalable Dust. Resp = Respirable dust)

Biological Exposure Limited:- Not applicable.

Provide appropriate exhaust ventilation, engineering controls and filtering at points where dust can be generated. Use in well ventilated areas.

Personnel Protective Equipment - use a respirator or Mask when WEL is likely to be exceeded.

9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL

Appearance	Golden Brown
Odour	Odourless
pH	7-10
Boiling Point	Not applicable
Flash Point	Not applicable
Melting Point Range	1330 deg C
Flammability	Non Combustible
Auton Flammability	Non Flammable
Explosive Properties	Not Applicable
Oxidising Properties	Not Applicable
Vapour Pressure	Not Applicable
Relative Density	2.5 (Typical Bulk Density loose 50 - 110 (kg/M3)
Solubility	Water Insoluble

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10 STABILITY & REACTIVITY

Stability	Stable
Hazardous Polymerisation	Will not Occur
Material to Avoid	Acids (*See Footnote)
Hazardous Decomposition Products	None known

11 TOXICOLOGICAL INFORMATION

Chronic Effects - None Known
No toxic effect known including sensitisation, narcosis or carcinogenicity

12 ECOLOGICAL INFORMATION

No Adverse Environmental Effects Foreseen
Not Readily Biodegradable
Not expected to Bioaccumulate
Aquatic Environment - Not Expected to be Toxic Marine Pollutant
Ozone Layer - No implication known.

13 DISPOSAL CONSIDERATIONS

Dispose of in Accordance with Local Authority Requirements, Landfill.

14 TRANSPORT INFORMATION

UN Number:- Not applicable
IMDG- Not dangerous goods
IATA:-Not dangerous goods
ADR/RID:- Not dangerous goods
Group:-_n/a Item :- n/a
No special precautions are required as Vermiculite is not classified as dangerous.

15 REGULATORY INFORMATION

UK Health and Safety At Work Act 1974
UK Environmental Protection Act 1990
HSE Guidance Note EH40 - occupational exposure limits.
Control of Substances Hazardous to Health Regulations 2002(AS AMMENDED)
ILO data sheet ICSC 1141

16 OTHER INFORMATION

Compiled According to the REACH and Classification, Labelling and Packaging (CLP) Regulations.

* Re Stability & Reactivity. Material to avoid is quoted as being acids. It has been shown that prolonged contact with acids particularly at elevated temperatures does effect exfoliated Vermiculite, so this statement is technically correct. However for many years Vermiculite has been used without problem as a safe and effective material for the packaging of a wide range of acids and other hazardous chemicals.

Spillage's of acids into the Vermiculite packaging material are quickly and safely contained with only minor degradation of the Vermiculite, no hazardous reaction products are released from the Vermiculite during this process. Appropriate precautions however should be taken when handling all packaging material that have been contaminated with any in transit seepage of hazardous materials.

*Also direct contact with ammonium Bifluoride and hydrofluoric acids must be avoided

This data sheet is compiled to be of assistance but without guarantee and is, to the best of the company's knowledge and belief, correct. Users are responsible for safe working.