

# VERMICULITE

MATERIAL SAFETY DATA SHEET

V928A

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Revision number

11

## 1 IDENTIFICATION OF SUBSTANCE AND COMPANY

<b>Material Trade Name</b>	Vermiculite
<b>Reach Registration N°</b>	Excepted according to article 2 §(7)
<b>Substance Identification</b>	Exfoliated Vermiculite
<b>Product Name</b>	
<b>Product Trivia Name</b>	VERMICULITE
<b>CAS Number</b>	
<b>Company</b>	William Sinclair Horticulture Ltd, Silvaperl Division,
<b>Address</b>	Albion Works Ropery Road Gainsborough Lincs. DN21 2QB
<b>Tel No</b>	01427 610160
<b>Responsible person for SDS in EU</b>	Lesley.joy@william-sinclair.co.uk
<b>Emergency telephone No</b>	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 <sub>2</sub> )	37-40%
MAGNESIUM	(as MgO)	21-29%
ALUMINUM	(as Al <sub>2</sub> O <sub>3</sub> )	6-10%
FERRIC OXIDE	(as Fe <sub>2</sub> O <sub>3</sub> )	4-8%
POTASSIUM	(as K <sub>2</sub> O)	3-6%
CALCIUM	(as CaO)	1-4%
CARBON	(as CO <sub>2</sub> )	0-2%

#### 4 FIRST AID MEASURE

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

#### 5 FIRE FIGHTING

<b>Non-combustible</b>	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.
<b>Suitable Extinguishers</b>	exfoliated Vermiculite is a non-combustible material.
<b>Unsuitable Extinguishers</b>	not applicable.
<b>Hazardous Decomposition</b>	not applicable
<b>Special Procedures</b>	not applicable.
<b>Reaction to Fire</b>	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

<b>Handling</b>	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.
<b>Storage</b>	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

## **10 STABILITY & REACTIVITY**

<b>Stability</b>	Stable
<b>Hazardous Polymerisation</b>	Will not Occur
<b>Material to Avoid</b>	Acids (*See Footnote)
<b>Hazardous Decomposition Products</b>	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.