



# EXFOLIATORS

## SAFETY DATA SHEET

### EXFOLIATORS PREMIUM VERMICULITE

#### 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

##### 1.1 Product identifier

**Product name** EXFOLIATORS PREMIUM VERMICULITE (All Grades)  
**Synonym(s)** • Exfoliators Premium Vermiculite • Premium Vermiculite • Vermiculite • Grade 1 • 301 • Grade 2 • 302com • Grade 3 • 303 • Grade 4 • 304 • Horticultural Mix • 307 • 308

##### 1.2 Uses and uses advised against

**Use(s)** Hydroponics, Horticulture, Insulation, Lightweight Concrete, Refractory Insulation, Filler, Texture Coating and Absorbent

##### 1.3 Details of the supplier of the product

**Supplier name** EXFOLIATORS (AUST) PTY LTD  
**Address** 3 Kitchen Road  
Dandenong South, Victoria 3175  
Australia  
**Telephone** +61 3 9706 6049  
**Fax** +61 3 9706 6046  
**Email** [office@exfoliators.com.au](mailto:office@exfoliators.com.au)  
**Website** [www.exfoliators.com.au](http://www.exfoliators.com.au)

##### 1.4 Emergency telephone number(s)

**Emergency** +61 3 9706 6049

#### 2. HAZARD(S) IDENTIFICATION

##### 2.1 Classification of the substance or mixture

NON-HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to SWA Criteria and the ADG Code.

**GHS Classification** Not Applicable  
**Poisons Schedule** Not Applicable

##### 2.2 GHS Label elements

**Hazard Pictograms** Not Applicable  
**Signal Word** Not Applicable  
**Hazard statement(s)** Not Applicable  
**Precautionary Statement(s)** Not Applicable

##### 2.3 Other hazards

No information provided.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

##### 3.1 Ingredients

Name	Product Identifier	Proportion
Vermiculite	(CAS No.) 1318-00-9	99.9 – 100%

##### 3.2 Hazardous Components

These products may contain naturally occurring Respirable Crystalline Silica (CAS #'s 14808-60-7 and 14464-46-1) at trace concentration levels below HazCom 2012 and GHS Revision 3 hazard classification limits. Per XRC analysis, which combines the analytical capabilities of X-Ray Diffraction, Computer Controlled Scanning Electron Microscopy/Energy Dispersive Spectroscopy and Raman Spectroscopy to conduct particle-by-particle inter-instrumental relocation and physicochemical/mineralogical analysis - naturally occurring trace level substances in these products, including Respirable Crystalline Silica are inextricably bound, environmentally unavailable and at de minimis concentrations. Thus, in the current and anticipated future physical state of these products, they are believed to be incapable of causing harm under normal conditions of use or as a result of extreme upset.

#### 4. FIRST AID MEASURES

##### 4.1 Description of first aid measures

**Inhalation** Remove from contaminated area. Encourage casualty to blow nose to ensure clear passage of breathing. Apply artificial respiration if not breathing. If irritation or discomfort persist seek medical attention.  
**Skin** Remove contaminated clothing and wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse. If symptoms develop seek medical attention.  
**Eye** Immediately flush eye/s with plenty of water for at least 15minutes. Ensure complete irrigation of the eye. Remove contact lenses if easy to do so. If irritation or discomfort persist seek medical attention.

**Ingestion** Do NOT induce vomiting. If vomiting occurs, lean casualty forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Never give liquid to a person showing signs of reduced awareness. If symptoms develop seek medical attention.

**First Aid Facilities** Eye wash station. Normal washroom facilities.

**4.2 Most important symptoms and effects, both acute and delayed**

See Section 11 for more detailed information on health effects and symptoms.

**4.3 Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

**5.1 Extinguishing media**

Use extinguishing media suitable for surrounding environment.

**5.2 Special hazards arising from the substance or mixture**

Non-combustible material. Not considered a fire risk.

**5.3 Advise for firefighters**

**Firefighting instructions** Alert Fire Brigade and advise location and nature of hazard. Product is not combustible. No special firefighting procedures required. Use firefighting procedures suitable for surrounding area.

**Protection during Firefighting** Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA)

**5.4 HAZCHEM code**

None allocated

**6. ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

**General measures** Avoid breathing dust. Use in well-ventilated area. Handle in accordance with good industrial hygiene and safety practices.

**Protective equipment** Wear Personal Protective Equipment (PPE) as detailed in Section 8 of the SDS.

**Emergency procedure** Evacuate all unnecessary personnel. Increase ventilation.

**6.2 Environmental precautions**

Vermiculite is inert and is not expected to present a hazard to the environment. Prevent product from entering drains and waterways. If contamination of waterways occurs, contact the Environmental Protection Authority (EPA).

**6.3 Methods and materials for containment and cleaning up**

Contain spillage immediately. Vacuum or wet sweep spilled material to avoid generating dust. Collect and transfer material to a suitable container for reuse or disposal. Use absorbent paper dampened with water to pick up remaining material. Wash surfaces well with soap and water. Dispose of in accordance with federal, EPA and state regulations.

**6.4 References to other sections**

See Sections 8 and 13 for exposure controls and disposal.

**7. HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

Avoid generation of dust. Use smallest possible amounts in designated areas with adequate ventilation. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Before use carefully read the product label. Use of safe work practices are recommended to avoid inhalation and eye or skin contact. Observe good personal hygiene, including washing hands before eating, drinking, and smoking or using toilet facilities. Prohibit eating, drink and smoking in contaminated areas.

**7.2 Conditions for safe storage, including any incompatibilities**

**Storage conditions** Store in a cool, dry, well-ventilated area, out of direct sunlight and moisture. Store away from water, foodstuffs and incompatible materials. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use.

**Storage container** Multi-ply paper bag with sealed plastic liner or heavy gauge plastic bag.  
**NOTE:** Bags should be stacked, blocked, interlocked, and limited in height so that they are stable and secure against sliding or collapse. Check that all containers are clearly labelled and free from leaks.

**Incompatible materials** Strong acids and reducing agents.

**7.3 Specific end use(s)**

See Section 1 of SDS for further information.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters**

**Occupational Exposure Limits (OEL)**

Material Name	TWA	STEL	Peak	Notes
Vermiculite	Not Available	Not Available	Not Available	

No Exposure Standards have been established for Vermiculite. However, Safe Work Australia – Workplace Exposure Standards for Airborne Contaminants states; exposure standards for dusts not otherwise classified (nuisance dusts) is 10 mg/m<sup>3</sup>.

**Biological limits** No biological limit values have been allocated for this material.

**8.2 Exposure controls**

**Appropriate engineering controls**

Use in well ventilated area. Local exhaust ventilation should be used to prevent excessively dusty conditions and to maintain dust levels below exposure limits. Work areas should be cleaned regularly by wet sweeping or vacuuming.

**Personal protective equipment**



**Eye Protection**

Wear safety glasses with side shields, safety goggles or full-face shield as appropriate. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Eye protection should conform to the specifications detailed in AS/NZS 1336:2014 Eye and Face Protection – Guidelines.

**Hand protection**

Generally not required. However, for industrial use, wear gloves of impervious material. Reference should be made to AS/NZS 2161.1:2016 Occupational protective gloves - Selection, use and maintenance.

**Body protection**

Wearing of long sleeved shirts and full-length trousers is recommended. Clothing should conform to the specifications detailed in AS/NZS 4501.1:2008 Occupational Protective Clothing – Guidelines on the selection, use, care and maintenance of protective clothing.

**Respiratory**

If engineering controls are not effective in controlling airborne exposure then a Class P1 or P2 (Particulate) respirator should be worn. Final choice of appropriate breathing protection is dependent upon actual airborne concentrations and the type of breathing protection required will vary according to individual circumstances. Respiratory protection should conform to the specifications detailed in AS/NZS 1715:2009 Selection, Use and Maintenance of Respiratory Protective Devices and AS ISO 16972:2015 Respiratory Protective Devices – Terms, definitions, graphical symbols and units of measurement.

**General hygiene considerations**

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Eye wash station is recommended.

**Thermal protection**

Not Applicable

**9. PHYSICAL AND CHEMICAL PROPERTIES AND SAFETY CHARACTERISTICS**

**9.1 Information on basic physical and chemical properties**

<b>Physical state</b>	Granular
<b>Colour</b>	Mixture of golden brown and white
<b>Odour</b>	Odourless
<b>Melting point</b>	1200 – 1320°C
<b>Boiling point</b>	Not Applicable
<b>Flammability</b>	Non-combustible
<b>Lower Explosion limits</b>	Not Applicable
<b>Upper Explosion limits</b>	Not Applicable
<b>Flash point</b>	Not Applicable
<b>Auto-ignition temp.</b>	Not Applicable
<b>Decomposition temp.</b>	Not Applicable
<b>pH value</b>	6 – 9
<b>Kinematic viscosity</b>	Not Applicable
<b>Solubility</b>	Soluble in strong mineral acids Insoluble in organic solvents Insoluble in water
<b>Partition coefficient (n-octanol/water)</b>	Not Applicable
<b>Vapour pressure</b>	Not Applicable
<b>Density and/or relative density</b>	Not Applicable
<b>Relative vapour density</b>	Not Applicable
<b>Particle characteristics</b>	1µm – 16mm

**9.2 Other information**

<b>Bulk density</b>	64-160 kg/m³
<b>Specific Gravity</b>	2.4 – 2.7

**10. STABILITY AND REACTIVITY**

**10.1 Reactivity**

Stable under normal conditions.

**10.2 Chemical stability**

Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**10.3 Possibility of hazardous reactions**

Hazardous polymerization not expected to occur.

**10.4 Conditions to avoid**

Avoid dust generation.

**10.5 Incompatible materials**

Strong acids and reducing agents.

**10.6 Hazardous decomposition products**

None known.

**11. TOXICOLOGICAL INFORMATION**

**11.1 Likely routes of exposure**

Inhalation, dermal contact and eye contact. Exposure by ingestion (swallowing) is not expected to occur.

**11.2 Symptoms related to the physical, chemical and toxicological characteristics**

<b>Inhalation</b>	Inhalation of airborne dust may cause irritation to the mucous membrane and upper airways. Symptoms can include coughing, sneezing and breathing difficulties.
<b>Skin</b>	Prolonged contact with skin may cause irritation resulting in redness and itching. People with pre-existing skin conditions, such as dermatitis, should take extra care so as not to exacerbate the condition.
<b>Eye</b>	Contact with eyes may cause mechanical irritation resulting in redness, lacrimation and pain. May cause mild abrasion.
<b>Ingestion</b>	Ingestion of large amounts may cause gastrointestinal disturbances. Symptoms can include nausea, vomiting and abdominal pain.

**11.3 Toxicological effects from short and long term exposure**

<b>Acute Toxicity:</b>	There is no data available.
<b>Irritation/Corrosion</b>	There is no data available.
<b>Sensitization:</b>	There is no data available.
<b>Mutagenicity:</b>	There is no data available.
<b>Carcinogenicity:</b>	There is no data available.
<b>Reproductive Toxicity:</b>	There is no data available.
<b>Teratogenicity:</b>	There is no data available.
<b>Specific Target Organ Toxicity (Single Exposure):</b>	There is no data available.
<b>Specific Target Organ Toxicity (Repeated Exposure):</b>	There is no data available.
<b>Aspiration Hazard:</b>	There is no data available.

**Potential Acute Health Effects**

<b>Eye Contact:</b>	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
<b>Inhalation:</b>	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
<b>Skin Contact:</b>	No known significant health effects or critical hazards.
<b>Ingestion:</b>	No known significant health effects or critical hazards.

**Symptoms Related to the Physical, Chemical and Toxicological Characteristics**

<b>Eye Contact:</b>	Adverse symptoms may include irritation and redness
<b>Inhalation:</b>	Adverse symptoms may include respiratory tract irritation and coughing
<b>Skin Contact:</b>	No known significant health effects or critical hazards.
<b>Ingestion:</b>	No known significant health effects or critical hazards.

**Delayed and Immediate Effects and Also Chronic Effects from Short and Long Term Exposure**

**Short Term Exposure**

<b>Potential Immediate Effects:</b>	No known significant health effects or critical hazards.
<b>Potential Delayed Effects:</b>	No known significant health effects or critical hazards.

**Long Term Exposure**

<b>Potential Immediate Effects:</b>	No known significant effects or critical hazards.
<b>Potential Delayed Effects:</b>	No known significant effects or critical hazards.

**Potential Chronic Health Effects**

<b>General:</b>	Repeated or prolonged inhalation of dust may lead to respiratory irritation.
<b>Carcinogenicity:</b>	No known significant effects or critical hazards.
<b>Mutagenicity:</b>	No known significant effects or critical hazards.
<b>Teratogenicity:</b>	No known significant effects or critical hazards.

<b>Developmental Effects:</b>	No known significant effects or critical hazards.
<b>Fertility Effects:</b>	No known significant effects or critical hazards.
<b>Other Adverse Effects:</b>	None known

**12. ECOLOGICAL INFORMATION**

**12.1 Toxicity**

No data available for this material.

**12.2 Persistence and degradability**

No data available for this material.

**12.3 Bio accumulative potential**

No data available for this material.

**12.4 Mobility in soil**

No data available for this material.

**12.5 Other adverse effects**

No data available for this material.

**13. DISPOSAL CONSIDERATIONS**

**13.1 Disposal**

Reuse or recycle where possible. Dispose of to an approved landfill. Dispose of in accordance with federal, EPA and state regulations.

**14. TRANSPORT INFORMATION**

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG, IMDG OR IATA CODE

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG)	AIR TRANSPORT (ICAO- IATA / DGR)
14.1 UN Number	Not Regulated	Not Regulated	Not Regulated
14.2 Proper Shipping Name	Not Regulated	Not Regulated	Not Regulated
14.3 DG Class	Not Regulated	Not Regulated	Not Regulated
14.4 Packing Group	Not Regulated	Not Regulated	Not Regulated

**14.5 Environmental hazards**

No data is available for this material.

**14.6 Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)**

Not regulated

**14.7 Special precautions for user**

HAZCHEM code None allocated

**15. REGULATORY INFORMATION**

**15.1 Safety, health and environmental regulations/legislation specific for the product**

**Poison schedule** A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

**Classifications** SWA (Safework Australia) criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

**Inventory listing(s)** **AUSTRALIA: AICS (Australian Inventory of Chemical Substances)**  
All components are listed on AICS, or are exempt.  
**AUSTRALIA: HCIS (Hazardous Chemical Information System)**  
All components are listed on HCIS, or are exempt.

**16. OTHER INFORMATION**

**Additional information**

**PPE GUIDELINES:** The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment.

**HEALTH EFFECTS FROM EXPOSURE:** It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

**Reference Materials / Sources for Data**

- AS/NZS 1336:2014 Eye and Face Protection – Guidelines
- AS/NZS 1715:2009 Selection, Use and Maintenance of Respiratory Protective Devices
- AS/NZS 2161.1:2016 Occupational protective gloves - Selection, use and maintenance
- AS/NZS 4501.1:2008 Occupational Protective Clothing – Guidelines on the selection, use, care and maintenance
- AS ISO 16972:2015 Respiratory Protective Devices – Terms, definitions, graphical symbols and units of measurement
- Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code)
- Australian Inventory of Chemical Substances
- Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
- Hazardous Chemical Information System (HCIS)
- International Air Transport Association Dangerous Goods Regulations (DGR)
- International Bulk Chemical Code (IBC Code)
- MARPOL 73/78 Annex II Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk
- Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice
- Safe Work Australia
- Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)
- The International Maritime Dangerous Goods Code (IMDG Code)
- The Vermiculite Association
- The Work Health and Safety Act (WHS Act)
- The Work Health and Safety Regulations (WHS Regulations)
- Workplace Exposure Standards for Airborne Contaminants

**Abbreviations**

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail
AICS	Australian Inventory of Chemical Substances
CAS No.	Chemical Abstract Service number – used to uniquely identify chemical compounds
DGR	Dangerous Goods Regulations
EPA	Environmental Protection Authority
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
HAZCHEM Code	Emergency action code of numbers and letters which gives information to emergency services
HCIS	Hazardous Chemical Information System (HCIS)
IATA	International Air Transport Association
IBC Code	International Bulk Chemical Code
ICAO	International Civil Aviation Organisation
IMDG Code	International Maritime Dangerous Goods Code
IMO	International Maritime Organisation
kg/m <sup>3</sup>	Kilograms per Cubic Metre
MARPOL	The International Convention for the Prevention of Pollution from Ships
mg/m <sup>3</sup>	Milligrams per Cubic Metre
OEL	Occupational Exposure Limits
pH	A numeric scale used to specify the acidity or basicity (alkalinity) of an aqueous solution. Ranges from 0 (high acidity) to 14 (high alkalinity) with 7 being neutral.
PPE	Personal Protective Equipment
SCBA	Self-Contained Breathing Apparatus
SDS	Safety Data Sheet
STEL	Short Term Exposure Limit
STOT	Specific Target Organ Toxicity
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TWA	Time-Weighted Average
WHS	Work Health and Safety

**Revision history**

Version	Description
2.1	Standard SDS review
2.0	Amendment to composition and improved explanation on the toxicological effects
1.0	Initial SDS creation

**Prepared by**

Exfoliators (Aust) Pty Ltd  
 3 Kitchen Road  
 Dandenong South, Victoria 3175  
 Australia  
 Contact: Graeme Raper  
 Phone: +61 3 9706 6049  
 Fax: +61 3 9706 6046  
 Email: [office@exfoliators.com.au](mailto:office@exfoliators.com.au)  
 Web: [www.exfoliators.com.au](http://www.exfoliators.com.au)

All information contained in this Safety Data Sheet are considered to be accurate to the best of our knowledge as of the issue date specified above. Health and safety precautions and environmental advice noted in this data sheet may not be accurate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations.

Revision: 2.1  
 SDS Date: 20 August 2019

**[ End of SDS ]**

<b>Implementation Date</b>	16/08/2016	<b>Prepared By</b>	EXFOLIATORS	<b>Review Date</b>	20/08/2022
<b>Authorised By</b>	G Raper	<b>Document No.</b>	SDS-006	<b>Reviewed</b>	20/08/2019