



# MATERIAL SAFETY DATA SHEET

Page: 1

## Vermiculite

Not Classified as Hazardous according to criteria of Worksafe Australia

### COMPANY DETAILS

**Company Name:** L & A Fazzini Manufacturing Pty Ltd  
**Address:** 23-25 Wentworth St Greenacre NSW 2190  
**Emergency Telephone:** (02) 96424745  
**Tel/Fax:** Ph: (02) 96424745 Fax: (02) 97425164

### IDENTIFICATION

**Product Name:** VERMICULITE

**Shipping Name (CSN):** Applicable  
**Other Names:** Name

#### Mancode

Vermiculite

**UN Number:** Not Regulated

**DG Class:** Not Regulated

**Packaging Group:** Regulated

**Hazchem Code:** Regulated

**Product Use:** Heat containment. Insulator component, fire protection panels. Component of light weight insulating material & concrete aggregate. As an inert non-reactive absorbent material for chemical spills. A light weight packing for transport, particularly for bottled liquids. May be compressed and used in expanding gaskets, seals. As an ingredient in lightweight filler mixes and in rubber, paint. As an absorbent in 'kitty litter' type material, and as a soil conditioner. A minor component of animal feeds, dog food, poultry food.

### Physical Data

**Appearance:** Grey/brown soft translucent solid. Very light, apparent density 0.11. This is the exfoliated form, which is a very light sponge like bulky 'granular' material capable of absorbing large quantities of liquid and remaining free flowing. Absorbs water to 200-300% by weight. The material characteristically cleaves into thin sheets which are flexible and elastic. The colour may be grey/colourless to slight red, brown to greenish yellow. Mohs hardness: 2.8 - 3.2. Heat resistant to 1200 °C. Also available as vermiculite ore, the unexpanded form.

**Melting Point:** 900 - 1300 sinters

**Boiling Point:** Not applicable

**Vapor Pressure:** Negligible

**Specific Gravity:** 50 – 180 kg/m<sup>3</sup>

**Flash Point:** Non flammable

**Explosion Data:** Not applicable

### Other Properties

**Form:** Solid

### Ingredients:

#### Name

Vermiculite

#### CAS

1318-00-9

#### Proportion

99.00%

### HEALTH HAZARD INFORMATION

#### Health Effects

**Acute – Ingestion:** Considered an unlikely route of entry in commercial/industrial environments. Not normally a hazard due to the physical form of product. The material is a physical irritant to the gastro-intestinal tract and regarded as non toxic if swallowed.

**Acute – Eye:** The solid/dust is irritating and may be abrasive to the eyes.

**Acute – Skin:** Not considered an irritant through normal use. Irritation and skin reactions are possible with sensitive skin. May be slightly abrasive and may cause dryness of the skin which may lead to dermatitis.

**Acute – Inhalation:** The dust is irritating to the upper respiratory tract and lungs if inhaled and if exposure is prolonged.

**Chronic:** Principal routes of exposure as usually by inhalation of generated dust and skin contact with the material. Long term exposure of mine workers to vermiculite dust showed no health hazard related to vermiculite with less than 1% silica and no asbestos. There is no evidence of mesothelioma caused by vermiculite. Some vermiculite ores contain silica which converts to the crystalline formula when ore is heated making expanded vermiculite. Hence exposure to vermiculite dust may cause irritation of the respiratory tract and continuous exposure for several years may cause fibrotic pneumoconiosis (lung scarring) to develop; and is readily detected by Xray. A form of silicosis may be caused by silica in vermiculite

### First Aid

**Ingestion:** Rinse mouth with plenty of water. If poisoning occurs, contact a doctor or Poisons Information Centre.

**Eye:** If this product comes in contact with the eyes: Immediately hold the eyes open and wash continuously for at least 15 minutes with fresh running water. Ensure irrigation under eyelids by occasionally lifting the upper and lower lids. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

**Skin:** If product comes in contact with skin: Wash affected areas thoroughly with water - (and soap if available). Seek medical attention in event of irritation.

**Inhalation:** If dust is inhaled, remove to fresh air. Encourage patient to blow nose to ensure clear breathing passages. Rinse mouth with water. Consider drinking water to remove dust from throat. If irritation or discomfort persists seek medical attention.

**Advice to Doctor:** Treat symptomatically



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### PRECAUTIONS FOR USE

Exposure Limits	Name	STEL		TWA		TWA Footnote
		mg/m3	ppm	mg/m3	ppm	
	Vermiculite			2.5		

**Other Exposure Info.:** TWA: 3mg/m3 respirable dust. The concentration of respirable dust for application of this limit, is to be determined from the fraction that penetrates a separator, whose size collection efficiency is described by the cumulative lognormal function with a median aerodynamic volume of 4.0 um (+-) 0.3 um and with a geometric standard deviation of 1.5 um (+-) 0.1 um, ie. less than 5 um. ES TWA: 2.5 mg/m3 inspirable dust (Under review).

**Engineering Controls:** None required when handling small quantities. OTHERWISE: Use in a well-ventilated area. If inhalation risk of overexposure, wear SAA approved dust respirator.

### Personal Protection

**Protective Equipment:** EYE: Safety glasses with side shields; or as required, Chemical goggles. Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them. HANDS AND FEET: Wear general protective gloves: ie. Disposable polythene gloves or cotton gloves or light weight rubber gloves, with barrier cream preferably. Safety footwear. OTHER: Overalls. Eye wash unit. If exposure is regular use Cotton washable overalls buttoned to the neck and wrist and washable hat. The local concentration of the material, quantity and condition of use determine the type of personal protective equipment required. For further information consult your Occupational Health and Safety Advisor.

### Flammability

**Fire Hazards:** Non Combustible material. Not considered to be a significant fire risk, however in a fire containers may decompose on heating and produce toxic/ corrosive fumes of sulfuroxides (SOx) and Calcium oxide.

### SAFE HANDLING INFORMATION

#### Storage and Transport

**Storage Precautions:** STORAGE REQUIREMENTS Observe manufacturer's storing and handling recommendations. Store away from incompatible materials. Protect containers against physical damage. Keep dry. Check regularly for spills and leaks. STORAGE INCOMPATIBILITY: None. TRANSPORT: No restrictions.

**Shipping Name (CSN):** Not Applicable

### Spills and Disposal

**Spills and Leaks:** MINOR SPILLS: Clean up all spills immediately. Wear impervious gloves and safety glasses. If inhalation risk of overexposure exists, wear SAA approved dust respirator. Use dry clean up procedures and avoid generating dust. Place spilled material in clean, dry sealable, labelled container. MAJOR SPILLS: Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear protective clothing, impervious gloves, safety glasses and dust respirator. Prevent, by all means available, spillage from entering drains or water courses. Use dry clean up procedures and avoid generating dust. Recover uncontaminated product in clean, dry, labelled containers. Collect residues and seal in labelled drums for disposal. If contamination of drains or waterways occurs as a result of the above actions, advise emergency services. DISPOSAL: Recycle where possible. Consult State Land Waste Management Authority for disposal. Bury residue in an authorised landfill.

### Fire/Explosion Hazard

**Fire/Explos. Hazards:** Non Combustible material. Not considered to be a significant fire risk, however in a fire containers may decompose on heating and produce toxic/ corrosive fumes of sulfuroxides (SOx) and Calcium oxide.

**Hazchem Code:** Not Regulated

### OTHER INFORMATION

**Packaging & Labelling:** Packaging as recommended by manufacturer. Paper bag with sealed plastic liner. Multi-ply woven plastic or paper bag with sealed plastic liner. Check that containers are clearly labelled.

### CONTACT POINT

**Contact:** In the case of an emergency, contact the Technical Manager on (02) 96424745 or, for additional information on this or other products, contact by fax on (02) 97425164. This material safety data sheet and the information contained herein is provided for the sole purpose of enabling persons handling and using the product to do so with safety. The information herein is believed to be an accurate transcription from data sheets provided by the manufacturer.

...End of Report...