

## MATERIAL SAFETY DATA SHEET

### 1. IDENTIFICATION of the SUBSTANCE/PREPARATION and COMPANY

Product Name : Vermicular  
 Mineral Name : Vermiculite  
 CTN : 680 620 90 000  
 CAS Number : 1318-00-9  
 EEC Number : Not applicable (natural mineral)  
 EINECS Number : 3101276 (for inert natural minerals)  
 RTECS Number : Not applicable (non toxic)  
 Product type : Mineral Powder  
 Supplier : Elpis Technologies Inc.  
 4520 E Ashman Road  
 Midland, MI 48642, USA  
 Emergency Telephone : 866-643-5747  
 HMIS Information : **H = 1, F = 0, R = 0, P = F**

### 2. Composition/Information on Ingredients

Chemical Name	% of composition	OES 8hr TWA (mg/m <sup>3</sup> ) Total	OES 8hr TWA (mg/m <sup>3</sup> ) Respirable
Vermiculite (Magnesium, aluminium Iron Silicate)	approx 95	10	1□
Silica	approx. 1		MEL 8hr TWA (mg/m <sup>3</sup> ) 0.4
Proprietary organic surface coating	approx. 4		

### 3. Health hazard identification

Routes of exposure : Inhalation and Ingestion  
 Health Hazards :  
 Symptoms of exposure : None known  
 (Acute effects)  
 Symptoms of exposure : Possible impairment of lung function after long  
 (Long term effects) term exposure to dust levels in excess of the  
 OES-TWA  
 Medical conditions : Any conditions aggravated by dust (e.g. asthma or  
 pneumoconiosis) aggravated by exposure.

### 4. First aid measures

Skin contact : No special requirements  
 Eye contact : Irrigate thoroughly with water  
 Ingestion : No special requirements

Inhalation	:	No special requirements
Injection under pressure	:	Not applicable
Antidote	:	Not applicable
Advice to physicians	:	Not applicable

## 5. Fire Fighting Measures

Extinguishing media	:	Not applicable
Special exposure hazard	:	None known
Protective equipment	:	Not applicable

## 6. Accidental Release Measures

Leaks and Spills	:	Vacuum spills
Personal Protection	:	No special requirements

## 7. Handling and Storage

Handling precaution	:	Avoid high dust levels
Storage precautions	:	No special precautions.
Shelf life	:	Indefinite

## 8. Exposure Controls/Personal Protection

Exposure controls	:	Maintain dust levels below OES-TWA limits
Personal Protection	:	Dust masks conforming to OSHA standards should be used if OES limits are exceeded

## 9. Physical and Chemical Properties

Appearance and odor	:	Flakes or powder, odor free
Boiling point °C	:	Not applicable
Melting range °C	:	Approximately 375°F
Flash point °C	:	Not applicable
Flammability	:	Non flammable
Known synergists	:	None known
Oxidizing properties	:	None
Vapour pressure mPa	:	Not oxidising
Density at 20°C (Kg/m <sup>3</sup> )	:	Variable depending on grade
Solubility	:	Negligible
Specific gravity (Water = 1)	:	2.8
Evaporation Rate (Butylacetate = 1)	:	Zero
Partition coefficient (octan-1-ol/water)	:	Not applicable
pH value of 10% aqueous slurry	:	Approximately 9
Viscosity	:	Not applicable
Explosion limited	:	Not applicable

## 10. Stability and Reactivity

Chemical stability	:	Excellent
Materials to avoid	:	Concentrated alkali metal hydroxides Concentrated mineral acids
Hazardous decomposition products:	:	None
Hazardous polymerisation	:	Not applicable

## 11. Toxicological Information

### Acute Toxicity

Oral LD<sub>50</sub> (rat) (mg/kg) : Not known, but since Vermiculite is an inert mineral, LD<sub>50</sub>/LC<sub>50</sub> values would be high

Dermal LD<sub>50</sub> (rat) (mg/kg) :

Inhalation LC<sub>50</sub>4hr(rat) (mg/l)

### Irritation to

Skin	:	No special irritation known
Eyes	:	No special irritation known
Respiratory	:	Chronic long term problems are <b>possible</b>
Sensitisation	:	None known
Appraisal	:	Not applicable

## 12. Ecological Information

Ecotoxicity	:	No information available, but since Vermiculite is a stable, unreactive insoluble material, no ecological
Persistence	:	No problem is known or expected.
Appraisal	:	Not applicable

## 13. Disposal Information

Containment Techniques	:	No special requirements
Clean-up procedures	:	Vacuum preferred but simpler methods are acceptable
Waste disposal	:	No special precautions necessary other than compliances with local regulations for non-hazardous materials

## 14. Transport Information

United Nations Number	:	
ADR/RID Class	:	
Packing Group	:	
IMDG Code	:	Not applicable as material is classified as
ICAO/IATA	:	non-hazardous
IMO Shipping name	:	
IATA Shipping name	:	
ADR Shipping name	:	
RID Shipping name	:	

## 15. Regulatory Information

(EEC regulatory information) :  
EC Supply labelling : Not applicable as material is classified as  
Label name : non-hazardous  
Classification & Symbol :  
Risk Phrases :  
Safety Phrases :  
FAO Hazard labelling :

### OSHA Regulations

Air Contaminant : Not listed

### CONEG Regulations

Based on the information provided to All Plastics, Inc. by its suppliers, we certify that sum of the incidental concentration levels of lead, mercury, cadmium, and hexavalent chromium in these products is less than 100 parts per million by weight, and that in cases where said metals are present, such metals were not intentionally added during the manufacturing process.

### TSCA

This substance or all of its components are on the Chemical Substances Inventory of the Toxic Substance Control Act (TSCA Inventory [USA]). Please note that this product is not subject to any legal reporting requirements under these acts.

### International Regulations

Canadian DSL :

European Community :

### FDA

## 16. Other Information

**Technical contact point** Elpis Technologies Inc.  
4520 E Ashman Road, Midland, MI 48642

### **MSDS**

Revision History : ISSUE 1.0  
First Issue date : July 3, 2008  
Date of last revision : July 3, 2008

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