1. VERMICULITE

1.1 General

.1 Vermiculite refers to a small group of minerals resembling the lamella structure of the micas, which expand or exfoliate greatly when heated rapidly. Its consumption is mainly in horticultural uses with other applications in construction and insulation.

1.2 Vermiculite Characteristics

.1 Although much research has been performed on the chemical and structural composition, there is not yet complete agreement on the exact formula. This is to be expected when different workers have examined the many different varieties. Vermiculite is not considered to be a single mineral specified but a family of related minerals.

Characteristic	*Sample*
Chemical Names and Family	*Vermiculite Concentrate: Magnesium-Aluminosilicate Mineral*
Color	*Dark blackish grey-brown to golden brown in color*
Specific gravity	*2.1 to 2.8*
Vapor Density (Air=1)	*N/A Evaporation Rate (Butyl Acetate=1)*
Solubility in Water	*None*
PH	*7.0 (in Water)*
Bulk Density (lbs per cu. ft.)	*40-65*
Specific Density after exp. (lbs per cu. ft.)	*4.5 – 5.0*
# Chemical Abstract Service	*01318-009*
Structural formula for a trioctahedral vermiculite	*(H_2O) – (Mg, Ca, K) – $(Al_2$, Fe, Mg) – $(Si, Al, Fe)_4$, $O_{10}(OH)_2$*
Stable under normal conditions	*Yes*
Unusual Fire and Explosion Hazards	*Vermiculite concentrate itself is inorganic and will not burn*

USA Dept of Transportation and Canada transportation of dangerous goods	
DOT Class	*Non-hazardous*
TDG Class	*Non-hazardous*
NPCA-HMIS Hazard Index	
Health	*1*
Flammability	*0*
Reactivity	*0*

1.3 Physical Appearance of Vermiculite

.1 Dark blackish grey-brown to golden brown in color, flake shaped when dry.

1.4 Horticultural Applications

.1 In horticultural applications, vermiculite is used throughout the world as a component of soil's growing mixes where it provides aeration and optimum moisture retention for superior plant growth.

.2 Other benefits of horticultural vermiculite are its neutral pH. In addition, its lightweight makes it ideal for use in container growing.

.3 Other horticultural applications for vermiculite are as a carrier for fertilizer, herbicides and pesticides and for pelletizing seed. Horticultural vermiculite is as useful to the home gardener as it is to the commercial grower. It is used with equal success in greenhouse growing, landscaping applications and in the home in houseplants.

2. MATERIAL SAFETY DATA FOR VERMICULITE

2.1 Inhalation

.1 Vermiculite dust released in handling, expanding, and subsequent end use may cause symptoms of nuisance dusts including coughing, sneezing, and minor respiratory irritation.

2.2 Skin and Eye

.1 Direct eye contact may cause minor physical or mechanical irritation. Skin contact not expected to cause any harmful effects.

2.3 Ingestion

.1 Adverse health effects are not expected as a result of ingestion.

2.4 Emergency and First Aid Procedures

.1 If INHALED, get fresh air. If symptoms persist, consult a physician.

.2 In case of contact flush EYES with plenty of water while lifting eyelids and rolling eyes.

.3 Do not rub eyes. If irritation, blinking or tearing persists, consult a physician.

.4 Adverse health effects are not expected if SWALLOWED.

.5 Consult a physician if symptoms develop.

2.5 Warning Statements

.1 Avoid creating dust.

.2 Inhalation of concentrate dust (CAS# 1318-00-9) may cause slight physical irritation of the respiratory tract resulting in coughing or sneezing.

.3 DUST may cause slight physical or mechanical irritation to eyes.

2.6 Precautionary Measures

.1 Avoid contact with eyes. (Wear goggles if necessary).

.2 Avoid inhalation of airborne dust.

.3 Equip hoppers with dust covers where applicable.

2.7 Respiratory Protection

.1 A NIOSH Type TC-21C-XXX dust respirator is recommended to control exposure to dust.

2.8 Ventilation

.1 Local Exhaust: Recommended

.2 Mechanical: Recommended

.3 Special: None Required

.4 Other: None Required

2.9 Protective Gloves

.1 Not generally required.

2.10 Eye Protection

.1 Goggles recommended when dust is created.

2.11 Other Protective Clothing or Equipment

.1 None Required.

2.12 Spill & Disposal information – US Only

.1 According to US EPA (40 CFR § 261.3), waste of this product is not defined as hazardous. Dispose of all waste in accordance with federal, state and local regulations.

3. PACKAGING FOR VERMICULITE

3.1 Grade for Vermiculite

.1 Grade N° 3 - medium

.2 Grade N° 2 – fine

.3 Grade N° 1 – super-fine

3.2 Bags sizes

.1 56 cu. ft. (not returnable).

.2 4 cu. ft. (not returnable).

.3 Skid (returnable). The volume of each skid is approximately 120 cu. ft.

For all your vermiculite needs,
call Perlite Canada inc.

HOW TO PLACE AN ORDER

commande@perlitecanada.com

Address: 1775 52nd Avenue, Lachine, Montreal, Quebec H8T 2Y1
Telephone: (514) 631-4251
Fax: (514) 631-4254
Nicole Duchaine, customer services, extension 222

Do not hesitate to call us,
it will be our pleasure to answer all of your requests.