

Material Safety Data Sheet



Date Reviewed and Issued: March 1, 2005

MSDS# 4100

Section 1. Identification: Perlite - expanded

Product Names:

- Black Gold Perlite
- Nature's Perlite
- Sunshine Strong-Lite Medium Perlite
- Sunshine Strong-Lite Coarse Perlite

Manufacturer/Supplier:

Sun Gro Horticulture Canada Ltd.
P.O. Box 189
Seba Beach, AB T0E 2B0

For more information call:

Western Region 1-888-797-7328
Central Region 1-888-982-4500
Eastern Region 1-888-896-1222
For more information: www.sungro.com

Product uses: Horticultural and Industrial

Section 2. Hazardous Ingredient & Composition

Component	CAS#	OSHA PEL		ACGIH TLV	
		Total	Respirable	Total	Respirable
Perlite, expanded	93763-70-3	15 mg/m ³	5 mg/m ³	3 mg/m ³	10 mg/m ³

This product may contain crystalline silica (quartz) <1.0%; CAS No. 14808-60-7; OSHA PEL 0.1 mg/m³ (respirable).

Section 3. Physical/Chemical Characteristics

Physical State: Solid	Boiling Point: Not applicable
Appearance: Granular or powder	Freezing Point: Not applicable
Color: White	Vapor Pressure: Not applicable
Odor: Odorless	Vapor Density: Not applicable
pH: Neutral	Solubility in Water: Negligible
Density: 160 –288 g/l (10 – 18 lbs/cf)	Melting point: Not applicable
Specific gravity: 2.33	Evaporation rate: Not applicable

Section 4. Fire and Explosion Hazard Data

Flash Point: Nonflammable
Flammable Limits: Not Applicable
Extinguishing Media: Not Applicable
Special Fire Fighting Procedures: None.
Unusual Fire and Explosion Hazards: None

Section 5. Stability and Reactivity

Stability:	Stable
Conditions to Avoid:	None in designed use. Keep packaging away from heat, sparks and open flames. Avoid contact with hydrofluoric acid.
Incompatibility:	Hydrofluoric acid
Hazardous Decomposition or Byproducts:	May react with hydrofluoric acid to form toxic silicon tetrafluoride gas
Polymerization:	Will not occur

Section 6. Health Hazard Data

Summary: Perlite is a naturally occurring volcanic glass consisting of fused sodium-potassium-aluminum silicate. OSHA has classified perlite as a “Particulate Not Otherwise Regulated” (PNOR), which has the same Permissible Exposure Limit (PEL) as that used for nuisance and inert dusts. Although there are no published reports of adverse health effects from exposure to perlite dust, dust levels should be maintained below the OSHA PEL for PNORs and respirators should be used when airborne dust is present. Excessive inhalation over long periods of time may cause harmful irritation. Perlite is considered a nuisance dust by ACGIH.

This product may contain crystalline silica (quartz) (see section 2) which is considered a hazard by inhalation. IARC has classified crystalline silica as carcinogenic to humans (Group 1). Crystalline silica is also listed by NTP as a known human carcinogen.

Routes of Entry:	Inhalation, open wounds and eyes
Health Hazards:	Nuisance dust
Target Organs:	Lungs, eyes
Medical conditions which may be aggravated:	Pre-existing upper respiratory and lung disease such as, but not limited to bronchitis, emphysema and asthma.
Acute Health Effects:	Transitory upper respiratory irritant. May cause coughing or throat irritation.
Chronic Health Effects of Exposure:	Inhalation over long periods of high amounts of any nuisance dust may overload lung clearance mechanism, irritate mucous membranes and make lungs more vulnerable to respiratory disease.
Emergency and First Aid Procedures:	If inhaled, provide fresh air. If eye irritation occurs, flush with water. Keep open wounds covered and clean as suggested by any good program of hygiene.
Other Concerns:	Keep out of reach of children and pets.

Section 7. Toxicological Information

General Comments: Inhalation of dust may irritate nose, throat and lungs. Eye contact with solids may produce irritation, tearing or blinking as a foreign body in the eye.

Section 8. Precautions for Safe Handling and Use

- Steps to be taken in case material is spilled:** Use methods to clean spill which avoid creating airborne dust. Vacuum clean spillage. Wet sweep or wash away. Avoid creating dust.
- Waste Disposal Method:** According to 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.
- Precautions to be taken in handling and storage:** If excessive dust is created avoid breathing dust by using adequate ventilation and/or using NIOSH or MSHA approved respirator for nuisance dust of this type. Breathing dust may be harmful to your health. Repair or properly dispose of broken bags. Maintain good housekeeping procedures.
- Other Precautions:** Protective eyewear (goggles) should be worn where dust levels are high enough to cause irritation.
- Ecological Information:** Keep out of lakes, streams or ponds.

Section 9. Control Measures

- Respiratory Protection:** Adequate protective devices, such as an N95 respirator, is recommended when the PEL is exceeded and/or when airborne dust is present.
- Engineering controls:**
- Ventilation:** Local if necessary to maintain allowable PEL or TLV levels.
- Protective Gloves:** Not normally necessary but suggested in cases of open wounds that are not appropriately protected.
- Eye Protection:** Protective eyewear (goggles) should be worn to prevent dust from entering eyes.
- Other Protective Clothing or Equipment:** Normal work clothing
- Work/Hygienic Practices:** NIOSH or MSHA approved respirator, eye protection and ventilation under conditions where excessive dust is created. Open wounds should be kept clean and suitably protected.
- Storage segregation Hazard Classes:** Not Applicable
- Special Shipping Instructions:** None
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Section 10. First Aid Measures

- Skin:** Not absorbed by skin. May cause dryness. Use moisture renewing lotions if dryness occurs.
- Eyes:** May cause irritation or inflammations. Flush eyes with copious quantities of water. If irritation persists, call a physician.
- Inhalation:** Acute inhalation can cause dryness of nasal passages and congestion of the upper respiratory tract. Remove to fresh air. Drink water to clear throat and blow nose to evacuate dust.
- Ingestion:** Short term exposures not considered harmful. Drink water to reduce bulk.

Section 11. Supplemental Information

These materials are made from natural products and may contain naturally occurring microorganisms. Proper precautions are advised to prevent infection of open wounds, inhalation of excessive amounts of dust and eye irritation. The proper hygiene practices necessary to prevent health hazards from any naturally occurring substance such as soil, bark, perlite, etc., should be observed.

HMIS Ratings		NFPA rating	
Health	*	Health	*
Flammability	0	Flammability	0
Reactivity	0	Reactivity	0
Personal Protection	E	Special Hazards	0

HMIS Rating: 0 = Minimal Hazard E = Dust Respirator * = Refer to data on MSDS

NFPA Rating: 0 = Insignificant 1 = Slight * = Refer to data on MSDS

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