

Material Safety Data Sheet

Identity: PHC™ BioPak WS Powder and/or Paks **Last Update:** 20 August 2005

Section I -- Manufacturer

Plant Health Care, Inc. **Emergency Phone #:** 800-421-9051
440 William Pitt Way **Phone # for Information:** 412-826-5488
Pittsburgh, PA 15238

Section II -- Hazardous Ingredients/Identity Information

Potentially Hazardous Components	OSHA PEL	ACGIH TLV
Humate (Leonardite, naturally occurring mineral)	--	--
Common soil bacteria beneficial for horticulture	--	--

Section III -- Physical/Chemical Characteristics

Boiling Point: NA **Specific Gravity:** NA
Vapor Pressure: NA **Melting Point:** NA
Vapor Density: NA **Evaporation Rate:** NA
Solubility in Water: Soluble
Appearance and Odor: Mixture of black, brown, and white crystals, flakes. Slight herbal odor.

Section IV -- Fire and Explosion Hazard Data

Flash Point: No Data **Flammable Limits; LEL:** No Data; **UEL:** No Data

Extinguishing Media: Water, fog, foam, alcohol foam, CO₂, dry chemical

Special Fire Fighting Procedures: Do not stir up dust with hose streams, as dust cloud is flammable and may be explosive. Wear respiratory protection to avoid breathing dust and smoke. Beware of slippery floors if product becomes wet.

Unusual Fire and Explosion Hazards: May ignite if dust is suspended in air in the presence of an ignition source.

Section V -- Reactivity Data

Stability: Chemically stable **Conditions to Avoid:** Avoid stirring up dust. Avoid ignition of dust.

Incompatibility (Materials to avoid): None Known

Hazardous Decomposition or Byproducts: When burned: CO, CO₂, SO₂, Hydrocarbons, small amounts of sulfuric acid.

Hazardous Polymerization: Will Not Occur

PHC™ BioPak

Section VI -- Health Hazard Data

Route(s) of Entry: Inhalation--Yes Skin--Yes Ingestion--Yes Eyes--Yes

Health Hazards (Acute and Chronic):

Acute: May irritate skin or eyes; Could cause skin rash, with swelling and itching in allergic individuals. Product dust or spray mist may be irritating to nasal and respiratory passages, and/or lungs if inhaled. May result in infection if product comes in direct contact with lungs, eyes or open wounds.

Chronic: This product produces fine dusts, which may cause delayed respiratory disease if inhaled over a prolonged period of time, continuously or intermittently. Potentially allergenic. Repeated or prolonged skin contact with powder or dissolved product may result in allergic skin rash in sensitive individuals.

Carcinogenicity: None known

Signs and Symptoms of Exposure: Excess inhalation of airborne dusts or mist may result in shortness of breath and reduced pulmonary function. Infection, irritation and/or allergic reaction may result if product contacts eyes, or open wounds. See above under "Health Hazards, Chronic".

Medical Conditions Generally Aggravated by Exposure: Individuals with any pulmonary and/or respiratory disease such as asthma, bronchitis, etc. should not be exposed to dust or mist. Eyes and open wounds could potentially become infected if contacted by dry or dissolved product. Can cause allergic skin reaction in some individuals. Persons with compromised immune systems, such as those with AIDS, or those undergoing chemotherapy, or receiving anti-rejection drugs should consult with their physician before handling bacterial products.

Emergency and First Aid Procedures: If material is ingested, drink water, call a physician. If inhaled, remove to fresh air, give oxygen if needed; give artificial respiration if needed, get medical attention. Watch for respiratory infection. In case of skin contact, wash area with soap and water. In case of contact with an open wound, wash with soap and water, and use an over-the-counter approved external antiseptic. Watch for infection. If material gets into eyes, flush with water, see physician if discomfort persists, watch for infection.

Section VII -- Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled: Avoid stirring up excessive dust. Wet down spilled material lightly before sweeping to prevent producing airborne dusts. Then sweep up and collect excess material with adequate ventilation, and use the product as directed. If spilled in residential living quarters or dining area, clean area with water containing a disinfectant. Residue will not harm drains or sewers. Beware of slippery floors when material becomes wet, or if spillage occurs in wet areas.

Waste Disposal Method: Dilute excess or spilled product according to usage instructions (0.25 to 1.0 lb per 100 gal.), and apply to grass, trees, or ornamental plants as originally intended.

PHC™ BioPak

Follow application with irrigation. Material is biodegradable, and does not contain pesticides

Precautions to be Taken in Storage and Handling: Avoid stirring up excessive dust. Avoid ignition of dust. Avoid inhaling dust. Use nonporous gloves are recommended to avoid direct skin contact. The bacteria contained in this product are strains of typically harmless soil and water bacteria, and do not cause infections under normal circumstances. However, reasonable precautions are in order. Handle as you would rich, dark soil or compost: keep it out of your mouth, eyes, lungs, and broken skin.

Other Precautions: Wash hands after handling. Use normal hygiene practices. If spilled on clothes, wash separately. The bacteria contained in this product are strains of typically harmless soil and water bacteria, and do not cause infections under normal circumstances. However, reasonable precautions are in order. Handle as you would rich, dark soil or compost: keep it out of your mouth, eyes, lungs, and broken skin. See First Aid.

Section VII -- Control Measures

Respiratory Protection: Dust mask, good work practices, adequate ventilation.

Ventilation: Dust mask, and any means adequate to avoid buildup of concentrations above the TLV or PEL, or of explosive airborne concentrations: such as mechanical ventilation, hood, good engineering controls, etc.

Protective Gloves: Rubber, latex, vinyl, or other impervious gloves

Eye Protection: Safety goggles recommended where eye contact could occur.

Other Protective Clothing or Equipment: Apron recommended.

Work/Hygienic Practices: The bacteria contained in this product are strains of typically harmless soil and water bacteria, and do not cause infections under normal circumstances. However, reasonable precautions are in order. Handle as you would rich, dark soil or compost: keep it out of your mouth, eyes, lungs, and broken skin. Do not eat, drink, or smoke when handling product. Wash hands after handling. If spilled on clothes, wash separately from other clothes.
