Material Safety Data Sheet

PHC Tree Saver Identity:

Last Update: January 3, 2007

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 NIOSH ACGIH

35% Humate (Coal Dust, Humic Acids) 1.5 mg/m^3 0.1 mg/m^3 Crystalline Quartz 0.7% - 2.5% 0.1 mg/m^3 $50\mu\text{g/m}^3$ $25\mu\text{g/m}^3$ (respirable) (respirable)

<1% Natural fungus spores 0.0033% Max. -Acrylamide

- 0.03 mg/m³ Selected soil bacteria beneficial for horticulture

0.007%Phytoestrogenic compounds

Nuisance Dusts

Respirable (TWA) 5 mg/m^3 10 mg/m^3 Total (TWA) 15 mg/m³ 10 mg/m^3

Section III -- Physical/Chemical Characteristics

Boiling Point: NA **Bulk Density:** Approx. 1 g/cc

Melting Point: Vapor Pressure: NA NA **Vapor Density:** NA **Evaporation Rate:** NA

Solubility in Water: Most components Insoluble

Appearance and Odor: Mixed powders and granules, slight odor of seaweed, material swells

dramatically when in contact with water.

Section IV -- Fire and Explosion Hazard Data

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

Extinguishing Media: Water, fog, foam.

Special Fire Fighting Procedures:

Wear respiratory protection to avoid breathing dust and smoke.

Product gets very slippery when wet.

Unusual Fire and Explosion Hazards:

Avoid stirring up dust with hose stream.

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Section V -- Reactivity Data

Stability: Chemically stable **Conditions to Avoid:** Avoid burnable dust concentrations.

Incompatibility (Materials to avoid): None Known

Hazardous Decomposition or Byproducts: When burned, CO, CO₂, SO₂, hydrocarbons,

(normal byproducts of combustion)

Hazardous Polymerization: Will Not Occur

Section VI -- Health Hazard Data

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

Health Hazards (Acute and Chronic):

Acute: Prolonged contact may irritate skin or eyes; Could cause irritation in allergic individuals. Product dust or spray mist may be irritating to nasal and respiratory passages, and/or lungs if inhaled. Persons with acute allergies to molds or other fungi could experience typical hayfever symptoms (never reported). Contact with open wounds could lead to skin response.

Chronic: Contains some silica (sand mineral). See below under "Carcinogenicity". 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 sensitivity in sensitive individuals.

This product contains a tiny amount (0.007% by weight) of an insoluble isoflavanoid compound (formononetin) classed as a phytoestrogen, which can mimic the effects of the hormone estrogen in humans and other mammals. Avoid prolonged skin contact to preclude the possibility of skin absorption of the hormonal compound.

Carcinogenicity: This product may contain a small amount of crystalline silica (sand mineral), which is common in mined mineral ingredients, like humate. IARC Monographs concludes that there is "limited evidence" of the carcinogenicity of crystalline silica to humans. IARC Classification 2A. See above under "Health Hazards, Chronic". Dust inhalation should be avoided or limited, particularly by persons who handle such products daily, such as manufacturing personnel (Not a problem for normal product use).

Regarding acrylamide, the ACGIH classification is Carcinogen A3: Available evidence does not suggest that acrylamide is likely to cause human cancer except under uncommon or unlikely routes or levels of exposure. This product contains less than 0.017% free acrylamide.

Signs and Symptoms of Exposure:

None known. Persons with acute allergies to dust or molds could theoretically experience hayfever symptoms, but this has never been reported with these products.

Medical Conditions Generally Aggravated by Exposure:

Individuals with pulmonary and respiratory disease including, but not limited to, asthma and bronchitis, should avoid exposure to excess dusts. Persons with severely compromised immune systems, such as those with advanced AIDS, or those taking anti-rejection drugs, or those undergoing chemotherapy, or anyone at risk from exposure to common, normally harmless

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bacteria should consult their physician before handling bacterial products.

Emergency and First Aid Procedures:

If hayfever symptoms develop, remove individual from exposure. Product is not toxic, but is not intended to be ingested. If ingested, induce vomiting, treat symptoms and contact a physician. 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

Precautions to be Taken in Storage and Handling: Avoid stirring up excessive dust. Avoid ignition of dust. Avoid inhaling dust. Use of nonporous gloves is 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. Wash hands after handling.

Steps to be Taken in Case Material is Released or Spilled: Sweep up and use as intended. Avoid stirring up dust. Wear a dust mask where dusty conditions occur. If spilled in residential living quarters or dining area, clean area with soap or water. 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: After removing excess material, rinse the spill area with water. Spilled material may be used as usual, or mixed with the soil at the base of trees or shrubs.

Other Precautions: Wash hands after handling. Use normal hygiene practices. Product becomes very slippery when wet.

Section VII -- Control Measures

Respiratory Protection: Dust mask if dusty conditions prevail.

Ventilation: Use adequate ventilation during manufacture of this product to keep dust levels below safe limits. Hood or other mechanical exhaust is recommended for production; not required for normal use of the product.

Protective Gloves: Garden gloves, wash hands when finished.

Eye Protection: Safety glasses should be used if spilling granular material into eyes is likely.

Other Protective Clothing or Equipment: Not needed.

Work/Hygienic Practices: Work/Hygienic Practices: The bacteria contained in this product are strains of typically harmless soil and water bacteria, and are not typically associated with disease. However, reasonable precautions are in order. Handle as you would rich, dark soil or

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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 clothes are heavily soiled with product, wash separately from other clothes.

Avoid stirring up dust. Wash hands after handling..

Transportation Data:

Proper Shipping Name: Not Regulated

Technical Name: N/A
UN Number: N/A
Hazard Class/Packing Group: N/A
Labels Required: None
DOT Packaging Requirements: N/A
Exceptions: N/A