Material Safety Data Sheet MycoApply® Ultrafine Endo

Emergency Phone: (541) 476-3985 Last Revision: April 26, 2007

Product Identification

MycoApply® Ultrafine Endo Name:

Chemical description: Beneficial endomycorrhizal propagules on an expanded clay carrier beneficial for

plant growth.

Hazardous components: none

Company: Mycorrhizal Applications, Inc. (541) 476-3985 www.mycorrhizae.com

Physical/Chemical Characteristics

Boiling point Not applicable Vapor pressure Not applicable Vapor density Not applicable Evaporation rate Not applicable Melting point Not applicable

Specific gravity 0.45

pН 6.5 @10% dispersion in water

Solubility in water Hydrophobic initially: becoming suspendable with agitation.

Appearance Beige fine powder Odor Not distinctive

Fire and Explosion Information

Flash point Not applicable

Flammable limits Smolders when directly heated in flame.

Extinguishing media Water, CO₂

Special Fire Fighting Procedures No special methods required

Special Fire Fighting Procedures
Special Fire and Explosion hazards Dust explosion is possible when product is finely dispersed in air.

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Reactivity Data

Stability Stable at normal temperatures.

Conditions to avoid Strong winds

Incompatibility None

Hazardous decomposition Will not occur Hazardous polymerization Will not occur

Hazards Identification

This product is a non-combustible, chemically inert mineral. This mineral sample contains a small amount of naturally-occurring crystalline silica as quartz. Prolonged overexposure to respirable crystalline silica may cause lung disease (silicosis). IARC, in Monograph 68, has concluded that crystalline silica inhaled in the form of quartz from occupational sources is carcinogenic to humans (Group 1); however, carcinogenicity was not detected in all industrial circumstances studied. Because applications and exposure data indicate that exposure to respirable quartz in this product with normal use is well below the OSHA Permissible Exposure Limit (PEL) and ACGIH Threshold Limit Value (TLV); and because the company is not aware of any scientific or medical data available indicating that exposure to dust from this product under conditions of normal use will cause silicosis or cancer: adverse effects would not be expected from normal use of this product.

Health Hazards

Ingestion: No adverse effects expected with unused material.

Inhalation: Inhalation of excessive concentrations of dust may cause irritation of mucous membranes and upper respiratory tract.

Eye: Contact may cause mechanical irritation and possible injury.

Skin: No adverse effects expected.

Sensitization: No adverse effects expected.

Chronic/Carcinogenicity:

Inhalation of excessive concentrations of any dust, including this material, may lead to lung injury. This product contains crystalline silica. Excessive inhalation of respirable crystalline silica may cause silicosis, a progressive, disabling and fatal disease of the lung. Symptoms may include cough, shortness of breath, wheezing and reduced pulmonary function. The International Agency for Research on Cancer (IARC), in Monograph 68 has concluded that crystalline silica inhaled in the form of quartz or cristobalite, from occupational sources is carcinogenic to humans (Group 1). However, in making the overall evaluation, the Working Group noted that carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs. The National Toxicology Program (NTP) classifies crystalline silica as a known carcinogen. Because applications and exposure data indicate that exposure to respirable quartz in this product with normal use is well below the OSHA Permissible Exposure Limit (PEL) and ACGIH Threshold Limit Value (TLV); and because the company is not aware of any scientific or medical data available indicating that exposure to dust from this product under conditions of normal use will cause silicosis or cancer; adverse effects would not be expected from normal use of this product. Routes of entry:

Emergency and First Aid Procedures:

Eye: Immediately flush eyes with cool running water, lifting upper and lower lids. If irritation persists or for foreign body in the eye, get immediate medical attention.

Skin: None needed for normal use.

Ingestion: If used material is ingested, get medical attention due to possibility of chemical contamination. If large amount of unused material is swallowed, get immediate medical attention.

Inhalation: Remove to fresh air.

Handling and Storage:

Exposure Guidelines -

Component Exposure Limit Silica Hydrated (Amorphous Opaline Silica) Fullers Earth

Bentonite (Montmorillonite type)

PEL - 80 mg/m³ / % SiO2 PEL - 15 mg/m³ TWA (total dust) PEL - 5 mg/m³ TWA (respirable fraction) PEL - 15 mg/m³ TWA (total dust) PEL - 5 mg/m³ TWA (respirable

fraction)

PEL - 10 mg/m³/%Si02+2 TWA TLV - 0.025 mg/m³ TWA

PEL- OSHA Permissable Exposure Limit. TLV- American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value. TWA- 8 hour Weighted Average. STEL-Short Term Exposure Limit.

Engineering Controls:

For operations where the exposure limit may be exceeded, local exhaust ventilation is recommended.

Respiratory Protection:

For operations where the exposure limit may be exceeded, a NIOSH/MSHA approved high efficiency particulate respirator is recommended.

Skin Protection: None required for normal use.

Eye Protection: Safety glasses or goggles recommended.

Other: None required for normal use.

Handling: Avoid breathing dust. If clothing becomes dusty, launder before re-use.

Storage: Store in a dry area.