

Material Safety Data Sheet

Mike O'Rizey

Last Revision: May 16, 2012

Emergency Phone: (714) 545-5335

Product Identification

Name: **Mike O'Rizey**

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

Hazardous components: none

Company: Plant Revolution Inc. (714) 545-5335 www.plant-success.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	0.6
pH	6.5 @10% dispersion in water
Solubility in water	Hydrophobic - not soluble
Appearance	Pale white granules
Odor	Not distinctive

Fire and Explosion Information

Flash point	Not applicable
Flammable limits	Smolders when directly heated in flame
Extinguishing media	Water, CO ₂
Special Fire Fighting Procedures	No special methods required
Special Fire and Explosion hazards	Dust explosion is possible when product is finely dispersed in air.

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**

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

Bentonite (Montmorillonite type)

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

QuartzPEL - 10 mg/m³/%SiO₂+2 TWATLV - 0.025 mg/m³ TWA

PEL- OSHA Permissible 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.