# **Material Safety Data Sheet**

Last Updated: August 11, 2008

Identity: Terra-Sorb Water Management Polymers: Coarse, Medium, or Fine

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## 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

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## Section II -- Hazardous Ingredients/Identity Information

**Hazardous Components** Specific Chemical Identity

Chemical Nature: Acrylamide and potassium acrylate copolymer; (cross-linked, anionic)

CAS No.: 31212-13-2

Free acrylamide (CAS #79-06-1) may be present in amounts not exceeding 0.05% dry wt.

OSHA PEL ACGIH TLV Other

**Nuisance Dust** 

Respirable (TWA) 5 mg/m $^3$  10 mg/m $^3$  0.05 mg/m $^3$ \*

Total (TWA)  $15 \text{ mg/m}^3$   $10 \text{ mg/m}^3$ 

\*PHC recommended inhalation exposure limit guideline for respirable polyacrylate dust<10 micron particle size. See also Section VI.

D.O.T. Hazard Class: Not a DOT/IMO Hazardous Material.

<u>HMIS Ratings</u>: Health 2, Flammability 1, Reactivity 0, Protection B.

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#### Section III -- Physical/Chemical Characteristics

**Boiling Point:** Not established **Melting Point:** >390 F **Vapor Pressure:** <10 mm Hg **Evaporation Rate:** Less than 1

**Vapor Density:** Nil (Butyl acetate = 1)

**Solubility in Water:** insoluble; swells in water **Polymer Attributes:** Cross-linked,

**Appearance and Odor:** clear to yellow crystals; no odor

Anionic

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#### Section IV -- Fire and Explosion Hazard Data

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

**Extinguishing Media:** Water, CO<sub>2</sub>, dry chemical.

**Special Fire Fighting Procedures:** Treat as Class A. Wetted product is slippery. Pedestrian and vehicular traffic may face a slip hazard where wet product is located.

**Unusual Fire and Explosion Hazards:** Handle so as to minimize dusting, and eliminate open flame and other sources of ignition of dust. Watch out for slippery conditions when product becomes wet.

# Terra-Sorb Water Management Polymers: all sizes

Section V -- Reactivity Data

**Stability:** Chemically stable **Conditions to Avoid:** High heat sources, sparks, open flame. **Incompatibility (Materials to avoid):** Strong oxidants such as liquid chlorine, enriched gaseous or liquid oxygen, and chemical bleach, such as sodium or calcium hypochlorite.

**Hazardous Decomposition or Byproducts:** Burning may release noxious fumes and gases such as carbon monoxide, nitrous oxides, acetic acid, sulfuric acid, sulfur dioxide, ammonia or other noxious or toxic compounds, depending on the combustion sources.

Hazardous Polymerization: Will Not Occur

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Section VI -- Health Hazard Data

Route(s) of Entry: Inhalation--yes (dust) Skin: Chronic Ingestion: No Eyes: Yes

#### **Health Hazards (Acute and Chronic):**

Acute: <u>Inhalation</u> of large amounts of dust may cause mild irritation of upper respiratory tract (nose and throat) and lungs. <u>Eye contact</u> may cause slight irritation and redness. <u>Ingestion</u>: Nontoxic by ingestion. Dry product contains 0.05% or less free acrylamide monomer. Less when added to water.

*Chronic:* Long term inhalation exposure to rats for a lifetime (2 years) using a sodium polyacrylate that had been micronized to a respirable particle size (less than 10 micrometers) produced non-specific inflammation and chronic lung injury at 0.2 mg/m³ and 0.8 mg/m³. At 0.8 mg/m³, tumors were seen in some animals. In the absence of chronic inflammation, tumors are not expected. There were no adverse effects of any kind at 0.05 mg/m³.

Carcinogenicity of Product: NTP: No IARC: No OSHA: No Note: Dry material contains less than 0.05% free acrylamide, which is listed as a probable human carcinogen (EPA: B2, IARC: 2A, NIOSH-Ca, ACGIH: A3) with a potential for skin absorption. When added to water during use, this amount is lowered further by the degree of dilution during use (about 200x). The ACGIH classification of acrylamide is A3: Confirmed animal carcinogen with unknown relevance to humans. Available epidemiologic studies do not confirm that acrylamide causes an increased risk of cancer in exposed humans. This product contains less than 0.05% free acrylamide (CAS # 79-06-1), and the following states recognize acrylamide as a carcinogen or suspected carcinogen: CA (Prop 65), MA, MN, NJ & PA.

**Signs and Symptoms of Exposure:** May experience nausea if large amounts are ingested. May cause mild irritation of upper respiratory tract (nose and throat) and lungs if large amounts of dust are inhaled. Prolonged contact with dry product: possible reddening, drying of skin or eyes on dry contact with itching, burning, or other discomfort. No toxic effects.

**Medical Conditions Generally Aggravated by Exposure:** Prolonged breathing of dust may aggravate existing respiratory conditions, or skin conditions (on contact) due to drying effect.

**Emergency and First Aid Procedures:** Flush eyes thoroughly with water. If inhaled, move to source of fresh air. Call a physician regarding any continued discomfort.

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# Terra-Sorb Water Management Polymers: all sizes

#### Section VII -- Precautions for Safe Handling and Use

**Handling:** Handle as an eye irritant, Do not get into eyes. Avoid prolonged or repeated skin contact, as dry material may irritate skin. Do not handle dust. Not intended for ingestion.

**Steps to be Taken in Case Material is Released or Spilled:** Sweep up and collect dry product. Avoid breathing dust. Do not flush to a drain, as clogging may result. Wash hands.

**Waste Disposal Method:** This material, when unadulterated, is not a RCRA regulated waste. It is a nonhazardous waste material suitable for approved solid waste landfill (normal trash). However, local disposal regulations may apply. Dispose in accordance with local, state, and federal regulations.

**Precautions to be Taken in Case Material is Released or Spilled:** If material becomes wet, it swells and causes slippery conditions. Guard against slips and falls.

**Other Precautions:** Store in a dry place. Avoid wetting material before use. Avoid repeated and prolonged dry skin contact. Dusty conditions may irritate eyes and respiratory system. When dusty conditions are created, wear goggles and respirator with high efficiency filter.

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#### Section VII -- Control Measures

**Respiratory Protection:** If concentrations of airborne particles exceed 0.05 mg/m³, use a NIOSH approved dust respirator with high efficiency filter in accordance with ANSI Z88.2

**Ventilation:** Not needed for normal use. For large-scale packaging or manufacturing, sufficient mechanical or local ventilation should be in place to maintain exposures at or below the recommended level of 0.05 mg/m<sup>3</sup>.

**Local Exhaust:** Not needed for normal use. For large-scale packaging or manufacturing, ensure airborne particles are removed.

**Protective Gloves:** Recommended for repeated handling.

**Eye Protection:** Safety Glasses or goggles recommended. ANSI Z87.1 standard safety glasses alone do not protect from dust.

**Other Protective Clothing or Equipment:** Eye wash should be available for large scale packaging or manufacturing of this material. Not needed for normal use.

**Work/Hygienic Practices:** Wash hands after handling. If spilled on clothes, wash as usual.

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#### Regulatory Information

TSCA: Components listed.

SARA Title III: Section 311/312: No reporting required

Section 313: No reporting required.