MATERIAL SAFETY DATA SHEET

Product and Manufacturer Identification

Product Name: DeepRoot Water Barrier products

Product Description: Rolled sheeting material of polyethylene

compounds

Base Resin: Ethylene and Propylene Polymers and Copolymers

Color: Black

Issue Date: June 3, 2004

Contact for Information / Manufacturer Identification:

Deep Root Partners, L.P. 530 Washington Street San Francisco, CA 94111 USA

Phone: 415-781-9700 Fax: 415-781-0191

Hazardous Components

Component	CAS#	% By Weight	OSHA PEL	ACGIH TLV
Polyethylene	9002-88-4	100	Not	Not
			Established	Established

Personal Protection Information

Ventilation: Use adequate Ventilation to control below recommended exposure levels.

Respiratory Protection: For concentrations exceeding the recommended exposure level, use NIOSH/MSHA approved air purifying respirator. In case of spill or leak resulting in unknown concentration, use NIOSH/MSHA approved supplied air respirator.

Eye Protection: Use safety glasses with side shields

Skin Protection: Use protective garments to prevent excessive skin contact

Note: Personal protection information shown above is based upon

general information as to normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified

professional be sought.

Handling and Storage Precautions

Wear protective equipment and/or garments described above if exposure conditions warrant. Store away from heat or flames.

Reactivity Data

Stability/Instability Stable

Incompatibly (Materials to Avoid) Oxidants

Hazardous Polymerization: Will Not Occur

Hazardous Decomposition Products: Carbon Oxides and hydrocarbon gases

Health Hazard Data

Recommended Exposure Limits:

Treat dust as a Nuisance	Respirable Fraction	Total Dust
Particulate:		
OSHA	5 mg/m^3	15 mg/m ³
ACGIH	5 mg/m^3	10 mg/m^3

Fume: Carbon Monoxide 50 ppm (OSHA & ACGIH)
Acrolein 0.1 ppm (OSHA & ACGIH)

Acute Effects of Overexposure

Eye: Dust may cause mechanical irritation. Fumes can be very irritating

resulting in a burning sensation and photosensitivity.

Skin: Essentially non-irritating

Inhalation: Dust may product mechanical irritation to the mucous membranes

of the nose, throat and upper respiratory tract. Fumes ban be quite

irritating to the eyes and mucous membrane of the upper

respiratory tract. Delayed pulmonary-edema and

carboxyhemoglobinemia can result from exposure to thermal

decomposition products.

Subchronic and Chronic Effects of Overexposure

Subchronic animal feeding studies have demonstrated no adverse effects with diets containing 5% or less polymer. Polypropylene and Polyethylene have been reported to produce malignant tumors at the implantation site when solid forms (films, fragments and sheets) are implanted in laboratory animals.

Other Health Effects:

No known applicable information

First Aid and Emergency Procedures

Eye: Flush eyes with water

Skin: Rinse with water

Inhalation: Remove from exposure. If exposed to flames: If breathing becomes

labored or irritation develops, seek medical attention

Ingestion: If illness or adverse symptoms develop, seek medical attention

Physical Data

Appearance: Rolled sheeting material of varying widths and thickness; black

color

Odor: None

Fire and Explosion Data

Flash Point (Method Used): 430°F, (221°C) (COC, ASTM D92)

Fire Extinguishing Media: Dry chemical, foam or carbon dioxide (CO₂)

Special Fire Fighting Procedures: Use NIOSH/MSHA approved self-contained breathing apparatus and other protective equipment and/or garments as described

on page 2 if exposure conditions warrant. Use water spray or fog to cool exposed equipment and containers.

Fire and Explosion Hazards: Smoke and noxious gases (carbon oxides and hydrocarbons) released when burned.

Spill, Leak and Disposal Procedures

Precautions Required if Material is Released or Spilled: The product is shipped in complete rolls and poses no release problems

Waste Disposal: Incinerate or place in waste management facility

Hazard Classification

This product meets the following hazard definition(s) as defined by occupational safety and health regulations (29 CFR part 1910.1200)

Not Hazardous.