



SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Penterra

MANUFACTURER: Geoponics Corp.
3415 Radio Road # 105
Naples, FL 34104

EMERGENCY PHONE: 1-800-424-9300 CHEMTREC
COMPANY PHONE: 239.261.6500
FAX PHONE: (239)692.8653

TRADE NAME: Penterra
SYNONYMS: Soil Penetrant
FORMULA: Proprietary

CHEMICAL FAMILY: Sulfosuccinates

SECTION 2: COMPOSITION/INFORMATION OF HAZARDOUS INGREDIENTS

Component	Weight %	CAS#	EINECS#
Diocetyl sodium sulfosuccinate	70-80	577-11-7	209-406-4
Propylene Glycol	5-7	57-55-6	200-338-0
Water	15-23	7732-18-5	231-791-2

SECTION 3: HAZARDS IDENTIFICATION

GHS Classification and Label Elements:

Health

Acute Toxicity Oral (4)
Skin Irritation (2)
Eye Irritation (2A)

Physical

Not Classified

Environmental

Acute Aquatic Toxicity (3)

Hazard Statements:

H302 Harmful if swallowed
H315 Causes skin irritation
H319 Causes serious eye irritation.
H402 Harmful to aquatic life

Precautionary Statements:

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P264 Wash any affected areas of skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301 + P312 If swallowed: Call a poison center/doctor if you feel unwell.
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P321 Specific treatment (see supplemental first aid instructions on this label.)
 P330 Rinse mouth.
 P332 + P313 If skin irritation occurs: Get medical advice/attention.
 P337 + P313 If eye irritation persists: Get medical advice/attention.
 P362 + P364 Take off contaminated clothing and wash it before reuse.
 P501 Dispose of contents/container to an approved waste disposal plant

Signal Word: WARNING!



SECTION 4: FIRST AID MEASURES

EYES: Rinse eyes with water. Remove any contact lenses, and continue flushing eyes with running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eyes and lids with water. Seek medical attention if irritation develops or persists

SKIN: Wash affected areas with plenty of water, and soap if available, for 15 minutes. Seek medical attention if irritation develops or persists..

INGESTION: Give 3-4 glasses of water, but **DO NOT** induce vomiting. If vomiting occurs, give fluids again. Get medical attention to determine whether vomiting or evacuation of stomach is necessary. Do not give anything by mouth to an unconscious or convulsing person.

INHALATION: Remove from area to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: None known

SECTION 5: FIRE-FIGHTING MEASURES

FLASHPOINT: >200F (PMCC)
FIRE FIGHTING MEASURES: As in any fire, wear NIOSH/MSHA approved, pressure-demand self-contained breathing apparatus and full protective gear.
EXTINGUISHING MEDIA: Use media suitable for the material that is burning.
SPECIAL FIRE FIGHTING PROCEDURES: Move containers from area if it can be done without risk. Cool fire-exposed containers with water from side.

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPILL PROCEDURES: Spill area will be slippery. Wear appropriate protective equipment.
 Absorb spills with vermiculite, fuller's earth, or sand. Shovel up and place in a non-metal waste container for disposal. Dike large spills with soil or sandbags to contain it and prevent its spread. Prevent liquid from entering sewers or water ways.

WASTE DISPOSAL: Keep away from natural water sources. Observe all applicable federal, state, and local regulations.
Empty packaging: Remove all residue when emptying.

RCRA STATUS: Not regulated under RCRA, 40 CFR 261

SECTION 7: PHYSICAL / CHEMICAL PROPERTIES

BOILING POINT: 150C

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WEIGHT PER GALLON:..... 1
SPECIFIC GRAVITY: 1.00+/- 0.04 at 20 C
pH:5 - 7
SOLUBILITY IN WATER:..... Soluble
ODOR:Mild
MOLECULAR WEIGHT: 444.56 g/mol
PHYSICAL STATE:Liquid solution
COLOR:Straw to amber

SECTION 8: STABILITY AND REACTIVITY

STABILITY: Stable under recommended storage conditions.
HAZARDOUS DECOMP.: Oxides of Carbon and Nitrogen on combustion
INCOMPATIBILITY: None known
REACTIVITY This product is not combustible.

SECTION 9: HANDLING AND STORAGE

HANDLING:Wear appropriate protective equipment.
STORAGE:Keep container tightly closed. Keep away from heat and sunlight. Storage temperature range: 5-30 C. If material freezes, gently thaw prior to use. Mild agitation may be required.

SECTION 10: EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATORY PROTECTION:In operations where mists are generated, wear a NIOSH/MSHA approved respirator that has been selected by a technically qualified person for the specific work conditions.
PROTECTIVE CLOTHING:..... HMIS Personal Protection: B: Safety glasses and Gloves.
ADDITIONAL MEASURES:Eye wash; Safety shower

SECTION 11: TOXICOLOGICAL INFORMATION

EYES: Rabbit: Moderately irritating
SKIN: Rabbit LD50 10000 mg/kg
INGESTION: Rat LD50: 1900 mg/kg
INHALATION: No data available
LISTED CARCINOGEN:..... None known
REPRODUCTIVE EFFECTS: 8820 mg/kg oral-rat TDL_o multigenerations

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND DISTRIBUTION:

Fish Toxicity: >24000 ug/L 96 hours LC₅₀ (Mortality) Rainbow trout, Donaldson trout (*Oncorhynchus mykiss*)
Invertebrate Toxicity: 9200 ug/L 96 days LD₅₀ (Mortality) Sea anemone (*Actinia equina*)
Algal Toxicity: 7700 ug/L 48 days LD₅₀ (Mortality) Diatom (*Gyrosigma spencerii*)

BIODEGRADABILITY:

Bioaccumulation: 3.47 ug/L 72 hours BCF (residue) Rainbow Trout, Donaldson Trout (*Oncorhynchus mykiss*) 5.5 ug/L
Environmental Summary: Moderately toxic to aquatic life. Not expected to leach through the soil or the sediment.
Accumulates very little in the bodies of living organisms.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:Keep away from natural water sources. Observe all applicable federal, state, and local regulations. Empty packaging: Remove all residue when emptying.

RCRA STATUS:Not regulated under RCRA, 40 CFR 261

SECTION 14: TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME: Not regulated for transportation
IATA CLASSIFICATION: Not regulated for transportation
IMDG CLASSIFICATION: Not regulated for transportation

SECTION 15: REGULATORY INFORMATION

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29CFR 1910.1200

EPA SARA Title III Chemical Listings:

CHEMICAL INVENTORY STATUS: Australia (AICS) Canada (DSL) China (EICS) Europe (EINECS) Japan (ENCS) Korea (ECL) New Zealand (NZIOC) Philippines (PICCS) USA (TSCA)

SARA EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355):

This product does not contain any chemicals subject to the reporting requirements of SARA Section 302.

SARA HAZARD CATEGORIES (40 CFR 370): ... Acute

SARA TOXIC SUBSTANCES (40 CFR 372): This product does not contain any chemicals subject to the reporting requirements of SARA Section 313.

CERCLA RQ/SUPERFUND (40 CFR 117, 302): ... No product components are listed

STATE REGULATIONS: None

OSHA HAZARDS: Non-Hazardous

SECTION 16: OTHER INFORMATION

HMIS CATEGORIES:

HEALTH: 2

FLAMMABILITY: 0

REACTIVITY: 0

OTHER: B

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