

MATERIAL SAFETY DATA SHEET

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Material Name: EarthTec®

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Section 1 – PRODUCT IDENTIFICATION

Product Name: EarthTec®

EPA No: 64962-1

Certified to: NSF / Standard 60 Do not exceed 19 mg/L.

Section 2 – HAZARDOUS INGREDIENTS

Components	CAS#	OSHA PEL	ACGIH TLV	%
Copper sulfate pentahydrate	7758-99-8	1mg/m <sup>3</sup>	1mg/m <sup>3</sup>	18.25-21.75%

Section 3 – HEALTH HAZARDS IDENTIFICATION

Primary Routes of Entry: Inhalation, Absorption, and Ingestion.

Eyes: Corrosive. Exposure may cause severe burns, destruction of eye tissue and possible permanent injury or blindness.

Skin: Corrosive. Contact may cause reddening, itching, inflammation, burns, blistering and possibly tissue damage.

Ingestion: Corrosive. May cause painful irritation and burning of the mouth and throat, painful swallowing, labored breathing, burns or perforation of the gastrointestinal tract leading to ulceration and secondary infection.

Inhalation: Irritating. Overexposure may cause burns and tissue damage.

Section 4 – FIRST AID MEASURES

Eyes: Flush immediately with large amounts of water for at least 20 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get immediate medical attention.

Skin: Immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothing and shoes. Get immediate medical attention.

Ingestion: If victim is conscious and alert, give 1-3 glasses of water to dilute stomach contents. Rinse mouth out with water. Do not induce vomiting unless directed by medical personnel. Get immediate medical attention.

Inhalation: Remove to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. Keep affected person warm and at rest. Get immediate medical attention.

Section 5 – FIRE AND EXPLOSION HAZARDS

Flash Point: N/E

UFL: N/E

LFL: N/E

General Fire Hazards: Water applied directly could result in spattering of acid solution.

Hazardous Combustion Products: May react with high carbon metals to produce hydrogen gas, which can form an explosive mixture.

Fire Fighting Equipment/Instructions: Firefighters must wear MSHA/NIOSH approved positive pressure breathing apparatus (SCBA) with full face mask and full protective equipment.

NFPA Ratings:	Fire: 0	Health: 2	Reactivity: 1	Other: X
HMIS III Ratings:	Fire: 0	Health: 2	Reactivity: 1	Personal Protection: X

Section 6 – ACCIDENTAL RELEASE MEASURES

Containment Procedures: Flush with water into retaining area or container. Caution should be exercised regarding personal safety and exposure to released product.

Clean-Up Procedures: Neutralize solution with bicarbonate of soda.

Evacuation Procedures: Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind.

Special Instructions: Notify local authorities and the National Response Center, if required.

### Section 7 – HANDLING AND STORAGE

**Procedures for Handling:** Avoid contact with strong oxidizers. Do not use with materials or equipment sensitive to corrosive solutions.

**Recommended Storage Methods:** Avoid storage in excessive heat; expansion of container may occur creating spillage. Do not store in galvanized or nylon equipment.

### Section 8 – PERSONAL PROTECTION

**Respiratory Protection:** Ventilation and other forms of engineering controls are the preferred means for controlling exposures. A NIOSH/ MSHA approved air-purifying respirator with an appropriate acid gas cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.

**Protective Gloves:** Use appropriate chemical gloves that are in usable order.

**Other Protective Clothing or Equipment:** Eye and face protection is necessary, long sleeved shirts, long pants, socks and shoes.

**Work/Hygienic Practices:** Use good personal hygiene. Body shower for prolonged skin contact.

### Section 9 – PHYSICAL & CHEMICAL PROPERTIES

**Appearance:** Clear blue liquid

**Physical State:** Liquid

**pH:** 0.5

**Vapor Pressure:** 0.1mm 68° F

**Boiling Point:** 220° F

**Melting Point:** N/A

**Odor:** Minimal odor

**Vapor Density (Air=1):** 1.0

**Evaporation Rate:** N/A

**Solubility in Water:** Complete

**Specific Gravity (H<sub>2</sub>O=1):** 1.2

### Section 10 – REACTIVITY INFORMATION

**Chemical Stability:** Stable.

**Conditions to Avoid:** Avoid mixing with strong bases and strong reducing agents.

**Incompatibility:** Incompatible with strong bases and strong reducing agents.

**Hazardous Decomposition Products:** Sulfur dioxide and sulfur trioxide may be produced with decomposition.

**Hazardous Polymerization:** Will not occur.

### Section 11 - TOXICOLOGICAL INFORMATION

**Acute Toxicity / Chronic Toxicity:** Continued overexposure to this solution may cause systemic toxicity.

**Carcinogenicity:** N/A

**Signs and Symptoms of Exposure:** Overexposure may cause the following specific symptoms, depending on the concentration and duration of exposure: vomiting, shallow respiration and lung function changes.

### Section 12 – DISPOSAL CONSIDERATIONS

**Disposal Instructions:** Neutralize with bicarbonate of soda or fertilizer grade lime and dispose of in accordance with all federal, state and local regulations.

### Section 13 – TRANSPORTATION INFORMATION

#### DOT Information

**Proper Shipping Name:** Corrosive liquid, acidic, inorganic, n.o.s., (contains cupric sulfate)

**Hazard Class:** 8

**UN/NA #:** UN3264

**Packing Group:** III

- Packages that contain more than 5.1 US gallons are **RQ** (reportable quantity)
- Packages that contain less than 4.0 liters could be **ORM-D**
- The proper shipping information is the responsibility of the shipper and this information is only guidelines.

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