

MATERIAL SAFETY DATA SHEET

MSDS

Hydrotech Algae Terminator

Date-Issued: 03/12/1999
MSDS Ref. No: AHYD23500
Date-Revised: 12/27/2004
Revision No: 3

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Hydrotech Algae Terminator
GENERAL USE: Swimming pool algaecide.

MANUFACTURER

Asepsis, Inc.
Hydrotech
P.O. Box 1788
Suwanee, GA 30024-0973
Customer SERVICE: (800) 959-7946

24 HR. EMERGENCY TELEPHONE NUMBERS

Poison Control Center (Medical) : (877) 800 - 5553
CHEMTREC (US Transportation) : (800) 424 - 9300

COMMENTS: EPA Registration Number: 5185-473-10305

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>CAS#</u>	<u>Wt.%</u>
Copper (metallic)	7440-50-8	3.3

COMMENTS: Copper derived from copper sulfate pentahydrate. Product also contains polymeric polyacrylate and gluconate stabilizing agents.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Blue-green liquid.

IMMEDIATE CONCERNS: CAUTION: Harmful if swallowed. Causes moderate, but temporary, eye irritation. Avoid contact with eyes or clothing. Wear protective eye wear (safety glasses). Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

POTENTIAL HEALTH EFFECTS

EYES: Causes moderate, but temporary, eye irritation.

SKIN: Product is non-irritating to skin. However, as part of a good work and personal hygiene practices, avoid unnecessary contact with skin.

INGESTION: Harmful if swallowed.

INHALATION: May be irritating to nose and throat. Avoid breathing vapors.

CHRONIC: There are no known chronic hazards.

ROUTES OF ENTRY: Eye Contact and Ingestion.

4. FIRST AID MEASURES

EYES: If contact with eyes occurs: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

SKIN: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advise.

INGESTION: If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

INHALATION: If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call poison control center or doctor for treatment advice.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: Not Applicable

GENERAL HAZARD: At 400 C product may emit toxic fumes of copper oxide and sulfur.

EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Water

FIRE FIGHTING PROCEDURES: Firefighters should wear full protective clothing and self contained breathing apparatus (SCBA). Thoroughly decontaminate fire fighting equipment including all fire fighting wearing apparel after the incident.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Utilizing appropriate clothing and safety equipment, contain spilled material. Cover the liquid with an inert absorbent. Using clean, dedicated equipment, sweep and scoop all spilled material, contaminated soil, and other contaminated material and place into clean dry plastic containers for disposal. Dispose of according to local, state and federal regulations.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Avoid contact with eyes, skin or clothing. Avoid breathing vapors.

HANDLING: Do not mix with other chemicals.

STORAGE: Keep this product in its original container when not in use. Store in cool, dry, well-ventilated area. Keep this product and all other chemicals out of children's reach.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

Copper (metallic)

TWA

EXPOSURE LIMITS

<u>OSHA PEL</u>		<u>ACGIH TLV</u>		<u>SUPPLIER OEL</u>	
<u>ppm</u>	<u>mg/m³</u>	<u>ppm</u>	<u>mg/m³</u>	<u>ppm</u>	<u>mg/m³</u>

[1]

OSHA TABLE COMMENTS:

1. N/A = Not Applicable

ENGINEERING CONTROLS: General room ventilation plus local exhaust should be used to minimize exposure to vapors.

PERSONAL PROTECTIVE EQUIPMENT:

EYES AND FACE: Wear goggles or safety glasses with side shields when handling this product.

SKIN: With repeated or prolonged use, wear gloves.

RESPIRATORY: None required for normal use.

WORK HYGIENIC PRACTICES: Remove and wash contaminated clothing before reuse.

OTHER USE PRECAUTIONS: Facilities storing or utilizing this material should be equipped with an eyewash and safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Faintly acidic.

COLOR: Blue-green

pH: 2.4

VAPOR PRESSURE: Not Established

VAPOR DENSITY: Not Established

BOILING POINT: Not Established

FREEZING POINT: Not Established

SOLUBILITY IN WATER: Miscible in Water

DENSITY: 10.09 lbs/gal

SPECIFIC GRAVITY: 1.18

VISCOSITY: 15cps at 25°C

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: High temperature. Poor ventilation. Contamination.

STABILITY: This product is stable under normal conditions.

POLYMERIZATION: Hazardous polymerization will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Vapors/fumes of organic/inorganic materials; oxides of carbon; copper oxide; sulfur.

INCOMPATIBLE MATERIALS: Other swimming pool/spa chemicals in their concentrated forms. Oxidizing compounds.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: >5000 mg/kg of body weight in rabbits.

ORAL LD₅₀: 3501 mg/kg of body weight in rats

EYE EFFECTS: Causes moderate, but temporary, eye irritation.

SKIN EFFECTS: Non-irritant (rabbit)

SENSITIZATION: This product is not a skin sensitizer.

CARCINOGENICITY:

This product is not listed as a carcinogen by IARC.

This product is not listed as a carcinogen by NTP.

This product is not listed as a carcinogen by OSHA.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds or estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

13. DISPOSAL CONSIDERATIONS

PRODUCT DISPOSAL: Securely wrap original container in several layers of newspaper and discard in trash.

EMPTY CONTAINER: Do not reuse container. Rinse thoroughly before discarding in trash.

14. TRANSPORT INFORMATION**DOT (DEPARTMENT OF TRANSPORTATION)****PROPER SHIPPING NAME:** Corrosive Liquids, N.O.S. (Contains copper sulfate)**PRIMARY HAZARD CLASS/DIVISION:** 8 (Corrosive)**UN/NA NUMBER:** 1760**PACKING GROUP:** III**OTHER SHIPPING INFORMATION:** Limited Quantity**CANADA TRANSPORT OF DANGEROUS GOODS****PROPER SHIPPING NAME:** Corrosive Liquids, N.O.S. (Contains copper sulfate)**PRIMARY HAZARD CLASS/DIVISION:** 8 (Corrosive)**UN/NA NUMBER:** 1760**PACKING GROUP:** III**AIR (ICAO/IATA)****IATA NOTE:** Not recommended for transport by air.**COMMENTS:** Limited Quantity**15. REGULATORY INFORMATION****UNITED STATES****SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)****311/312 HAZARD CATEGORIES:** This product or its components are not listed.**FIRE:** NO **PRESSURE GENERATING:** NO **REACTIVITY:** NO **ACUTE:** YES **CHRONIC:** NO**313 REPORTABLE INGREDIENTS:** This product or its components are not listed.**CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)****CERCLA REGULATORY:** Cupric sulfate (CAS # 7758-98-7), a component of this product, has a CERCLA RQ of 10 lbs.**TSCA (TOXIC SUBSTANCE CONTROL ACT)****TSCA REGULATORY:** This product or its components are not subject to export notification.**TSCA STATUS:** This product or its components are listed on the TSCA Inventory.**OSHA HAZARD COMM. RULE:** Product is hazardous by definition of the Hazardous Communication Standard.**FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT):** This product is a registered pesticide.**16. OTHER INFORMATION****PREPARED BY:** Regulatory Affairs Department

REVISION SUMMARY Revision #: 3 This MSDS replaces the August 28, 2000 MSDS. Any changes in information are as follows: In Section 1 [] Print CHEMTREC Phone Number 24 Hour Emergency Phone Numbers In Section 3 Potential Health Effects - Skin In Section 4 Firstaid - Eyes Firstaid - Skin Firstaid - Ingestion Firstaid - Inhalation In Section 8 Respiratory Protection In Section 14 TDG Proper Shipping Name IATA Note In Section 15 Fire Pressure Generating Reactivity Accute Chronic SARA 311/312 Hazard Categories SARA 313 Reportable Ingredients In Section 16 Manufacturer Disclaimer Section 16 Footnotes

HMIS RATING

HEALTH:		2
FLAMMABILITY:		0
PHYSICAL HAZARD:		0
PERSONAL PROTECTION:		B

NFPA RATING

HEALTH:	2
FIRE:	0
REACTIVITY:	0

Key

- 4 = Severe
- 3 = Serious
- 2 = Moderate
- 1 = Slight
- 0 = Minimal

COMMENTS: The contents and format of this MSDS are in accordance with OSHA Hazard Communication Standard, National Fire Protection Association (NFPA), and Hazardous Materials Identification System (HMIS).

MANUFACTURER DISCLAIMER: IMPORTANT: The information is given without a warranty or guarantee. No suggestions for use are intended or shall be construed as a recommendation to infringe any existing patents or violate any Federal, State or local laws. Safe handling and use is the responsibility of the customer. Read the label before using this product. This information is true and accurate to the best of our knowledge.