

# MATERIAL SAFETY DATA SHEET

## MSDS

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Date-Issued: 09/12/1997  
MSDS Ref. No: AHYD23112  
Date-Revised: 08/28/2000  
Revision No: 3

### Hydrotech Super Algae Kill

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#### 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Hydrotech Super Algae Kill  
GENERAL USE: Granular algae killer.  
CHEMICAL FAMILY: Chlorinated Isocyanurates

##### MANUFACTURER

Asepsis, Inc.  
Hydrotech  
P.O. Box 537  
Avondale Estates, GA 30002  
Customer SERVICE: (800) 959-7946

##### 24 HR. EMERGENCY TELEPHONE NUMBERS

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

##### COMMENTS:

EPA Registration Number: 5185-100-10305

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#### 2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>CAS#</u>	<u>Wt.%</u>
Trichloro-s-triazinetriene	87-90-1	99

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#### 3. HAZARDS IDENTIFICATION

##### EMERGENCY OVERVIEW

###### PHYSICAL APPEARANCE:

White, granular solid with chlorine odor.

###### IMMEDIATE CONCERNS:

DANGER: Corrosive: Causes irreversible eye damage and skin burns. May be fatal if absorbed through skin. May be fatal if inhaled. Do not breathe dust or spray mists. Irritating to nose and throat. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield, protective clothing and rubber gloves when handling this product. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash before reuse.

##### POTENTIAL HEALTH EFFECTS

###### EYES:

DANGER: Corrosive: Causes irreversible eye damage. Do not get in eyes.

###### SKIN:

DANGER: Corrosive: Causes skin burns. Do not get on skin.

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**SKIN ABSORPTION:**

May be fatal if absorbed through skin.

**INGESTION:**

Harmful if swallowed.

**INHALATION:**

May be fatal if inhaled. Irritating to nose and throat. Avoid breathing dust or vapors.

**ROUTES OF ENTRY:**

Skin Contact, Inhalation, Ingestion, Eye Contact.

**COMMENTS HEALTH:**

There are no known chronic hazards.

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#### 4. FIRST AID MEASURES

**EYES:**

If in eyes: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

**SKIN:**

If on skin: Wash with plenty of soap and water. Get medical attention if irritation persists.

**INGESTION:**

If swallowed: Drink promptly large quantities of water. Do not induce vomiting. Avoid alcohol. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

**INHALATION:**

If inhaled: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention.

**NOTES TO PHYSICIAN:**

Probable mucosal damage may contraindicate the use of gastric lavage.

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#### 5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: None

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#### GENERAL HAZARD:

This product did not ignite when exposed to pallet scale burn tests. When in direct contact with combustible material, this product may slightly enhance the burning rate of the combustible material. Under extreme heat (greater than 400F), this product will evolve noxious chlorine containing gases necessitating the need for self contained breathing apparatus (SCBA) when applying extinguishing media (WATER).

#### EXTINGUISHING MEDIA:

In case of fire or smoke, call the fire department. Do not attempt to extinguish the fire without a self-contained breathing apparatus (SCBA). Do not let the fire burn. Flood with copious amounts of water. DO NOT use ABC or other dry chemical extinguishers since there is the potential for a violent reaction.

#### EXPLOSION HAZARDS:

Nitrogen trichloride can be generated slowly by the reaction of small quantities of water with a high concentration of this product. Nitrogen trichloride can present an explosion hazard.

Immediately after a fire has been extinguished, check for wet or damp material. Any spilled material from burned or broken containers should be assumed contaminated. Neutralize to a non-oxidizing material for safe disposal. Do not attempt to re-close broken containers, even for movement to the disposal area. They should be left open to disperse any nitrogen trichloride that may form.

Material which appears undamaged except for being damp on the outside, should be opened and inspected immediately. If the plastic liner (where applicable) of the container is damaged or the material is damp, the material should be chemically treated if allowable, to a non-oxidizing material for safe disposal.

Bulging containers require extreme care. Contact the fire department.

#### FIRE FIGHTING PROCEDURES:

Firefighters should wear full protective clothing and self-contained breathing apparatus (SCBA). Using a 10% solution of sodium carbonate, thoroughly decontaminate fire fighting equipment including all fire fighting wearing apparel after the incident.

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## 6. ACCIDENTAL RELEASE MEASURES

#### GENERAL PROCEDURES:

Using appropriate protective clothing and safety equipment, contain spilled material. Do not add water to spilled material. Using clean dedicated equipment, sweep and scoop all spilled material, contaminated soil, and other contaminated material and place into clean dry containers for disposal. Do not use floor sweeping compounds to clean up spills. Do not close containers containing wet or damp material. They should be left open to disperse any hazardous gases that may form. Do not transport wet or damp material. Keep product out of sewers, watersheds and water systems. Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment. Dispose of according to local, state and federal regulations.

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#### 7. HANDLING AND STORAGE

##### HANDLING:

**STRONG OXIDIZING AGENT:** Do not mix with other chemicals. Mix only with water. Never add water to product. Always add product to large quantities of water. Use clean dry utensils. Do not add this product to any dispensing device containing remnants of any other product. Such use may cause a violent reaction leading to fire or explosion. Contamination with moisture, organic matter or other chemicals will start a chemical reaction and generate heat, hazardous gas, possible fire and explosion. In case of contamination or decomposition, do not reseal container. If possible, isolate container in open air or well ventilated area. Flood area with large volumes of water.

##### STORAGE:

Keep this product in original closed container when not in use. Store in a cool, dry, well ventilated area away from heat or open flame. Do not contaminate water, food or feed by storage or disposal or cleaning of equipment. Do not store above 125 F (52 C).

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#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

##### EXPOSURE GUIDELINES:

##### OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

		EXPOSURE LIMITS					
		OSHA PEL ppm	OSHA PEL mg/m <sup>3</sup>	ACGIH TLV ppm	ACGIH TLV mg/m <sup>3</sup>	SUPPLIER OEL ppm	SUPPLIER OEL mg/m <sup>3</sup>
Trichloro-s-triazinetrione	TWA	N/E <sup>[1]</sup>		N/E			

##### OSHA TABLE COMMENTS:

1. N/E = Not Established

##### ENGINEERING CONTROLS:

General room ventilation plus local exhaust should be used to minimize exposure to dust/vapors.

##### PERSONAL PROTECTIVE EQUIPMENT:

##### EYES AND FACE:

Wear goggles or safety glasses with side shields when handling this product.

##### SKIN:

Wear rubber gloves when handling this product. Avoid contact with skin.

##### RESPIRATORY:

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

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#### **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.

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## **9. PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL STATE: Solid  
ODOR: Chlorine  
APPEARANCE: Granules  
COLOR: White  
pH: 3 to 3.5(1% solution @ 25 C)  
VAPOR PRESSURE: Not Determined  
VAPOR DENSITY: Not Determined  
BOILING POINT: Not Applicable  
THERMAL DECOMPOSITION: 225°C to 230°C  
SOLUBILITY IN WATER: 1.2g/100g Water  
DENSITY: 58 - 68 lb / cu ft

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## **10. STABILITY AND REACTIVITY**

#### **CONDITIONS TO AVOID:**

High temperature. Poor ventilation. Contamination. Moisture/high humidity.

#### **STABILITY:**

This product is stable under normal conditions.

#### **POLYMERIZATION:**

Hazardous polymerization will not occur under normal conditions.

#### **HAZARDOUS DECOMPOSITION PRODUCTS:**

Chlorine containing gases can be produced.

#### **INCOMPATIBLE MATERIALS:**

This material is a strong oxidizing agent. Avoid contact with water on concentrated material in the container. Also avoid contact with easily oxidizable organic material; ammonia, urea, or similar nitrogen containing compounds; inorganic reducing compounds; floor sweeping compounds; calcium hypochlorite; alkalis; other swimming pool/spa chemicals in their concentrated forms.

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#### 11. TOXICOLOGICAL INFORMATION

##### ACUTE

ORAL LD<sub>50</sub>: 1500 mg/kg (rat).

INHALATION LC<sub>50</sub>: 0.5 mg/L (rat).

Note: This inhalation study was based on product that was milled (ground) to respirable particle size. Under normal storage and use conditions, product should not be of respirable particle size.

##### EYE EFFECTS:

This product is corrosive to eyes.

##### SKIN EFFECTS:

This product is corrosive to skin.

##### 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.

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#### 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.

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#### 13. DISPOSAL CONSIDERATIONS

##### DISPOSAL METHOD:

Pesticide wastes are toxic. Improper disposal of excess pesticide or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance. Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment. Do not put product, spilled product, or filled or partially filled containers into the trash or waste compactor. Contact with incompatible materials could cause a reaction or fire.

##### EMPTY CONTAINER:

Do not reuse container. Rinse thoroughly before discarding in trash.

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#### 14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)  
PROPER SHIPPING NAME: Trichloroisocyanuric Acid, Dry  
PRIMARY HAZARD CLASS/DIVISION: 5.1  
UN/NA NUMBER: 2468  
PACKING GROUP: II  
OTHER SHIPPING INFORMATION: Limited Quantity

CANADA TRANSPORT OF DANGEROUS GOODS  
PROPER SHIPPING NAME: Trichloroisocyanuric Acid, Dry  
TERTIARY HAZARD CLASS/DIVISION: 5.1  
UN/NA NUMBER: 2468  
PACKING GROUP: II

#### COMMENTS:

Limited Quantity

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#### 15. REGULATORY INFORMATION

##### UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)  
313 REPORTABLE INGREDIENTS: This product or its components are not listed.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)  
CERCLA REGULATORY: This product or its components are not listed.

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.

CLEAN WATER ACT:  
Not Listed.

FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT):  
This product is a registered pesticide.

SDWA (SAFE DRINKING WATER ACT):  
Not listed.

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#### 16. OTHER INFORMATION

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PREPARED BY: Regulatory Affairs

#### REVISION SUMMARY

Revision #: 3

This MSDS replaces the May 03, 2000 MSDS. Any changes in information are as follows:

In Section 1

Prepared By

In Section 14

Other DOT Shipping Information TDG Packing Group Section 14 Footnotes TDG UN/NA Number  
TDG Proper Shipping Name Tertiary Hazard Class/Division

#### NFPA CODES

HEALTH: 3    FIRE: 1    REACTIVITY: 1

#### NFPA STORAGE CLASSIFICATION:

NFPA Oxidizer Class 1

#### HMIS CODES

HEALTH: 3    FIRE: 1    REACTIVITY: 1    PROTECTION: B

#### MANUFACTURER DISCLAIMER:

IMPORTANT: This 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.

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