

**MATERIAL SAFETY DATA SHEET**

**I - PRODUCT IDENTIFICATION**

Product: Protech Copper Algaecide  
Description: Swimming Pool Algaecide  
Synonyms: None  
Chemical Family: A solution of a copper triethanolamine complex in water  
Formula: NA - mixture

**II - TRANSPORTATION DATA**

U.S. Department of Transportation - 49 CFR

This material is not regulated as a DOT hazardous material  
Emergency Telephone Number: Chemtrec 800-424-9300

**III - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION**

Chemical Name: Triethanolamine complex with copper sulfate  
CAS Number: 41121-61-3  
Percentage Range: 50-60%  
Hazardous 29 CFR 1910.1200: Yes  
Exposure Standards: None established

Chemical Name: Water  
CAS Number: 7732-18-5  
Percentage Range: 40-50%  
Hazardous 29 CFR 1910.1200: No  
Exposure Standards: None established

**IV - PHYSICAL/CHEMICAL CHARACTERISTICS**

Odor: none  
Appearance: clear blue liquid  
Total acidity: 7.0  
Freezing Point: 0°C  
Solubility in Water: miscible  
Bulk Density (g/cc): 1.3  
Specific Gravity (H<sub>2</sub>O=1): 1.3  
Percent volatile by volume: 50%  
Boiling Point (@ 760 mm Hg): 100°C  
Coefficient of Oil/Water Dist: insoluble in oils

## **V - FIRE AND EXPLOSION HAZARD DATA**

Flash Point:

None

Flammable Limits

LEL: N/A

UEL: N/A

Extinguishing Media:

Not-applicable- choose extinguishing media suitable for surrounding materials

Special Fire-fighting Procedures:

This product would not be expected to burn unless all the water is boiled away. The remaining organic compounds may be ignitable. Use water to cool containers exposed to fire.

Unusual Explosion Hazards:

None

## **VI - REACTIVITY DATA**

Stability:

( ) Unstable            (X) Stable

Shelf Life Limitations:

1-2 years under normal storage conditions

Conditions to Avoid:

Product is stable at normal temperatures

Incompatibility:

Oxidizers

Hazardous Decomposition or By-Products:

Carbon monoxide, carbon dioxide and oxides of nitrogen on combustion of dried product

## **VII - PRECAUTIONS FOR SAFE HANDLING AND USE**

Steps To Be Taken In Case Material Is Spilled Or Released:

Reportable Quantity:

Not applicable per 40 CFR 302.4

Spill Mitigation Procedures:

Evacuate all non-essential personnel. Stop source of spill as soon as possible and notify appropriate personnel.

Air Release:

Vapors may be suppressed by the use of a water fog or spray. Contain all liquid for treatment or neutralization.

Water Release:

This material is heavier than and miscible with water. Divert water flow around spill if possible and safe to do so. If unable to divert, create a dam

to contain material. Continue to handle as described in land spill.

#### Land Spill:

Create a dike or trench to contain material. Spill materials may be absorbed using sand, clay or commercial absorbent. Do not place spill materials back in their original containers. Containerize and label all spill materials properly. Decontaminate all clothing and the spill area using a soap solution and flush with large amounts of water.

#### Waste Disposal Method:

If this product becomes a waste, it DOES NOT meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D.

As a non hazardous liquid waste, it should be disposed of in accordance with local, state, and federal regulations by treatment to remove copper.

CARE MUST BE TAKE TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THIS MATERIAL. THE USER OF THIS MATERIAL HAS THE RESPONSIBILTY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE, AND DISPOSAL FOR HAZARDOUS AND NON HAZARDOUS WASTES.

#### Precautions to Be Taken in Handling and Storage:

Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash off with water.

Storage: store in a cool, dry, well ventilated area. Do not store at temperatures above 100°C (212°F)

### **VIII - HEALTH HAZARD DATA**

#### OSHA Hazard Classification:

Eye, skin, and respiratory irritant

#### NPCA-HMIS Ratings:

Health: 1

Flammability: 0

Reactivity: 0

#### Medical Conditions Aggravated by Exposure:

None known or reported

#### Signs & Symptoms of Exposure:

##### Inhalation:

ACUTE: if inhaled, may cause irritation to the throat, mucous membranes, upper respiratory tract, and lungs. Any irritation would be expected to be transient with no permanent damage expected.

CHRONIC: no effects would be expected except for those listed under

acute inhalation exposure.

**Skin Contact:**

**ACUTE:** skin contact may cause an irritation consisting of transient redness. This irritant effect would not be expected to result in permanent damage.

**CHRONIC:** there are no known or reported effects from chronic exposure except for effects similar to those experienced from single exposure.

**Eye Contact:**

Contact with the eyes would be expected to cause an irritation consisting of redness, swelling and mucous membrane discharge to the conjunctiva. No corneal damage or visual impairment would be expected to occur.

**Ingestion:**

**ACUTE:** ingestion may cause gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting, lethargy, or diarrhea.

**CHRONIC:** there are no known or reported effects from chronic exposure except for effects similar to those experienced from single exposure.

**Emergency and First Aid Procedures:**

**Ingestion:** immediately drink large quantities of water. Induce vomiting. Call a physician at once. DO NOT give anything by mouth if the person is unconscious or if having convulsions.

**Inhalation:** if person experiences nausea, headache or dizziness, person should stop work immediately and move to fresh air until these symptoms disappear. If breathing is difficult, administer oxygen, keep the person warm and at rest. Call a physician. In the event that an individual inhales enough product to lose consciousness, person should be moved to fresh air at once and a physician should be called immediately. If breathing has stopped, artificial respiration should be given immediately. In all cases, ensure adequate ventilation and provide respiratory protection before the person returns to work

**Skin Contact:** immediately flush with water for fifteen minutes. Wash the contaminated skin with soap and water. If irritation develops, call a physician. If clothing comes in contact with the product, the clothing should be laundered before reuse.

**Eye Contact:** immediately flush with large amounts of water for at least fifteen minutes, occasionally lifting the upper and lower eyelids. If eye irritation develops, call a physician

## Animal Toxicology:

### Acute Toxicity:

Inhalation LC50:	No data
Dermal LD 50:	No data
Oral LD50:	No data
Irritation:	Cause eye irritation, may cause skin and respiratory irritation.

## Acute Target Organ Toxicity:

No organs known to be damaged from exposure to this product.

## Chronic Target Organ Toxicity:

There are no known or reported effects from repeated exposure to this product.

## Reproductive and Developmental Toxicity:

There are no known or reported effects on reproductive function or fetal development.

## Carcinogenicity:

This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA.

## Mutagenicity:

This product is not known or reported to be mutagenic.

## Aquatic Toxicity:

No data.

## **IX - CONTROL MEASURES**

### Exposure Control/Personal Protection:

**Respiratory:** respirator protection not normally needed. If vapors, mists, or aerosols are generated, wear a NIOSH/MSHA approved respirator.

**Ventilation:** local exhaust ventilation is recommended if vapors, mists, or aerosols are generated. Otherwise, use general exhaust ventilation.

**Skin:** use impermeable gloves

**Eye:** use chemical goggles

### Equipment specifications

**Respirator Type:** NIOSH/MSHA approved organic vapor plus dust/mist filter respirator

**Protective Clothing:** Impervious

### Personal Protection for Emergency Spill and Fire-fighting Situations:

Additional respiratory protection is necessary when a spill or accident involving this product occurs. You are recommended to use a NIOSH/MSHA approved positive pressure supplied-air respirator.

Additional protective clothing must be worn to prevent personal contact with this material. Those items include but are not limited to: boots, gloves, splash-proof goggles.

## **X – TOXICOLOGY AND HEALTH INFORMATION**

Routs of Absorption:

Inhalation, ingestion, skin and eye contact

Warning Statements and Warning Properties:

DO NOT TAKE INTERNALLY. MAY BE HARMFUL IF SWALLOWED OR ABSORBED THROUGH THE SKIN. CAUSES EYE AND MUCOUS MEMBRANE IRRITATION. MAY CAUSE SKIN IRRITATION. MAY CAUSE RESPORATORY IRRITATION.

Human Threshold Response Date:

Odor Threshold: no data

Irritation Threshold: no data

Immediately Dangerous to Life or Health: The IDLH concentration had not been established for this product.

## **XI – REGULATORY STATUS INFORMATION**

Toxic Substances Control Act:

This product is regulated under the Federal Insecticide, Fungicide and Rodenticide Act. The only registered use is in an algaecide. A component of this product is not listed on the Toxic Substance Control Act inventory.

Hazard Catergoried, Per 40 CFR 370.2:

Health: Immediate (Acute)

Physical: None

Emergency Planning and Community Right to Know, Per 40 CFR 355, App.A:

Extremely Hazardous Substance – Threshold Planning Quantity:

None established

Supplier Notification Requirements, Per 40 CFR 372.45:

This mixture or trade name product contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372.

Chemicals Listed are:

Triethanolamine complex with copper sulfate (Copper compounds)

## **XII - ADDITIONAL INFORMATION**

**ALWAYS COMPLY WITH ALL APPLICABLE INTERNATIONAL, FEDERAL, STATE AND LOCAL REGULATIONS REGARDING THE TRANSPORTATION, STORAGE, USE AND DISPOSAL OF THIS CHEMICAL.**

Due to the changing nature of regulatory requirements, the REGULATORY

INFORMATION listed in Section X of this document should NOT be considered all-inclusive or authoritative. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.

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Revised: April 3, 1998