

SAFETY DATA SHEET

Date issued : 06/16/2026

SDS number : HammerTech Chelated Copper Algaecide

HammerTech Solutions Chelated Copper Algaecide

1. Identification

Product identifier: HammerTech Solutions Chelated Copper Algaecide**Product description:** Algaecide**Relevant identified uses:** Algaecide**Distributor**

HammerTech Solutions, LLC.
 270 W. Bell Road
 Suite 1100
 Phoenix, AZ 85053
Web: hammertechsolutions.com

Emergency telephone number (24 hour)

Chem-Tel 24-Hour Emergency # (800) 255-3924

2. Hazard identification

Classification of the substance or mixture**Health hazards:**

Acute Toxicity (Oral), Category 4
 Acute Toxicity (Dermal), Category 4
 Skin Corrosion, Category 1B
 Serious Eye Damage, Category 1

Label elements

Corrosion

Exclamation
mark**Signal word:** DANGER**Hazard statement(s)**

H302: Harmful if swallowed.
 H312: Harmful in contact with skin.
 H314: Causes severe skin burns and eye damage.

Precautionary statement(s)**Prevention:**

P260: Do not breathe dust/fume/gas/mist/vapours/spray.
 P264: Wash ... thoroughly after handling.
 P270: Do not eat, drink or smoke when using this product.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P301+P312: IF SWALLOWED: Call a POISON CENTER/ doctor/...if you feel unwell.
 P330: Rinse mouth.
 P362: Take off contaminated clothing.
 P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P321: Specific treatment (see ... on this label).
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310: Immediately call a POISON CENTER/doctor/...

Storage:

P405: Store locked up.

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Disposal:

P501: Dispose of contents/container to ...

Potential health effects
Ingestion: May be harmful if swallowed.

Routes of entry: Eyes, Skin, Inhalation, Ingestion

Sensitization: Not expected to be a skin sensitizer.

3. Composition/information on ingredients

Chemical name	% w/w	CAS No.
Quaternary ammonium compounds, benzyl C12-18 alkyl dimethyl, chlorides	Proprietary	68424-85-1
2,2',2''-Nitrilotriethanol	Proprietary	102-71-6
2-Aminoethanol	Proprietary	141-43-5
Copper carbonate	Proprietary	12069-69-1
Ethanol	Proprietary	64-17-5

4. First-aid measures

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

Skin: Remove contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Ingestion: Call 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 do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

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

Comments: Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a doctor or poison control, or going for treatment.

5. Fire-fighting measures

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.

Explosion hazards: Will not burn.

Fire fighting procedures: Use water spray to cool unopened containers.

Fire fighting equipment: Firefighters should wear self-contained breathing apparatus (SCBA) and turn-out gear.

Hazardous decomposition products: Hydrogen chloride gas, carbon oxides, nitrogen oxides (NOx)

6. Accidental release measures

Environmental precautions
Water spill: This material is soluble in water. If the product contaminates rivers and lakes or drains, inform respective authorities.

Land spill: Contain and/or absorb spill with inert material (e.g. sand, vermiculite). Do not use clay to absorb spill. Avoid release to the environment.

Air spill: Keep people away from and upwind of spill/leak.

General procedures: Prevent further leakage or spillage if safe to do so. Evacuate personnel to safe areas.

Special protective equipment: Additional protective clothing must be worn to prevent personal contact with this material. Those items include but are not limited to boots, impervious gloves, hard hat, splash-proof goggles, impervious clothing, i.e., chemically impermeable suit, self-contained breathing apparatus.

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7. Handling and storage

Precautions for safe handling: Do not take internally. Avoid contact with skin, eyes and clothing. If in eyes or on skin, rinse well with water. Avoid inhalation of dust and fumes.

Conditions for safe storage: Store in a cool, dry, well-ventilated area away from incompatible materials. Do not freeze.

Comments: Use safe chemical handling procedures suitable for the hazards presented by this material.

8. Exposure controls/personal protection

Exposure controls

Control parameters				
Occupational exposure limit values				
Chemical name	Type		ppm	mg/m ³
2,2',2''-Nitrilotriethanol	ACGIH TLV	TWA		5 mg/m ³
2-Aminoethanol	OSHA PEL	TWA	3 ppm	6 mg/m ³
	ACGIH TLV	TWA	3 ppm	7.5 mg/m ³
		STEL	6 ppm	15 mg/m ³
	Supplier OEL	STEL	6 ppm NIOSH/GUIDE	15 mg/m ³ NIOSH/GUIDE
Copper carbonate	OSHA PEL	TWA	[1]	[1]
	ACGIH TLV	TWA	[2]	mg/m ³ [2]
	Supplier OEL	TWA		100 mg/m ³ (NIOSH/GUIDE 2005)
Ethanol	OSHA PEL	TWA	1000 ppm	1900 mg/m ³
		STEL	ppm	mg/m ³
	ACGIH TLV	TWA	1000 ppm	1884 mg/m ³
		STEL	ppm	mg/m ³
	Supplier OEL	TWA	NL	NL
		STEL	NL	NL

Footnotes:

1. dusts and mists

2. Calculated as copper TWA dusts and mists

Appropriate engineering controls: Use local exhaust to maintain levels below exposure limits.

Individual protection measures, such as personal protective equipment

Eye / face protection: Wear chemical goggles and face shield.

Skin protection - hand protection: Avoid contact with skin. Impervious gloves, boots, apron, and a full impervious suit is recommended if exposure is possible to a large portion of the body.

Respiratory protection: Wear a NIOSH approved respirator if levels above the exposure limits are possible. A NIOSH approved air purifying respirator with organic vapor cartridge and P95 particulate filter. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten times the published limit.

Skin protection - other: Impervious, neoprene or butyl rubber.

Occupational hygiene practices: Provide safety shower and eyewash station in the work area.

9. Physical and chemical properties

Physical state: Liquid

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Appearance: Blue liquid.**pH:** 9.5 to 9.7**Flash point:** Product is not flammable. Not combustible. Not classified as pyrophoric. Not explosive.**Evaporation rate (n-butyl acetate = 1):** < 1**Lower explosion limit / flammability limit:** 0**Upper explosion limit / flammability limit:** 0**Vapor pressure:** N/A**Relative vapor density:** > 1**Relative density:** 1.049**Solubility:** Soluble**Dynamic viscosity:** 34.5 mPa.s at 20°C

10. Stability and reactivity

Dangerous polymerization: Will not occur.**Chemical stability:** Stable under normal conditions.**Conditions to avoid:** Heat.**Hazardous decomposition products:** Hydrogen chloride fumes, oxides of carbon and nitrogen oxide.**Incompatible materials:** Strong acids, oxidizing agents, clay.

11. Toxicological information

Acute toxicity

Acute dermal toxicity LD₅₀: 1872 mg/kg (rat)**Acute oral toxicity LD₅₀:** 1030 mg/kg - Rat**Respiratory or skin sensitization:** Not known or reported to be a skin or respiratory sensitizer.

Carcinogenicity

IARC: Ethanol - Group 1 - Carcinogenic to humans**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

12. Ecological information

Ecotoxicological information: No data available.**Environmental data:** Not available.**Mobility in soil:** No data.**Comments:** Very toxic to aquatic organisms.

13. Disposal considerations

Disposal methods: Dispose in accordance with all applicable regulations.**Empty container:** Empty containers retain hazardous residue, dispose of accordingly.**RCRA/EPA waste information:** 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 a hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D.

14. Transport information

USA Department of Transport Regulations (DOT)

UN proper shipping name: Corrosive liquid, basic, organic, n.o.s. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)

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UN number: 3267

Transport hazard class(es): 8

Packing group, if applicable: II

NAERG: 153

Environmental hazards - marine pollutant: No.

DOT other shipping information: DOT exception 173.154 - this product qualifies as a Limited Quantity when inner packaging does not exceed 0.3 gallons.

ADR / RID - road / rail

UN proper shipping name: Corrosive liquid, basic, organic, n.o.s. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)

UN number: 3267

Hazard class: 8

Packing group, if applicable: II

Hazard label: 8-Corrosive substances

ICAO / IATA - air

UN proper shipping name: Corrosive liquid, basic, organic, n.o.s. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)

UN number: 3267

Transport hazard class(es): 8

Packing group, if applicable: II

Hazard label: 8

IMO / IMDG - International

UN proper shipping name: Corrosive liquid, basic, organic, n.o.s. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)

UN number: 3267

Transport hazard class(es): 8

Packing group, if applicable: II

EmS: F-A, S-B

Environmental hazards - marine pollutant: No.

Hazard label: 8

Canadian Transport of Dangerous Goods Regulations (TDG)

UN proper shipping name: Corrosive liquid, basic, organic, n.o.s. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)

UN number: 3267

Transport hazard class(es): 8

Packing group, if applicable: II

Hazard label: 8

15. Regulatory information

UNITED STATES

SARA Section 311/312 Hazard Categories

313 reportable ingredients: Copper Carbonate, CAS #12069-69-1; 5.64%

EPCRA Section 302 Extremely Hazardous Substances

EPCRA Status: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

CERCLA Hazardous Substances and Reportable Quantities (RQ)

CERCLA rq: 2, 2'-Iminodiethanol, CAS #111-42-2: 100 lbs.

TSCA (The Toxic Substances Control Act)

TSCA regulatory: This is an EPA registered product.

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States with special requirements

Chemical name	Requirements
2,2',2''-Nitrilotriethanol	Massachusetts Hazardous Substance
Ethanol	Ethyl Alcohol: New Jersey Workplace Hazard New Jersey Special Hazard Pennsylvania Workplace Hazard CA Proposition 65 Massachusetts Hazardous Substance New York City Hazardous Substance

Regulations

State regulations: Copper Carbonate, CAS# 12069-69-1, listed PA RTK and NJ RTK.

Quaternary ammonium compound, CAS# 68424-85-1, listed PA RTK and NJ RTK.

California Proposition 65: WARNING! This product contains a chemical known to the State of California to cause cancer.

2,2''-Iminodiethanol, CAS #111-42-2

Formaldehyde, CAS #50-00-0

FIFRA (federal insecticide, fungicide, and rodenticide act): This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Below you will find the hazard information that is required on the EPA pesticide label.

General comments: HAZARD INFO FOUND ON PRODUCT'S EPA LABEL, EPA Reg. No. 46043-25:

DANGER. Corrosive.

Harmful if swallowed.

May be fatal if absorbed through skin.

Causes skin burns.

Causes irreversible eye damage.

This pesticide is toxic to fish and aquatic organisms.

16. Other information

Date Prepared: 06/16/2026

Manufacturer disclaimer: Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).