

# Material Safety Data Sheet



## K-TEA\* Algaecide

### 1. Product and company identification

**Product name** : K-TEA\* Algaecide  
**EPA Registration Number** : 67690-24  
**Material uses** : Aquatic Algaecide.  
**Supplier/Manufacturer** : **SePRO Corporation**  
 11550 North Meridian Street  
 Suite 600  
 Carmel, IN 46032 U.S.A.  
 Tel: 317-580-8282  
 Toll free: 1-800-419-7779  
 Fax: 317-428-4577  
 Monday - Friday, 8am to 5pm E.S.T.  
**www.sepro.com**

**Responsible name** : KMK Regulatory Services Inc.  
**In case of emergency** : **INFOTRAC - 24-hour service 1-800-535-5053**

### 2. Hazards identification

**Physical state** : Liquid.  
**Color** : Blue. [Dark]  
**Odor** : None  
**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).  
**Emergency overview** : **MAY CAUSE ALLERGIC SKIN REACTION. HARMFUL IF ABSORBED THROUGH SKIN. HARMFUL IF SWALLOWED. MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.**  
 Harmful if absorbed through the skin. Harmful if swallowed. Moderately irritating to the eyes and respiratory system. Slightly irritating to the skin. May cause sensitization by skin contact. Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Contains material that may cause target organ damage, based on animal data. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.  
**Routes of entry** : Dermal contact. Eye contact. Inhalation. Ingestion.  
**Potential acute health effects**  
**Inhalation** : Moderately irritating to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.  
**Ingestion** : Harmful if swallowed.  
**Skin** : Harmful in contact with skin. Slightly irritating to the skin. May cause sensitization by skin contact.  
**Eyes** : Moderately irritating to eyes.  
**Potential chronic health effects**  
**Chronic effects** : Contains material that may cause target organ damage, based on animal data. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.  
**Carcinogenicity** : No known significant effects or critical hazards.

- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.
- Target organs** : Contains material which may cause damage to the following organs: lungs, upper respiratory tract, skin, eye, lens or cornea, testes.

## Over-exposure signs/symptoms

- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing
- Ingestion** : No specific data.
- Skin** : Adverse symptoms may include the following:  
irritation  
redness
- Eyes** : Adverse symptoms may include the following:  
irritation  
watering  
redness
- Medical conditions aggravated by over-exposure** : Pre-existing skin disorders and disorders involving any other target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

## 3 . Composition/information on ingredients

<b>United States</b>			
<b>Name</b>	<b>CAS number</b>	<b>%</b>	
<b>Active ingredient:</b> Copper hydroxide	20427-59-2	12.9	
<b>Inert ingredient:</b> Proprietary Base	Proprietary	1 - 5	
Proprietary Amine	Proprietary	30 - 60	

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

## 4 . First aid measures

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
- Inhalation** : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

**Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

## 5 . Fire-fighting measures

**Flammability of the product** : In a fire or if heated, a pressure increase will occur and the container may burst.

### Extinguishing media

**Suitable** : Use an extinguishing agent suitable for the surrounding fire.

**Not suitable** : None known.

**Special exposure hazards** : No specific fire or explosion hazard.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
metal oxide/oxides  
Decomposes above 200°C.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6 . Accidental release measures

**Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods for cleaning up

**Spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

## 7 . Handling and storage

**Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## 8 . Exposure controls/personal protection

**Product name**

Proprietary Amine

**Exposure limits**

ACGIH TLV (United States, 2/2010).

TWA: 5 mg/m<sup>3</sup> 8 hour(s).
**Recommended monitoring procedures**

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

**Engineering measures**

: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal protection**

**Applicators should refer to the product label for personal protective equipment.**

**Respiratory**

: Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Hands**

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Eyes**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

**Skin**

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Environmental exposure controls**

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## 9 . Physical and chemical properties

**Physical state**

: Liquid.

**Color**

: Blue. [Dark]

**Odor**

: None

**pH**

: 9.1 to 9.6

**Relative density**

: 9.8 – 10.2 lbs/gal typically.

**Vapor pressure**

: No appreciable vapor pressure. Open containers can lose small amounts of water by volatilization.

**Solubility**

: Easily soluble in the following materials: cold water, hot water, Methanol, diethyl ether, n-octanol and acetone.

## 10 . Stability and reactivity

- Chemical stability** : The product is stable.
- Conditions to avoid** : No specific data.
- Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials, metals and acids. Copper chelate may dissociate and release copper ions which could subsequently be precipitated as insoluble copper salts. Should not be applied when water temperature is below 60°F.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

## 11 . Toxicological information

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Proprietary Amine	LD50 Oral	Rat	7.39 g/kg	-
Copper dihydroxide	LD50 Oral	Rat	1 g/kg	-
Proprietary Base	LD50 Oral	Rat	350 mg/kg	-
K-TEA* Algaecide	LD50 Dermal	Rabbit	2.675 mg/kg	-
	LD50 Oral	Rat	1.312 mg/kg	-

### Chronic toxicity

There is no data available.

### Irritation/Corrosion

- Skin** : There is no data available.
- Eyes** : There is no data available.
- Respiratory** : There is no data available.

### Sensitizer

- Skin** : There is no data available.
- Respiratory** : There is no data available.

### Carcinogenicity

### Mutagenicity

There is no data available.

### Teratogenicity

There is no data available.

### Reproductive toxicity

There is no data available.

## 12 . Ecological information

- Ecotoxicity** : No known significant effects or critical hazards.

### Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Proprietary Amine	Acute LC50 >100 mg/l Marine water Acute LC50 11800 mg/l Fresh water	Crustaceans - <i>Crangon crangon</i> - Adult Fish - <i>Pimephales promelas</i> - 30 days - 18.1 mm - 0.083 g	48 hours 96 hours
Proprietary Base	Chronic NOEC 16 mg/l Fresh water Acute EC50 0.66 mg/l Acute LC50 8.2 mg/l	Daphnia - <i>Daphnia magna</i> - <=24 hours Daphnia Fish	21 days 48 hours 96 hours

### Persistence/degradability

There is no data available.

## 13 . Disposal considerations

**Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## 14 . Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
<b>DOT Classification</b>	Not regulated.	-	-	-		-
<b>IMDG Class</b>	Not regulated.	-	-	-		-
<b>IATA-DGR Class</b>	Not regulated.	-	-	-		-

PG\* : Packing group

Exemption to the above classification may apply.

**AERG** : Not applicable.

## 15 . Regulatory information

**HCS Classification** : Irritating material  
Sensitizing material  
Target organ effects

**U.S. Federal regulations** : **TSCA 8(a) IUR Exempt/Partial exemption:** Not determined  
**Commerce control list precursor:** Proprietary Amine  
**United States inventory (TSCA 8b):** All components are listed or exempted.  
**SARA 302/304/311/312 extremely hazardous substances:** No products were found.  
**SARA 302/304 emergency planning and notification:** No products were found.  
**SARA 302/304/311/312 hazardous chemicals:** Copper dihydroxide; Proprietary Amine; Proprietary Base  
**SARA 311/312 MSDS distribution - chemical inventory - hazard identification:**  
Copper dihydroxide: Immediate (acute) health hazard; Proprietary Amine: Immediate (acute) health hazard, Delayed (chronic) health hazard; Proprietary Base: Immediate (acute) health hazard, Delayed (chronic) health hazard  
**Clean Water Act (CWA) 307:** Copper dihydroxide  
**Clean Water Act (CWA) 311:** Proprietary Base; Proprietary Acid

**Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

## SARA 313

	Product name	CAS number	Concentration
<b>Form R - Reporting requirements</b>	Copper hydroxide Proprietary Base	20427-59-2 -	10 - 30 -
<b>Supplier notification</b>	Copper hydroxide Proprietary Base	20427-59-2 -	10 - 30 -

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

## State regulations

**Massachusetts** : The following components are listed: Proprietary Amine; Proprietary Base

**New York** : The following components are listed: Proprietary Base

**New Jersey** : The following components are listed: Proprietary Amine; Copper dihydroxide; Proprietary Base

**Pennsylvania** : The following components are listed: Proprietary Amine; Copper dihydroxide; Proprietary Base

## California Prop. 65

No products were found.

## 16 . Other information

**Label requirements** : MAY CAUSE ALLERGIC SKIN REACTION. HARMFUL IF ABSORBED THROUGH SKIN. HARMFUL IF SWALLOWED. MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

**Hazardous Material Information System (U.S.A.)** : **Health** : 2 \* **Flammability** : 0 **Physical hazards** : 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

**National Fire Protection Association (U.S.A.)** : **Health** : 2 **Flammability** : 0 **Instability** : 0

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## History

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.