

# Material Safety Data Sheet



Transportation and Medical Emergency Phone: 1-800-535-5053  
(INFOTRAC)  
General Phone: 317-580-8282

EPA Reg. Number: 67690-10  
Effective Date: 2/28/03

## Nautique\* Aquatic Herbicide

SePRO Corporation Carmel, IN 46032

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT:** Nautique\* Aquatic Herbicide

**COMPANY IDENTIFICATION:**

SePRO Corporation  
11550 North Meridian Street, Suite 600  
Carmel, IN 46032  
www.sepro.com

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

|                                     |                   |
|-------------------------------------|-------------------|
| Copper as Elemental**               | 9.1%              |
| Inert Ingredients, Total, Including | 90.9%             |
| Ethylenediamine                     | CAS # 000107-15-3 |

\*\*One gallon contains 0.91 pounds of elemental copper from a mixed ethylenediamine/triethanolamine/copper complex (1 liter contains 110.0 grams copper).

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not 'Hazardous' per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard.

### 3. HAZARDOUS IDENTIFICATIONS

**EMERGENCY OVERVIEW**

Dark purple liquid with a slight ammoniacal odor. May cause severe eye irritation with corneal injury, even blindness. May be absorbed through the skin in harmful amounts. Corrosive to the skin.

**EMERGENCY TELEPHONE NUMBER:**  
**(800) 535-5053**

**POTENTIAL HEALTH EFFECTS:** This section includes possible adverse effects, which could occur if this material is not handled in the recommended manner.

**EYES:** Corrosive to eyes. Corneal injury may be severe, extensive, and, if not treated promptly, could result in permanent impairment of vision. Causes severe irritation, experienced as discomfort or pain, excess blinking and tear production, marked excess redness and swelling of the conjunctiva, and chemical burns of the eye.

**SKIN:** Corrosive to skin. Avoid contact. May cause local discomfort or pain, severe excess redness and swelling, tissue destruction, fissures, ulceration, and possibly bleeding into the injured area. Prolonged or widespread contact may result in the absorption of potentially harmful amounts of material. LD<sub>50</sub> for skin absorption in rabbits is 700 mg/kg.

**INGESTION:** May be toxic if swallowed. May cause burns of the mouth and throat, abdominal pain, nausea, vomiting, diarrhea, dizziness, weakness, thirst, collapse, and possible coma. The nature and severity of these signs and symptoms will be dependent on the amount swallowed. Aspiration into the lungs may occur during ingestion or vomiting, resulting in lung injury. Oral LD<sub>50</sub> for rats is 680 mg/kg.

**INHALATION:** Vapors may be irritating and may cause excessive tear formation, burning sensation of the nose and throat, coughing, wheezing, shortness of breath, nausea and vomiting. Extremely high vapor concentrations may cause lung damage. Some individuals may develop asthma. Inhalation LC<sub>50</sub> for rats is 2.1 mg/L.

**SYSTEMIC (OTHER TARGET ORGAN) EFFECTS:**  
No relevant information found.

**CANCER INFORMATION:** No relevant information found.

**TERATOLOGY (BIRTH DEFECTS):** No relevant information found.

**REPRODUCTIVE EFFECTS:** No relevant information found.

### 4. FIRST AID

**EYE:** Immediately flush eyes with flowing water while holding eyelid away from eyeball. Continue washing for at least 15 minutes. Do not remove contact lenses if worn. Get prompt medical attention.

**SKIN:** Immediately flush skin thoroughly with water for at least 15 minutes while removing contaminated clothing and shoes. Wash thoroughly with soap and water. Get medical attention if irritation persists. Wash clothing before reuse. Discard contaminated leather articles such as shoes and belt.

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**INGESTION:** Do not induce vomiting. Get immediate medical attention. If patient is fully conscious, give 1 or 2 glasses of water or milk.

**INHALATION:** Remove to fresh air. Give artificial respiration if not breathing. If breathing is difficult, oxygen may be given by qualified personnel. Obtain medical attention.

**NOTE TO PHYSICIAN:** Corrosive. May cause stricture. If lavage is performed, suggest endotracheal and/or esophagoscopy control. If burn is present, treat as any thermal burn after decontamination. No specific antidote. Supportive care. Treatment is based on the judgment of the physician in response to reactions of the patient. Prolonged or repeated inhalation may aggravate preexisting asthma, liver and kidney disease. Corrosive to eyes and skin. Causes irreversible eye damage.

### 5. FIRE FIGHTING MEASURES

**FLASH POINT:** Not determined  
**METHOD USED:** Not applicable

**FLAMMABLE LIMITS:**

LFL: Not applicable  
UFL: Not applicable

**EXTINGUISHING MEDIA:** All-purpose foam is preferred.

**FIRE AND EXPLOSION HAZARDS:** Keep unnecessary people away; isolate the hazard area and deny unnecessary entry. Highly toxic fumes are released in fire situations.

**FIRE FIGHTING EQUIPMENT:** Wear positive-pressure, self-contained breathing apparatus and full protective clothing.

### 6. ACCIDENTAL RELEASE MEASURES

**ACTION TO TAKE FOR SPILLS AND LEAKS:** Ventilate area. Avoid breathing vapors. Wear respiratory protection and avoid contact with skin, eyes or clothing. Use absorbent material such as sweeping compound, oil absorbent, or lime to contain and clean up small spills and dispose as waste in a chemical disposal container. Wash spill area with water containing a strong detergent, absorb it, and place in chemical disposal container. Report large spills to INFOTRAC and consult SePRO Corporation for assistance. Prevent runoff.

### 7. HANDLING AND STORAGE

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Utilize good personal hygiene practices and exercise normal liquid handling procedures. Store below 95°F (35°C) whenever possible. Decomposes at temperatures above 400°F (200°C). Average shelf life under proper storage conditions in the original sealed containers is 2 years. Store in a clean, dry area. Keep out of reach of children. Harmful if swallowed, absorbed through the skin, or inhaled. Avoid breathing of spray mist or contact with skin, eyes, or clothing.

### 8. EXPOSURE CONTROL/PERSONAL PROTECTION

These precautions are suggested for conditions where the potential for exposure exists. Emergency conditions may require additional precautions.

**EXPOSURE GUIDELINES:**

**Ethylenediamine:** ACGIH TLV and OSHA PEL are 10 ppm or 25 mg/M<sup>3</sup>, TWA.

**Proprietary Ingredient:** ACGIH TLV is 5 mg/M<sup>3</sup>, TWA

**ENGINEERING CONTROLS:** Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

### RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

**RESPIRATORY PROTECTION:** Use a NIOSH approved full-face air-purifying respirator. For emergency response or for situations where the atmospheric level is unknown, use a NIOSH approved positive-pressure self-contained breathing apparatus.

**SKIN PROTECTION:** Use protective clothing impervious to this material. Selection of specific items such as face shield, gloves, boots, apron, or full body suit will depend on operation. Use gloves, impervious to this material, at all times. Safety shower should be located in immediate work area. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse. Items, which cannot be decontaminated, such as shoes, belts, and watchbands, should be removed, destroyed, and disposed.

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**EYE/FACE PROTECTION:** Use chemical goggles. Eye wash fountain should be located in immediate work area. If vapor exposure causes eye discomfort, use a NIOSH approved full-face respirator for vapors.

**APPLICATORS AND ALL OTHER HANDLERS:** Refer to the product label for personal protective clothing and equipment.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**BOILING POINT:** Not determined  
**SOLUBILITY IN WATER:** Soluble  
**VAPOR PRESSURE:** Approximately the same as water  
**SPECIFIC GRAVITY:** 1.2  
**APPEARANCE:** Dark purple liquid  
**ODOR:** Slight ammoniacal  
**pH:** Not determined

### 10. STABILITY AND REACTIVITY

**STABILITY:** Stable under normal storage conditions.

**INCOMPATIBILITY: (Specific materials to avoid)** Strong acids and nitrites. Should not be used in water where the pH is less than 6.0 due to the possible breakdown of the copper chelate, which could form copper ions, which would precipitate. Should not be applied to water when temperature of the water is below 60°F (15°C).

**HAZARDOUS DECOMPOSITION PRODUCTS:** Decomposes above 390°F (200°C). May form oxides of carbon and nitrogen.

**HAZARDOUS POLYMERIZATION:** Not known to occur.

### 11. TOXICOLOGICAL INFORMATION

**MUTAGENICITY:** No relevant information found.

### 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** No relevant information found.

### 13. DISPOSAL CONSIDERATIONS

**DISPOSAL:** Responsibility of proper waste disposal rests with the owner of the waste. Consult with local and environmental authorities. Contaminated materials should be placed in sealed drums and shipped to an approved chemical dump for disposal in accordance with all federal, state and local regulations.

### 14. TRANSPORT INFORMATION

**U.S. DEPARTMENT OF TRANSPORTATION INFORMATION:**

**FOR PACKAGE SIZES ONE GALLON OR LESS AND ALL MODES OF TRANSPORTATION (air, land, vessel):**  
This material is not regulated.

**FOR PACKAGES SIZES GREATER THAN ONE GALLON AND ALL MODES OF TRANSPORTED (air, land, vessel):**

Copper based pesticides, liquid, toxic (mixed copper ethylenediamine/triethanolamine complex).

**DOT Hazard Class:** Class 6.1

### 15. REGULATORY INFORMATION

**NOTICE:** The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations.

#### U.S. REGULATIONS

**SARA 313 INFORMATION:** To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

**SARA HAZARD CATEGORY:** This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund

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Amendments and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

An Immediate Health Hazard

### NATIONAL FIRE PROTECTION ASSOCIATION

**(NFPA 701):** (4 = Extreme; 3 = High; 2 = Moderate; 0 = Insignificant)

|              |   |
|--------------|---|
| Health       | 3 |
| Flammability | 0 |
| Reactivity:  | 1 |

**STATE RIGHT-TO-KNOW:** The following product components are cited on certain state lists as mentioned. Non-listed components may be shown in Section 1 of the MSDS.

| Chemical Name          | CAS Number  | List                |
|------------------------|-------------|---------------------|
| Proprietary Ingredient | Proprietary | PA1                 |
| Ethylenediamine        | 000107-15-3 | NJ1 NJ2 NJ3 PA1 PA3 |

NJ1=New Jersey Special Health Hazard Substance (present at > or = to 0.1%).

NJ2=New Jersey Environmental Hazardous Substance (present at > or = to 1.0%).

NJ3=New Jersey Workplace Hazardous Substance (present at > or = to 1.0%).

PA1=Pennsylvania Hazardous Substance (present at > or = to 1.0%).

PA3=Pennsylvania Environmental Hazardous Substance (present at > or = to 1.0%).

**TOXIC SUBSTANCES CONTROL ACT (TSCA):** All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

**OSHA HAZARD COMMUNICATION STANDARD:** This product is a "hazardous Chemical" as defined by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA, or SUPERFUND):** This product contains the following substance(s) listed as "Hazardous Substances" under CERCLA, which may require reporting of releases:

| Chemical Name   | CAS Number  | RQ   | % in Product |
|-----------------|-------------|------|--------------|
| Ethylenediamine | 000107-15-3 | 5000 | 20.7%        |

### 16. OTHER INFORMATION

**MSDS STATUS:** Revised  
**Replaces MSDS Dated:** 6/25/98  
**Replaces MSDS Dated:** 10/10/02

The information herein is given in good faith, but no warranty, express or implied, is made. Consult SePRO Corporation for further Information.