

# SAFETY DATA SHEET



## HARPOON®

### SECTION 1. IDENTIFICATION

Product name : HARPOON®

#### Manufacturer or supplier's details

Company : SePRO Corporation  
11550 North Meridian Street, Suite 600  
Carmel, IN 46032

Telephone : 317-580-8282 / 1-800-419-7779  
Fax: 317-580-8290  
Monday-Friday, 8am-5pm EST  
Email [www.sepro.com](http://www.sepro.com)

Emergency telephone number : INFOTRAC 24-hour service 1-800-535-5053

#### Recommended use of the chemical and restrictions on use

Recommended use : Aquatic Herbicide

### SECTION 2. HAZARDS IDENTIFICATION

#### GHS Classification

Acute toxicity (Oral) : Category 4

Eye irritation : Category 2B

Respiratory sensitisation : Category 1

Skin sensitisation : Category 1

Specific target organ toxicity - single exposure : Category 3 (Respiratory system)

#### GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H302 Harmful if swallowed.  
H320 Causes eye irritation.  
H317 May cause an allergic skin reaction.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H335 May cause respiratory irritation.



Precautionary statements

- Prevention:**
  - P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
  - P264 Wash skin thoroughly after handling.
  - P270 Do not eat, drink or smoke when using this product.
  - P271 Use only outdoors or in a well-ventilated area.
  - P272 Contaminated work clothing should not be allowed out of the workplace.
  - P280 Wear protective gloves/ eye protection/ face protection.
  - P284 Wear respiratory protection.
- Response:**
  - P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
  - P302 + P352 IF ON SKIN: Wash with plenty of water.
  - P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
  - P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
  - P337 + P313 If eye irritation persists: Get medical advice/ attention.
  - P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.
  - P362 + P364 Take off contaminated clothing and wash it before reuse.
- Storage:**
  - P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
  - P405 Store locked up.
- Disposal:**
  - P501 Dispose of contents/container in accordance with local regulation.

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical nature : Mixture

**Hazardous components**

Chemical name / Synonyms	CAS-No.	Concentration (% w/w)
Cupriethylenediamine solution	13426-91-0	20 - 25
Ethylenediamine	107-15-3	0.5 - 1

**SECTION 4. FIRST AID MEASURES**

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



- In case of skin contact : IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- In case of eye contact : IF IN EYES: Hold eye 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.
- If swallowed : IF SWALLOWED: Call a 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.
- Most important symptoms and effects, both acute and delayed : None known.

**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Water  
Carbon dioxide (CO2)  
Dry powder  
Foam
- Specific hazards during firefighting : May be ignited by open flame.
- Further information : Use water spray to cool unopened containers. In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Use the personal protective equipment recommended in Section 8 and a NIOSH approved self-contained breathing apparatus.  
Remove all sources of ignition.  
Prevent further leakage or spillage if safe to do so.  
Use personal protective equipment as required.  
Evacuate personnel to safe areas.
- Environmental precautions : If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).  
Do not flush into surface water or sanitary sewer system.



**SECTION 7. HANDLING AND STORAGE**

- Advice on safe handling : Do not take internally.  
Avoid contact with skin, eyes and clothing.  
If in eyes or on skin, rinse well with water.  
Avoid breathing vapours, mist or gas.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.  
Do not store near feed, food, or within the reach of children.
- Materials to avoid : Refer to Section 10, "Incompatible Materials."
- Recommended storage temperature : 95 °F / 35 °C
- Further information on storage stability : Maximum storage temperature:

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Ethylenediamine	107-15-3	TWA	10 ppm	ACGIH
		REL	10 ppm 25 mg/m3	NIOSH/GUIDE
		PEL	10 ppm 25 mg/m3	OSHA_TRANS
		TWA	10 ppm 25 mg/m3	Z1A

**Engineering measures** : Local exhaust ventilation or other engineering controls are normally required when handling or using this product to keep airborne exposures below the TLV, PEL or other recommended exposure limit.

**Personal protective equipment**

- 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 P100 filter. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten (10) times the published limit.
- Hand protection  
Remarks : Impervious gloves butyl-rubber Neoprene
- Eye protection : Use chemical goggles.



Skin and body protection	:	Impervious butyl-rubber Neoprene
Protective measures	:	Emergency eyewash should be provided in the immediate work area.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	:	liquid
Colour	:	purple
Odour	:	Amine
Odour Threshold	:	no data available
pH	:	10.0 - 10.5
Melting point/freezing point	:	no data available
Boiling point/boiling range	:	215.1 °F / 101.7 °C
Flash point	:	212 °F / 100 °C Method: closed cup
Evaporation rate	:	no data available
Flammability (solid, gas)	:	Combustible above 93 deg. C / 200 deg. F.
Flammability (liquids)	:	no data available
Upper explosion limit	:	no data available
Lower explosion limit	:	no data available
Vapour pressure	:	no data available
Relative vapour density	:	no data available
Relative density	:	1.221 (68 °F / 20 °C)
Density	:	Not applicable
Bulk density	:	no data available
Water solubility	:	soluble
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	no data available
Decomposition temperature	:	> 392 °F / 200 °C



Viscosity, dynamic : 3.268 mPa.s (68 °F / 20 °C)  
Viscosity, kinematic : no data available

**SECTION 10. STABILITY AND REACTIVITY**

Possibility of hazardous reactions : Stable under normal conditions.  
Conditions to avoid : Heat, flames and sparks.  
Incompatible materials : Oxidizing agents  
Hazardous decomposition products : During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**SECTION 11. TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure : This product will not exert a significant adverse effect to health from any route of exposure.

**Acute toxicity**

Acute oral toxicity : LD50 (Rat): 550 mg/kg  
Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg

**Skin corrosion/irritation** Assessment: Mild skin irritation

**Serious eye damage/eye irritation** Result: Mild eye irritation

**Carcinogenicity**

**IARC** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
**OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.  
**NTP** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
**ACGIH** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.



**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**                                **no data available**

**Persistence and degradability**    **no data available**

**Bioaccumulative potential**

**Components:**

**Ethylenediamine:**

Partition coefficient: n-octanol/water    :    log Pow: -2 - -1.3

**Mobility in soil**                                **no data available**

**Other adverse effects**

Ozone-Depletion Potential                :    Regulation: US. EPA Clean Air Act (CAA) Section 602 Ozone-Depleting Substances (40 CFR 82, Subpt. A, App A & B)Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information        :    There is no data available for this product.

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

Waste from residues                        :    If this product becomes a waste, it will be a nonhazardous waste.  
As a nonhazardous liquid waste, it should be disposed of in accordance with local, state and federal regulations.

**SECTION 14. TRANSPORT INFORMATION**



**DOT**

**UN number** : 3082  
**Proper shipping name** : Environmentally hazardous substance, liquid, n.o.s. (Cupriethylenediamine solution)

**Transport hazard class** : 9  
**Packing Group** : III  
Labels : 9  
Emergency Response Guidebook Number : 171  
**Environmental hazards** : yes

**TDG**

**UN number** : 3082  
**Proper shipping name** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cupriethylenediamine solution)

**Transport hazard class** : 9  
**Labels** : 9  
**Packing group** : III  
**Environmental hazards** : yes

**IATA**

**UN number** : 3082  
**Proper shipping name** : Environmentally hazardous substance, liquid, n.o.s. (Cupriethylenediamine solution)

**Transport hazard class** : 9  
**Packing group** : III  
Labels : 9MI  
**Environmental hazards** : yes  
**Environmental hazards** : yes

**IMDG**

**UN number** : 3082  
**Proper shipping name** : Environmentally hazardous substance, liquid, n.o.s. (Cupriethylenediamine solution)  
**Transport hazard class** : 9  
**Transport hazard class** : 9  
**Packing group** : III  
Labels : 9  
EmS Number 1 : F-A  
EmS Number 2 : S-F  
**Environmental hazards** : Marine pollutant: yes





**ADR**

**UN number** : 3082  
**Proper shipping name** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cupriethylenediamine solution)  
**Transport hazard class** : 9  
**Packing group** : III  
Classification Code : M6  
Hazard Identification Number : 90  
Labels : 9  
**Environmental hazards** : yes

**RID**

**UN number** : 3082  
**Proper shipping name** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cupriethylenediamine solution)  
**Transport hazard class** : 9  
**Packing group** : III  
Classification Code : M6  
Hazard Identification Number : 90  
Labels : 9  
**Environmental hazards** : yes  
**Special precautions for user** : none  
**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not applicable

**SECTION 15. REGULATORY INFORMATION**

**This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals.**

EPA Registration number : 67690-99  
Signal word : CAUTION!  
Hazard statements : Harmful if swallowed.  
Causes moderate eye irritation.  
This pesticide is toxic to fish.  
This pesticide is toxic to aquatic invertebrates.

**EPCRA - Emergency Planning and Community Right-to-Know Act**

**CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Ethylenediamine	107-15-3	5000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.



**SARA 304 Extremely Hazardous Substances Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Ethylenediamine	107-15-3	5000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 311/312 Hazards**

See above: SECTION 2. Hazard Identification-GHS Classification

**SARA 313**

Components	CAS-No.	Concentration
Cupriethylenediamine solution	13426-91-0	20 - 30 %

**Clean Air Act**

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

The following chemical(s) are listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F):

Components	CAS-No.	Concentration
Ethylenediamine	107-15-3	0.1 - 1 %

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489):

Components	CAS-No.	Concentration
Ethylenediamine	107-15-3	0.1 - 1 %

This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450.

**Clean Water Act**

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Components	CAS-No.	Component RQ (lbs)
Ethylenediamine	107-15-3	5000

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Components	CAS-No.	Concentration
Ethylenediamine	107-15-3	0.1 - 1 %

This product contains the following toxic pollutants listed under the U.S. Clean Water Act Section 307

Components	CAS-No.	Concentration
Cupriethylenediamine solution	13426-91-0	20 - 30 %

**US State Regulations**



**Massachusetts Right To Know**

Components	CAS-No.
Ethylenediamine	107-15-3

**Pennsylvania Right To Know**

Components	CAS-No.
Cupriethylenediamine solution	13426-91-0
Sulfate	14808-79-8

**New Jersey Right To Know**

Components	CAS-No.
Cupriethylenediamine solution	13426-91-0
Sulfate	14808-79-8

**California Prop. 65**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**Canadian lists**

**NPRI**

Components	CAS-No.
Cupriethylenediamine solution	13426-91-0

**The components of this product are reported in the following inventories:**

TSCA : This is an EPA registered pesticide.

**SECTION 16. OTHER INFORMATION**

**Full text of other abbreviations**

- ACGIH : US. ACGIH Threshold Limit Values
- NIOSH/GUIDE : US. NIOSH: Pocket Guide to Chemical Hazards, as amended
- OSHA\_TRANS : US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
- Z1A : US. OSHA Table Z-1-A (29 CFR 1910.1000)

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECl - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health



**HARPOON®**

Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 2020.03.12

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Date format : 2022.02.18

US / EN