



Preparation Date 23-Apr-2015

Revision date 31-Dec-2018

Safety Data Sheet

Revision Number: 4

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier

Product Description: Current Aquatic Herbicide

Other means of identification

Product code 12P-0002
UN/ID no. UN3010
Registration number(s) 70506-248

Recommended use of the chemical and restrictions on use

Recommended use Aquatic herbicide.
Uses advised against Activities contrary to label recommendation

Details of the Supplier of the Safety Data Sheet

Supplier Address

UPL NA Inc.
630 Freedom Business Center
Suite 402
King of Prussia, PA 19406

Emergency telephone number

Company Phone Number 1-800-438-6071
Emergency telephone number Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison Control Center
(866) 673-6671 (24hrs)

2. Hazards Identification

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Skin Corrosion/Irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Respiratory sensitization	Category 1
Skin sensitization	Category 1

Label elements

EMERGENCY OVERVIEW

DANGER

Hazard Statements

HARMFUL IF SWALLOWED
Causes severe skin burns and eye damage
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction

**Appearance** dark purple**Physical state** Liquid**Odor** no data available**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Do not breathe dust/fume/gas/mist/vapors/spray
 Wear protective gloves/protective clothing/eye protection/face protection
 In case of inadequate ventilation wear respiratory protection
 Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Immediately call a POISON CENTER or doctor/physician
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 If skin irritation or rash occurs: Get medical advice/attention
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Immediately call a POISON CENTER or doctor/physician
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 Rinse mouth
 Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)**OTHER INFORMATION**

- May be harmful in contact with skin
- Very toxic to aquatic life with long lasting effects

3. Composition/information on Ingredients

Chemical name	CAS No	Weight-%
Ethylene diamine	107-15-3	15.13
Copper sulfate pentahydrate	7758-99-8	31.43

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. First aid measures**FIRST AID MEASURES****Eye contact**

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

Skin contact

Wash off immediately with soap and plenty of water for at least 15 minutes. Call a poison

control center or doctor for treatment advice.

Inhalation	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 physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.
Protection of First-aiders	Use personal protective equipment.

Most Important Symptoms and Effects, Both Acute and Delayed

Most Important Symptoms and Effects	no data available.
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Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician	Treat symptomatically.
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5. Fire-fighting measures

Suitable extinguishing media

Use: Dry chemical. Carbon dioxide (CO₂). Water spray. alcohol-resistant foam.

Unsuitable extinguishing media no data available.

Specific hazards arising from the chemical

No information available.

Explosion data

Protective equipment and precautions for firefighters

Use personal protective equipment. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protective equipment. Avoid contact with skin and eyes. Provide adequate ventilation. Wash thoroughly after handling.
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Environmental Precautions

Environmental precautions	Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.
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Methods and material for containment and cleaning up

Methods for Clean-Up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.
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7. Handling and Storage

Precautions for safe handling

Handling	Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe vapours or spray mist. Do not eat, drink or smoke when using this product.
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Conditions for safe storage, including any incompatibilities

Storage Keep in properly labelled containers. Keep container tightly closed in a dry and well-ventilated place.

Incompatible materials No information available.

8. Exposure Controls/Personal Protection

Exposure guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical name	ACGIH TLV	OSHA PEL
Ethylene diamine	TWA: 10 ppm S*	TWA: 10 ppm TWA: 25 mg/m ³ (vacated) TWA: 10 ppm (vacated) TWA: 25 mg/m ³

Engineering controls Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Personal protective equipment

Eye/Face Protection

Use eye protection to avoid eye contact. Where there is potential for eye contact have eye flushing equipment available. Safety glasses with side-shields. If splashes are likely to occur, wear: Goggles.

Skin protection

Long sleeved clothing. Impervious butyl rubber gloves. Boots. Apron.

Respiratory protection

In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

General hygiene considerations

Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state	Liquid		
Appearance	dark purple	Odor	no data available
color	No information available		
Property	VALUES	Remarks/ • Method	
pH	9.62		
Melting point/freezing point	10.62 °C / 51 °F		
Boiling Point/Range	102 °C / 216 °F		
Flash Point			
Evaporation Rate	No information available		
Flammability (solid, gas)	No information available		
Flammability limit in air			
Upper Flammability Limit	No information available		
Lower Flammability Limit	No information available		
vapor pressure	No information available		
Vapor Density	No information available		
Specific gravity	No information available		
Water solubility	No information available		
Solubility in Other Solvents	No information available		
Partition coefficient: n-octanol/water	No information available		
Autoignition temperature	no data available		
Decomposition temperature	No information available		
Viscosity, kinematic	No information available		
Dynamic viscosity	No information available		
Explosive properties	No information available		
Oxidizing properties	No information available		

OTHER INFORMATION

Softening point	No information available
molecular weight	No information available
VOC Content	No information available
Liquid Density	No information available

10. Stability and Reactivity

Reactivity

no data available

Chemical stability

Hazardous polymerisation does not occur. Stable under normal conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Should not be used where pH of water is below 6 due to the possibility that the 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.

Incompatible materials

No information available.

Hazardous decomposition products

Carbon oxides.

11. Toxicological Information

Information on Likely Routes of Exposure

Product information

Current:
Acute oral LD50 = 498 mg/kg
Acute dermal LD50 = >2000 mg/kg
Acute inhalation LC50 = 0.81 mg/L 4 hr (rat)
Eye irritation = Moderately irritating.
Skin irritation = Slightly toxic dermally

Inhalation Harmful by inhalation.

Eye contact Moderately irritating to the eyes.

Skin contact May be absorbed through the skin in harmful amounts. Prolonged contact may cause redness and irritation.

Ingestion MAY BE FATAL IF SWALLOWED.

Information on Toxicological Effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic effects no data available.

Carcinogenicity The information below indicates whether any agency has listed any ingredient as a carcinogen.

Reproductive effects Not Available.

STOT - Single Exposure no data available.

STOT - Repeated Exposure	no data available.
Chronic toxicity	Avoid repeated exposure.
Target organ effects	liver, kidney, Respiratory System, skin.
Aspiration hazard	No information available.

Numerical Measures of Toxicity - Product information

The following values are calculated based on chapter 3.1 of the GHS document .

LD50 Oral	498 mg/kg (rat)
LD50 Dermal	> 2000 mg/kg (rat)
LC50 Inhalation	0.81 mg/l (rat) (4-hr)

12. Ecological Information

Marine Pollutant.

ecotoxicity

Toxic to fish and aquatic invertebrates

Persistence/Degradability

no data available.

Bioaccumulation/ Accumulation

Bioaccumulative potential.

Chemical name	Log Pow
Ethylene diamine 107-15-3	-1.221

Other Adverse Effects

no data available

13. Disposal Considerations

Waste Treatment Methods

Waste Disposal Method	Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.
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Contaminated packaging

Refer to product label.

Chemical name	Ethylene diamine
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14. Transport Information

DOT	When shipped non-bulk domestically (US) the Marine pollutant marking is not required.
UN/ID no.	UN3010
Proper shipping name	Copper based pesticides liquid, toxic
Hazard class	6.1
Packing group	PG III
IMDG - Marine Pollutant	Marine Pollutant.

ICAO

UN/ID no.

UN3010

Proper shipping name	Copper based pesticides liquid, toxic
Hazard class	6.1
Packing group	PG III
Description	IMDG - Marine Pollutant

IATA

UN/ID no.	UN3010
Proper shipping name	Copper based pesticides liquid, toxic
Hazard class	6.1
Packing group	PG III
Description	IMDG - Marine Pollutant

IMDG

UN/ID no.	UN3010
Proper shipping name	Copper based pesticides liquid, toxic
Hazard class	6.1
Packing group	PG III
EmS No.	F-A,S-A
Environmental hazards	IMDG - Marine Pollutant

15. Regulatory Information

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. Following is the hazard information as required on the pesticide label:

signal word WARNING

Ventilation Control PESTICIDE APPLICATORS & WORKERS THESE WORKERS MUST REFER TO PRODUCT LABELING AND DIRECTIONS FOR USE IN ACCORDANCE WITH EPA WORKER PROTECTION STANDARD 40 CFR PART 170.

Keep out of Reach of Children. Causes moderate eye irritation. Harmful if inhaled or absorbed through skin. May be fatal if swallowed. Toxic to fish and aquatic invertebrates.

International Inventories

USINV	Not present
DSL/NDSL	Not present
EINECS/	Not Present
ELINCS	
ENCS	Not Present
China	Not Present
KECL	Not Present
PICCS	Not Present
AICS	Not Present
TSCA	Not Present

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Ethylene diamine 107-15-3	5000 lb			X

CERCLA

Not applicable

Chemical name	RQ	CERCLA EHS RQs	RQ
Ethylene diamine 107-15-3	5000 lb	5000 lb	RQ 5000 lb final RQ RQ 2270 kg final RQ

CERCLA

Component	RQ
Ethylene diamine 107-15-3 (15.13)	5000 lb

SARA Product RQ

0

Component	CERCLA EHS RQs
Ethylene diamine 107-15-3 (15.13)	5000 lb

RCRA

Pesticide Information

State Regulations

State Right-to-Know

Not applicable

International regulations

U.S. EPA Label information

EPA Pesticide registration number 70506-248

16. Other Information

<u>NFPA</u>	<u>HEALTH</u> 3	<u>flammability</u> 1	<u>Instability</u> 0	<u>Physical hazard</u> -
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Revision Summary

Update logo Update section 1 Update Section 16***

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