



# Safety Data Sheet

United Phosphorus, Inc.

Preparation Date 23-Apr-2015

Revision date 24-Feb-2017

Revision Number: 3

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

### Product identifier

**Product Description:** Current Aquatic Herbicide

### Other means of identification

**Item#:** 12P-0002  
**UN-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**

United Phosphorus 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 information 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 %	Trade secret
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 information available.

#### **Indication of Any Immediate Medical Attention and Special Treatment Needed**

**Notes to physician** Treat symptomatically.

### **5. Fire-fighting measures**

#### **Suitable extinguishing media**

Use: Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray. alcohol-resistant foam.

**Unsuitable extinguishing media** No information 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.

#### **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.

#### **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.

### **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.

#### **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 <sup>3</sup> (vacated) TWA: 10 ppm (vacated) TWA: 25 mg/m <sup>3</sup>

**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

<b>Physical state</b>	Liquid	<b>Odor</b>	No information available
<b>Appearance</b>	dark purple		
<b>color</b>	No information available		

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

### OTHER INFORMATION

<b>Softening point</b>	No information available
<b>molecular weight</b>	No information available
<b>VOC Content</b>	No information available
<b>density</b>	No information available
<b>Bulk density</b>	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 information available.

#### **Carcinogenicity**

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

#### **Reproductive effects**

Not Available.

**STOT - Single Exposure** No information available.  
**STOT - Repeated Exposure** No information 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 information available.

**Bioaccumulation/ Accumulation**

Bioaccumulative potential.

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

**Other Adverse Effects**

No information 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.

**Contaminated packaging**

Refer to product label.

Chemical name	Ethylene diamine
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**14. Transport Information**

**DOT**

**UN-No** UN3010  
**Proper shipping name** Copper based pesticides liquid, toxic  
**Hazard class** 6.1  
**Packing group** PG III  
**Marine Pollutant** Marine Pollutant.

**ICAO**

<b>UN-No</b>	UN3010
<b>Proper shipping name</b>	Copper based pesticides liquid, toxic
<b>Hazard class</b>	6.1
<b>Packing group</b>	PG III
<b>Description</b>	Marine Pollutant

**IATA**

<b>UN-No</b>	UN3010
<b>Proper shipping name</b>	Copper based pesticides liquid, toxic
<b>Hazard class</b>	6.1
<b>Packing group</b>	PG III
<b>Description</b>	Marine Pollutant

**IMDG/IMO**

<b>UN-No</b>	UN3010
<b>Proper shipping name</b>	Copper based pesticides liquid, toxic
<b>Hazard class</b>	6.1
<b>Packing group</b>	PG III
<b>EmS No.</b>	F-A,S-A
<b>Marine Pollutant</b>	Marine Pollutant

<b>15. Regulatory Information</b>
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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**

<b>USINV</b>	Does not comply
<b>DSL/NDSL</b>	Does not comply
<b>EINECS/ ELINCS</b>	Does not comply
<b>ENCS</b>	Does not comply
<b>China</b>	Does not comply
<b>KECL</b>	Does not comply
<b>PICCS</b>	Does not comply
<b>AICS</b>	Does not comply
<b>TSCA</b>	Does not comply

**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 40n of the Code of Federal Regulations, Part 372:

**SARA 311/312 Hazardous**

**Categorization**

Acute health hazard yes  
 Chronic health hazard yes  
 Fire hazard No  
 Sudden release of pressure hazard No  
 Reactive Hazard yes

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

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**

**International regulations**

**U.S. EPA Label information**

EPA Pesticide registration number 70506-248

**16. Other Information**

**NFPA** HEALTH 3 flammability 1 Instability 0 Physical hazard -

Preparation Date 23-Apr-2015  
 Revision date 24-Feb-2017

**Revision Summary**

Update section 14

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End of MSDS