



United Phosphorus, Inc.

<b>NFPA</b>	<b>PPE</b>	

Issued Date 24-Jan-2008

Revision Date 28-Mar-2014

Revision Number: 7

**1. PRODUCT AND COMPANY IDENTIFICATION**

**UPI**  
 630 Freedom Business Center  
 Suite 402  
 King of Prussia, PA 19406

**Emergency Telephone Number**  
 Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887  
 Medical: Rocky Mountain Poison Control Center  
 (866) 673-6671 (24hrs)

<u>Company Information</u>	<u>Contact Information</u>	<u>Phone Number</u>	<u>Available Hrs</u>
UPI	Customer Service R&D Technical Service	1-800-438-6071 610-878-6100	8:00 am to 5:00 pm EST 8:00 am - 5:00 pm (EST)
<b>Product Name</b>	Ethotron SC Herbicide		
<b>EPA Reg #</b>	70506-106 /PMRA # 28350		
<b>Recommended Use</b>	Herbicide		
<b>Product Code</b>	12U-139		

**2. HAZARDS IDENTIFICATION**

<b>Emergency Overview</b>		
May be harmful if swallowed May cause irritation of respiratory tract		
<b>CAUTION</b>		
<b>Appearance</b> Creamy, White.	<b>Physical State</b> Liquid.	<b>Odor</b> faint. Organic. Sulfur.

Potential Health Effects

<b>Eyes</b>	May cause slight irritation.
<b>Skin</b>	May cause mild skin irritation.
<b>Inhalation</b>	May cause irritation of respiratory tract.
<b>Ingestion</b>	May be harmful if swallowed.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients Name

Component	CAS-No	Weight %	OSHA PEL
Ethofumesate 26225-79-6 ( 42.0 )	26225-79-6	42.0	N/A

### 4. FIRST AID MEASURES

<b>Eye Contact</b>	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.
<b>Skin Contact</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. If symptoms persist, call a physician
<b>Inhalation</b>	If breathing is irregular or stopped, administer artificial respiration May cause allergic respiratory reaction Call a physician or poison control center immediately
<b>Ingestion</b>	Call a physician or poison control center immediately May produce an allergic reaction Do not induce vomiting unless told to do so by a poison control center or doctor Never give anything by mouth to an unconscious person
<b>Notes to Physician</b>	No information available

### 5. FIRE-FIGHTING MEASURES

#### Flammable Explosive Properties

<b>Flash Point</b>	Not applicable
<b>Autoignition Temperature</b>	Not available
<b>Flammability Limits in Air</b>	Not available
<b>Extnguishing Media</b>	Dry powder, Foam Carbon dioxide (CO2) Water.
<b>Fire/Explosion Hazard</b>	Keep product and empty container away from heat and sources of ignition
<b>Hazardous Combustion Products</b>	None known.
<b>NFPA</b>	<b>Health</b> 1 <b>Flammability</b> 0 <b>Instability</b> 0

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Avoid contact with the skin and the eyes. Use personal protective equipment.
<b>Environmental Precautions</b>	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 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

**Handling** Do not eat, drink or smoke when using this product. Wear personal protective equipment. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use.

**Storage** Keep from freezing. Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur.

## 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.

**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. 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.

### Personal Protective Equipment

#### **Eye/face Protection**

Where there is potential for eye contact have eye flushing equipment available. Use eye protection to avoid eye contact.

#### **Skin Protection**

Long sleeved clothing. Long pants. Chemical resistant gloves. Socks and footwear.

#### **Respiratory Protection**

Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection programs must comply with 29 CFR 1910.134.

### **General Hygiene Considerations**

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Creamy White	<b>Odor</b>	faint Organic Sulfur
<b>Physical State</b>	Liquid	<b>pH</b>	no data available
<b>Boiling Point/Range</b>	Not available	<b>Melting Point/Range</b>	Not available
<b>Specific Gravity</b>	1.14 g/ml (for A.I.)	<b>Solubility</b>	110 mg/l ( for A.I.)
<b>Evaporation Rate</b>	Not available	<b>Vapor pressure</b>	Not available
<b>Vapor Density</b>	Not available	<b>VOC Content</b>	Not available
<b>Viscosity</b>	Not available	<b>Molecular Weight</b>	no data available
<b>Bulk Density</b>	no data available	<b>Percent Solids</b>	Not available
<b>Percent Volatiles</b>	Not available		

## 10. STABILITY AND REACTIVITY

**Stability** Stable under recommended storage conditions

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<b>Conditions to Avoid</b>	Heat, flames and sparks
<b>Incompatible Materials</b>	No materials to be especially mentioned
<b>Hazardous Decomposition Products</b>	None under normal use
<b>Possibility of Hazardous Polymerization</b>	None under normal processing

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

<b>Product Information</b>	<b>Ethofumesate SC formulation:</b> <b>Acute oral LD50 (rat) = &gt;2,100 mg/kg</b> <b>Acute dermal LD50 (rat) = &gt; 4,1000 mg/kg</b> <b>Eye irritation = Slightly irritating</b>
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### Chronic Toxicity

<b>Carcinogenicity</b>	Ethofumesate: In two year feeding studies with animals, adverse effects were only observed at very high doses. These include, a reduced weight gain in males and increased liver weight in females (rats 5,000 ppm); an increase of liver weight in females (hamsters, 2,000 ppm); an increased liver weight in both males and females (dogs 20,000 ppm).  Reproductive and developmental toxicity: Demonstrated no adverse effects on reproduction in a three generation rat reproduction study.  Teratogenicity: No teratogenic effects were seen in rats at dose levels up to 8-0 mg/kg/day. In rabbits, no adverse effects of biological significance were observed at the low dose (30 mg/kg/day) slight embryolethal effects were noted at 300 mg/kg/day; severe maternal toxicity and moderate embryolethal effects were observed at the highest dose.
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## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not clean equipment or dispose of equipment washwaters in a manner that will contaminate water resources or arable land. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water by cleaning equipment or disposal of waste.

## 13. DISPOSAL CONSIDERATIONS

<b>Waste Disposal Method</b>	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**

Non refillable container. Do not reuse this container. Clean container promptly after emptying. [For containers smaller than 5 gallons] Triple rinse as follows: Empty the contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 3/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. [For containers larger than 5 gallons] Triple rinse or pressure rinse as follows:  
 Triple rinse: Empty the remaining contents into application equipment or a mix tank. Fill container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll back and forth, ensuring at least one complete revolution, for 30 seconds. Stand container on its end and tip back and forth several times. Empty rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.  
 Pressure rinse: Empty remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after flow begins to drip.  
 The offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

**14. TRANSPORT INFORMATION**

**DOT** Not regulated  
**ICAO** Not regulated  
**IATA** Not regulated  
**IMDG/IMO** Not regulated  
**TDG** Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

Chemical Name	TSCA	DSL	NDSL	EINECS/ ELINCS	ENCS	CHINA	KECL	AICS
Ethofumesate				X				X

**USA**

**Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazardous Categorization**

Chronic Health Hazard No  
 Acute Health Hazard Yes  
 Fire Hazard No  
 Sudden Release of Pressure Hazard No

Reactive Hazard

No

Clean Water Act

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any HAPs.

CERCLA

RCRA

Pesticide Information

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Ethofumesate 26225-79-6 ( 42.0 )			X	

State Regulations

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**State Right-to-Know**

International Regulations

**Mexico - Grade**

Mexico - Grade

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS Hazard Class**

Not determined

**16. OTHER INFORMATION**

**Revision Date**

28-Mar-2014

**Revision Summary**

Update Section 16

**Miscellaneous**

TDG regulations:

Not regulated

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**End of MSDS**