



Material Safety Data Sheet

United Phosphorus, Inc.

NFPA	PPE	

Issued Date 24-Jan-2008

Revision Date 23-Dec-2010

Revision Number: 5

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)

Company Information
 UPI

Contact Information
 Customer Service
 R&D Technical Service

Phone Number
 1-800-438-6071
 610-878-6100

Available Hrs
 8:00 am to 5:00 pm EST
 8:00 am - 5:00 pm (EST)

Product Name Ethotron SC Herbicide
EPA Reg # 70506-106 / 264-613-70506
Recommended Use herbicide
Product Code 12U-139

2. HAZARDS IDENTIFICATION

Emergency Overview
 May be harmful if swallowed
 May cause irritation of respiratory tract

CAUTION
Appearance Creamy, White.

Physical State Liquid.

Odor faint. Organic. Sulfur .

Potential Health Effects

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients Name

Chemical Name	CAS-No	Weight %	OSHA PEL
Ethofumesate	26225-79-6	42.0	N/A

4. 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

Take off contaminated clothing.
Rinse skin immediately with plenty of water for 15-20 minutes.
If symptoms persist, call a physician

Inhalation

Move person to fresh air.
If person is not breathing, call 911 or an ambulance, then give artificial respiration.
Call a physician or Poison Control Centre immediately

Ingestion

Call a physician or Poison Control Center immediately
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
Never give anything by mouth to an unconscious person

Notes to Physician

No information available

5. FIRE-FIGHTING MEASURES

Flammable Explosive Properties

Flash Point

Not applicable

Autoignition Temperature

Not available

Flammability Limits in Air

Not available

Extinguishing Media

Dry powder, Foam Carbon dioxide (CO2) Water.

Fire/Explosion Hazard

Keep product and empty container away from heat and sources of ignition

Hazardous Combustion Products

None known.

NFPA

Health 1

Flammability 0

Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with the skin and the eyes. Use personal protective equipment.
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 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

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

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions
Conditions to Avoid	Heat, flames and sparks
Incompatible Materials	No materials to be especially mentioned
Hazardous Decomposition Products	None under normal use
Possibility of Hazardous Polymerization	None under normal processing

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information

Ethofumesate SC formulation:
Acute oral LD50 (rat) = >2,100 mg/kg
Acute dermal LD50 (rat) = > 4,1000 mg/kg
Eye irritation = Slightly irritating

Chronic Toxicity

Carcinogenicity

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. .

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

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

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

15. REGULATORY INFORMATION

15. REGULATORY INFORMATION

International Inventories

Ethofumesate

EINECS/ELINCS

Listed

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

State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

State Right-to-Know

International Regulations

Mexico - Grade

Not available

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 23-Dec-2010

Revision Summary

Update section 13 Update section 8 Update section 2

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End of MSDS