






Material Safety Data Sheet

United Phosphorus, Inc.

NFPA	PPE	
		

Issued Date 19-Apr-2007

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Revision Number: 4

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)

UPI Company Information

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

EPA Reg #

Recommended Use

Product Code

Devrinol 2-EC Selective Herbicide
70506-64
herbicide
12U-118

2. HAZARDS IDENTIFICATION**Emergency Overview**

Flammable Liquid
May cause eye and skin irritation
May cause irritation to the respiratory tract.
Harmful if swallowed
Harmful if absorbed through skin

CAUTION**Appearance** Light brown.**Physical State** Liquid.**Odor** Not available**Potential Health Effects**

- Inhalation
- Skin contact

Eyes

Moderately irritating to the eyes.

Skin

May cause mild skin irritation.

Ingestion

Irritation to the mouth, pharynx, esophagus and stomach may result upon ingestion..

3. COMPOSITION/INFORMATION ON INGREDIENTS**Ingredients Name**

Chemical Name	CAS-No	Weight %	OSHA PEL
Hexanol	111-27-3	14	N/A
Devrinol technical (Napropamide)	15299-99-7	24.1	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.
Call 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.
Call a poison control center or doctor for further treatment advice.

Ingestion

Call a physician or Poison Control Center immediately
Have person sip a glass of water if able to swallow
Never give anything by mouth to an unconscious person
Do not induce vomiting unless told to do so by a poison control center or doctor

Notes to Physician

No information available

5. FIRE-FIGHTING MEASURES

Flammable Explosive Properties

Flash Point 70.4°C / 158.7°F
Autoignition Temperature Not available

Flammability Limits in Air Not available

Extnguishing Media Water spray Dry chemical Foam Carbon dioxide (CO2)

Fire/Explosion Hazard Combustible material Keep product and empty container away from heat and sources of ignition Thermal decomposition can lead to release of irritating gases and vapours

Hazardous Combustion Products Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by heat, pilot lights, and other flames and ignition sources at locations distant from material handling point. , Avoid breathing fumes from fire exposed material. .

NFPA **Health** 2 **Flammability** 2 **Instability** 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Remove all sources of ignition. Avoid contact with the skin and the eyes. Use personal protective equipment. Ensure adequate ventilation. Take precautionary measures against static discharges.

Environmental Precautions Keep material out of lakes, streams, ponds and sewer drains. Dike to confine spill and absorb with an absorbant such as clay, sand or soil. . 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 Remove all ignition sources. Ground and bond containers when transferring material. Use non-sparking tools . Prevent product from entering drains. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable and closed containers for disposal.

7. HANDLING AND STORAGE

Handling Remove all sources of ignition. Keep out of reach of children. Do not eat, drink or smoke when using this product. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Use spark resistant tools. Check that all equipment is properly bonded and grounded.. Wash thoroughly after handling. . Remove and wash contaminated clothing before re-use. Empty containers may contain hazardous residues.

Storage	Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur. . Keep away from open flames, hot surfaces and sources of ignition. Ensure that all storage and handling equipment is properly rated, grounded and installed to satisfy electrical classification requirements. Static electricity may accumulate and create fire hazard. All storage containers must be bonded and grounded during filling and emptying operations. . Keep containers tightly closed in a dry, cool and well-ventilated place.
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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

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. .
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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	Use eye protection to avoid eye contact. . Goggles. Where there is potential for eye contact have eye flushing equipment available..
Skin Protection	Long sleeved clothing. Long pants. waterproof gloves. Chemical resistant gloves. Socks and footwear.
Respiratory Protection	Avoid breathing dust. 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. Keep away from food, drink and animal feeding stuffs. Wash hands and face before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Light brown	Odor	Not available
Physical State	Liquid	pH	approx.6
Boiling Point/Range	Not available	Melting Point/Range	Not available
Specific Gravity	Not available	Solubility	Not available
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	9.91 lb/gal	Percent Solids	Not available
Percent Volatiles	Not available		

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions
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Conditions to Avoid	Keep away from open flames, hot surfaces and sources of ignition.
Incompatible Materials	oxidizers.
Hazardous Decomposition Products	Oxides of carbon and nitrogen. Ammonical vapors.
Possibility of Hazardous Polymerization	Hazardous polymerisation does not occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Devrinol 2 EC:
Acute oral LD50 = 2,419 mg/kg (rat)
Acute dermal LD50 = >2,000 mg/kg (rabbit)
Acute inhalation LC50 = >2.02 mg/L (4 hr, rat)
Eye Irritation = Moderate irritant
Skin = Moderately irritating to the skin
Systemic toxicity is not expected after dermal exposure.
Sensitization = Sensitizer

Chronic Toxicity

There are no known carcinogenic chemicals in this product

Carcinogenicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to fish.

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. . Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. Do not apply directly to wetlands or water..

Contaminated Packaging

Non refillable container. Do not reuse this container. . Clean container promptly after emptying. . Triple rinse as follows: Empty the 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 the flow begins to drip.

Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. .

14. TRANSPORT INFORMATION

DOT	When shipped domestically by highway in non-bulk containers this product can be shipped as not regulated.
Proper Shipping Name	Combustible liquid, n.o.s.
Hazard Class	COMB LIQUID
UN-No	NA1993
Packing Group	PG III
ICAO	Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated

15. REGULATORY INFORMATION**International Inventories**

Hexanol	
DSL	Listed
EINECS/ELINCS	Listed
ENCS	Listed
CHINA	Listed
KECL	Listed
Devrinol technical (Napropamide)	
EINECS/ELINCS	Listed
ENCS	Listed
CHINA	Listed
KECL	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

12U-118 - Devrinol 2-EC Selective Herbicide

Acute Health Hazard	Yes
Fire Hazard	Yes
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

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Hexanol		Substance no. 1001 Listed. Substance no. 2079 Listed.	Listed.		Listed.

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 22-Dec-2010

Revision Summary

Update section 13 Update section 8 Update section 2

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End of MSDS