



United Phosphorus, Inc.

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

Issued Date 17-Sep-2012

Revision Date 17-Sep-2012

Revision Number: 1

**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)

**Product Name** Devrinol DF-XT Selective Herbicide  
**EPA Reg #** 70506-36  
**Recommended Use** herbicide  
**Product Code** 12U-117X

**2. HAZARDS IDENTIFICATION**

<b>Emergency Overview</b>		
Causes moderate eye irritation Harmful by inhalation, in contact with skin and if swallowed		
<b>CAUTION</b>		
<b>Appearance</b> Tan.	<b>Physical State</b> Granular.	<b>Odor</b> Not available.

**Potential Health Effects**

- Inhalation
  - Skin contact
- Eyes** Contact with eyes may cause irritation.  
**Skin** Substance may cause slight skin irritation.  
**Inhalation** May cause irritation of respiratory tract.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients Name

Chemical Name	CAS-No	Weight %	OSHA PEL
Kaolin	1332-58-7	31.95	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction
Napropamide	15299-99-7	50	N/A
Titanium dioxide	13463-67-7	5	TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 10 mg/m <sup>3</sup> total dust

### 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 Call poison control center or doctor for treatment advice.
<b>Inhalation</b>	If breathing is irregular or stopped, administer artificial respiration May cause allergic respiratory reaction Toxic by inhalation Call a poison control center or doctor for further treatment advice.
<b>Ingestion</b>	Call a physician or poison control center immediately May produce an allergic reaction 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
<b>Notes to Physician</b>	No information available

### 5. FIRE-FIGHTING MEASURES

#### Flammable Explosive Properties

<b>Flash Point</b>	Not available
<b>Autoignition Temperature</b>	Not available
<b>Flammability Limits in Air</b>	Not available
<b>Extnguishing Media</b>	Water spray Dry chemical Foam Carbon dioxide (CO2)
<b>Fire/Explosion Hazard</b>	Thermal decomposition can lead to release of irritating gases and vapours

Hazardous Combustion Products

No information available.

NFPA

Health 1

Flammability 0

Instability 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.
<b>Methods for Clean-up</b>	Prevent product from entering drains. Sweep up and shovel into suitable containers for disposal.

## 7. HANDLING AND STORAGE

<b>Handling</b>	Keep in a well-ventilated place. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Keep out of reach of children. Remove and wash contaminated clothing before re-use.
<b>Storage</b>	Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur. Keep in a dry, cool and well-ventilated place. Keep in properly labelled containers.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Guidelines

<b>Chemical Name</b>	Kaolin
<b>ACGIH TLV</b>	TWA: 2 mg/m <sup>3</sup> particulate matter containing no asbestos and <1% crystalline silica, respirable fraction
<b>OSHA PEL</b>	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction
<b>Chemical Name</b>	Titanium dioxide
<b>ACGIH TLV</b>	TWA: 10 mg/m <sup>3</sup>
<b>OSHA PEL</b>	TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 10 mg/m <sup>3</sup> total dust

### 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

Use eye protection to avoid eye contact. Eye contact should be avoided through the use of chemical safety glasses, goggles, or a faceshield selected in regard to exposure potential. Where there is potential for eye contact have eye flushing equipment available.

#### 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 before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Tan	<b>Odor</b>	Not available
<b>Physical State</b>	Granular	<b>pH</b>	6.5-8.5
<b>Boiling Point/Range</b>	Not available	<b>Melting Point/Range</b>	Not available
<b>Specific Gravity</b>	Not available	<b>Solubility</b>	Not available
<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>	30-40 lb/cu. ft	<b>Percent Solids</b>	Not available
<b>Percent Volatiles</b>	Not available		

## 10. STABILITY AND REACTIVITY

### Stability

Stable under recommended storage conditions

<b>Conditions to Avoid</b>	No information available
<b>Incompatible Materials</b>	oxidizers
<b>Hazardous Decomposition Products</b>	Thermal decomposition can lead to release of irritating gases and vapours
<b>Possibility of Hazardous Polymerization</b>	Hazardous polymerisation does not occur

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

<b>Product Information</b>	<b>Devrinol DF-XT:</b> Acute oral LD50 = >5,000 mg/kg (female rat) Acute dermal LD50 = >5,000 mg/kg (rat) Acute inhalation LC50 = >2.32.mg/L Skin irritation = Slightly irritating Eye irritation = Mildly irritating, clearing within 72 hours Dermal Sensitization = Not a sensitizer
----------------------------	---

<b>Component Information</b>	Devrinol 50 Inhalation of overwhelming amounts of kaolin dust after many years of exposure induced pneumoconiosis in workers. There is no evidence of mutagenic or clastogenic potential. Studies in animals have shown that this product is not a developmental toxicant.
------------------------------	---

### Chronic Toxicity

<b>Carcinogenicity</b>	The information below indicates whether any agency has listed any ingredient as a carcinogen.
------------------------	---

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide		Group 2B		X

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Toxic to fish.

## 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.
------------------------------	---

**Contaminated Packaging** Non refillable container. Do not reuse this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag 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** Not regulated  
**ICAO** Not regulated  
**IATA** Not regulated  
**IMDG/IMO** Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

Chemical Name	TSCA	DSL	NDSL	EINECS/ ELINCS	ENCS	CHINA	KECL	AICS
Kaolin	Present	X		X	(1)-20	X	KE-21772	X
Napropamide				X	(9)-2333	X	KE-10499; KE-05-0908	X
Titanium dioxide	Present	X		X	(5)-5225 (1)-558	X	KE-33900	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**

12U-117X  
 Devrinol DF-XT Selective Herbicide

**RCRA**

**Pesticide Information**

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Kaolin 1332-58-7 ( 31.95 )			X	
Napropamide 15299-99-7 ( 50 )			X	
Titanium dioxide 13463-67-7 ( 5 )			X	

**State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	Category	California Prop. 65	Non-additive, corrosive chemical type
Titanium dioxide	13463-67-7	Carcinogen	Carcinogen	

**State Right-to-Know**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Kaolin	X	X	X		
Titanium dioxide	X	X	X		

**International Regulations**

**Mexico - Grade**

Mexico - Grade

Component	Category	Carcinogen Status	Exposure Limits
Kaolin 1332-58-7 ( 31.95 )			Mexico: TWA 10 mg/m <sup>3</sup> Mexico: STEL 20 mg/m <sup>3</sup>
Titanium dioxide 13463-67-7 ( 5 )	Carcinogen		Mexico: TWA 10 mg/m <sup>3</sup> Mexico: STEL 20 mg/m <sup>3</sup>

**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** 17-Sep-2012

**Revision Summary**

Add to system

UPI, Inc. believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with other materials or in any process. Further, since the conditions and methods of use are beyond the control of UPI, Inc. UPI, Inc. expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.

**End of MSDS**