



MATERIAL SAFETY DATA SHEET

United Phosphorus, Inc.

NFPA	PPE	

Issued Date 06-Jan-2015

Revision date 06-Jan-2015

Revision Number: 1

1. PRODUCT AND COMPANY IDENTIFICATION

UPI

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

Company Information

Emergency telephone number

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

Contact Information

Phone number

Available Hrs

UPI

Customer Service 1-800-438-6071
R&D Technical Service 610-878-6100

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

Product name

EPA Reg

Recommended use

Product code

Devrinol DF-XT Selective Herbicide
PMRA No. 31081
Herbicide
12U-117XCAN

2. Hazards Identification

EMERGENCY OVERVIEW

Causes moderate eye irritation
Harmful by inhalation, in contact with skin and if swallowed
irritant
Very toxic in contact with skin
Very toxic if swallowed

DANGER

appearance tan.

Physical state granular.

Odor Not Available.

Potential health effects

- Inhalation
- Skin Contact

EYES

skin

Inhalation

Ingestion

Contact with eyes may cause irritation.
Substance may cause slight skin irritation. Very toxic in contact with skin.
May cause irritation of respiratory tract.
Very toxic if swallowed.

3. Composition/information on Ingredients

Ingredients Name

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

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. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes
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. Call a physician immediately Wash off immediately with plenty of water for at least 15 minutes Remove and wash contaminated clothing before re-use
Inhalation	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.
Ingestion	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 Call a physician immediately Do not induce vomiting without medical advice
Notes to physician	No information available

5. Fire-fighting measures

Flammable Explosive Properties

flash point	Not Available
Autoignition temperature	Not Available
Flammability Limits in Air	Not available
Extnguishing Media	Water spray Dry chemical Foam Carbon dioxide (CO2)

Fire/Explosion Hazard		Thermal decomposition can lead to release of irritating gases and vapours	
Hazardous combustion products		No information available.	
NFPA	HEALTH 4	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	Prevent product from entering drains. Sweep up and shovel into suitable containers for disposal.

7. Handling and Storage

Handling	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.
Storage	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. Keep containers tightly closed in a cool, well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines

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

Respiratory protection

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

appearance	tan	Odor	Not Available
Physical state	granular	pH	6.5-8.5 6.41
Boiling Point/Range	Not Available	Melting Point/Range	7.41 °C / 45 °F
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	30-40 lb/cu. ft	Percent Solids	Not Available
Percent Volatiles	Not Available		

10. Stability and Reactivity

stability	Stable under recommended storage conditions
Conditions to avoid	No information available
incompatible materials	OXIDIZERS

Hazardous decomposition products	Thermal decomposition can lead to release of irritating gases and vapours
Possibility of Hazardous Polymerization	Hazardous polymerisation does not occur

11. Toxicological Information

Acute toxicity

Product information	Devrinol DF-XT: 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
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Component Information	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.
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Chronic toxicity

Carcinogenicity	The information below indicates whether any agency has listed any ingredient as a carcinogen.
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Chemical name	ACGIH	IARC	NTP	OSHA
Titanium dioxide		Group 2B		X

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.
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

<u>DOT</u>	NOT REGULATED
<u>ICAO</u>	NOT REGULATED

12U-117XCAN
Devrinol DF-XT Selective Herbicide

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
Kaolin	Present	X		X	Present	X	Present	X
Napropamide				X	Present	X	Present	X
Titanium dioxide	Present	X		X	Present	X	Present	X

USA

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

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

SARA Product RQ 0

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	

12U-117XCAN
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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 Severe risk, Grade 4

Component	CATEGORY	Carcinogen Status	Exposure limits
Kaolin 1332-58-7 (31.95)			Mexico: TWA 10 mg/m ³ Mexico: STEL 20 mg/m ³
Titanium dioxide 13463-67-7 (5)	Carcinogen		Mexico: TWA 10 mg/m ³ Mexico: STEL 20 mg/m ³

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

The preparation is classified as dangerous in accordance with Directive 1999/45/EC

16. Other Information

Revision date 06-Jan-2015

Revision Summary

Add to system

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End of MSDS