

Safety Data Sheet

United Phosphorus, Inc.

Preparation Date 27-Apr-2015

Revision date 05-Nov-2015

Revision Number: 2

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier Product Description:

Devrinol DF-XT Ornamental Herbicide

Other means of identification Item#: Synonyms Registration number(s)

12U-117AA Not Available 70506-38

Recommended use of the chemical and restrictions on useRecommended useHerbicide.Uses advised againstActivities contrary to label recomendation

Details of the Supplier of the Safety Data SheetSupplier AddressUnited Phosphorus Inc.630 Freedom Business CenterSuite 402King of Prussia, PA 19406Emergency telephone numberCompany Phone NumberEmergency telephone numberChemtrec: (800) 424-9300 (24hrs) or (703) 527-3887Medical: Rocky Mountain Poison Control Center(866) 673-6671 (24hrs)

2. Hazards Identification

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Vapors)	Category 3

Label elements

	EMERGENCY OVERVIEW	
DANGER		
hazard statements Toxic if inhaled		
appearance Tan	Physical state granular	Odor No information available

Precautionary Statements - Prevention

Do not get in eyes, on skin, or on clothing Use only outdoors or in a well-ventilated area

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)

OTHER INFORMATION

Causes mild skin irritation

• May be harmful in contact with skin

3. Composition/information on Ingredients

Chemical name	CAS-No	Weight %	Trade secret
Kaolin	1332-58-7	35	
Napropamide	15299-99-7	50	

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. First aid measures

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	Rinse skin immediately with plenty of water for 15-20 minutes. Call poison control center or doctor for treatment advice. Remove and wash contaminated clothing before re-use.	
Inhalation	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.	
Ingestion	Call a physician or poison control center immediately. May produce an allergic reaction. Never give anything by mouth to an unconscious person. Clean mouth with water. Seek immediate medical attention/advice. Do not induce vomiting without medical advice.	
Most Important Symptoms and Effe	ects, Both Acute and Delayed	
Most Important Symptoms and Effects	No information available.	
Indication of Any Immediate Medical Attention and Special Treatment Needed		
Notes to physician	No information available.	
5. Fire-fighting measures		

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

No information available.

Hazardous combustion productsNo information available.

Explosion data

Protective equipment and precautions for firefighters

Use personal protective equipment. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures		
Personal precautions, protective ed	quipment and emergency procedures_	
Personal Precautions	Avoid contact with the skin and the eyes. Wear protective gloves/clothing and eye/face protection.	
Environmental Precautions		
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 pertinenet environmental permits.	
Methods and material for containment and cleaning up		
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		
Precautions for safe handling		
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.	
Conditions for safe storage, including any incompatibilities		
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.	
incompatible materials	No information available.	
	8. Exposure Controls/Personal Protection	

Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL
Kaolin	TWA: 2 mg/m ³ particulate	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction
	matter containing no asbestos and <1%	(vacated) TWA: 10 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction
	crystalline silica, respirable fraction	
Engineering controls		chniques to reduce exposures. Local mechanical exhaust onsult ACGIH ventilation manual or NFPA Standard 91 for design
Personal protective equipment Eye/Face Protection	Use eye protection to avoid eye contact. Where there is potential for eye contact have flushing equipment available. Safety glasses with side-shields.	

Skin protection Respiratory protection	Wear protective gloves/clothing. 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.
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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. Wear suitable gloves and eye/face protection.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state appearance color	granular Tan No information available	Odor	No information available
Property	VALUES	Remarks/ • Method	
pH	6.41		
Melting point/freezing point	7.41 °C / 45 °F No information available		
Boiling Point/Range Flash Point	No information available		
Evaporation Rate	No information available		
flammability (solid, gas)	No information available		
Flammability limit in air	No information available		
Upper Flammability Limit	No information available		
Lower Flammability Limit	No information available		
vapor pressure	No information available		
Vapor Density	No information available		
Specific gravity	No information available		
Water solubility	No information available		
Solubility in Other Solvents	No information available		
Partition coefficient: n-octanol/wate	erNo information available		
Autoignition temperature	No information available		
decomposition temperature	No information available		
Viscosity, kinematic	No information available		
Dynamic viscosity	No information available		
Explosive properties	No information available		
Oxidizing properties	No information available		
OTHER INFORMATION			
Softening point molecular weight VOC Content density Bulk density	No information available No information available No information available No information available 28-34 lb/cu. ft		

10. Stability and Reactivity

Reactivity no data available

Chemical stability

Stable under recommended storage conditions. Possibility of hazardous reactions

None under normal processing. Conditions to avoid No information available. incompatible materials No information available. Hazardous decomposition products Thermal decomposition can lead to release of irritating gases and vapours.

11. Toxicological Information

Information on Likely Routes of Exposure

Product information Devrinol 50 DF : Acute oral LD50 (rat) = >5000 mg/kg Acute dermal LD50 (rat) = >5000 mg/kg Acute inhalation LC50 (rat) = >2.32 mg/L Skin irritation = Slightly irritating Eye irritation = Mildly irritating, clearing within 72 hours Dermal sensitization = Not a sensitizer Inhalation Harmful by inhalation. Eye contact Irritating to eyes. Skin contact May cause irritation. Ingestion MAY BE HARMFUL IF SWALLOWED. **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 anmials have shown that this product is not a developmental toxicant. Information on Toxicological Effects

Delayed and immediate effects	as well as chronic effects from short and long-term exposure
sensitization	No information available.
Mutagenic effects	No information available.
Carcinogenicity	There are no known carcinogenic chemicals in this product.
Reproductive effects	Not Available.
STOT - Single Exposure	No information available.
STOT - repeated exposure	No information available.
Target organ effects	Respiratory System.
Aspiration hazard	No information available.

No information available.

Numerical Measures of Toxicity - Product information

LD50 Oral	>	5000	mg/kg (rat)
LD50 Dermal	>	5000	mg/kg (rat)
LC50 Inhalation:	>	2.32	mg/l (rat)

12. Ecological Information

ecotoxicity

Symptoms

Toxic to fish

Persistence/Degradability No information available.

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Bioaccumulation/Accumulation

No information available.

Other Adverse Effects

No information available

13. Disposal Considerations		
Waste Treatment Methods		
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	Refer to product label.	

14. Transport Information

NOT REGULATED
NOT REGULATED
NOT REGULATED
NOT REGULATED

15. Regulatory Information

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

signal word	CAUTION

Ventilation Control

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.

Keep out of Reach of Children. Harmful if inhaled or absorbed through skin. Harmful if swallowed. Causes moderate eye irritation.

International Inventories	
USINV	Not determined
DSL/NDSL	Not determined
EINECS/	Does not comply
ELINCS	
ENCS	Does not comply
China	Complies
KECL	Complies

PICCS	Does not comply
AICS	Complies
TSCA	Does not comply

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances ENCS - Japan Existing and New Chemical Substances IECSC - China Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances AICS - Australian Inventory of Chemical Substances

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 and Title 40n of the Code of Federal Regulations, Part 372:

SARA 311/312 Hazardous	
Categorization	
Acute health hazard	yes
Chronic health hazard	NO
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CERCLA	
SARA Product RQ	0

RCRA Pesticide Information

State Regulations

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island	
Kaolin	Х	Х	Х			
nternational regulations I.S. EPA Label information PA Pesticide registrations PA P	ion	i -				
16. Other Information						
IFPA	HEALTH 1	flammability 0	Instability 0	Phy	vsical hazard -	
reparation Date evision date evision Summary pdate section 3 <u>isclaimer</u> nited Phosphorus, Inc. tatements) are accurate (ARRANTY OF MERCH HE INFORMATION PRO	e as of the date hereo ANTABILITY, OR AN	015 ormation and recomi f. NO WARRANTY O Y OTHER WARRANT information provide	F FITNESS FOR ANY Y, EXPRESSED OR II d herein relates only	PARTICULAR MPLIED, IS MAI to the specific	PURPOSE, DE CONCERNING product designate	

such information.

End of MSDS