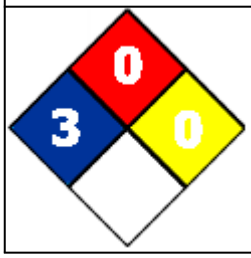
MATERIAL SAFETY DATA SHEET

United Phosphorus, Inc.

NFPA	PPE
	 

Issued Date 13-Dec-2012 **Revision date** 31-Mar-2014 **Revision Number:** 2

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	Contact Information	Phone number	Available Hrs
UPI	Customer Service	1-800-438-6071	8:00 am to 5:00 pm EST
	R&D Technical Service	610-878-6100	8:00 am - 5:00 pm (EST)

Product name Tricor 75 DF Herbicide (CANADA)
EPA Reg # PMRA PCP No. 30661
Recommended use Herbicide
Product code 12U-144C

2. Hazards Identification

EMERGENCY OVERVIEW

May cause eye and skin irritation
May cause irritation to the respiratory tract.
irritant
May cause drowsiness and dizziness
Very toxic in contact with skin
Very toxic if swallowed
corrosive

DANGER

appearance light, tan. **Physical state** granular. **Odor** sweet. Musty.

Potential health effects

EYES May cause slight irritation.
skin May cause mild skin irritation. Very toxic in contact with skin.
Ingestion Very toxic if swallowed.

3. Composition/information on Ingredients

Ingredients Name

Component	CAS-No	Weight %	OSHA PEL
Silicon dioxide 112926-00-8 (1)	112926-00-8	1	(vacated) TWA: 6 mg/m^3 TWA: 20 mppcf : (80)/(% SiO2) mg/m^3 TWA
Metribuzin technical 21087-64-9 (75)	21087-64-9	75	(vacated) TWA: 5 mg/m^3

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
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
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
Treat symptomatically

5. Fire-fighting measures

Flammable Explosive Properties

flash point Not Applicable
Autoignition temperature Not Available

Flammability Limits in Air Not available

Extnguishing Media Dry chemical, Water.

Fire/Explosion Hazard Dust clouds generated during handling and/or storage can form explosive mixtures with air. Dust explosion characteristics vary with the particle size, particle shape, moisture content, contaminants, and other variables.

Hazardous combustion products Dust clouds generated during handling and/or storage can form

explosive mixtures with air. Dust explosion characteristics vary with the particle size, particle shape, moisture content, contaminants, and other variables.

As with any dry material, pouring this material or allowing it to free fall or be conveyed through chutes or pipes can accumulate and generate electrostatic sparks, potentially causing ignition of the material itself, or any flammable materials which may come into contacft with the material or its contianer. Check that all equipment is properly grounded and installed to satisfy electrical classification requirements, Carbon dioxide (CO2), Sulfur oxides, Methyl mercaptan, Amines.

NFPA **HEALTH** 3 **flammability** 0 1 **Instability** -

6. Accidental release measures

Personal Precautions Avoid contact with the skin and the eyes.

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 for Clean-Up Sweep up and shovel into suitable containers for disposal.

7. Handling and Storage

Handling Keep out of reach of children. Provide adequate ventilation. Fine dust dispersed in air may ignite.

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL
Silicon dioxide		(vacated) TWA: 6 mg/m³ TWA: 20 mppcf : (80)/(% SiO2) mg/m³ TWA
Metribuzin technical	TWA: 5 mg/m³	(vacated) TWA: 5 mg/m³

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 Eye contact should be avoided through the use of chemical safety glasses, goggles, or a faceshield selected in regard to exposure potential.

Skin protection Wear protective gloves/clothing. 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.

9. Physical and Chemical Properties

appearance	light tan	**Odor**	sweet Musty
Physical state	granular	**pH**	8.9
Boiling Point/Range	Not Available	**Melting Point/Range**	9.9 °C / 50 °F
Specific gravity	Not Available	**solubility**	1100 ppm @ 20 C (metribuzin)
evaporation rate	Not Available	**vapor pressure**	1.2 X 10 - 7 mmHg @ 20 C
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 normal conditions

Conditions to avoid Sustained temperatures above 100 F

incompatible materials ketones Aldehydes

Hazardous decomposition products Carbon dioxide (CO2) Oxides of sulfur Amines Methyl mercaptans

Possibility of Hazardous Polymerization None under normal processing

11. Toxicological Information

Acute toxicity

Product information

TriCor DF-
Acute oral LD50 rat = 2379 mg/kg (male) 2794 mg/kg (female)
Acute dermal LD50 rabbit = >5,000 mg/kg
Eye - rabbit = Minimal irritation to the conjunctiva was observed with all irritation resolving witin 4 days.
Skin effects- rabbit = Not a dermal irritant Metribuzin -
In a three week dermal toxicity study, rabbits were treated with metribuzin at doses of 40, 200, and 1000 mg/kg for 6 hr/dy, 5 dys/wk. The high dose evidence of increased cholesterol levels and liver enzyme function was noted. Thyroxine levels were increased at doses of 200 mg/kg and above. All of these effects were slight and reversible. The NOEL was 40 mg/kg. In subacute inhalation studies, rats were exposed to aerosol concentrations of metribuzin ranging from 31 to 745 mg/cubic meter for 6 hr/dy, 5 dys/wk, for 3 weeks. Effects observed included behavioral changes, decreased body weight gains, liver enzyme induction and organ weight effects. The NOEC was 31 mg/cubic meter.

Oral LD50 (rat) = 2,194 mg/kg
Dermal LD50 (rat) = >5,000 mg/kg
Inhalation LC50 (4 hr rat) = 0.709 mg/L

Chronic toxicity

Carcinogenicity

The information below indicates whether any agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Silicon dioxide		Group 3		

12. Ecological Information

ecotoxicity

Metribuzin - can travel (seep or leach) through soil and can comtaminate ground water which may be used as drinking water.

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. (For plastic containers). Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application requipment or a 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. The offer for recycling if avilable or puncture and dipose of in a sanitary landfill, or by incineration, or, if allowed by

state and local authorities, by burning. If burned, stay out of smoke. (For paper bags). 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

TDG NOT REGULATED

15. Regulatory Information

International Inventories

Chemical name	TSCA	DSL	NDSL	EINECS/ ELINCS	ENCS	China	KECL	AICS
Silicon dioxide		X			Present	X	Present	X
Metribuzin technical				X		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 and Title 40n of the Code of Federal Regulations, Part 372:

Chemical name	CAS-No	Weight %	SARA 313 - Threshold Values
Metribuzin technical	21087-64-9	75	1.0

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
Silicon dioxide 112926-00-8 (1)			X	

Metribuzin technical 21087-64-9 (75)			X	

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
Silicon dioxide	X	X	X		
Metribuzin technical	X	X	X		

International regulations

Mexico - Grade Severe risk, Grade 4

Component	CATEGORY	Carcinogen Status	Exposure limits
Silicon dioxide 112926-00-8 (1)			Mexico: TWA 10 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 31-Mar-2014

Revision Summary
Update section 14

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End of MSDS