



Safety Data Sheet

United Phosphorus, Inc.

Preparation Date 26-Jun-2017

Revision date 26-Jun-2017

Revision Number: 2

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

Product identifier

Product Description: Tripzin ZC Herbicide

Other means of identification

Item#: 12-PMFORM

UN-No UN3082

Registration number(s) 70506-330

Recommended use of the chemical and restrictions on use

Recommended use Herbicide.

Uses advised against Non labeled activities

Details of the Supplier of the Safety Data Sheet

Supplier Address

United Phosphorus Inc.
630 Freedom Business Center
Suite 402
King of Prussia, PA 19406

Emergency telephone number

Company Phone Number

1-800-438-6071

Emergency telephone number

Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887

Medical: 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)

Skin sensitization

Category 1

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard Statements

May cause an allergic skin reaction



Appearance Opaque

Physical state Liquid

Odor faint

Precautionary Statements - Prevention

Do not get in eyes, on skin, or on clothing
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves

IF ON SKIN: Wash with plenty of soap and water
 If skin irritation or rash occurs: Get medical advice/attention
 Wash contaminated clothing before reuse

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)**OTHER INFORMATION**

- May be harmful in contact with skin
- Very toxic to aquatic life with long lasting effects
- Very toxic to aquatic life

3. Composition/information on Ingredients

Chemical name	CAS-No	Weight %	Trade secret
Pendimethalin [N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzeneamine]	40487-42-1	29.75	
Metribuzin	21087-64-9	11.25	

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 a 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 poison control center or doctor for further treatment advice.
Ingestion	Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

Most Important Symptoms and Effects, 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 Treat symptomatically.

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

Do not mix or allow contact with oxidizing agents as a hazardous chemical reaction may occur.

Hazardous combustion products Carbon monoxide. Carbon dioxide (CO2). Oxides of nitrogen. Hydrocarbons.

Explosion data

Protective equipment and precautions for firefighters

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 equipment and emergency procedures

Personal Precautions Avoid contact with skin and eyes. Provide adequate ventilation. Remove all sources of ignition. Use personal protective equipment.

Environmental Precautions

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.

Methods and material for containment and cleaning up

Methods for Clean-Up Follow all label instructions regarding spill clean-up and residual disposal methods.

7. Handling and Storage

Precautions for safe handling

Handling Avoid contact with skin and eyes. Keep away from open flames, hot surfaces and sources of ignition. Do not eat, drink or smoke when using this product. Provide adequate ventilation. Wash thoroughly after handling. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities

Storage If stored below 0 C or above 40 C for extended periods of time changes to the product properties may occur. Keep containers tightly closed in a cool, well-ventilated place.

incompatible materials Corrosive effect on brass, mild steel. Do not mix or allow contact with oxidizing agents as a hazardous chemical reaction may occur.

8. Exposure Controls/Personal Protection

Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL
Metribuzin	TWA: 5 mg/m ³	(vacated) TWA: 5 mg/m ³

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.

Personal protective equipment

Eye/Face Protection Where there is potential for eye contact have eye flushing equipment available. Use eye protection to avoid eye contact.

Skin protection Long sleeved clothing. Chemical resistant gloves.

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. Remove and wash contaminated clothing before re-use. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection. Wash hands and face before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state	Liquid	Odor	faint
Appearance	Opaque		
color	yellow-orange		

<u>Property</u>	<u>VALUES</u>	<u>Remarks/ • Method</u>
pH	7.3	
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash Point	No information available	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability limit in air		
Upper Flammability Limit	No information available	
Lower Flammability Limit	No information available	
vapor pressure	No information available	
Vapor Density	No information available	
Specific gravity	1.122	
Water solubility	No information available	
Solubility in Other Solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity, kinematic	No information available	
Dynamic viscosity	153.2@ 20C	
Explosive properties	No information available	
Oxidizing properties	No information available	

OTHER INFORMATION

Softening point	No information available
molecular weight	No information available
VOC Content	No information available
density	No information available
Bulk density	No information available

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

Extremes of temperature and direct sunlight.

incompatible materials

Corrosive effect on brass, mild steel. Do not mix or allow contact with oxidizing agents as a hazardous chemical reaction may occur.

Hazardous decomposition products

None under normal use conditions.

11. Toxicological Information**Information on Likely Routes of Exposure****Product information**

Tripzin:
Acute oral LD50 (rat) =>5000 mg/kg
Acute dermal LD50 (rabbit/rat) = >5000 mg/kg
Acute inhalation LC50 (rat)= >2.21 mg/L (4 hr) No deaths

Inhalation	May cause irritation of respiratory tract. May be harmful if inhaled.
Eye contact	May cause slight irritation.
Skin contact	Substance may cause slight skin irritation.
Ingestion	MAY BE HARMFUL IF SWALLOWED.

Information on Toxicological Effects

Symptoms No information available.

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	Metribuzin carcinogenicity - Metribuzin was investigated for carcinogenicity in chronic feeding studies using rats and mice at maximum levels of 900 and 3200 ppm, respectively. There was no evidence of carcinogenic potential observed in either species.
	Mutagenicity - Metribuzin is not genotoxic
	Developmental toxicity - In rat teratology studies, metribuzin was administered orally during gestation at doses of 25, 70, or 200 mg/kg. Maternal toxic effects were observed at all doses. At 200 mg/kg fetotoxic effects observed included reduced median placental weights, reduced median fetal weights, and increased incidence of delayed ossification. Teratogenic effects were not observed at any of the doses tested. The NOEL's for maternal and developmental toxicity were less than 25 and 70 mg/kg, respectively. When rabbits were administered metribuzin by oral gavage during gestation at doses of 10, 30, or 85 mg/kg, there was no evidence of any developmental effects. The NOEL's for maternal and developmental toxicity were 30 and 85 mg/kg respectively.
	Reproduction - In a rat reproduction study, metribuzin was administered for 2 generations at dietary concentrations of 30, 150 or 750 ppm. Offspring at the high dose exhibited reduced body weight gains starting at day 14 lactation, an age correlating with the consumption of treated diets. The NOEL's for materials and reproductive toxicity were 30 and 750 ppm, respectively.
Reproductive effects	Not Available.
STOT - Single Exposure	No information available.
STOT - Repeated Exposure	No information available.
Target organ effects	liver, Central Nervous System (CNS), Thyroid.
Aspiration hazard	No information available.

Numerical Measures of Toxicity - Product information

LD50 Oral > 5,000 mg/kg (rat)
 LD50 Dermal > 5,000 mg/kg (rat)

12. Ecological Information

Marine Pollutant.

ecotoxicity

Pendimethalin:

Rainbow trout 96 hr LC50 = 0.89 mg/L
 Daphnia Magna 48 hr EC50 = 0.979 mg/L
 Green algae 72 hr EC50 = 0.0081 mg/L
 Mallard duck LD50 = 1421 mg/kg
 Honey Bee LD50 = 49.8 ug/bee

Persistence/Degradability

No information available.

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**DOT**

Not regulated when shipped domestically by highway in non-buk containers as per 49 CFR 171.4

UN-No

UN3082

Proper shipping name

Environmentally hazardous substance, liquid, n.o.s (Pendimethalin)

Hazard class

9

Packing group

PG III

Marine Pollutant

Marine Pollutant.

TDG

When shipped in Canada domestic highway non-bulk this product can be shipped as Not regulated as per TDG 1.45.1
 In bulk - use IMDG description

ICAO

UN-No	UN3082
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s (Pendimethalin)
Hazard class	9
Packing group	PG III
Description	Marine Pollutant

IATA

UN-No	UN3082
Proper shipping name	Environmentally hazardous substances, liquid, n.o.s (Pendimethalin)
Hazard class	9
Packing group	PG III
Description	Marine Pollutant

IMDG/IMO

UN-No	UN3082
Hazard class	9
Packing group	PG III
Marine Pollutant	Marine Pollutant

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

Harmful if swallowed. Harmful if inhaled or absorbed through skin. Toxic to fish.

International Inventories

USINV	Does not comply
DSL/NDL	Does not comply
EINECS/	Does not comply
ELINCS	
ENCS	Does not comply
China	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply
TSCA	Does not comply

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - 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 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

State Right-to-Know

International regulations

U.S. EPA Label information

EPA Pesticide registration number 70506-330

16. Other Information

NFPA HEALTH 1 flammability 0 Instability 0 Physical hazard -

Preparation Date 26-Jun-2017

Revision date 26-Jun-2017

Revision Summary

Add to system

Disclaimer

United Phosphorus, Inc. believes that the information and recommendations container 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 United Phosphorus , Inc. and United Phosphorus 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