



Safety Data Sheet

Preparation Date 26-Jun-2017

Revision date 20-Nov-2024

Revision Number: 7

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

Identification of the product

Product Description Tripzin ZC Herbicide

Other means of identification

Internal SDS code 12-PMFORM

UN/ID 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

UPL NA Inc.
PO Box 12219
Research Triangle Park, NC 27709-12219

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 and Drug Safety (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 (Dusts/Mists)	Category 4
Skin sensitization	Category 1
Specific target organ toxicity (repeated exposure)	Category 2

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard Statements

May cause an allergic skin reaction
Harmful if inhaled
Causes damage to organs through prolonged or repeated exposure
(Blood)

**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

Precautionary Statements - Response

Get medical advice/attention if you feel unwell
 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
 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 - Disposal

Dispose of contents/container to an approved waste disposal plant

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

- Toxic to aquatic life

3. Composition/information on Ingredients

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

*The exact percentage (concentration) 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 May cause damage to organs through prolonged or repeated exposure. (Blood effects).

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 data 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

9.1 Information on basic physical and chemical properties

Appearance Opaque
Physical state Liquid
Odor faint
color yellow-orange

Property	VALUES	Remarks/ Method
pH	7.3	None known
Melting point/freezing point		None known
Boiling Point/Range		None known
Flash Point	No information available	None known
Evaporation Rate		None known
Flammability (solid, gas)		None known
Specific gravity	1.122	None known
Bulk density		None known
Water solubility		None known
Solubility in Other Solvents	No information available	None known
Partition coefficient: n-octanol/water		None known
Autoignition temperature		None known
Decomposition temperature		None known
Viscosity		None known

9.2 OTHER INFORMATION- NONE

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. Harmful if inhaled.

Eye contact

May cause slight irritation.

Skin contact

Based on available data, the classification criteria are not met.

Ingestion

Based on available data, the classification criteria are not met.

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 data 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 data available.

STOT - Repeated Exposure	Causes damage to organs through prolonged or repeated exposure.
Target organ effects	liver, Central Nervous System (CNS), Thyroid, blood.
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

IMDG - 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

metribuzin

FISH - rainbow trout 42 mg/L (96 hr)

DAPHNIA - water flea 4.18 mg/L (48 hr)

ALGAE Pseudokirchneriella subcapitata 0.038 mg/L (96 hr) LOEC

Persistence/Degradability

no data available.

Bioaccumulation/ Accumulation

No information available.

Other Adverse Effects

no data available

13. Disposal Considerations**Waste Treatment Methods****Waste Disposal Method**

Pesticide wastes can be 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-bulk containers as per 49 CFR 171.4

UN/ID no**Proper shipping name****Hazard class****Packing group**

When shipped in bulk the following description must be used:

UN3082

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

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PG III

IMDG - Marine Pollutant

IMDG - 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, by vessel or internationally - use IMDG description

IATA

Single or inner packagings less than 5L (liquid) or 5kg net (solids) are excepted from the Dangerous Goods regulations (IATA Special provision A197)

UN/ID no

UN3082

Proper shipping name

Environmentally hazardous substances, liquid, n.o.s (Pendimethalin and Metribuzin)

Hazard class

9

Packing group

PG III

Description

IMDG - Marine Pollutant

IMDG

Single or inner packaging less than 5L (liquid) or 5 kg net (solids) are excepted from the Dangerous Goods regulations (IMDG 2.10.2.7)

UN/ID no

UN3082

Proper shipping name

Environmentally hazardous substances, liquid, n.o.s (Pendimethalin and Metribuzin)

Hazard class

9

Packing group

PG III

Environmental hazards

IMDG - 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**

Not present

DSL/NDSL

Not present

EINECS/

Not Present

ELINCS**ENCS**

Not Present

China

Not Present

KECL

Not Present

PICCS

Not Present

AICS

Not Present

TSCA

Not Present

- **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 does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

CERCLA

Not applicable

CERCLA**RCRA****Pesticide Information**

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Pendimethalin [N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzeneamine] 40487-42-1 (29.75)			X	
Metribuzin 21087-64-9 (11.25)			X	

State Regulations**State Right-to-Know**

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Pendimethalin [N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzeneamine] - 40487-42-1		X			
Metribuzin - 21087-64-9	X	X	X		

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

20-Nov-2024

Revision Summary

Update section 2 Update section 4 Update section 11

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End of SDS