



Safety Data Sheet

Preparation Date 01-Nov-2017

Revision date 02-Jan-2019

Revision Number: 3

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

Product identifier

Product Description: Moccasin MTZ Herbicide

Other means of identification

Product code 12U-335
Registration number(s) 70506-335

Recommended use of the chemical and restrictions on use

Recommended use Herbicide.
Uses advised against Activities contrary to label recommendation
Non labeled activities

Details of the Supplier of the Safety Data Sheet

Supplier Address

UPL NA Inc.
630 Freedom Business Center
Suite 402
King of Prussia, PA 19406

Emergency telephone number

Company Phone Number 610-223-2180
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)

Serious eye damage/eye irritation	Category 1
Aspiration toxicity	Category 1

Label elements

EMERGENCY OVERVIEW

DANGER

Hazard Statements

Causes serious eye damage
May be fatal if swallowed and enters airways



Appearance Clear

Physical state Liquid

Odor characteristic

Precautionary Statements - Prevention

Wear protective gloves/protective clothing/eye protection/face protection

IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Immediately call a POISON CENTER or doctor/physician

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

Precautionary Statements - Storage

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
- Very toxic to aquatic life with long lasting effects
- Very toxic to aquatic life

3. Composition/information on Ingredients

Chemical name	CAS No	Weight-%
Metribuzin	21087-64-9	12.98
S-METOLACHLOR	87392-12-9	38.94
petroleum distillates	Proprietary	>36

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	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
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. Clean mouth with water. Do not give any liquids. Never give anything by mouth to an unconscious person.

Most Important Symptoms and Effects, Both Acute and Delayed

Most Important Symptoms and Effects no data available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician Contains a petroleum distillate - vomiting may cause aspiration pneumonia.

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

No information available.

Hazardous combustion products Thermal decomposition or combustion may produce irritating and possibly toxic gases in a fire.

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 Use personal protective equipment. Avoid contact with skin and eyes. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Wash thoroughly after handling.

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 pertinent 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 Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from open flames, hot surfaces and sources of ignition. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling. KEEP OUT OF REACH OF CHILDREN AND PETS.

Conditions for safe storage, including any incompatibilities

Storage Keep in a dry, cool and well-ventilated place. Keep away from food, drink and animal feeding stuffs.

incompatible materials No information available.

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. If splashes are likely to occur, wear: Goggles.

Skin protection Chemical resistant protective clothing. Chemical resistant footwear plus socks.

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. Keep away from food, drink and animal feeding stuffs. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state	Liquid		
Appearance	Clear	Odor	characteristic
color	light brown		
Property	VALUES	Remarks/ • Method	
pH	5.70	@20 C (1% solution)	
Melting point/freezing point	no data available		
Boiling Point/Range	No information available		
Flash Point	102 °C / 215 °F		
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	1.03 g/ml @ 20 C		
Water solubility	Miscible with water		
Solubility in Other Solvents	No information available		
Partition coefficient: n-octanol/water	No information available		
Autoignition temperature	no data 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	No information available
molecular weight	No information available
VOC Content	No information available
Liquid 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

No information available.

Hazardous decomposition products

no data available.

11. Toxicological Information

Information on Likely Routes of Exposure**Product information**

Moccasin MTZ
 Acute oral LD50 = 2615 mg/kg
 Acute dermal LD50 = >2000 mg/kg
 Acute inhalation LC50 = > 5.323 mg/L

Inhalation	May be harmful if inhaled.
Eye contact	Moderately irritating to the eyes.
Skin contact	Substance may cause slight skin irritation.
Ingestion	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 data available.
Carcinogenicity	The information below indicates whether any agency has listed any ingredient as a carcinogen.
Reproductive effects	Not Available.
STOT - Single Exposure	no data available.
STOT - Repeated Exposure	no data available.
Aspiration hazard	No information available.

Numerical Measures of Toxicity - Product information

LD50 Oral	2615 mg/kg (rat)
LD50 Dermal	> 2000 mg/kg (rat)

12. Ecological Information

ecotoxicity

Harmful to aquatic life
 S-metolachlor
 FISH
 Rainbow trout 96 hr = 1.23 mg/L
 Brown trout 21 day = 0.25 mg/L
 ALGAE
 Selenastrum capricornutum = 0.0008 mg/L

Aquatic Invertebrates
 Daphnia magna 21 day = 5.9 mg/L
 BIRDS
 Duck LD50 = >2150 mg/kg

Persistence/Degradability
 no data available.

Bioaccumulation/ Accumulation
 Bioaccumulative potential.

Chemical name	Log Pow
petroleum distillates	2.9 - 6.1

Other Adverse Effects
 no data 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 When shipped domestically by highway in non-bulk containers this product can be shipped as not regulated.
 When shipped in bulk, by vessel, or internationally use the IMDG shipping description:

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

IATA

UN/ID no.	UN3082
Proper shipping name	Environmentally hazardous substances, liquid, n.o.s (S-metolachlor)
Hazard class	9
Packing group	PG III
Description	IMDG - Marine Pollutant

IMDG

UN/ID no.	UN3082
Proper shipping name	Environmentally hazardous substances, liquid, n.o.s (S-metolachlor)
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 or absorbed through the skin. Causes moderate eye irritation.
Contains petroleum distillates.**

International Inventories

USINV	Present
DSL/NDSL	Not present
EINECS/ ELINCS	Not Present
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
 IECS - 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

State Regulations

State Right-to-Know

Not applicable

International regulations

U.S. EPA Label information

EPA Pesticide registration number 70506-335

16. Other Information

NFPA

HEALTH 2

flammability 1

Instability 0

Physical hazard -

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Revision Summary

Update logo Update section 1 Update Section 16

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