SAFETY DATA SHEET

Revision date 21-Oct-2020



Revision Number 4

1. Identification		
Product identifier		
Product Name	Metribuzin 4L	
Other means of identification		
Product Code(s)	42750-361	
UN/ID no.	UN3082	
Synonyms	None	
EPA Registration Number(s)	42750-361	
Recommended use of the chemical and restrictions on use		
Recommended use	Herbicide	
Restrictions on use	Follow label instructions	
Details of the supplier of the safety	data sheet	
<u>Company Address</u> ALBAUGH , LLC Ankeny, IA 50211		

Emergency telephone number

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night

- Within USA and Canada: 1-800-424-9300
- Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as the FIFRA label. Certain sections of this SDS are superseded by federal law governed by US EPA for a registered pesticide. Please see Section 15. REGULATORY INFORMATION for explanation.

2. Hazard(s) identification

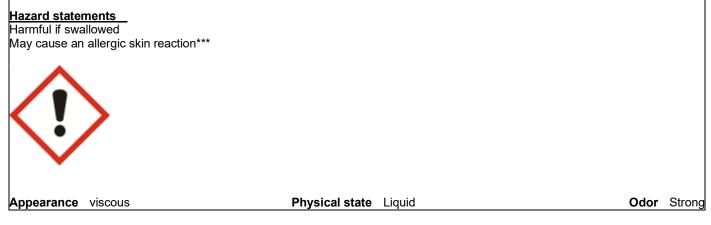
Classification

Acute toxicity - Oral	Category 4
Skin sensitization	Category 1

Hazards not otherwise classified (HNOC)

Not applicable

Label elements



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Avoid breathing dust/fume/gas/mist/vapors/spray Contaminated work clothing must not be allowed out of the workplace Wear protective gloves***

Precautionary Statements - Response

Specific treatment (see .? on this label)*** IF ON SKIN: Wash with plenty of water and soap If skin irritation or rash occurs: Get medical advice/attention Wash contaminated clothing before reuse*** IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell Rinse mouth***

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant***

Unknown acute toxicity ***

7 % of the mixture consists of ingredient(s) of unknown acute oral toxicity***

Other information

Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.***

3. Composition/information on ingredients

Substance

Not applicable.***

Mixture ***

Chemical name	CAS No	Weight-%	Trade secret	Active Ingredient
Metribuzin	21087-64-9	39.8-42.2	*	Х
Propelyne Glycol	57-55-6	4.8-5.3	*	
Other Ingredients	PROPRIETARY	>52.5	*	

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid m	easures
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Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.***
Inhalation	Remove to fresh air.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.***
Ingestion	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.***

Most important symptoms and effects, both acute and delayed		
Symptoms	Itching. Rashes. Hives.***	
Indication of any immediate medical attention and special treatment needed		
Note to physicians	May cause sensitization in susceptible persons. Treat symptomatically.***	

5. Fire-fighting measures

Suitable Extinguishing Media Large Fire	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. CAUTION: Use of water spray when fighting fire may be inefficient.	
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.	
Specific hazards arising from the chemical	Product is or contains a sensitizer. May cause sensitization by skin contact.***	
Explosion data Sensitivity to mechanical impac	ct None.	
Sensitivity to static discharge	None.	
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.	

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal
	protective equipment as required. Evacuate personnel to safe areas. Keep people away
	from and upwind of spill/leak.***

Methods and material for containment and cleaning up		
Methods for containment	Prevent further leakage or spillage if safe to do so.	
Methods for cleaning up	Pick up and transfer to properly labeled containers.	

7. Handling and storage

Precautions for safe handling

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.***
Conditions for safe storage, includ	ing any incompatibilities
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up.***

8. Exposure controls/personal protection

Control parameters

Exposure Limits

The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.***

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Metribuzin 21087-64-9	TWA: 5 mg/m ³	(vacated) TWA: 5 mg/m ³	TWA: 5 mg/m ³

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering controls	Showers Eyewash stations Ventilation systems.
Individual protection measures, su	ch as personal protective equipment
Eye/face protection	Wear safety glasses with side shields (or goggles).***
Hand protection	Wear suitable gloves.***
Skin and body protection	Wear suitable protective clothing.***
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties		
Physical state	Liquid	
Appearance	viscous	
Color	white	
Odor	Strong	
Odor threshold	No information available	
Property_	Values	Remarks • Method
Hq	6.0 - 7.0	@ 20 °C
Melting point / freezing point	No data available °C / °F	9
Boiling point / boiling range	No data available °C / °F	
Flash point	No data available °C / °F	
Evaporation rate	Not required	
Flammability (solid, gas)	Not required	
Flammability Limit in Air		
Upper flammability or explosive	Not required	
limits	Notrequied	
Lower flammability or explosive	No data available	
limits		
Vapor pressure	Not required	
	Not required No data available	
Vapor density Relative density	0.4 0.5	
Water solubility	No data available Not required	
Solubility(ies)	No data available	
Partition coefficient	Not required	
Autoignition temperature	Not required °C / °F	
Decomposition temperature	Not required - °C °F	
Kinematic viscosity	199.0	
Dynamic viscosity	No data available	
Other information		
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening point	Not required	
Molecular weight	Not required	
VOC Content (%)	No information available	
Liquid Density	1.091	
Bulk density	Not required	
-	-	

10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	None known based on information supplied.
Incompatible materials	None known based on information supplied.
Hazardous decomposition products None known based on information supplied.	

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11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation

Specific test data for the substance or mixture is not available.

Eye contact	Specific test data for the substance or mixture is not available.	
Skin contact	May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components).***	
Ingestion	Specific test data for the substance or mixture is not available. Harmful if swallowed. (based on components).***	
Symptoms related to the physical, chemical and toxicological characteristics		
Symptoms	Itching. Rashes. Hives.***	
Acute toxicity		
Numerical measures of toxicity		

The following values are calculated based on chapter 3.1 of the GHS document .*** ATEmix

ATEmix (oral)	1,190.90***	mg/kg***
ATEmix (dermal)	17,545.31***	mg/kg***

Unknown acute toxicity

*** 7 % of the mixture consists of ingredient(s) of unknown acute oral toxicity***

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Metribuzin 21087-64-9	= 2020 mg/kg (Rat) = 1100 mg/kg (Rat)	> 5000 mg/kg (Rat)= 2 g/kg (Rat)> 20 g/kg (Rabbit)	>860 mg/m³ (Rat)4 h
Propelyne Glycol 57-55-6	= 20 g/kg (Rat)	= 20800 mg/kg (Rabbit)	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Serious eye damage/eye irritation Respiratory or skin sensitization Germ cell mutagenicity	No information available. No information available. May cause sensitization by skin contact.*** No information available.
Reproductive toxicity	No information available.
STOT - single exposure STOT - repeated exposure Target organ effects	No information available. No information available. liver, Central nervous system, Thyroid.***
Aspiration hazard	No information available.
Other adverse effects	No information available.
Interactive effects	No information available.

12. Ecological information

Ecotoxicity	Very toxic to	aquatic life with long lastin	g effects.***	
Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Propelyne Glycol	EC50: =19000mg/L (96h,	LC50: =51600mg/L (96h,	-	EC50: >1000mg/L (48h,
57-55-6	Pseudokirchneriella	Oncorhynchus mykiss)		Daphnia magna) EC50:

su	bcapitata)	LC50: 41 - 47mL/L (96h, Oncorhynchus mykiss) LC50: =51400mg/L (96h, Pimephales promelas) LC50: =710mg/L (96h, Pimephales promelas)	>10000mg/L (24h, Daphnia magna)
Persistence and degradability Bioaccumulation		ion available. data for this product.	
Component Information	***		
Other adverse effects	No informat	ion available.	

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

14. Transport information

DOT UN/ID no.	Not regulated UN3082
TDG	Not regulated
MEX	Not regulated
ICAO (air)	Not regulated
IATA	Not regulated
IMDG	Not regulated
RID	Not regulated
ADR	Not regulated
ADN	Not regulated

15. Regulatory information

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

International Inventories

TSCA	Does not comply
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply

IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply

Legend:

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 Chemical Substances/European 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

US 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 40 of the Code of Federal Regulations, Part 372.***

Chemical name	SARA 313 - Threshold Values %	
Metribuzin - 21087-64-9	1.0	

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Trade secret	-	-	Х
Metribuzin 21087-64-9	Х	Х	Х
Propelyne Glycol 57-55-6	Х	-	Х

16. Other information

NFPA	Health hazards	3	Flammability	1	Instability 0	Physical and chemical properties -
<u>HMIS</u>	Health hazards	2	Flammability	0	Physical hazards 0	Personal protection X
	abbreviations and acro 8: EXPOSURE CONTR TWA (time-weighted av Maximum limit value	OLS/PE	RSONAL PRO		<u>eet</u> STEL (Short Term Skin designation	n Exposure Limit)
Agency for Toxic S U.S. Environmenta European Food Sa EPA (Environment Acute Exposure G U.S. Environmenta U.S. Environmenta Food Research Jou Hazardous Substa International Unifor Japan GHS Classii Australia National In NIOSH (National In National Library of National Library of National Toxicolog New Zealand's Che Organization for Ed	nce Database rm Chemical Information fication Industrial Chemicals Noti nstitute for Occupational Medicine's ChemID Plus Medicine's PubMed data y Program (NTP) emical Classification and conomic Co-operation ar conomic Co-operation ar	Registry mView s)) eral Inso Product Databa ification Safety a s (NLM (abase (N abase (N I Informa id Deve id Deve	y (ATSDR) Database ecticide, Fungicio ction Volume Ch se (IUCLID) and Assessmer and Health) CIP) NLM PUBMED) ation Database (lopment Environ lopment High Pr	de, and Ro nemicals nt Scheme CCID) ment, Hea oduction V	(NICNAS) Ith, and Safety Publicatior /olume Chemicals Prograr	
Revision date Revision Note		Oct-202 informat	0 tion available.			

Revision Note Disclaimer

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End of Safety Data Sheet