

SAFETY DATA SHEET



Revision date 17-Jun-2021

Revision Number 1

1. Identification

Product identifier

Product Name Priority Meso

Other means of identification

Product Code(s) 000075

Synonyms None

Registration Number(s) 42750-346

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

Company Address

ALBAUGH LLC
1525 NE 36th St,
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 Certain sections of this SDS are superseded by federal law governed by US EPA for a registered pesticide.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 - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 2A

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Warning

Hazard statements

Harmful if inhaled
Causes serious eye irritation

**Appearance** viscous**Physical state** Liquid**Odor** Slight Faint sweet**Precautionary Statements - Prevention**

Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wash face, hands and any exposed skin thoroughly after handling
Wear eye protection/ face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF INHALED: Remove person to fresh air and keep comfortable for breathing
Call a POISON CENTER or doctor if you feel unwell

Unknown acute toxicity**Other information**

Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

3. Composition/information on ingredients**Substance**

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Active Ingredient
Metolachlor	51218-45-2	35.70-37.90	X
Ethylene Glycol	107-21-1	4.75-5.25	
Mesotrione	104206-82-8	3.55-3.92	X
Dichlormid	37764-25-3	1.11-1.23	
Bronopol	52-51-7	0.12-0.14	
Other Ingredients	PROPRIETARY	>50	

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

4. First-aid measures**Description of first aid measures****General advice**

Show this safety data sheet to the doctor in attendance.

Inhalation	Remove to fresh air. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
Skin contact	Wash skin with soap and water.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical attention.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing vapors or mists. Use personal protective equipment as required. See section 8 for more information.

Most important symptoms and effects, both acute and delayed

Symptoms	May cause redness and tearing of the eyes. Burning sensation. Coughing and/ or wheezing. Difficulty in breathing.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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5. Fire-fighting measures

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Large Fire	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	No data available.
Explosion data	
Sensitivity to mechanical impact	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. Use personal protective equipment as required. Ensure adequate ventilation. Avoid breathing vapors or mists.
Other information	Refer to protective measures listed in Sections 7 and 8.

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. Do not eat, drink or smoke when using this product. Avoid breathing vapors or mists. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

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
Ethylene Glycol 107-21-1	STEL: 50 ppm vapor fraction STEL: 10 mg/m ³ inhalable particulate matter, aerosol only TWA: 25 ppm vapor fraction	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 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, such as personal protective equipment

Eye/face protection If splashes are likely to occur, wear safety glasses with side-shields.

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 Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	viscous
Color	white
Odor	Slight Faint sweet
Odor threshold	No data available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	3.0 4.0	
Melting point / freezing point	No data available	
Boiling point / boiling range	No data available	
Flash point	No data available	
Evaporation rate	No data available	
Flammability (solid, gas)	No data available	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	
Vapor density	No data available	
Relative density	No data available	
Water solubility	No data available	
Solubility(ies)	No data available	
Partition coefficient	No data available	
Autoignition temperature	No data available	
Decomposition temperature		
Kinematic viscosity	706.1 cSt @ 20 °C, 121.2 cSt @ 40 °C	
Dynamic viscosity	No data available	

Other information

Explosive properties	No data available
Oxidizing properties	No data available
Softening point	No data available
Molecular weight	No data available
VOC Content (%)	No data available
Liquid Density	1.057 g/cm ³ @ 20 °C*
Bulk density	No data available

**Listed density is an approximate value and does not necessarily represent that of a specific batch*

10. Stability and reactivity

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

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. Harmful by inhalation. (based on components).
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
Skin contact	Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation.
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause redness and tearing of the eyes. Coughing and/ or wheezing.

Acute toxicity

Numerical measures of toxicity

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

Unknown acute toxicity

Oral LD50	> 5,000 mg/kg
Dermal LD50	> 5,000 mg/kg
Inhalation LC50	> 2.17 mg/L

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Metolachlor 51218-45-2	= 200 mg/kg (Rat) = 2200 mg/kg (Rat)	= 12700 mg/kg (Rabbit)	= 2.44 mg/L (Rat) 4 h
Ethylene Glycol 107-21-1	= 4700 mg/kg (Rat)	= 10600 mg/kg (Rat) = 9530 µL/kg (Rabbit)	-
Mesotrione 104206-82-8	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Dichlormid 37764-25-3	= 2146 mg/kg (Rat) = 2.146 mg/kg (Rat)	= 2.04 mg/kg (Rat) > 5 g/kg (Rabbit)	= 5500 mg/m ³ (Rat) 1 h
Bronopol 52-51-7	= 180 mg/kg (Rat)	= 1600 mg/kg (Rat)	> 5 g/m ³ (Rat) 6 h = 800 mg/m ³ (Rat) 4 h

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

Skin corrosion/irritation	Slightly irritating to the skin.
Serious eye damage/eye irritation	Causes moderate eye irritation.
Respiratory or skin sensitization	Did not cause sensitization on laboratory animals.
Germ cell mutagenicity	No data available.
Carcinogenicity	No data available.

Reproductive toxicity	No data available.
STOT - single exposure	No data available.
STOT - repeated exposure	No data available.
Target organ effects	Respiratory system, Eyes, Skin, Central nervous system.
Aspiration hazard	No data available.
Other adverse effects	No data available.
Interactive effects	No data available.

12. Ecological information

Ecotoxicity Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Metolachlor 51218-45-2	EC50: =57.1mg/L (72h, <i>Desmodesmus subspicatus</i>) EC50: 0.0448 - 0.0568mg/L (96h, <i>Pseudokirchneriella subcapitata</i>) EC50: =0.014mg/L (120h, <i>Pseudokirchneriella subcapitata</i>)	LC50: 8.6 - 12mg/L (96h, <i>Lepomis macrochirus</i>) LC50: 3.3 - 4.6mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 5.4 - 12mg/L (96h, <i>Pimephales promelas</i>) LC50: 7.4 - 10.5mg/L (96h, <i>Poecilia reticulata</i>)	-	LC50: =25.1mg/L (48h, <i>Daphnia magna</i>) EC50: =4.25mg/L (48h, <i>Daphnia magna</i>) EC50: 13 - 18.4mg/L (48h, <i>Daphnia magna</i>)
Ethylene Glycol 107-21-1	EC50: 6500 - 13000mg/L (96h, <i>Pseudokirchneriella subcapitata</i>)	LC50: =41000mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 14 - 18mL/L (96h, <i>Oncorhynchus mykiss</i>) LC50: =27540mg/L (96h, <i>Lepomis macrochirus</i>) LC50: =40761mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 40000 - 60000mg/L (96h, <i>Pimephales promelas</i>) LC50: =16000mg/L (96h, <i>Poecilia reticulata</i>)	-	EC50: =46300mg/L (48h, <i>Daphnia magna</i>)

Persistence and degradability No data available.

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
Metolachlor 51218-45-2	2.9
Ethylene Glycol 107-21-1	-1.93

Other adverse effects No data 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

<u>DOT</u>	Not regulated
<u>TDG</u>	Not applicable
<u>MEX</u>	Not applicable
<u>ICAO (air)</u>	Not applicable
<u>IATA</u>	Not applicable
<u>IMDG</u>	Not applicable
<u>RID</u>	Not applicable
<u>ADR</u>	Not applicable
<u>ADN</u>	Not applicable

15. Regulatory information**U.S. EPA Label Information**

EPA Pesticide Registration Number 42750-346

EPA Pesticide Label CAUTION. Causes moderate eye irritation.

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 %
Ethylene Glycol - 107-21-1	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, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Ethylene Glycol 107-21-1	5000 lb	-

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Ethylene Glycol - 107-21-1	Developmental

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Water 7732-18-5	-	-	X
Metolachlor 51218-45-2	X	-	-
Ethylene Glycol 107-21-1	X	X	X

16. Other information

NFPA	Health hazards 3	Flammability 0	Instability 0	Physical and chemical properties -
HMIS	Health hazards 3	Flammability 0	Physical hazards 0	Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGl(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision date 17-Jun-2021

Revision Note No data available.

Disclaimer

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End of Safety Data Sheet