

# Safety Data Sheet

## BRIDLE™ Herbicide

Date: 1/22/2016

Replaces:

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### 1. PRODUCT IDENTIFICATION

Product identifier on label: **BRIDLE™ Herbicide**

Product No.:

Use: Herbicide

Manufacturer: United Suppliers, Inc.,

P.O. Box 538

Eldora, IA 50627

**Emergency Phone:** For 24-Hour Medical Emergency Assistance (Human or Animal), Call 1-877-424-7452 or for Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-424-9300

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### 2. HAZARDS IDENTIFICATION

Classifications: Specific Target Organ Toxicity: Respiratory Irritation Category 3  
Eye Damage/Irritation: Category 2B

Signal Word (OSHA): Warning

Hazard Statements: Causes eye irritation  
May cause respiratory irritation

Hazard Symbols:



Precautionary Statements: Avoid breathing mist, vapors, spray.  
Wash hands and face thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
If inhaled: Remove person to fresh air and keep comfortable for breathing.  
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.  
Call a poison center, doctor or Syngenta if you feel unwell.  
Store locked up.  
Dispose of contents and container in accordance with local regulations.

Other Hazard Statements: Flammable hydrogen gas may be formed on contact with incompatible metals. See "Conditions to Avoid", Section 10.

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Common Name	CAS Number	Concentration
Ethylene Glycol	Ethylene Glycol	107-21-1	<15%
Other ingredients	Other ingredients	Trade Secret	>45%
2-[4-(methylsulfonyl)-2-nitrobenzoyl]-1,3-cyclohexanedione	Mesotrione	104206-82-8	40.0%

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

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### 4. FIRST AID MEASURES

Have the product container, label or Safety Data Sheet with you when calling a poison control center or doctor or going for treatment.

- Ingestion:** If swallowed: Call a poison control center or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
- Eye Contact:** If in eyes: 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:** If on skin or clothing: 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:** If inhaled: 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.

Most important symptoms/effects:

- Eye irritation
- Respiratory irritation

Indication of immediate medical attention and special treatment needed:

- There is no specific antidote if this product is ingested.
- Treat symptomatically.

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### 5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use dry chemical, foam or CO2 extinguishing media. If water is used to fight fire, dike and collect runoff.

Specific Hazards:

Flammable hydrogen gas may be formed on contact with incompatible metals. See "Conditions to Avoid", Section 10.

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

Special protective equipment and precautions for firefighters:

Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion.

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### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:

Follow exposure controls/personal protection outlined in Section 8.

Methods and materials for containment and cleaning up:

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

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### 7. HANDLING AND STORAGE

Precautions for safe handling:

Spray solutions of this product should be mixed, stored and applied using only plastic, plastic-lined steel, stainless steel or fiberglass/plastic containers. Concentrate should not be stored or maintained in long-term contact with galvanized steel, carbon steel, aluminum, brass or cast iron.

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Conditions for safe storage, including any incompatibilities:

Store locked up.

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THIS PRODUCT.**

**FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.**

Occupational Exposure Limits:

Chemical Name	OSHA PEL	ACGIH TLV	Other	Source
Ethylene Glycol	Not Established	100 mg/m <sup>3</sup> (ceiling) [aerosol]	Not Established	Not Applicable
Other ingredients	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Mesotrione	Not Established	Not Established	10 mg/m <sup>3</sup> TWA	Syngenta

Appropriate engineering controls:

Use effective engineering controls to comply with occupational exposure limits (if applicable).

Individual protection measures:

Ingestion:

Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact:

Where eye contact is likely, use chemical splash goggles.

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**Skin Contact:**

Where contact is likely, wear chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride [PVC] or Viton), coveralls, socks and chemical-resistant footwear.

**Inhalation:**

A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits.

In case of emergency spills, use a NIOSH approved respirator with any N, R, P or HE filter.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Beige to tan liquid

Odor: Faint; pleasant

Odor Threshold: Not Available

pH: 2.4 - 2.8 @ 68°F (20°C)

Melting point/freezing point: Not Available

Initial boiling point and boiling range: Not Available

Flash Point (Test Method): > 200°F

Flammable Limits (% in Air): Not Available

Flammability: Can burn in fire, releasing toxic vapors.

Vapor Pressure: Mesotrione < 4.3 x 10<sup>(-8)</sup> mmHg @ 68°F (20°C)

Vapor Density: Not Available

Relative Density: 1.2 g/ml ; 10 lbs/gal @ 68°F (20°C)

Solubility (ies): Mesotrione 160 mg/l @ 68°F (20°C) (99.7% pure)

Partition coefficient: n-octanol/water: Not Available

Autoignition Temperature: Not Available

Decomposition Temperature: Not Available

Viscosity: Not Available

Other: None

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### 10. STABILITY AND REACTIVITY

Reactivity: Not reactive.

Chemical stability: Stable under normal use and storage conditions.

Possibility of hazardous reactions: Will not occur.

Conditions to Avoid: Spray solutions of this product should be mixed, stored and applied using only plastic,

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plastic-lined steel, stainless steel or fiberglass/plastic containers. Concentrate should not be stored or maintained in long-term contact with galvanized steel, carbon steel, aluminum, brass or cast iron.

Incompatible materials: None known.

Hazardous Decomposition Products: Not Available

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### 11. TOXICOLOGICAL INFORMATION

Dermal, Inhalation

#### Health effects information

Likely routes of exposure: Eye irritation, Respiratory irritation

Symptoms of exposure:

Delayed, immediate and chronic effects of exposure: Eye irritation, Respiratory irritation

#### Numerical measures of toxicity (acute toxicity/irritation studies (finished product))

Ingestion:	Oral (LD50 Rat) :	> 5000 mg/kg body weight
Dermal:	Dermal (LD50 Rat) :	> 5000 mg/kg body weight
Inhalation:	Inhalation (LC50 Rat) :	> 5.19 mg/l air - 4 hours
Eye Contact:	Mildly Irritating (Rabbit)	
Skin Contact:	Slightly Irritating (Rabbit)	
Skin Sensitization:	Not a Sensitizer (Guinea Pig)	

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### Reproductive/Developmental Effects

Mesotrione : Did not show reproductive effects in animal experiments.

### Chronic/Subchronic Toxicity Studies

Mesotrione : No adverse effect has been observed in chronic toxicity tests.

### Carcinogenicity

Mesotrione : Did not show carcinogenic effects in animal experiments.

Chemical Name	NTP/IARC/OSHA Carcinogen
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Ethylene Glycol	No
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Other ingredients	No
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2-[4-(methylsulfonyl)-2-nitrobenzoyl]-1,3-cyclohexanedione	No
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### Other Toxicity Information

None

### Toxicity of Other Components

Ethylene Glycol

Ethylene glycol has been shown to produce dose-related teratogenic effects in rats and mice. Exposure to high concentrations of mists or aerosols may result in effects on the hematopoietic system and central nervous system with headache, dizziness and drowsiness. Severe kidney damage results from swallowing large amounts of ethylene glycol.

Other ingredients

Not Applicable

### Target Organs

#### Active Ingredients

Mesotrione : Blood, eye, kidney, liver.

#### Inert Ingredients

Ethylene Glycol: Blood, kidney, CNS

Other ingredients: Not Applicable

## 12. ECOLOGICAL INFORMATION

### Eco-Acute Toxicity

Mesotrione :

Fish (Rainbow Trout) 96-hour LC50 >120 mg/l

Fish (Bluegill Sunfish) 96-hour LC50 >120 mg/l

Invertebrate (Water Flea) Daphnia Magna 48-hour EC50 900 mg/l

Green Algae 72-hour EbC50 4.5 mg/l

### Environmental Fate

Mesotrione :

The substance has low potential for bioaccumulation. Mesotrione has medium to high mobility in soil.

## 13. DISPOSAL CONSIDERATIONS

Disposal:

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

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Characteristic Waste: Not Applicable

Listed Waste: Not Applicable

### 14. TRANSPORT INFORMATION

DOT Classification

Ground Transport - NAFTA  
Not regulated.

Comments

Water Transport - International  
Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Mesotrione), Marine Pollutant  
Hazard Class: Class 9  
Identification Number: UN 3082  
Packing Group: PG III

Air Transport

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Mesotrione)  
Hazard Class: Class 9  
Identification Number: UN 3082  
Packing Group: PG III

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### 15. REGULATORY INFORMATION

#### Pesticide Registration:

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:

Caution: Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes, or clothing.

#### EPA Registration Number(s):

100-1131-1381

#### EPCRA SARA Title III Classification:

Section 311/312 Hazard Classes: Acute Health Hazard

Section 313 Toxic Chemicals: Ethylene Glycol <15% (CAS No. 107-21-1)

#### CERCLA/SARA 304 Reportable Quantity (RQ):

Report product spills > 3260 gal. (based on ethylene glycol [RQ = 5000 lbs.] content in the formulation) (CERCLA)

#### RCRA Hazardous Waste Classification (40 CFR 261):

Not Applicable

#### TSCA Status:

Exempt from TSCA, subject to FIFRA

### 16. OTHER INFORMATION

#### NFPA Hazard Ratings

Health: 2  
Flammability: 1  
Instability: 0

#### HMIS Hazard Ratings

Health: 1  
Flammability: 1  
Reactivity: 0

0	Minimal
1	Slight
2	Moderate
3	Serious
4	Extreme
*	Chronic

Syngenta Hazard Category: B

For non-emergency questions about this product call: 1-800-334-

9481

Original Issued Date: 1/22/2016

Revision Date: Replaces:

Section(s) Revised:

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.