

SAFETY DATA SHEET



Date Issued : 10/24/2019
SDS No : RAVH

RAVINE HERBICIDE

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: RAVINE HERBICIDE

PRODUCT DESCRIPTION: Herbicide

DISTRIBUTOR

Innvictis Crop Care, LLC
1880 Fall River Drive, Suite 100
Loveland, CO 80538

24 HR. EMERGENCY TELEPHONE NUMBERS

ChemTrec 1-800-424-9300

EPA REG. NO.: 60063-64-89391

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Eye Irritation, Category 2A
Skin Sensitization, Category 1
Target Organ Toxicity (Repeated exposure), Category 2
Acute Toxicity (Oral), Category 5
Acute Toxicity (Dermal), Category 5

Environmental:

Acute Hazards to the Aquatic Environment, Category 1
Chronic Hazards to the Aquatic Environment, Category 1

GHS LABEL



Health
hazard



Environment



Exclamation
mark

SIGNAL WORD: WARNING

HAZARD STATEMENTS

H303: May be harmful if swallowed.
H313: May be harmful in contact with skin.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H373: May cause damage to liver through prolonged or repeated exposure.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

General:

P101: If medical advice is needed, have product container or label at hand.

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P102: Keep out of reach of children.

P103: Read label before use.

Prevention:

P260: Do not breathe mist, vapors or spray.

P264: Wash hands, face and other affected areas thoroughly after handling.

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

P391: Collect spillage.

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P321: Specific treatment see Section 4, First Aid Measures, on this SDS.

P363: Wash contaminated clothing before reuse.

P314: Get medical advice/attention if you feel unwell.

Storage:

P501: Dispose of contents/container to Local, State and Federal Regulations.

COMMENTS: Read all precautions of products being handled and follow the most restrictive language for all products to provide the safest work environment.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
2-chloro-N-(2-ethyl-6-methylphenyl) -N-(2-methoxy-1-methylethyl)acetamide	18.05 - 19.95	51218-45-2
2-chlor-4-(ethylamino)-6-(isopropylamino)-s-triazine (atrazine)	1.677 - 19.53	1912-24-9
Mesotrione	2.31 - 2.56	104206-82-8

4. FIRST AID MEASURES

EYES: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes then continue rinsing eyes. Call a poison control center or doctor for treatment advice.

SKIN: 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.

INGESTION: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

INHALATION: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

NOTES TO PHYSICIAN: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

ADDITIONAL INFORMATION: Have the product container or label with you when calling a poison control center or doctor, or going in for treatment. For emergency medical assistance call **NPCC 1-800-222-1222** or call **CHEMTREC 1-800-424-9300**.

5. FIRE FIGHTING MEASURES

GENERAL HAZARD: Toxic fumes may be emitted in a fire situation.

EXTINGUISHING MEDIA: Dry chemical, water spray, water fog, CO₂, foam, sand or earth

HAZARDOUS COMBUSTION PRODUCTS: Normal combustion forms carbon dioxide, water vapor and may produce oxides of carbon, nitrogen and phosphorous.

EXPLOSION HAZARDS: No specific explosion hazards are identified or expected. Always fight fire with the implication that other volatile substances may be present.

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FIRE FIGHTING PROCEDURES: Evacuate area and fight fire upwind a safe distance to avoid hazardous vapors and decomposition products. Fire exposed containers can build up pressure and should be kept cool with water spray if possible. Dike and collect water used to fight fire to prevent environmental damage due to runoff. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

FIRE FIGHTING EQUIPMENT: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Pick up spilled liquid with absorbent material and sweep up for disposal. Place it and damaged unusable containers in a container suitable for chemical waste. Check local, state, and federal regulations for proper disposal and follow those regulations.

LARGE SPILL: Immediately dike around the spill area to prevent spreading. Pick up spilled material with suitable absorbent material and place in appropriate container for disposal. Scrub the contaminated area with a detergent or soap solution. Check local, state, and federal regulations for proper disposal.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Do not contaminate any body of water.

LAND SPILL: Avoid runoff onto any adjacent land.

SPECIAL PROTECTIVE EQUIPMENT: Always wear proper protective equipment when handling this product.

7. HANDLING AND STORAGE

HANDLING: Wash hands after handling, before eating, drinking, chewing gum, using tobacco, or using the toilet. Avoid contact with eyes and contact with skin. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

STORAGE: Store in original container, in a dry well ventilated area. Keep container tightly closed. Keep away from food, feed or other product, especially oxidizing agents. Keep away from unauthorized people, children and animals.

STORAGE TEMPERATURE: Store at 40°F or above.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)				
			EXPOSURE LIMITS	
			ACGIH TLV	
Chemical Name			ppm	mg/m ³
2-chlor-4-(ethylamino)-6-(isopropylamino)-s-triazine (atrazine)			TWA	5

ENGINEERING CONTROLS: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear chemical goggles or shielded safety glasses (ANSI Z87.1 or approved equivalent) when handling and mixing product. Contact lenses should not be worn when working with chemicals.

SKIN: Wear chemical resistant gloves such as Viton or barrier laminate, Coveralls over long-sleeved shirt, long pants and chemical resistant footwear plus socks. Chemical resistant headgear for overhead exposure. When exposed to product concentrate, wear a chemical resistant apron. Always refer to the label of the pesticide(s) in the tank mix and follow the most restrictive requirements.

RESPIRATORY: Proper ventilation is required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. Wear a NIOSH/MSHA approved dust mask or filter when vapors are expected to be generated above the permissible limit.

PROTECTIVE CLOTHING: Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for

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washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

OTHER USE PRECAUTIONS: Avoid contact with skin, eyes, and clothing. Avoid breathing vapors. Wash thoroughly after handling product. Eye wash fountains and drench showers should be located within 100 feet or a 10 second walk from the work area per ANSI Z358.1-1990

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Mild

APPEARANCE: Opaque

COLOR: Off-white

pH: 3 to 4

Notes: 1% Solution

PERCENT VOLATILE: No data available.

FLASH POINT AND METHOD: > 100°C (212°F) Closed cup

VAPOR PRESSURE: ~ 17 mm Hg

VAPOR DENSITY: Not Available

BOILING POINT: Not Available

FREEZING POINT: Not Available

MELTING POINT: Not Available

POUR POINT: Not Available

THERMAL DECOMPOSITION: Not Available

SOLUBILITY IN WATER: Dispersible

EVAPORATION RATE: Not Available

DENSITY: ~ 8.92 lbs./gal.

SPECIFIC GRAVITY: ~ 1.07 g/mL

VISCOSITY: Not Available

MOLECULAR WEIGHT: Not Available

(VOC): Not Available

OXIDIZING PROPERTIES: Not Applicable

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

STABILITY: Stable under normal use and storage conditions.

POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Elevated temperatures and oxidizing materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may lead to release of irritating and toxic gases and vapors.

INCOMPATIBLE MATERIALS: Oxidizing materials.

11. TOXICOLOGICAL INFORMATION

ACUTE

EYES: Moderately irritating to eyes.

DERMAL LD₅₀: > 2000 mg/kg (Rabbit)

ORAL LD₅₀: > 2000 mg/kg (Rat)

INHALATION LC₅₀: > 5.12 mg/L

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EYE EFFECTS: Causes serious eye irritation.

SKIN EFFECTS: Repeated or prolonged contact may cause irritation or drying.

CARCINOGENICITY

Chemical Name	NTP Status	IARC Status	OSHA Status
2-chlor-4-(ethylamino)-6-(isopropylamino)-s-triazine (atrazine)		3	
Mesotrione	Not Listed	Not Listed	Not Listed

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: This pesticide is toxic to aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean water mark. Do not apply when weather conditions favor drift from treated areas. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water.

GROUND WATER ADVISORY Atrazine can travel (seep or leach) through soil and can enter ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (ground water) is close to the surface and where these soils are very permeable, i.e., well-drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water. Metolachlor has the potential to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

SURFACE WATER ADVISORY The active ingredients in this product have the potential to contaminate surface water through ground spray drift. Under some conditions, the active ingredients may also have a high potential for runoff into surface water (primarily via dissolution in runoff water) for several months post-application. These include poorly drained or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

AQUATIC TOXICITY (ACUTE)

96-HOUR LC₅₀: 6.75 mg/L *Oncorhynchus mykiss*

48-HOUR EC₅₀: ~ 6.65 mg/L (*Daphnia Magna*)

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Do not contaminate water, food or feed by disposal. Dispose of in accordance with local, state and federal regulations.

PRODUCT DISPOSAL: Improper disposal of excess waste is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your Local Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

EMPTY CONTAINER: Do not reuse product containers. Triple rinse (or equivalent), then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by local, state, and federal regulations.

14. TRANSPORT INFORMATION**DOT (DEPARTMENT OF TRANSPORTATION)**

PROPER SHIPPING NAME: Not regulated by DOT

15. REGULATORY INFORMATION

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UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

FIRE: No PRESSURE GENERATING: No REACTIVITY: No ACUTE: Yes CHRONIC: Yes

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
2-chlor-4-(ethylamino)-6-(isopropylamino)-s-triazine (atrazine)	1.677 - 19.53	1912-24-9

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Not Listed

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
2-chlor-4-(ethylamino)-6-(isopropylamino)-s-triazine (atrazine)	1912-24-9

TSCA REGULATORY: Complies

CALIFORNIA PROPOSITION 65: Not Listed

GENERAL COMMENTS: EPA LANGUAGE FROM THE LABEL

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION. Causes moderate eye irritation. Harmful if swallowed. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

16. OTHER INFORMATION

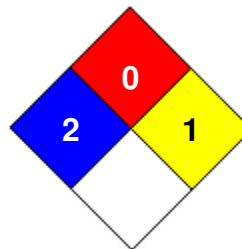
REASON FOR ISSUE: New Product

PREPARED BY: Lighthouse Product Services

HMIS RATING

HEALTH	*	2
FLAMMABILITY		0
PHYSICAL HAZARD		0
PERSONAL PROTECTION		X

NFPA CODES



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