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SAFETY DATA SHEET



Date Issued: 2/22/2020 SDS No: Vandal First

VANDAL FIRST

1. PRODUCT AND COMPANY IDENTIFICATION

CHEMICAL FAMILY: Herbicide

DISTRIBUTOR

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

EPA REG. NO.: 89168.84.89391

24 HR. EMERGENCY TELEPHONE NUMBERS

24-Hour Emergency Assistance Call: 1-800-222-1222

Chemical Emergency Call CHEMTREC: 1-800-42 9300

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Target Organ Toxicity (Repeated exposure), Category 2

Environmental:

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

GHS LABEL



Health hazard



Environment

SIGNAL WORD: WARNING HAZARD STATEMENTS

H373: May cause damage to organs [or state all organs affected, if known] through prolonged or repeated exposure [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard].

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.

P102: Keep out of reach of children.

P103: Read label before use.

Prevention:

P260: Do not breathe dust or fumes.

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

P273: Avoid release to the environment.

P391: Collect spillage.

Disposal:

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

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

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Sulfentrazone	62.1	122836-35
Cloransulam-methyl	7.9	147150-35

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 treatme 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 b 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 artifici 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 produ may have occurred.

ADDITIONAL INFORMATION: Have the product container or label with you when calling a poison control cen 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: Foam, dry chemical, carbon dioxide, water spray or fog.

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.

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. Explosive vapor could form from ruptured containers. Dike and collect water use 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 damage unusable containers in a landfill appropriate for non hazardous chemical waste. Check local, state, and fede regulations for proper disposal.

LARGE SPILL: Dike around the spill area to prevent spreading. Pick up spilled material with suitable absorbe material and place in appropriate container for disposal. Scrub the contaminated area with a detergent or so solution. Place it and unusable containers in a landfill appropriate for non hazardous chemical waste. Check local, state, and federal regulations for proper disposal.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Do not contaminate any body of water.

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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 product in original container only, away from other pesticides, fertilizers, food or feed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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 agricultral 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 permissable limit.

PROTECTIVE CLOTHING: Eye protection, long sleeved shirt and long pants, shoes plus socks and chemical resistant gloves. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for 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

ODOR: Mildly bitter

APPEARANCE: Granule

COLOR: Light brown

pH: 7.06

PERCENT VOLATILE: Not Established

FLASH POINT AND METHOD: Not Established

FLAMMABLE LIMITS: Not Established

AUTOIGNITION TEMPERATURE: Not Established

VAPOR PRESSURE: Not Established VAPOR DENSITY: Not Established BOILING POINT: Not Established FREEZING POINT: Not Established MELTING POINT: Not Established POUR POINT: Not Established

THERMAL DECOMPOSITION: Not Established

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SOLUBILITY IN WATER: Dispersible **EVAPORATION RATE:** Not Established

DENSITY: 39.1 lbs./ft³

SPECIFIC GRAVITY: Not Established

VISCOSITY: Not Established

MOLECULAR WEIGHT: Not Established

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

STABILITY: Stable

POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Heat, open flame, sparks and static electricity.

INCOMPATIBLE MATERIALS: Carbon oxides, nitrogen oxides, sulfur oxides, hydrogen chloride, hydrogen

fluoride.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: > 5000 mg/kg (Rat)

ORAL LD₅₀: 2504 mg/kg

INHALATION LC₅₀: > 4.9 mg/L (Rat)(4-Hour)

EYE EFFECTS: Mild skin irritation **SKIN EFFECTS:** Slightly Irritating

CHRONIC: Prolonged exposure to sulfentrazone caused decreased hemoglobin content and hematocrit, and increased spleen weight and splenic extramudullary hematopoiesis at high doses in animals. Formulation may cause damage to organs through prolonged or repeated exposure.

CARCINOGENICITY

IARC: Not Listed NTP: Not Listed

Notes: Group E - Evidence of non-carcinogenecity for humans (sulfentrazone, cloransulam-methyl)

REPRODUCTIVE EFFECTS: No evidence of fertility or reproductive effects for the active ingredients.

TERATOGENIC EFFECTS: Evidence of teratogenic effects for the sulfentrazone component in animal

studies.

MUTAGENICITY: No evidence of mutagenic effects during in vivo or in vitro studies.

COMMENTS: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: This product is toxic to marine/estuarine invertebrates. This product contains chemicals known to leach through soil into groundwater.

AQUATIC TOXICITY (ACUTE):

Fish Toxicity: (Sulfentrazone Technical)

96 hour LC₅₀ - 94 mg/L

48 hour EC₅₀ - Crustacea - 60.4 mg/L

72 Hour EC₅₀ - Algae - 32.8 mg/L

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Fish Toxicity: (cloransulam-methyl Technical)

96 hour LC_{50} - >86 mg/L

48 hour EC₅₀ - Daphnia Magna- 98 mg/L

EC₅₀ - Algae - 3.5-12 ug/L

 LD_{50} - Bird - >2,200 mg/kg

GENERAL COMMENTS: ENVIRONMENTAL HAZARDS

This product is toxic to marine/estuarine invertebrates. Do not apply directly to water, to areas where surface water is present or to inter-tidal areas below the mean high water mark. Drift and runoff may be hazardous to the terrestrial and aquatic plants in neighboring areas. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

Groundwater Advisory:

This product contains chemicals known to leach through soil into groundwater under certain conditions as a result of label use. Use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Do not use on coarse soils classified as sand, which have less than 1.0% organic matter.

Surface Water Advisory:

This product can contaminate surface water through spray drift. Un-der some conditions this product may also have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several to many months post-application. These include poorly drain-ing or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filler strips, and areas over-lying tile drainage systems that drain to surface waters.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: 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: Environmentally hazardous substance, solid, N.O.S (Contains sulfentrazone, cloransulam-methyl)

PRIMARY HAZARD CLASS/DIVISION: 9

UN/NA NUMBER: UN3077
PACKING GROUP: III

NAERG: 171

REPORTABLE QUANTITY (RQ) UNDER CERCLA: None **NOTE:** Not regulated for *ground only* shipments by DOT

ROAD AND RAIL (ADR/RID)

PROPER SHIPPING NAME: Not regulated when shipped in single or inner packaging < 11 lbs. (5 kg).

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transporation classifications may vary by container volume and may be influenced by regional or country variation in regulations. Additional transportation system information can be obtained through an authorized sales or customr service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

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15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: None

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

313 REPORTABLE INGREDIENTS: None

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA RQ: None

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: None

CALIFORNIA PROPOSITION 65: This product does not contain ingredients on the list of proposition 65.

State of California safe drinking water and toxic enforcement act of 1986

FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT):

Labeling 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: FIFRA: 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. The following is the hazard information as required on the pesticide label: PRECAUTIONARY STATEMENTS - HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. See inside label booklet for additional precautionary statements.

16. OTHER INFORMATION

REASON FOR ISSUE: New Product

GENERAL STATEMENTS: DISCLAIMER AND LIMITATION OF LIABILITY

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