SAFETY DATA SHEET



Date Issued: 2/27/2017 SDS No: VANDAL MOC

Date Revised: 3/2/2018

Revision No: 2

VANDAL MOC

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: VANDAL MOC **CHEMICAL FAMILY:** Herbicide

DISTRIBUTOR

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

EPA REG. NO.: 89168-60-89391

24 HR. EMERGENCY TELEPHONE NUMBERS

24-Hour Emergency Assistance Call: 1-800-222-1222 Chemical Emergency Call CHEMTREC: 1-800-424-9300

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Acute Toxicity (Oral), Category 4 Acute Toxicity (Dermal), Category 5 Acute Toxicity (Inhalation), Category 5 Eye Irritation, Category 2A Skin Irritation, Category 3

Environmental:

Acute Hazards to the Aquatic Environment, Category 2 Chronic Hazards to the Aquatic Environment, Category 2

GHS LABEL





Exclamation Environment mark

SIGNAL WORD: WARNING HAZARD STATEMENTS

H302: Harmful if swallowed.

H313: May be harmful in contact with skin.

H333: May be harmful if inhaled. H316: Causes mild skin irritation. H319: Causes serious eye irritation.

H401: Toxic to aquatic life.

H411: 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:

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

P270: Do not eat, drink or smoke when using this product.

P273: Avoid release to the environment.

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

Response:

P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330: Rinse mouth.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P304+P312: IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.

P332+P313: If skin irritation occurs: Get medical advice/attention.

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.

Disposal:

3894MH2K: Dispose of contents/container in accordance with all Federal, State and Local Regulations and according to the Storage and Disposal instructions on the EPA Registered Label.

SENSITIZATION: Not a skin sensitizer.

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
Sulfentrazone	7.55	122836-35-5
Metolachlor II	68.25	51218-45-2
Other Ingredients	24.2	Mixture

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: 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 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 landfill appropriate for non hazardous chemical waste. Check local, state, and federal regulations for proper disposal.

LARGE SPILL: 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. 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. 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 a cool, dry place away from children and animals. Mix well before using. Keep tightly closed. Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

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

PHYSICAL STATE: Liquid ODOR: Petroleum-like COLOR: Clear, light amber

pH: 4.80

PERCENT VOLATILE: Not Established

FLASH POINT AND METHOD: 85 ℃ (185 ℉)

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

EVAPORATION RATE: Not Established

DENSITY: 9.274 lbs./gal.

SPECIFIC GRAVITY: 1.112 g/mL

VISCOSITY #1: 58.0 Centistokes at 20 °C VISCOSITY #2: 19.6 Centistokes at 40 °C MOLECULAR WEIGHT: Not Established

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Excessive heat and open flames.

INCOMPATIBLE MATERIALS: None known.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: > 2000 mg/kg **ORAL LD**₅₀: 1098 mg/kg

INHALATION LC₅₀: > 2.05 mg/L

EYE EFFECTS: Causes moderate eye irritation. **SKIN EFFECTS:** Causes mild skin irritation.

CARCINOGENICITY

Notes: Not listed in OSHA, NTP, IARC or ACGIH

SENSITIZATION: Not a contact sensitizer

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 pesticide is toxic to fish and marine/estuarine invertebrates. Do not apply directly to water, or to

areas where surface water is present or to intertidal areas below the mean high water mark. Runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water or rinsate.

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

AIR (ICAO/IATA)

SHIPPING NAME:

Environmentally hazardous substance, Liquid, N.O.S., UN 3082, Class 9, PG III, ERG 171 (Sulfentrazone)

UN/NA NUMBER: 3082

PRIMARY HAZARD CLASS/DIVISION: 9

PACKING GROUP: III

ERG: 171

VESSEL (IMO/IMDG)
SHIPPING NAME:

Environmentally hazardous substance, Liquid, N.O.S., UN 3082, Class 9, PG III, ERG 171 (Sulfentrazone)

UN/NA NUMBER: 3082

PRIMARY HAZARD CLASS/DIVISION: 9

PACKING GROUP: III

MARINE POLLUTANT #1: Sulfentrazone

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

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

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:

PRECAUTIONARY STATEMENTS

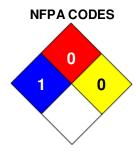
Hazards to Humans and Domestic Animals

CAUTION - Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

16. OTHER INFORMATION

REASON FOR ISSUE: New Revision

REVISION SUMMARY: This SDS replaces the 1/10/2018 SDS. Revised: **Section 14:** AIR (ICAO/IATA) (PRIMARY HAZARD CLASS/DIVISION, PACKING GROUP, UN/NA NUMBER, ERG), DOT (DEPARTMENT OF TRANSPORTATION) (PRIMARY HAZARD CLASS/DIVISION, UN/NA NUMBER, PACKING GROUP, NAERG), VESSEL (IMO/IMDG) (MARINE POLLUTANT #1, PRIMARY HAZARD CLASS/DIVISION, PACKING GROUP, UN/NA NUMBER).



GENERAL STATEMENTS: DISCLAIMER AND LIMITATION OF LIABILITY

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