



## SAFETY DATA SHEET

SDS ID: 74530-95

### 1. IDENTIFICATION

**Product Name:** ZONE MAXX Herbicide

**EPA Registration Number:** 74530-95

**Date of Preparation:** September 8, 2020

**Recommended use of the chemical and restrictions on use:**

**Recommended use:** Herbicide. Read and understand the entire label before using. Use only according to label directions. It is a violation of Federal law to use this product in a manner inconsistent to label directions.

**Restrictions on use:** Do not apply this product in a way that will contact workers or other persons, either directly or through drift.

**Manufacturer/Supplier:** HELM Agro US, Inc.  
401 E Jackson St., Suite 1400  
Tampa, FL 33602

**Phone Number:** 813-621-8846

**Email:** [info@helmagro.com](mailto:info@helmagro.com)

**Emergency Phone Number:** Chemtrec: 1-800-424-9300

### 2. HAZARD(S) IDENTIFICATION

**GHS Classification:**

Physical	Health
Combustible Dust	Acute Oral Toxicity Category 4 Eye Irritant Category 2B

**Label Elements:**

Warning!



**Hazard Statements:**

Harmful if swallowed.

Causes eye irritation.

May form combustible dust concentrations in air.

**Precautionary Statements:**

Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
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 attention.  
If swallowed: Call a POISON CENTER or doctor if you feel unwell.  
Rinse mouth.  
Dispose of contents and container in accordance with local and national regulations.

**Other Hazards:** None known.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Concentration
Sulfentrazone	122836-35-5	62.2%
Other Ingredients, including:	Mixture	33.9%
Ammonium Sulfate	7783-20-2	<25%
Sodium Dodecyl Sulfate	151-21-3	<3%
Chlorimuron Ethyl	90982-32-4	3.9%

The specific identity and/or exact percentage of composition has been withheld as a trade secret.

### 4. FIRST-AID MEASURES

**Description of First Aid Measures:**

**Eye:** Flush eyes with large quantities of water for several minutes, while holding the eyelids apart. Remove contact lenses if easy to do so. Continue rinsing. Get medical attention if irritation persists.

**Skin:** Flush thoroughly with water. Get medical attention if irritation or symptoms of exposure develop. Remove and launder contaminated clothing before re-use.

**Inhalation:** Remove victim to fresh air. If breathing is difficult or irritation persists, get medical attention.

**Ingestion:** Rinse mouth. Do not induce vomiting unless directed to do so by medical personnel. Keep the victim calm and warm. Get medical attention if you feel unwell.

**Most Important Symptoms/Effects, Acute and Delayed:** May cause moderate eye irritation. Inhalation of dust may cause irritation of the nose, throat and upper respiratory irritation. Harmful if swallowed.

**Indication of Immediate Medical Attention and Special Treatment, If Necessary:** None required under normal conditions of use.

### 5. FIRE-FIGHTING MEASURES

**Suitable (and Unsuitable) Extinguishing Media:** Use media appropriate for the surrounding fire. Do not use solid water jet as that may create a dust cloud that can present an explosion hazard.

**Specific Hazards Arising From the Chemical:** Not classified as flammable or combustible. Dust generated in handling this material may present a potential fire and explosion hazard if suspended in air at high concentrations. Settled dust presents a fire hazard. Resuspension of the dust into the air by vibration, traffic, material handling, etc. in high concentrations in the presence of an ignition source could result in a dust

explosion. Minimize the generation and accumulation of dust. Thermal decomposition may produce oxides of carbon, nitrogen, and sulfur, hydrogen chloride, and hydrogen fluoride.

**Special Protective Equipment and Precautions for Fire-Fighters:** Wear an approved, positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water. Powders that become wet may cause surfaces to be extremely slippery and cause a slip hazard. Do not allow run-off from firefighting to enter drains or water courses.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment and Emergency Procedures:** Evacuate spill area and keep unprotected personnel away. Avoid contact with eyes or clothing. Wear appropriate protective clothing as described in Section 8. Avoid generating and breathing air-borne dust. Remove all ignition sources such as open flames, spark producing equipment, pilot lights, etc. Powders that become wet may cause surfaces to be extremely slippery and present a slip hazard.

**Environmental Hazards:** Avoid unintentional releases to the environment. Report spill as required by local and federal regulations.

**Methods and Materials for Containment and Cleaning Up:**

Scoop or shovel up using methods that minimize the generation of airborne dust and place into a closable, labeled container for disposal. Avoid generating airborne dust. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Wash spill area with water. Do not contaminate water when disposing of equipment washwater or rinsate.

**7. HANDLING AND STORAGE**

**Precautions for Safe Handling:** Avoid contact with eyes or clothing. Wear protective clothing and equipment as described in Section 8. Avoid breathing dust. Only protected handlers may be in the area at the time of application. Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Possible combustible dust hazard. Minimize the generation and accumulation of dust. Keep dust away from heat, sparks, flames and all other sources of ignition. Follow good housekeeping practices to keep surfaces free from settled dust. Keep containers closed when not in use. Refer product label for additional information on use and handling.

**Conditions for Safe Storage, Including Any Incompatibilities:** Store in a cool dry place and avoid excess heat. Do not store below 30°F degrees. Store product in original container only. Keep container closed when not in use, away from food or feed, fertilizer and other pesticides. Do not contaminate water, food or feed by storage or disposal or cleaning of equipment.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Guidelines:**

Sulfentrazone	None Established
Ammonium Sulfate (as PNOC)	5 mg/m3 (respirable fraction), 15 mg/m3 (total dust) TWA OSHA PEL

Sodium Dodecyl Sulfate	None Established
Chlorimuron Ethyl	None Established

**Appropriate Engineering Controls:** If use generates dust, use general ventilation or local exhaust as required to maintain exposures below the occupational exposure limits. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust handling systems (such as exhaust ducts, dust collectors, vessels and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e. there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks. Refer product label for additional information.

**Individual Protection Measures, Such As Personal Protective Equipment:**

**Respiratory Protection:** In operations where exposure levels are excessive, an approved respirator with dust/mist cartridges or filtering facepiece should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice. Refer product label for additional information.

**Skin Protection:** Use chemical-resistant gloves (barrier laminate, butyl or nitrile rubber, natural rubber, polyvinyl chloride, or viton) to prevent skin contact.

**Eye Protection:** Protective eye wear such as chemical safety goggles or dust goggles are recommended to prevent eye contact.

**Other:** Impervious clothing such as long-sleeved shirt, long pants, coveralls, and shoes plus socks are required to prevent skin contact and contamination of personal clothing. Washing facilities should be available in the work area.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b> Brown granules	<b>Flammable limits:</b> LEL: Not applicable UEL: Not applicable
<b>Odor:</b> Mildly bitter	<b>Vapor pressure:</b> Not applicable
<b>Odor Threshold:</b> Not applicable	<b>Vapor density:</b> Not applicable
<b>pH:</b> 4.93 (1% dispersion)	<b>Relative density:</b> 0.563 g/cm <sup>3</sup> at indoor ambient temperature.
<b>Melting point/freezing point:</b> Not available	<b>Solubility(ies):</b> Not available
<b>Boiling point/range:</b> Not applicable	<b>Partition coefficient (n-octanol/water):</b> Not applicable
<b>Flash point:</b> Not applicable	<b>Auto-ignition temperature:</b> Not applicable
<b>Evaporation rate:</b> Not applicable	<b>Decomposition temperature:</b> Not applicable
<b>Flammability (solid, gas):</b> Combustible dust	<b>Viscosity:</b> Not applicable

**10. STABILITY AND REACTIVITY**

**Reactivity:** Not reactive under normal conditions of use.

**Chemical Stability:** Stable under normal storage and handling conditions.

**Possibility of Hazardous Reactions:** Contact with oxidizing agents may cause a hazardous chemical reaction.

**Conditions To Avoid:** Keep away from heat, sparks, flames and other sources of ignition. Avoid hygroscopic conditions and dust formation.

**Incompatible Materials:** Do not mix or allow coming in contact with oxidizing agents.

**Hazardous Decomposition Products:** Thermal decomposition may produce oxides of carbon, nitrogen, and sulfur, hydrogen chloride, and hydrogen fluoride.

## 11. TOXICOLOGICAL INFORMATION

### Potential Health Effects:

**Eye:** Direct contact may cause moderate eye irritation based on laboratory studies conducted on a similar product.

**Skin:** This product is expected to be non-irritating based on laboratory studies conducted on a similar product.

**Inhalation:** High concentrations of dust may cause nose, throat, and upper respiratory tract irritation.

**Ingestion:** Harmful if swallowed. Swallowing may cause gastrointestinal irritation with nausea and vomiting.

**Chronic Effects:** None known.

**Sensitization:** Based on studies conducted on a similar product, this product is not expected to cause skin sensitization.

**Carcinogenicity:** None of the components in this product are listed as a carcinogen or suspected carcinogen by OSHA, IARC, and NTP.

**Reproductive Effects:** This product is not expected to cause reproductive harm.

**Mutagenic Effects:** None of the components have been shown to cause mutagenic activity.

### Acute Toxicity:

The following toxicity values are based on a similar product:

Oral rat LD50: 1750 mg/kg, Inhalation rat LC50: >5.17 mg/L, Skin rat LD50: >5000 mg/kg

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity:

Sulfentrazone: 96 hr LC50 Onchorhynchus mykiss- 120 mg/L, 96 hr LC50 Lepomis macrochirus- 93.8 mg/L, 48 hr EC50 Daphnia magna- 60.4 mg/L, 72 hr EC50 Algae- 32.8 mg/L, 21 day NOEC Fish 5.9 mg/L, 21 day NOEC Crustacea- 0.51 mg/L

Ammonium Sulfate: 96 hr LC50 Onchorhynchus mykiss- 53 mg/L

Sodium Dodecyl Sulfate: 96 hr LC50 Pimephales promelas- 29 mg/L, 48 hr EC50 Ceriodaphnia dubia- 5.55 mg/L, 42 days NOEC Pimephales promelas-  $\geq 1.357$  mg/L, 7 days NOEC Ceriodaphnia dubia- 0.88 mg/L

Chlorimuron Ethyl: 96 hr LC50 Cyprinodon variegatus->120 mg/L, 120 hr EC50 Selenastrum capricornutum- 0.004 mg/L, 90 day NOEC Onchorhynchus mykiss- 7.6 mg/L, 120 hr NOEC Selenastrum capricornutum-0.00052 mg/L

This product is expected to be very toxic to the aquatic environment with long lasting effects. Releases to the environment should be avoided.

**Persistence and Degradability:** Sulfentrazone and Chlorimuron Ethyl: Not readily biodegradable.

**Bioaccumulative Potential:** Sulfentrazone and Chlorimuron Ethyl: Low potential for bioaccumulation.

**Mobility in Soil:** Sulfentrazone is known to leach through soil into groundwater under certain conditions

as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

**Other Adverse Effects:** This pesticide is toxic to marine/estuarine invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to terrestrial and aquatic plants in neighboring areas. Do not contaminate water when disposing of equipment washwaters or rinsate.

**13. DISPOSAL CONSIDERATIONS**

**Pesticide Disposal:** Wastes resulting from the use of this product that cannot be used must be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, State or local procedures. For more information contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

**Container Disposal:** Do not contaminate water, food or feed by storage or disposal or cleaning of equipment.

**Nonrefillable container** - Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: (For containers 50 pounds or less) Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into begins to drip. Repeat this procedure two more times. Then offer for recycling if available, or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Returnable/Refillable Containers** - Refill this container with ZONE MAXX HERBICIDE only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

**14. TRANSPORT INFORMATION**

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
US DOT	None	Not Regulated	None	None	Not applicable
IMDG*	UN3077	Environmentally hazardous substance, solid, n.o.s. (Chlorimuron Ethyl)	9	III	Marine Pollutant
IATA*	UN3077	Environmentally hazardous substance, solid, n.o.s. (Chlorimuron Ethyl)	9	III	Yes

\*Inner packages with less than 5 kg of solid are exempt per IMDG Code 2.10.2.7 and ICAO Special Provision A197.

**Transport in Bulk (According to Annex II of MARPOL 73/78 and the IBC Code):** Not applicable

**Special precautions:** None known

**15. REGULATORY INFORMATION**

**Safety, Health, and Environmental Regulations Specific for the Product In Question:**

This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

**FIFRA Labeling:**

**Keep Out Of Reach of Children**

**CAUTION**

**PRECAUTIONARY STATEMENTS**

**Hazards to Humans and Domestic Animals**

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Avoid contact with eyes or clothing.

**Physical and Chemical Hazard Statement:** Do not mix or allow coming in contact with oxidizing agents. Hazardous chemical reaction may occur.

**U.S. FEDERAL REGULATIONS:**

**CERCLA 103 Reportable Quantity:** This product is not subject to reporting under CERCLA. Some states have more stringent reporting requirements. Report all spills in accordance with local, state, and federal regulations.

**SARA TITLE III:**

**Hazard Category for Section 311/312:** See OSHA Hazard Classification in Section 2.

**Section 313 Toxic Chemicals:** This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements:

Chlorimuron Ethyl	90982-32-4	3.9%
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**Section 302 Extremely Hazardous Substances (TPQ):** None

**EPA Toxic Substances Control Act (TSCA) Status:** This product is a EPA Registered product #74530-95 and is exempt from TSCA.

**16. OTHER INFORMATION**

**SDS Revision History:** New SDS

**Date of preparation:** September 8, 2020

**Date of last revision:** N/A