# **Section 1. Product and Company Identification**

#### **PRODUCT:**

Sulfentrazone + Carfentrazone-ethyl SE Herbicide

OTHER MEANS OF IDENTIFICATION

#### **IUPAC** name:

CARFENTRAZONE-ETHYL: Benzenepropanoic acid, .alpha., 2-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-4-fluoro-, ethyl ester SULFENTRAZONE: Methanesulfonamide, N-[2,4-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]phenyl]-

**Active Ingredients:** Carfentrazone-ethyl, Sulfentrazone

RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE

**Recommended Use:** Herbicide

**Restrictions on Use:** Use as recommended by the label

COMPANY IDENTIFICATION:

Maxunitech North America, Inc.

Add: 27 Goleta Point Drive, Corona Del Mar, CA 92625

Tel: 571-280-57983

#### **EMERGENCY PHONE NUMBER**

National Pesticide Information Center: 1-800-858-7378 (Monday through Friday, 8:00 AM to 12 PM Pacific Standard Time)

Poison Control Center: 1-800-222-1222 (In the event of a medical emergency)

#### **Section 2 - Hazards Identification**

#### **WARNING**

Very toxic to aquatic life with long lasting effects. (H400+H410)



#### **ENVIRONMENTAL HAZARDS**

Hazardous to the Aquatic Environment – Short-Term (Acute): Category 1 Hazardous to the Aquatic environment – Long-Term (Chronic): Category 1 PRECAUTIONARY STATEMENTS

Avoid release to the environment not in accordance with the product label. (P273) Collect spillage. (P391)

Dispose of contents / containers in accordance with local, State and Federal regulations. Refer to the product label for specific disposal instructions. (P501)

# Section 3 - Composition/Information on Ingredient

Sulfentrazone (CAS#122836-35-5)	31.77%
Carfentrazone-ethyl (CAS#128639-02-1)	3.53%
Inert ingredients	64.70%

#### **Section 4 - First Aid Measures**

INGESTION: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Never give anything by mouth to an unconscious person.

# INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED. IF NECESSARY

Treat symptomatically. Treatment is otherwise controlled by removal from exposure followed by symptomatic and supportive care.

#### **Section 5 - Fire Fighting Measures**

#### SUITABLE EXTINGUISHING MEDIA:

Foam, CO<sub>2</sub>, dry powder or water spray.

#### SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:

May support combustion at elevated temperatures. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

#### FIRE FIGHTING PROCEDURES:

Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe smoke, gases or vapors generated.

#### Section 6 - Accidental Release Measures

# PERSONAL PRECAUTION, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

Isolate and post spill area. Remove nearby ignition sources (such as smoking, matches or open flames). Wear protective clothing and respiratory protection. Keep unprotected persons and animals out of the area.

#### **ENVIRONMENTAL PRECAUTIONS:**

Keep material out of lakes, streams, ponds and sewer drains. Dike to confine spill and absorb with a noncombustible absorbent such as clay, sand or soil. Vacuum, shovel or pump waste into a drum and label contents for disposal.

# METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:

To clean and neutralize spill area, tools and equipment by washing with a strong soap and water solution. Absorb, as above, any excess liquid and add to the drums of waste already collected. Repeat if necessary. Dispose of drummed waste according to the method outlined in Section 13, "Disposal Considerations".

#### **RELEASE NOTES:**

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal.

# **Section 7 - Handling and Storage**

#### PRECAUTIONS FOR SAFE HANDLING:

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

#### CONDITIONS FOR SAFE STORAGE:

Store product in original container only, away from other pesticides, fertilizer, food or feed. Store in a cool dry place and avoid excess heat. Do not store below 32F degrees.

# **Section 8 - Exposure Controls / PPE**

#### **ENGINEERING CONTROLS**

Handle in well ventilated areas, generally natural ventilation is adequate.

# PERSONAL PROTECTIVE EQUIPMENT

Applicators, mixers, loaders and other pesticide handlers must wear long-sleeved shirt and long pants, chemical-resistant gloves, and shoes plus socks.

#### HYGIENE MEASURES

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.

# REQUIREMENTS CONCERNING SPECIAL TRAINING

Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.

# **Section 9 - Physical/Chemical Properties**

Odor:
Almond smell
Light gray liquid
Boiling Point/Boiling Range:
No data available
Melting Point/Freezing Point
No data available
Flammability
No data available
Lower and upper explosion:
No data available

limit/flammability limit

Auto-ignition temperature

Decomposition temperature

No data available

No data available

No data available

1.2026 g/cm<sup>3</sup> at

20°C

pH: 6.37 at 19.8°C (1%

dispersion)

Kinematic Viscosity: 9943Pa s at 1.0 rpm

at 20°C

3258 mPa s at 4.0 rpm at 40°C

Solubility: No data available Partition coefficent No data available

# **Section 9 - Physical/Chemical Properties (CONT.)**

Vapor pressure

Flash Point:

Explodability:

Combustibility:

Corrosivity:

Non-combustible

Non-corrosive

Non-corrosive

Non-corrosive

Non-corrosive

# Section 10 - Stability and Reactivity

#### REACTIVITY

None under normal use conditions.

# POSSIBILITY OF HAZARDOUS REACTIONS

Do not mix or allow coming into contact with oxidizing agents. Hazardous chemical reaction may occur.

# CONDITIONS TO AVOID:

Excessive heat, fire and sparks.

#### STABILITY:

Stable under normal conditions.

#### POLYMERIZATION:

Will not occur.

#### **INCOMPATIBLE MATERIALS:**

It is compatible with typical reducing agents but incompatible with typical oxidizing agents

# HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon monoxide, carbon dioxide, nitrogen oxides, sulfur oxides, hydrogen chloride, hydrogen fluoride.

# **Section 11 - Toxicological Information**

#### **ORAL**

 $LD_{50}$ :  $\geq 2,000 \text{ mg/kg(rat)}$ 

#### **DERMAL**

 $LD_{50}$ : > 5,000 mg/kg (rat)

# **INHALATION**

 $LC_{50}$ : > 5.523 mg/L (4 h, rat)

#### **EYE EFFECTS**:

Not an irritant (rabbit)

# **SKIN EFFECTS:**

Not an irritant (rabbit)

# **SKIN SENSITIZATION:**

Not a sensitizer (guinea pig)

# **Section 11 - Toxicological Information (CONT.)**

#### CHRONIC EFFECTS FROM OVEREXPOSURE:

No data available for the formulation. Sulfentrazone was not carcinogenic in lifetime feeding studies with laboratory animals, nor was it found to be mutagenic in a battery of tests. In a reproduction study, sulfentrazone produced adverse effects on the growth and survival of the offspring, decreased male fertility and oligospermia at 25 mg/kg/day, and 35 mg/kg/day. Sulfentrazone was found to be fetotoxic in oral and dermal developmental toxicity studies; the fetal NOELS were 10 mg/kg/day and 100 mg/kg/day, respectively. At labeled use rates and practices of mixing and applying, expected exposure to farm workers is at least one hundred times lower than the doses that produced effects in laboratory animals. At labeled use rates and practices of mixing and applying, expected exposure to farm workers is at least one hundred times lower than the doses that produced effects in laboratory animals.

#### **CARCINOGENICITY:**

NTP: Not listed

EPA: Not likely to be

carcinogenic to humans

IARC: Not listed OSHA: Not listed

OTHER: (ACGIH) Not listed

# **Section 12 - Ecological Information**

No data available for the formulation. Data presented below are based on the active ingredient.

#### **Sulfentrazone:**

**BIRDS** 

Acute oral LD<sub>50</sub> Mallard ducks: > 2,250 mg/kg

Dietary LC<sub>50</sub> (8 d) Ducks and quails: > 5,620 mg/kg

**FISH** 

LC<sub>50</sub> (96 h) Bluegill sunfish: 93.8 LC<sub>50</sub> Rainbow trout: > 130 mg/L

**DAPHNIA** 

LC<sub>50</sub> (48 h): 60.4 mg/L

**ALGAE** 

Algae EC<sub>50</sub>: 31.0 ug/L

Blue-green algae EC<sub>50</sub>: 32.9 µg/L

**BEES** 

LD<sub>50</sub>:  $> 25 \mu g/bee$ 

**WORMS** 

NOEC: 3,726 mg/kg in soil.

# **Section 12 - Ecological Information (CONT.)**

#### **Carfentrazone-ethyl:**

**BIRDS** 

LD<sub>50</sub> Bobwhite quail: > 2,250 mg/kg LC<sub>50</sub> Mallard duck: > 5,620 ppm

**FISH** 

LC<sub>50</sub> (96 h) Depending on species: 1.6-43 mg/L

**DAPHNIA** 

EC<sub>50</sub> (48 h): 9.8 mg/L

**ALGAE** 

EC<sub>50</sub> Depending on species: 5.7-17 ug/L

OTHER AQUATIC SPP.

 $EC_{50}$  (96 h) Eastern Oysters: 2.05 ppm  $EC_{50}$  (96 h) Mysid Shrimps: 1.16 ppm  $EC_{50}$  (14 d) Duckweed: 0.0057 mg/L

**BEES** 

LD<sub>50</sub>:  $> 200 \mu g/bee$  (contact)

LD<sub>50</sub>: >35 µg/bee (oral)

**WORMS** 

 $LC_{50}$ : > 820 mg/kg soil

#### PERSISTENCE AND DEGRADABILITY

Sulfentrazone: Persistent. Does not readily hydrolyze. Not readily biodegradable.

Carfentrazone-ethyl: Non-persistent. Readily hydrolyzed. Not readily biodegradable.

#### BIOACCUMULATION

Sulfentrazone, Carfentrazone-ethyl: The substance does not have a potential for bioconcentration.

#### **MOBILITY**

Residues of this chemical have properties and characteristics associated with chemicals detected in ground water. Residues of this chemical may leach into ground water if the chemical is used in areas where soils are permeable, particularly where the water table is shallow.

# **Section 13 - Disposal Considerations**

#### **DISPOSAL METHOD:**

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

# **CONTAINER HANDLING:**

Nonrefillable container and refillable containers. Refer to the product label for specific container disposal instructions.

#### **Section 14 - Transport Information**

UN No.: 3082

Packaging Group: III Hazard Class: 9 Marine Pollutant: Yes

Description: UN3082, Environmental hazardous substance, liquid, N.O.S.

(sulfentrazone, carfentrazone-ethyl), 9, PG III, Marine Pollutant

# **Section 15 - Regulatory Information**

#### **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 HUMAN AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to algae, marine/estuarine invertebrates, and moderately toxic to fish. 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 wash waters or rinsate.

# SARA TITLE III – SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES Not listed

# SARA TITLE III – SECTION 311/312 HAZARDOUS CATEGORIES

Immediate (acute)

# SARA TITLE III – SECTION 312 THRESHOLD PLANNING QUANTITY

The threshold planning quantity (TPQ) for this product treated as a mixture is 10,000 lbs. This product contains no ingredients with a TPQ of less than 10,000 lbs.

#### SARA TITLE III – SECTION 313 REPORTABLE INGREDIENTS

None

# CERLA REPORTABLE QUANTITY (RQ)

Not listed

# **CALIFORNIA PROP 65 STATUS**

This product does not contain any chemicals known to the state of California to cause cancer or reproductive harm.

#### **CANADA**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

# **Section 15 - Regulatory Information (CONT.)**

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws.

#### **Section 16 - Additional Information**

MSDS Creation Date: May 6, 2018 Revision #3 Date: January 8, 2021

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.