



## Maxunitech North America, Inc.

**SAFETY DATA SHEET**

Issue Date 16-Oct-2023

Version #1

**1. IDENTIFICATION****Product identifier****Product Name** Maxunitech® Sulfentrazone 480SC**Other means of identification****Synonyms**SULFENTRAZONE: 2',4'-dichloro-5'-(4-difluoromethyl-4,5-dihydro-3-methyl-5-oxo-1*H*-1,2,4-triazol-1-yl)methanesulfonanilide (IUPAC name); N-[2,4-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1*H*-1,2,4-triazol-1-yl]phenyl] methanesulfonamide (CAS name)**Registration Number(s)** PCP No. 34968**Recommended use of the chemical and restrictions on use****Recommended Use** Herbicide  
**Uses advised against** Use according to label**Supplier's details**Maxunitech North America, Inc.  
11601 Shadow Creek Pkwy, Suite 111-573  
Pearland, TX  
77584, USA**Emergency telephone number****Company Phone Number** 1-855-462-9621**Emergency Telephone** For spills or transportation accidents, Chemtrec, 1-800-424-9300.**2. HAZARDS IDENTIFICATION****Classification of the substance or mixture****Classification according to Regulation (GHS Rev.10)**Acute oral- Category 5  
Specific target organ toxicity (repeated exposure)-Category 2  
Hazardous to aquatic environment, acute -Category 3  
Hazardous to aquatic environment, chronic -Category 3**GHS label elements, including precautionary statements****Warning****Hazard Statements**H373 - May cause damage to organs through prolonged or repeated exposure  
H402 - Harmful to aquatic life



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H412 - Harmful to aquatic life with long lasting effects

## Precautionary Statements - Prevention

P260 - Do not breathe dust/fume/gas/mist/vapors/spray  
P273 - Avoid release to the environment.

## Precautionary Statements - Response

P319 - Get medical help if you feel unwell

## Precautionary statement(s) Storage

## Precautionary Statements - Disposal

P501 - Dispose of contents/container to in accordance with local regulations.

## Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

## Other Information

Harmful to aquatic life.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substance

Not applicable

#### Mixture

Chemical Name	CAS No.	%
Sulfentrazone	122836-35-5	38.8-41.2
Propylene glycol	57-55-6	5-10
Oxirane, methyl-, polymer with oxirane, monobutyl ester	9038-95-3	1-5
Toluene	108-88-3	1-5

### 4. FIRST AID MEASURES

#### Description of necessary first aid measures

<b>Eye contact</b>	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. Call a poison control center or doctor for further treatment advice.
<b>Skin contact</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.
<b>Inhalation</b>	Move to fresh air. If person is not breathing, contact emergency medical services, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
<b>Ingestion</b>	If swallowed, do not induce vomiting - seek medical advice 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 a poison control center or doctor. Do not induce vomiting or give anything by mouth to an unconscious person.
<b>Most important symptoms and effects, both acute and delayed</b>	Central nervous system effects.



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**Indication of immediate medical attention and special treatment needed, if necessary**

Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

<b>Suitable extinguishing media</b>	Carbon dioxide (CO <sub>2</sub> ). Foam. Dry powder. Water spray.
<b>Special hazards arising from the chemical</b>	Thermal decomposition can lead to release of irritating and toxic gases and vapors.
<b>Hazardous Combustion Products</b>	Carbon oxides (CO <sub>x</sub> ), Nitrogen oxides (NO <sub>x</sub> ), Sulfur oxides, Hydrogen chloride, Hydrogen fluoride.
<b>Explosion data</b>	
<b>Sensitivity to Mechanical Impact</b>	No information available.
<b>Sensitivity to Static Discharge</b>	No information available.
<b>Protective equipment and precautions for firefighters</b>	As in any fire, wear self-contained breathing apparatus and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Isolate and post spill area. Remove all sources of ignition. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8.
<b>Other</b>	For further clean-up instructions, call Maxunitech North America Inc. Emergency Hotline number listed in Section 1 "Product and Company Identification" above.
<b>Environmental precautions</b>	Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains.
<b>Methods for Containment</b>	Dike to prevent runoff. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
<b>Methods for cleaning up</b>	Clean and neutralize spill area, tools and equipment by washing with water and soap. Absorb rinsate and add to the collected waste. Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in Section 13.

## 7. HANDLING AND STORAGE

<b>Handling</b>	Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.
<b>Storage</b>	Keep in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep out of reach of children and animals. Store in original container.
<b>Incompatible products</b>	None known

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
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Toluene (108-88-3)	TWA: 20 ppm	TWA: 200 ppm Ceiling: 300 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m <sup>3</sup> STEL: 150 ppm STEL: 560 mg/m <sup>3</sup>	Mexico: TWA 50 ppm Mexico: TWA 188 mg/m <sup>3</sup>
<b>Chemical name</b>	<b>British Columbia</b>	<b>Quebec</b>	<b>Ontario TWAEV</b>	<b>Alberta</b>
Propylene glycol (57-55-6)	-	-	TWA: 10 mg/m <sup>3</sup> aerosol only  TWA: 50 ppm aerosol and vapor  TWA: 155 mg/m <sup>3</sup> aerosol and vapor	-
Toluene (108-88-3)	TWA: 20 ppm	TWA: 50 ppm TWA: 188 mg/m <sup>3</sup> Skin	TWA: 20 ppm	TWA: 50 ppm TWA: 188 mg/m <sup>3</sup> Skin

### Appropriate engineering controls

#### Engineering measures

Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

### Individual protection measures, such as personal protective equipment

#### Eye/Face Protection

For dust, splash, mist or spray exposure, wear chemical protective goggles.

#### Skin and Body Protection

Wear long-sleeved shirt, long pants, socks, and shoes.

#### Hand protection

Use protective gloves made of chemical materials such as nitrile or neoprene. Wash the outside of gloves with soap and water before reuse. Check regularly for leaks.

#### Respiratory protection

For dust, splash, mist or spray exposures, wear a filtering mask.

#### Hygiene measures

Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Remove and wash contaminated clothing before re-use. Launder work clothing separately from regular household laundry.

#### General information

If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Appearance</b>	Off-white liquid
<b>Physical State</b>	Liquid
<b>Color</b>	Off-white
<b>Odor</b>	Low Alcohol
<b>Odor threshold</b>	No information available
<b>pH</b>	5.3-6.0 @ 20°C
<b>Density</b>	1.15 - 1.25 g/cm <sup>3</sup> (20 °C)
<b>Melting point/freezing point</b>	123 °C
<b>Boiling Point/Range</b>	No information available
<b>Flash point</b>	> 94 °C / > 201.2 °F Tag Closed Cup
<b>Evaporation Rate</b>	No information available



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<b>Flammability (solid, gas)</b>	No information available
<b>Flammability Limit in Air</b>	
<b>Upper flammability limit:</b>	No information available
<b>Lower flammability limit:</b>	No information available
<b>Vapor pressure</b>	1 x 10 <sup>-9</sup> mm Hg at 25 °C
<b>Vapor density</b>	No information available
<b>Water solubility</b>	No information available
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Viscosity, kinematic</b>	No information available
<b>Viscosity, dynamic</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No data available
<b>Molecular weight</b>	No information available
<b>Bulk density</b>	Not Applicable

### 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	None under normal use conditions.
<b>Chemical stability</b>	Stable.
<b>Possibility of hazardous reactions</b>	None under normal processing.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Excessive heat
<b>Incompatible materials</b>	None known.
<b>Hazardous decomposition products</b>	Carbon oxides (CO <sub>x</sub> ), Nitrogen oxides (NO <sub>x</sub> ), Sulfur oxides, Hydrogen chloride, Hydrogen fluoride.

### 11. TOXICOLOGICAL INFORMATION

#### Information on the likely routes of exposure

#### The acute toxicity information of the formulated product:

<b>LD<sub>50</sub> Oral</b>	2084 mg/kg (rat)
<b>LD<sub>50</sub> Dermal</b>	> 2000 mg/kg (rabbit)
<b>LC<sub>50</sub> Inhalation</b>	> 2.72 mg/L 4 hr (rat) - Maximum attainable concentration (zero mortality)

<b>Serious eye damage/eye irritation</b>	Non-irritating.
<b>Skin corrosion/irritation</b>	Minimally irritating.
<b>Sensitization</b>	Did not cause sensitization on laboratory animals.

Chemical name	LD <sub>50</sub> Oral	LD <sub>50</sub> Dermal	LC <sub>50</sub> Inhalation
Propylene glycol (57-55-6)	20000 mg/kg (Rat)	20800 mg/kg (Rabbit)	



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Oxirane, methyl-, polymer with oxirane, monobutyl ester (9038-95-3)	2500 g/kg (Rat)		0.147 mg/L (Rat) 4 h
Toluene (108-88-3)	= 2600 mg/kg (Rat)	= 12000 mg/kg (Rabbit)	= 12.5 mg/L (Rat) 4 h

### Information on toxicological effects

#### Symptoms

Signs of toxicity in laboratory animals given sulfentrazone included clonic convulsions, ataxia, hypersensitivity to touch, chromorhinorrhea, abdominogenital staining, decreased locomotion, lacrimation, nasal discharge, and squinting eyes.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Chronic toxicity</b>	Sulfentrazone: Prolonged exposure cause decreased hemoglobin content and hematocrit, and increased spleen weight and splenic extramedullary hematopoiesis at high doses in animal studies
<b>Mutagenicity</b>	Sulfentrazone: Not genotoxic in animal studies
<b>Carcinogenicity</b>	Sulfentrazone: No evidence of carcinogenicity from animal studies
<b>Neurological effects</b>	Sulfentrazone: Clinical signs of neurotoxicity in laboratory animals was observed at high dose levels.
<b>Reproductive toxicity</b>	Sulfentrazone: No toxicity to reproduction in animal studies.
<b>Developmental toxicity</b>	Sulfentrazone: Fetal weight decreased; delayed skeletal ossification observed at maternally non-toxic doses are reversible effects and a dose-response is established; malformations observed in fetuses at maternally toxic doses and consistent with the mode of action for protoporphyrongen oxidase inhibitors. Developmental toxicity testing and results were generated for sulfentrazone with toluene present as an impurity.
<b>STOT - single exposure</b>	Not classified.
<b>STOT - repeated exposure</b>	May cause damage to organs through prolonged or repeated exposure.
<b>Target organ effects</b>	Sulfentrazone: Hematopoietic system.
<b>Neurological effects</b>	Sulfentrazone: Clinical signs of neurotoxicity in laboratory animals was observed at high dose levels.
<b>Aspiration hazard</b>	No information available.

Chemical name	ACGIH	IARC	NTP	OSHA
Toluene 108-88-3		Group 3		

#### Legend:

**IARC (International Agency for Research on Cancer)**

Group 3 - Not classifiable as to its carcinogenicity to humans

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Sulfentrazone (122836-35-5)				
Active Ingredient(s)	Duration	Species	Value	Units



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Sulfentrazone	72 h EC <sub>50</sub>	Algae	32.8	mg/L
	48 h EC <sub>50</sub>	Crustacea	60.4	mg/L
	96 h LC <sub>50</sub>	Fish	94	mg/L
	21 d NOEC	Fish	5.9	mg/L
	21 d NOEC	Crustacea	0.51	mg/L

**Persistence and Degradability** Sulfentrazone: Persistent, Does not readily hydrolyze, Not readily biodegradable.

**Bioaccumulation** Sulfentrazone: The substance does not have a potential for bioconcentration.

**Mobility** Sulfentrazone: Mobile, Has potential to reach ground water.

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods** Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance. Proper personal protective equipment, as described in Sections 7 and 8, must be worn while handling materials for waste disposal.

**Contaminated packaging** Containers must be disposed of in accordance with local, state and federal regulations. Refer to the product label for container disposal instructions. Do not reuse or refill this container.

### 14. TRANSPORT INFORMATION

**DOT** This material is not a hazardous material as defined by U.S. Department of Transportation at 49 CFR Parts 100 through 185.

**TDG** Classification below is only applicable when shipped by vessel and is not applicable when shipped by road or rail only.

**UN/ID no** UN3082  
**Proper shipping name** Environmentally hazardous substance, liquid, n.o.s.  
**Hazard Class** 9  
**Packaging group** III  
**Marine pollutant** Sulfentrazone  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s. (sulfentrazone), 9, III, Marine pollutant

#### ICAO/IATA

**UN/ID no** UN3082  
**Proper shipping name** Environmentally hazardous substance, liquid, n.o.s.  
**Hazard Class** 9  
**Packaging group** III  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s. (sulfentrazone), 9, III, Marine pollutant

#### IMDG/IMO

**UN/ID no** UN3082  
**Proper shipping name** Environmentally hazardous substance, liquid, n.o.s.  
**Hazard Class** 9  
**Packaging group** III  
**EmS No.** F-A, S-F  
**Marine Pollutant** Sulfentrazone  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s. (sulfentrazone), 9, III, Marine pollutant



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## 15. REGULATORY INFORMATION

### US Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical name	CAS-No	Weight %	SARA 313 - Threshold Values %
Toluene - 108-88-3	108-88-3	1-5	1.0

#### **SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic health hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

### Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium Hydroxide 1310-73-2	1000 lb			X
Toluene 108-88-3	1000 lb	X	X	X

### CERCLA

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Sodium Hydroxide 1310-73-2	1000 lb 454 kg	
Toluene 108-88-3	1000 lb 454 kg	

## US State Regulations

#### **California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Prop. 65
Toluene - 108-88-3	Developmental

#### **U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania





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Propylene glycol 57-55-6	X		X
Toluene 108-88-3	X	X	X

### International Inventories

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINC S (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Propylene glycol 57-55-6	X	X	X	X	X	X	X	X
Oxirane, methyl-, polymer with oxirane, monobutyl ester 9038-95-3,	X	X		X	X	X	X	X
polymer with oxirane, monobutyl ester 9038-95-3								
Toluene 108-88-3	X	X	X	X	X	X	X	X

### Mexico - Grade

Slight risk, Grade 1

Chemical name	Carcinogen Status	Mexico
Toluene		Mexico: TWA 50 ppm Mexico: TWA 188 mg/m <sup>3</sup>

Chemical name	Mexico - Pollutant Release and Transfer Register - Reporting Emissions for Fabrication, Process or Use - Threshold Quantities	Pollutant Release and Transfer Register - Reporting Emissions - Threshold Quantities
Toluene	1000 5000 kg/yr	1000 kg/yr

### WHMIS Statement

This product has been classified in accordance with the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

### WHMIS Hazard Class

D2A - Very toxic materials



### Canadian Regulations

#### Any Canadian specific regulatory information

Read the label, authorized under the *Pest Control Products Act*, prior to using or handling the pest control product.

This chemical is a pest control product registered by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the *Pest Control Products Act*. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. The following is the hazard information required on the pest control product label:



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## CAUTION

## POISON

There are Canada-specific environmental requirements for handling, use, and disposal of this pest control product that are indicated on the label.

## 16. OTHER INFORMATION

### Abbreviations and acronyms

ACGIH	US. Acgih Threshold Limit Values
CAS-No.	Chemical Abstracts Service number
CFR	Code of Federal Regulations
D2A	Very toxic
EC <sub>x</sub>	Effective Concentration to x %
EmS No.	Emergency Schedules number
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
IARC	International Agency for Research on Cancer
ICAO/IATA	International Civil Aviation Organization / International Air Transport Association
IDLH	Immediately Dangerous to Life or Health concentration
IMDG/IMO	International Maritime Dangerous Goods / International Maritime Organization
LC <sub>x</sub>	Lethal Concentration To x %
LD <sub>x</sub>	Lethal Dose to x %
N.O.S.	Not Otherwise Specified
NIOSH	National Institute for Occupational Safety and Health
NTP	US. National Toxicology Program (NTP) Report on Carcinogens
OSHA	US. Occupational Safety and Health Administration
RQs	Reportable Quantities
STEL	Short term exposure limit
TDG	Transportation of Dangerous Goods
TLV	Threshold Limit Value
TWA	Time Weighted Average
UN	United Nations

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### Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**