



Maxunitech North America, Inc.

SAFETY DATA SHEET

1. IDENTIFICATION

Product identifier

Product Name Maxunitech Sulfen + S-moc
EPA Registration Number 95009-8

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)

S-metolachlor: 2-chloro-6'-ethyl-*N*-[(1*S*)-2-methoxy-1-methylethyl]acet-*o*-toluidide;
2-chloro-*N*-(6-ethyl-*o*-tolyl)-*N*-[(1*S*)-2-methoxy-1-methylethyl]acetamide
(IUPAC name)

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.
Add: 11601 Shadow Creek Pkwy, Suite 111-573, Pearland, Texas 77584, USA

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)

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Dusts/Mists): Category 4
Serious eye damage/eye irritation: Category 2B
Carcinogenicity: Category 2
Specific target organ toxicity (repeated exposure): Category 2
Hazardous to the Aquatic Environment – Short-Term (Acute): Category 1



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GHS Label elements, including precautionary statements



WARNING

Hazard Statements

H320 - Causes eye irritation

H332 - Harmful if inhaled

H351 - Suspected of causing cancer

H373 - May cause damage to organs through prolonged or repeated exposure.

H400 - Very toxic to aquatic life

Precautionary Statements – Prevention

P203 - Obtain, read and follow all safety instructions before use.

P260 - Do not breathe mist/vapours/spray.

P264 + P265 - Wash hands thoroughly after handling. Do not touch eyes.

P271 - Use only outdoors or in a well-ventilated area.

P273 – Avoid release to the environment not in accordance with the product label.

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

Precautionary Statements – Response

P304 + P340 + P317- IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help.

P305 + P351 + P338 + P337 + P317– 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 help.

P318 – IF exposed or concerned, get medical advice.

P319 - Get medical help if you feel unwell.

P391 – Collect spillage.

Precautionary Statements - Storage

P405 - Store locked up.

Precautionary Statements - Disposal

P501 - Dispose of contents/container according to label directions.

Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

Other Information

Very toxic to aquatic life with long lasting effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture



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Chemical Name	CAS No.	%
S-metolachlor	87392-12-9	68.25
Sulfentrazone	122836-35-5	7.55

4. FIRST AID MEASURES

Description of necessary first aid measures

General advice: Have the product container, label or Safety Data Sheet with you when calling a poison control center or doctor or going for treatment.

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.

Eye contact: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 20 minutes. Call a poison control center or doctor for treatment advice.

Ingestion: Call a poison control center or doctor immediately for treatment advice. Have the 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 give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media

Suitable: Use extinguishing media suitable for surrounding materials. Dry chemical, carbon dioxide, foam, water spray or fog.

Special hazards arising from

Unusual Fire and Explosion Hazards: May form combustible dust concentrations in air. If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.

Hazardous Decomposition Materials (Under Fire Conditions): May produce gases such as oxides of carbon and nitrogen.

Advice for fire-fighters

Special protective equipment for fire-fighters: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full firefighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.



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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental precautions

Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains.

Methods and materials for containment and cleaning up

Methods for Containment: Dike to prevent runoff. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up and Disposal: 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

Precautions for safe handling

Handling: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin 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. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

Conditions for safe storage, including any incompatibilities

Storage: Store product in original container only, away from other pesticides, fertilizer, food, or feed. Do not use or store around the home. Avoid storage below 32F. Product that has been frozen should be thawed and recirculated prior to its use. Store in a cool, dry place and avoid excess heat.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Appropriate engineering controls

Engineering controls: Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Individual protection measures, such as personal protective equipment

General Protection: Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.

Eye/Face Protection: To avoid contact with eyes, wear chemical goggles or shielded safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.



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Skin protection: To avoid contact with skin, wear long pants, long-sleeved shirt, socks and shoes. An emergency shower or water supply should be readily accessible to the work area.

Respiratory protection: Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Transparent homogeneous liquid
Physical State	Liquid
Color	Brown
Odor	No pungent smell
Odor threshold	No information available
pH	5.29 at 20.5 °C
Specific Gravity/Density	1.1029 g/cm ³ (20°C)
Melting point/freezing point	No information available
Boiling Point/Range	Not applicable
Flash point	>93 °C at 101.3 kPa
Evaporation Rate	No information available
Flammability (solid, gas)	No information available
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor density	No information available
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity, kinematic	118.68 mm ² /s at 20°C, 20.736 mm ² /s at 40°C
Viscosity, dynamic	No information available
Explosive properties	No information available
Oxidizing properties	No information available
Molecular weight	No information available



10. STABILITY AND REACTIVITY

Reactivity

Not reactive.

Chemical stability

Stable under normal handling and storage conditions.

Possibility of hazardous reactions

Will not occur.

Conditions to avoid

None known.

Incompatible materials

None known.

Hazardous decomposition products

None known.

11. TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure

Dermal, inhalation

The acute toxicity information of the formulated product:

LD₅₀ Oral > 2,000 mg/kg (rat)

LD₅₀ Dermal > 2,000 mg/kg (rat)

LC₅₀ Inhalation > 4.804 mg/l 4 h (rat)

Serious eye damage/eye irritation: Corneal involvement or irritation clearing in 7 days or less (rabbit).

Skin corrosion/irritation: Mild or slight irritation (no irritation or slight erythema) (rabbit).

Sensitization: Non-Sensitizer (Guinea Pigs).

Information on toxicological effects

Symptoms: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Delayed and immediate effects and also chronic effects from short and long term exposure.

Chronic toxicity:

Prolonged exposure may cause chronic effects.

Mutagenicity:

Sulfentrazone: Did not show mutagenic effects in animal experiments

Carcinogenicity:

S-Metolachlor: Produced benign liver tumors in female rats administered high doses.

Sulfentrazone: Did not show carcinogenic effects in animal experiments.

Neurological effects:

Sulfentrazone: Altered motor activity and FOB effects, which reverse after single exposure, with no signs of histopathology.



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Reproductive toxicity:

S-Metolachlor: No toxicity to reproduction in animal studies.

Offspring Toxicity(sulfentrazone): LOAEL= 33 mg/kg/day for males; 40 mg/kg/day for females.

Developmental toxicity:

S-Metolachlor: Not teratogenic in animal studies.

Sulfentrazone: NOAEL of 10 mg/kg/day in the developmental toxicity study in rat. NOAEL of 14 mg/kg/day in a 2-generation reproduction study.

STOT - single exposure:

Not classified.

STOT - repeated exposure:

May cause damage to organs through prolonged or repeated exposure. See listed target organs below.

Target organ effects:

S-Metolachlor: Liver.

Sulfentrazone: Hematopoietic system.

Neurological effects:

Sulfentrazone: Altered motor activity and FOB effects, which reverse after single exposure, with no signs of histopathology.

Aspiration hazard:

No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

The ecotoxicity information of the formulated product unless otherwise noted:

Toxicity to fish	Rainbow trout
	LC ₅₀ : 11.9 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient S-Metolachlor
	Rainbow trout
	LC ₅₀ : >130 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient Sulfentrazone
Toxicity to aquatic plants	Algae
	EC ₅₀ : 0.008 mg/l Exposure time: 5 d The value mentioned relates to the active ingredient S-Metolachlor
	Algae
	EC ₅₀ : 32.8 mg/l Exposure time: 72 h The value mentioned relates to the active ingredient Sulfentrazone



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Acute toxicity to aquatic invertebrates Water flea
EC₅₀: 26 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient S-Metolachlor

Water flea
EC₅₀: 60.4 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient Sulfentrazone

Persistence and

Degradability

Biodegradability S-Metolachlor: Persistent. Does not readily hydrolyze.
Sulfentrazone: Persistent. Does not readily hydrolyze. Not readily biodegradable.

Koc No information available

Bioaccumulative

potential

Bioaccumulation S-Metolachlor: Low potential for bioconcentration.
Sulfentrazone: The substance does not have a potential for bioconcentration.

Mobility in soil No information available

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide is a violation of law.

Contaminated packaging and Disposal: Nonrefillable container. Do not reuse or refill this container. See container labeling for complete disposal instructions.

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.



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TDG

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

UN number: UN3082

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s.

Hazard Class: 9

Packaging group: III

Marine pollutant: S-Metolachlor, Sulfentrazone.

Description: UN3082, Environmentally hazardous substance, liquid, n.o.s. (S-Metolachlor, Sulfentrazone), 9, PG III, Marine pollutant

ICAO/IATA

UN/ID number: 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. (S-Metolachlor, Sulfentrazone), 9, PG III, Marine pollutant

IMDG/IMO

UN/ID number: UN3082

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s.

Hazard Class: 9

Packaging group: III

Marine pollutant: S-Metolachlor, Sulfentrazone.

Description: UN3082, Environmentally hazardous substance, liquid, n.o.s. (S-Metolachlor, Sulfentrazone), 9, PG III, Marine pollutant

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:

CAUTION

Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with eyes, skin 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.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and marine/estuarine invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean highwater 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.



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SARA Title III-Section 302 Extremely Hazardous Substances

Not listed

SARA Title III -Section 311/312 Hazard Categories

Acute Health Hazard

Chronic Health Hazard

SARA Title III -Section 313 Reportable Ingredients

Not listed

CERCLA Reportable Quantity (RQ)

Not applicable

16. OTHER INFORMATION

SDS Creation Date: 31-March-2023

Version Number: #1

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.