

SAFETY DATA SHEET

EMERGENCY CALL: 1-800-424-9300 (CHEMTREC)



1. IDENTIFICATION

PRODUCT NAME: SOLANO Herbicide
DESCRIPTION: A liquid herbicide
EPA Reg. No.: 81927-86

COMPANY IDENTIFICATION:
Alligare, LLC
1565 5th Avenue
Opelika, AL 36801

2. HAZARD IDENTIFICATION

WARNING

Very toxic to aquatic life (H400)



HAZARD CLASSIFICATION

Health Hazard None	Category -	Physical Hazards None	Category -
		Environmental Hazards Hazardous to the aquatic environment, short-term	Category 1

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC)

DO NOT mix or allow contact with oxidizing agents. Hazardous chemical reaction may occur. DO NOT use or store near heat or open flame.

PRECAUTIONARY STATEMENTS

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

Dispose of contents / container in accordance with local regulations. Refer to the product label for specific disposal instructions. (P501)

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Common Name</u>	<u>Chemical Name</u>	<u>CAS #</u>	<u>Composition</u>
Sulfentrazone	Methanesulfonamide, N-[2,4-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]phenyl]-	122836-35-5	39.6%

NOTE: Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

5. FIREFIGHTING MEASURES

Flash Point (CC): Not available

Flammable Limits (LFL-UFL): Not available

Fire and Explosion Hazards: Not available.

Extinguishing Medium: Foam, CO₂ or dry chemical. Soft stream water fog only if necessary. Contain all runoff.

Fire Fighting Equipment: Firefighters should be equipped with self-container positive pressure breathing apparatus and full bunker gear.

Fire Fighting Instructions: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Remove undamaged containers from fire area if it is safe to do so. Evacuate area. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers.

Hazardous Combustion Products: During a fire, smoke may contain the original material on addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Nitrogen oxides. Hydrogen chloride. Carbon monoxide. Carbon dioxide.

NFPA Ratings: Health – 1 / Flammability – 1 / Reactivity - 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Spill Cleanup: Dike spill using suitable absorbent or impervious materials such as sand or clay. Collect and contain contaminated absorbent and place in an appropriate container for disposal. Pump any free liquid into an appropriate closed container and decontaminate tools and equipment following cleanup. Collect washings for disposal.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

7. HANDLING AND STORAGE

Handling: 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.

Storage: Store in original containers only. Keep container closed when not in use. DO NOT store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth, or synthetic absorbent. Remove to chemical waste area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash station and a safety shower.

Protective Clothing: Applicators and other handlers must wear long sleeved shirt and long pants, waterproof gloves; and shoes plus socks.

General: 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	off-white liquid	Dynamic viscosity:	173.4-461.9 mPa at 20 ±0.2°C
Odor:	no pungent smell		
Melting/freezing point:	not available		168.2-450.6 mPa at 40 ±0.2°C
Boiling point/Boiling range:	not available	Solubility:	not available
Flammability:	not available	Partition coefficient:	not available
Flammability limits (upper/lower):	not available	Vapor pressure:	not available
Flash point (cc):	not available	Density:	1.20 g/mL (10.01 lb/gal)
Auto-ignition temperature:	not available	Relative vapor density:	not available
Decomposition temperature:	not available	Particle characteristics:	not available
pH:	5.61 at 20°C		

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Excessive heat, fire.

CHEMICAL STABILITY: Thermally stable at typical use temperatures.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, nitrogen oxides, sulfur oxides, hydrogen chloride, hydrogen fluoride, etc.

INCOMPATIBILITY WITH OTHER MATERIALS: Oxidizing agents.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Information presented below is from testing done on an identical or substantially similar product:

ORAL TOXICITY (rat LD₅₀): > 2,000 mg/kg

DERMAL TOXICITY (rat LD₅₀): > 2,000 mg/kg

INHALATION TOXICITY (rat LC₅₀): > 5.434 mg/L (4-hour)

EYE IRRITATION: Not irritating

SKIN IRRITATION: Not irritating

SKIN SENSITIZATION: Not a skin sensitizer

CARCINOGENICITY:

EPA: Not Likely to be Carcinogenic to Humans (Sulfentrazone)

ACGIH: Not listed

NTP: Not Listed

IARC: Not Listed

OSHA: Not Listed

REPRODUCTIVE TOXICITY / TERATOGENICITY: For the active ingredient(s): In animal studies, did not interfere with reproduction nor cause birth defects or any other fetal effects in laboratory animals.

MUTAGENICITY TOXICITY: In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

CHRONIC TOXICITY: 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.

12. ECOLOGICAL INFORMATION

This pesticide is toxic to marine/estuarine invertebrates.

AQUATIC TOXICITY

Rainbow Trout (96-hr LC ₅₀):	>130 mg/L
Water Flea (48-hr LC ₅₀):	60.4 mg/L
Saltwater Mysid (96-hr LC ₅₀):	1 mg/L
Green Algae (72-hr EC ₅₀):	31.0 µg/L

AVIAN TOXICITY

Mallard Ducks (Oral LD ₅₀):	>2,250 mg/kg (bodyweight)
Ducks and Quail (Dietary LC ₅₀ 8-day):	>5,620 mg/kg

OTHER TOXICITY

Honeybee (LD₅₀): >25 µg/bee
Worm (NOEC): 3,726 mg/kg in soil

PERSISTENCE AND DEGRADABILITY

Does not readily hydrolyze. Not readily biodegradable.

BIOACCUMULATIVE POTENTIAL

The substance does not have a potential for bioconcentration.

MOBILITY IN SOIL

This chemical 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.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. 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 at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Nonrefillable containers. Refer to the product label for specific container handling instructions.

14. TRANSPORT INFORMATION

UN Number:	UN3082
Proper Shipping Name:	Environmentally hazardous substance, liquid, N.O.S. (contains sulfentrazone)
Transport Hazard Class:	9
Packing Group:	III
Hazard Zone:	None
Marine Pollutant:	Yes ¹
Hazardous Substance RQ:	None
Labels / Placards:	US-DOT: Class 9 Environmentally Hazardous Substance ² IMDG, IATA: Class 9 Environmentally Hazardous Substance ³
Emergency Guide:	171 (NAERG – North American Emergency Response Guide)

¹ **Marine Pollutant Note:** Ground-only shipments are excluded from Marine Pollutant labeling requirements as per 49CFR§172.101 Appendix B(4). For any shipments involving all or part of the transport by vessel, the shipment must be classified as a Marine Pollutant unless a limited quantity exemption applies (see note 3 below).

² **US-DOT Note:** Not regulated for “ground only” shipments.

³ **IMDG / IATA Note:** Not regulated when shipped in single or inner packaging ≤ 1.3 gal. (5 L).

14. TRANSPORT INFORMATION (CONT.)

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

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 HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed or absorbed through skin. 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.

See inside label booklet for additional Precautionary Statements and Directions for Use including Storage and Disposal instructions.

ENVIRONMENTAL HAZARDS

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.

Ground water advisory:

This chemical 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.

DO NOT use on coarse soils classified as sand which have less than 1% organic matter.

Surface water advisory:

Sulfentrazone can contaminate surface water through spray drift. Under some conditions Sulfentrazone may also have a high potential for runoff into surface water (primarily via dissolution in runoff water) for many months post application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over lying tile drainage systems that drain to surface waters.

PHYSICAL OR CHEMICAL HAZARDS

DO NOT mix or allow contact with oxidizing agents. Hazardous chemical reaction may occur. DO NOT use or store near heat or open flame.

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide. This product is excluded from listing requirements under EPA/TSCA.

SARA Title III – Section 302 Extremely Hazardous Substances

Not listed

SARA Title III – Section 311/312 Hazard Categories

Immediate (acute)

SARA Title III – Section 312 Threshold Planning Quantity

N/A

SARA Title III – Section 313 Reportable Ingredients

None

CERCLA –

None

15. REGULATORY INFORMATION (CONT.)

CALIFORNIA PROP 65 STATUS –

This product does not contain any chemical known to the State of California to cause cancer or other 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.

16. OTHER INFORMATION

THIS INFORMATION IN THIS SDS IS BASED ON DATA AVAILABLE AS OF THE REVISION DATE GIVEN HEREIN, AND BELIEVED TO BE CORRECT. CONTACT ALLIGARE, LLC TO CONFIRM IF YOU HAVE THE MOST CURRENT MSDS. JUDGMENTS AS TO THE SUITABILITY OF THE INFORMATION HEREIN FOR THE INDIVIDUAL'S OWN USE OR PURPOSES IS NECESSARILY THE INDIVIDUAL'S OWN RESPONSIBILITY. ALTHOUGH REASONABLE CARE HAS BEEN TAKEN IN THE PREPARATION OF SUCH INFORMATION, ALLIGARE, LLC EXTENDS NO WARRANTIES, MAKES NO

REPRESENTATIONS, AND ASSUMES NO RESPONSIBILITY AS TO THE ACCURACY OR SUITABILITY OF SUCH INFORMATION FOR APPLICATION TO THE INDIVIDUAL'S PURPOSES OR THE CONSEQUENCES OF ITS USE.

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

SDS Version: 2.0

Effective Date: 03/28/2023