Safety Data Sheet

US Hazard Communication Standard 2024 (29 CFR 1910.1200)

SECTION 1: Identification

Product Identifier

Product Name: Atticus Cavallo 4 SC

Product code: EPA Reg. No.: 91234-75

Recommended Use of the Chemical and Restrictions on Use:

Recommended Uses: Liquid herbicide

Restrictions on Use: Any use other than specified above

Manufacturer or Supplier Details

Manufacturer:
United States
Atticus, LLC
940 NW Cary Parkway
Suite 200
Cary, North Carolina 27513
(984) 465-4754

Emergency Telephone Number:

For Chemical Emergency
CHEMTREC
1-800-424-9300 (24 hours)
+1-703-527-3887 (24 hours)
Collect calls accepted

For Emergency Medical Treatment Information
SAFETYCALL
1-844-685-9173 (24 hours)

SECTION 2: Hazard Identification

Classification of the chemical in accordance with paragraph (d) of § 1910.1200:

Skin sensitization, category 1B
Reproductive toxicity, category 2
Specific target organ toxicity - repeated exposure, category 2
Acute aquatic hazard, category 1
Chronic aquatic hazard, category 1

Label elements

Hazard Symbol(s):

Signal Word: Warning

Hazard statement(s):

H317 May cause an allergic skin reaction
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects

Precautionary Statement(s):

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read carefully and follow all instructions.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves, protective clothing and eye protection.
P260 Do not breathe mist, vapours or spray.
P272 Contaminated work clothing must not be allowed out of the workplace.
P273 Avoid release to the environment.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P302+P352 IF ON SKIN: Wash with plenty of water.
P391 Collect spillage.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P321 Specific treatment (see Sections 4-8 of this SDS and any supplemental information on the product label).
P362+P364 Take off contaminated clothing and wash it before reuse.
P405 Store locked up.
P501 Dispose of contents and container in accordance with federal, state and local regulations.

Hazards Not Otherwise Classified: None

SECTION 3: Composition/Information on Ingredients

Identification	Name	Weight %
CAS Number: 104206-82-8	Mesotrione	40
CAS Number: 57-55-6	Propane-1,2-diol	7-9

Additional information:

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

SECTION 4: First Aid Measures

Description of Necessary Measures

General Notes:

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at 1-844-685-9173 for emergency medical treatment information. For Chemical Emergency: spill, leak, fire, exposure or accident, call CHEMTREC day or night within USA and Canada at 1-800-424-9300 or +1-703-527-3887 (collect calls accepted)
Show this Safety Data Sheet to the doctor in attendance

After Inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If experiencing respiratory symptoms, seek medical advice/attention

After Skin Contact:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention

After Eye Contact:

Rinse eyes with plenty of water for several minutes. Remove contact lenses if present and easy to do

so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention

After Ingestion:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention

Most Important Symptoms and Effects, Both Acute and Delayed

Acute Symptoms and Effects:

Dermal exposure may cause an allergic skin reaction. Symptoms may include irritation, redness, pain, rash, inflammation, itching, burning and dermatitis

Delayed Symptoms and Effects:

Long term exposure may affect fertility. Symptoms include, but are not limited to: menstrual problems, altered sexual behavior/fertility/ and pregnancy outcome. Long term exposure may also affect development of the unborn child. Symptoms include, but are not limited to: intrauterine growth retardation, pre-term birth, birth defects and postnatal death

May cause damage to organs through prolonged or repeated exposure. Effects are dependent on exposure (dose, concentration, contact time)

Effects are dependent on exposure (dose, concentration, contact time)

Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary

Immediate Medical Attention:

No additional information.

Special Treatment:

No additional information.

Notes for the Doctor:

Treat symptomatically

SECTION 5: Firefighting Measures

Extinguishing Media

Suitable Extinguishing Media:

Water mist/fog, carbon dioxide, dry chemical or alcohol resistant foam

Unsuitable Extinguishing Media:

Do not use water jet

Specific Hazards Arising From The Chemical:

Thermal decomposition may produce irritating/toxic fumes/gases

Hazardous combustion products may include oxides of carbon, nitrogen, and sulfur

Special Protective Equipment and Precautions for Fire-Fighters

Special Protective Equipment:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode

Special precautions

Avoid contact with skin, eyes, hair and clothing. Do not breathe fumes/gas/mists/aerosols/vapors/dusts. Move containers from fire area if safe to do so. Use water spray/fog for cooling fire exposed containers. Avoid unnecessary run-off of extinguishing media which may cause pollution

SECTION 6: Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid

breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided

Methods and Material for Containment and Cleaning Up:

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13)

SECTION 7: Handling and Storage

Precautions for Safe Handling:

Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

Conditions for Safe Storage, Including Any Incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

SECTION 8: Exposure Controls/Personal Protection

Only those substances with limit values have been included below.

Occupational Exposure Limit Values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
WEEL	Propane-1,2-diol	57-55-6	8-Hour TWA: 10 mg/m³

Biological Limit Values:

No biological exposure limits noted for the ingredient(s).

Information on Monitoring Procedures:

Not determined or not applicable.

Appropriate Engineering Controls:

Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Individual Protection Measures, Such as Personal Protective Equipment

Eye and Face Protection:

Safety glasses or goggles. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Skin and Body Protection:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory Protection:

If engineering controls do not maintain airborne concentrations below the applicable workplace

exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn.

General Hygienic Measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

SECTION 9: Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Physical state	Liquid
Color	Opaque beige
Odor (includes odor threshold)	Characteristic
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flammability	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Flash point	> 100 °C (> 212 °F)
Auto-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
pH	3.48
Kinematic viscosity	Not determined or not available.
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Vapor pressure (includes evaporation rate)	Not determined or not available.
Density and/or relative density	1.2087 g/mL
Relative vapor density	Not determined or not available.
Particle characteristics	Not determined or not available.

Other Information

No additional information.

SECTION 10: Stability and Reactivity

Reactivity:

Not reactive under recommended handling and storage conditions.

Chemical Stability:

Stable under recommended handling and storage conditions.

Possibility of hazardous reactions, including those associated with foreseeable emergencies:

Hazardous reactions are not anticipated under recommended conditions of handling and storage.

Conditions to Avoid:

Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Incompatible Materials:

Strong oxidizing and reducing agents

Hazardous Decomposition Products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological Information

Acute Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

Route	Result
Oral ATE	LD50 Estimate based on ingredients: > 5,000 mg/kg
Dermal ATE	LD50 Estimate based on ingredients: > 4,000 mg/kg
Inhalation ATE	LC50 Estimate based on ingredients: 11.85 mg/L

Substance Data:

Name	Route	Result
Propane-1,2-diol	oral	LD50 Rat: 22,000 mg/kg
	dermal	LD50 Rabbit: >2000 mg/kg
	inhalation	LC50 Rat: > 44.9 mg/L (4hr [vapour])
Mesotrione	oral	LD50 Rat: > 5,000 mg/kg
	dermal	LD50 Rat: > 2,000 mg/kg
	inhalation	LC50 Rat: > 4.75 mg/L (4 hr)

Skin Corrosion/Irritation

Assessment: Based on available data, the classification criteria are not met.

Product Data:

Based on available information, the classification criteria are not met.

Substance Data:

Name	Result
Mesotrione	Non-irritant

Serious Eye Damage/Irritation

Assessment: Based on available data, the classification criteria are not met.

Product Data:

Based on available information, the classification criteria are not met.

Substance Data:

Name	Result
Mesotrione	Mild irritant

Respiratory or Skin Sensitization

Assessment:

May cause an allergic skin reaction.

Product Data:

Positive contact sensitizer

Substance Data:

Name	Result
Mesotrione	Not a dermal sensitizer

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data:

Name	Species	Result
Mesotrione		EPA: Not likely to be carcinogenic

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

OSHA Carcinogens: Not applicable

Germ Cell Mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data:

Name	Result
Mesotrione	No evidence of mutagenic effects during in vivo and in vitro assays.

Reproductive Toxicity

Assessment:

Suspected of damaging fertility or the unborn child.

Product Data:

No data available.

Substance Data:

Name	Result
Mesotrione	Suspected of damaging the unborn child.

Specific Target Organ Toxicity (Single Exposure)

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data: No data available.

Specific Target Organ Toxicity (Repeated Exposure)

Assessment:

May cause damage to organs through prolonged or repeated exposure.

Product Data:

No data available.

Substance Data:

Name	Result
Mesotrione	May cause damage to eyes and nervous system through prolonged or repeated exposure .

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data: No data available.

Information on Likely Routes of Exposure:

No data available.

Symptoms Related to the Physical, Chemical, and Toxicological Characteristics:

No data available.

Interactive effects:

No additional information.

Other Information:

Information in this section is provided from a similar formulation.

SECTION 12: Ecological Information

Ecotoxicity

Acute (Short-Term) Toxicity

Assessment:

Very toxic to aquatic life.

Product Data: No data available.

Substance Data:

Name	Result
Propane-1,2-diol	Fish LC50 Oncorhynchus mykiss: 51,600 mg/L (96 hr)
	Aquatic Plants EC50 Raphidocelis subcapitata: 19000 mg/L (96 hr [growth rate])
	Aquatic Invertebrates EC50 Daphnia magna: 43,500 mg/L (48 hr [Immobilisation])
Mesotrione	Fish LC50 Rainbow trout: > 120 mg/L (96 hr)
	Fish LC50 Sheepshead minnow: > 100 mg/L (96 hr)
	Aquatic Invertebrates LC50 Mysid shrimp: 3.3 mg/L (96 hr)
	Aquatic Plants EC50 Green algae: > 0.82 mg/L (120 hr)

Chronic (Long-Term) Toxicity

Assessment:

Very toxic to aquatic life with long lasting effects.

Product Data: No data available.

Substance Data:

Name	Result
Propane-1,2-diol	Aquatic Invertebrates NOEC Ceriodaphnia sp.: 13,020 mg/L (7 d [reproduction])
Mesotrione	Aquatic Plants EC50 Duckweed: 0.0048 mg/L (14 d)
	Fish NOEC Fathead minnow: 11 mg/L
	Aquatic Invertebrates NOEC Mysid shrimp: 0.012 mg/L

Persistence and Degradability

Product Data: No data available.

Substance Data:

Name	Result
Propane-1,2-diol	The substance is readily biodegradable. 81.7% degradation in water, measured by CO2 evolution, after 28 days.
Mesotrione	Non-persistent to moderately persistent depending on soil type

Bioaccumulative Potential

Product Data: No data available.

Substance Data:

Name	Result
Propane-1,2-diol	The substance is not expected to bioaccumulate (BCF: 0.09).
Mesotrione	Low, based on log Kow (< 3)

Mobility in Soil

Product Data: No data available.

Substance Data:

Name	Result
Propane-1,2-diol	The substance is highly mobile, therefore, adsorption to soil and sediment is not expected (calculated Koc: 2.9).
Mesotrione	Mobile to moderately mobile (Koc 16.5 to 390 mL/g)

Results of PBT and vPvB assessment

Product Data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT.
vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

Substance Data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT.
vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

Other Adverse Effects: No additional information.

SECTION 13: Disposal Considerations

Disposal Methods:

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Do not contaminate water, food, or feed by storage or disposal. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. Dispose of excess or waste pesticide by use according to label directions, or contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Contaminated packaging:

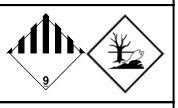
CONTAINER DISPOSAL: Nonrefillable and refillable containers. Refer to the product label for specific container disposal instructions.

SECTION 14: Transport Information

United States Transportation of Dangerous Goods (49 CFR DOT)

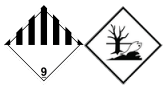
UN Number	Not regulated
UN Proper Shipping Name	Not regulated
UN Transport Hazard Class(es)	None
Packing Group	None
Environmental Hazards	None
Special Precautions for User	None
Additional Information	This information is not intended to convey all specific regulatory or operational requirements/information 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.

International Maritime Dangerous Goods (IMDG)

UN Number	UN3082
UN Proper Shipping Name	Environmentally hazardous substance, liquid, N.O.S. (mesotrione)
UN Transport Hazard Class(es)	9 
Packing Group	III
Environmental Hazards	Marine Pollutant
Special Precautions for User	None

Additional Information	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.

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN Number	UN3082
UN Proper Shipping Name	Environmentally hazardous substance, liquid, N.O.S. (mesotrione)
UN Transport Hazard Class(es)	9 
Packing Group	III
Environmental Hazards	Marine Pollutant
Special Precautions for User	None
Additional Information	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.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Bulk Name	Not Applicable
Ship Type	Not Applicable
Pollution Category	Not Applicable

SECTION 15: Regulatory Information

United States Regulations

Inventory Listing (TSCA): All ingredients are listed-active or exempt.
Significant New Use Rule (TSCA Section 5): None of the ingredients are listed.
Export Notification under TSCA Section 12(b): None of the ingredients are listed.
SARA Section 302 Extremely Hazardous Substances: None of the ingredients are listed.
SARA Section 313 Toxic Chemicals: None of the ingredients are listed.
CERCLA: None of the ingredients are listed.
RCRA: None of the ingredients are listed.
Section 112(r) of the Clean Air Act (CAA): None of the ingredients are listed.
Massachusetts Right to Know: None of the ingredients are listed.
New Jersey Right to Know:

57-55-6	Propane-1,2-diol	Listed

New York Right to Know: None of the ingredients are listed.

Pennsylvania Right to Know:

57-55-6	Propane-1,2-diol	Listed

California Proposition 65: None of the ingredients are listed.

Additional information: FIFRA: All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act (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 regulatory information presented outside of this FIFRA section is pertinent only when this product is handled outside of normal use and application as a pesticide. This product is excluded from listing requirements under EPA/TSCA. The following is the hazard information as required on the pesticide label:, PRECAUTIONARY STATEMENTS, HAZARDS TO HUMANS AND DOMESTIC ANIMALS, CAUTION., Harmful if absorbed through skin., Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals., Avoid contact with skin, eyes, or clothing., ENVIRONMENTAL HAZARDS, Do not contaminate water when disposing of equipment wash water or rinsate., SURFACE WATER ADVISORY: This product may contaminate water through drift or spray in wind. This product has a high potential for runoff for several weeks after application., PHYSICAL OR CHEMICAL HAZARDS, Do not use or store near heat or open flame., Do not use with or store near any oxidizing or reducing agents.

SECTION 16: Other Information

Disclaimer:

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. To the extent consistent with applicable law, neither Atticus, LLC nor Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ATTICUS, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ATTICUS, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

Initial Preparation Date: 04.09.2026

End of Safety Data Sheet