



MAMBA™

SAFETY DATA SHEET

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

1. IDENTIFICATION

PRODUCT NAME: Mamba
DESCRIPTION: A liquid herbicide
EPA REG. NO.: 91234-169
COMPANY IDENTIFICATION: Atticus, LLC
 5000 CentreGreen Way, Suite 100
 Cary, NC 27513

2. HAZARD IDENTIFICATION

WARNING

Harmful if swallowed (H302)
 Causes skin irritation (H315)
 Causes eye irritation (H320)
 May cause an allergic skin reaction (H317)
 May cause cancer (H350)
 Combustible liquid (H227)
 Very toxic to aquatic life with long lasting effects (H400+H410)



HAZARD CLASSIFICATION

Health Hazards	Category
Acute toxicity – oral	4
Serious eye damage / eye irritation	2B
Skin corrosion / irritation	2
Skin sensitization	1
Carcinogenicity	1B

Physical Hazards	Category
Flammable Liquids	4

Environmental Hazards	Category
Hazardous to the aquatic environment - short term	1
Hazardous to the aquatic environment - long term	1

HAZARDS NOT REQUIRING CLASSIFICATION

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

PRECAUTIONARY STATEMENTS

Do not handle until all safety precautions have been read and understood. (P202)

Wash hands and exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. (P264+P270)

Wear protective gloves. (P280)

Avoid breathing mist/vapors/spray. (P261)

Contaminated work clothing should not be allowed out of the workplace. (P272)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)

IF SWALLOWED: Call a POISON CENTER / doctor if you feel unwell. Rinse mouth. (P301+P312+P330)

IF ON SKIN: Wash with plenty of water. Specific treatment (see Section 4 on this label). **If skin irritation occurs:** Get medical advice/attention.

Take off contaminated clothing and wash it before reuse. (P302+P352+P321+P332+P313+P362+P364)

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 advice/attention. (P305+P351+P338+P337+P313)

IF EXPOSED OR CONCERNED: Get medical advice/attention. (P308+P313)

Store locked up. (P405)

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

Common Name	Chemical Name	CAS#	Composition
Lactofen	2-ethoxy-1-methyl-2-oxoethyl 5-[2-chloro-4-(trifluoromethyl)phenoxy]-2-nitrobenzoate	77501-63-4	24.0%

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



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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 CHEMTREC at 1-800-424-9300 for emergency medical information.

IF SWALLOWED: Immediately call a poison control center or doctor. Do not induce vomiting unless told to by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF IN EYES: 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 eyes. Call a poison control center or doctor for treatment advice.

NOTE TO PHYSICIAN: Contains petroleum distillate. Vomiting may cause aspiration pneumonia.

5. FIREFIGHTING MEASURES

Flash Point (CC): 70°C (158°F)

Flammable Limits (LFL - UFL): Not Determined

Fire and Explosion Hazards: Liquid evaporates and form vapor (fumes) which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches. Fire hazard is greater as liquid rises above 80°F.

Extinguishing Medium: Foam, fog, CO₂, or dry chemical.

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

Fire Fighting Instructions: Evacuate area of all unnecessary personnel and fight fire from a safe distance upwind. Contain contaminated water / firefighting water; do not allow to enter drains or waterways. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

Hazardous Decomposition Products: Oxides of carbon and nitrogen.

NFPA Ratings: Health – 2 / Flammability – 2 / Reactivity - 0

6. ACCIDENTAL RELEASE MEASURES

Clean up spills immediately observing the precautions in Section 8 of this SDS. Isolate the hazard area and keep unnecessary and unprotected personnel from entering.

Spill cleanup: Prevent material from further release into soil, surface water and ground water. Absorb spill with inert material (such as dry sand, clay or earth), then place in an appropriate container for disposal. Wash area with soap and water. Pick up wash liquid with suitable absorbent material and place in container for disposal. This material forms an emulsion in water. Stop or reduce contamination of any water. Isolate contaminated water.

7. HANDLING AND STORAGE

Handling: Avoid contact with skin or clothing. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Storage: Store in a cool, dry place. Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Not for use or storage in or around the home.

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: Wear coveralls worn over long-sleeved shirts and long pants, socks, chemical resistant footwear and gloves (such as Barrier Laminate or Viton ≥ 14 mils). Wear protective eyewear such as goggles, face shield or safety glasses.

General: Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: amber liquid

Odor: mild sweet

Melting / Freezing point: no data available

Boiling Point / Boiling Range: no data available

Flammability: not applicable

Flammability Limits (upper/lower): no data available

Flashpoint: 158°F (70°C)

Auto-ignition Temperature: no data available

Decomposition Temperature: no data available

pH: 5.32@1% aq.

Kinematic Viscosity: 6.27 cP (25°C), 4.50 cP (39°C)

Solubility: not available

Partition coefficient: no data available

Vapor Pressure: no data available

Density: 0.98-1.0 g/cm³

Vapor Density: no data available

Particle Characteristics: no data available

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Extreme temperatures and direct sunlight.

CHEMICAL STABILITY: Stable under all normal use and storage conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: None when stored and handled as prescribed.

INCOMPATIBILITY WITH OTHER MATERIALS: Oxidizing agents.

POLYMERIZATION: Will not occur.



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11. TOXICOLOGICAL INFORMATION

ORAL TOXICITY (rat LD₅₀): 1,750 mg/kg
DERMAL TOXICITY (rat LD₅₀): > 5,000 mg/kg
INHALATION TOXICITY (rat LC₅₀): >2.16 mg/L (4-hour) (no mortalities)
EYE IRRITATION (rabbit): mildly irritating
SKIN IRRITATION (rabbit): moderately irritating
SKIN SENSITIZATION: moderate contact sensitizer
CARCINOGENICITY:
IARC: Not listed
US EPA: likely carcinogen to humans at high doses; not likely at low doses (lactofen)
ACGIH: Not listed
MUTAGENIC TOXICITY: No evidence of mutagenic effects during in vivo and in vitro assays.
REPRODUCTIVE TOXICITY: Not known to cause reproductive or birth defects at normal exposure levels.

12. ECOLOGICAL INFORMATION

Lactofen is moderately to highly toxic to aquatic invertebrates and fish. This chemical (lactofen) has properties and characteristics associated with chemicals detected in groundwater. Acifluorfen, a degradate of this chemical, is known to leach through soil into groundwater under certain conditions as a result of labeled use.

The following is for the active ingredient, lactofen:

AQUATIC TOXICITY

Bluegill (96-hr LC₅₀): 0.46 mg/L; (NOAEC): 0.0014 mg/L
Daphnia (48-hr EC₅₀): 4.85 mg/L
Shrimp (NOAEC): 0.0049 mg/L
Aquatic plants (9-day EC₅₀): 0.44 ppb; (EC₀₅): 0.057 ppb

AVIAN TOXICITY

Bobwhite quail (LD₅₀): > 2,510 mg/kg
Mallard duck (LC₅₀): > 5,620 mg/kg

OTHER TOXICITY

Honeybee (oral LD₅₀): > 160 µg/bee

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: This product is 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: Non-refillable container. Do not reuse this container. Refer to the product label for specific container disposal instructions.

14. TRANSPORT INFORMATION

UN Number: UN3082
Proper Shipping Name: Environmentally hazardous substance, liquid, N.O.S. (contains lactofen)
Transport Hazard Class: 9
Packing Group: III
Hazard Zone: A
Marine Pollutant: Yes¹
Hazardous Substance RQ: None
Labels / Placards: US-DOT: Combustible Liquid²
IMDG, IATA: Class 9 Environmentally Hazardous Substance³
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:** “Ground only” shipments: NA1993, Combustible liquid, N.O.S. Not regulated when shipped in single or inner packaging ≤ 1.3 gal (5 L).

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

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

DANGER: Corrosive. Causes skin burns and irreversible eye damage. Harmful if swallowed, inhaled or absorbed through skin. Do not get in eyes or on skin or clothing. Avoid breathing vapor or spray mist. Wear coveralls worn over long-sleeved shirts and long pants, socks, chemical resistant footwear and gloves (such as Barrier Laminate or Viton ≥ 14 mils). Wear protective eye-wear such as goggles, face shield or safety glasses.

This product contains lactofen, which has been determined to cause tumors in laboratory animals (mouse, rat). Risks can be reduced by closely following use directions and precautions, and by wearing the protective clothing specified elsewhere on this label.

See inside label booklet for additional precautionary statements.



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ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water by cleaning of equipment or disposal of waste. Do not apply when weather conditions favor drift from target area.

Groundwater Advisory:

This chemical (lactofen) has properties and characteristics associated with chemicals detected in groundwater. Acifluorfen, a degradate of this chemical, is known to leach through soil into groundwater under certain conditions as a result of labeled use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

PHYSICAL OR CHEMICAL HAZARDS

Do not mix or allow to come in contact with oxidizing agents. Hazardous chemical reaction may occur.

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.

SARA Title III – Section 302 Extremely Hazardous Substances

None

SARA Title III – Section 311/312 Hazard Categories

Immediate, Delayed, Fire

SARA Title III – Section 312 Threshold Planning Quantity

Not listed

SARA Title III – Section 313 Reportable Ingredients

Lactofen (CAS No. 77501-63-4): 24%

CERCLA –

Not listed

CALIFORNIA PROP 65 STATUS –

⚠ WARNING: This product can expose you to lactofen, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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 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.

SDS Version: 2.0

Effective Date: 9/23/2019



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