

TIGRIS[™] LACTOFEN

SAFETY DATA SHEET

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

1. IDENTIFICATION

PRODUCT NAME: Tigris Lactofen
DESCRIPTION: A liquid herbicide.
EPA REG. NO.: 92647-19
COMPANY IDENTIFICATION: Tigris, LLC
P.O. Box 250
10025 Hwy. 264 Alternate
Middlesex, NC 27557

2. HAZARD IDENTIFICATION

WARNING

Combustible liquid (H227)

HAZARD CLASSIFICATION

| | |
|-------------------------|-----------------|
| Health Hazards | Category |
| None | - |
| Physical Hazards | Category |
| Flammable liquids | 4 |
| Other Hazards | Category |
| None | - |

HAZARDS NOT REQUIRING CLASSIFICATION

None

PRECAUTIONARY STATEMENTS

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

In case of fire: Use foam, fog, CO₂ or dry chemical to extinguish. Refer to Section 5 for additional firefighting information. (P370+P378)

Store in a well-ventilated place. Dispose of contents/container in accordance with local regulations. Refer to the product label for specific disposal instructions. (P403+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% |

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 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.

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 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 INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN: Ingestion of this product or subsequent vomiting can result in aspiration of light hydrocarbon liquid, which can cause pneumonitis.

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 Combustion Products: Oxides of carbon and nitrogen.

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



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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: Do not get in eyes or on skin or clothing. Avoid breathing vapor or spray mist. 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 \geq 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

Physical State: Amber liquid

Odor: Mild sweet

Flash Point: 70°C (158°F)

pH: 5.32 (1% aq.)

Density: 0.98-1.0 g/cm³

Viscosity: 6.27 centipoise (25°C), 4.50 centipoise (39°C)

Solubility: Not 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.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

There is no toxicological information available for this product. The information provided is based on studies done with a product formulated with the 72-78% technical grade material.

ORAL TOXICITY (rat LD₅₀): 2,400 mg/kg

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

INHALATION TOXICITY (rat LC₅₀): 6.65 mg/L (4-hour)

IRRITATION: significant irritation/damage

SKIN IRRITATION: corrosive to skin

SKIN SENSITIZATION: Not a contact sensitizer

CARCINOGENICITY:

IARC: Not Listed

US EPA: likely carcinogen 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

This pesticide is toxic to 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.

AQUATIC TOXICITY

Bluegill (96-hr LC₅₀): 2.1 mg/L (60% MUP)

Rainbow Trout (96-hr LC₅₀): > 100 mg/L (tech.)

Daphnia (48-hr EC₅₀): 4.8 mg/L (60% MUP)

AVIAN TOXICITY

Bobwhite quail (LD₅₀): > 2,510 mg/kg (tech.)

Mallard duck (LC₅₀): > 5,620 mg/kg (tech.)

OTHER TOXICITY

Honey bee (oral LD₅₀): > 160 μ g/bee (tech.)

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.



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14. TRANSPORT INFORMATION

| | |
|---|--|
| Non-Bulk Shipments (containers ≤ 119 gallons): | Not Regulated for Transportation |
| Bulk Shipments (containers > 119 gallons): | |
| UN Number: | NA1993 |
| Proper Shipping Name: | Combustible Liquid, N.O.S. (contains petroleum distillates) |
| Transport Hazard Class: | Comb Liq |
| Packing Group: | III |
| Hazard Zone: | A |
| Hazardous Substance RQ: | None |
| Emergency Guide: | 128 (NAERG – North American Emergency Response Guide) |

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 Lamine 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.

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
Not listed

SARA Title III – Section 311/312 Hazard Categories
Immediate, 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 Reportable Quantity (RQ) –
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

REFER TO THE PRODUCT LABEL FOR TERMS AND CONDITIONS OF USE

Warranty Disclaimer

Tigris, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth in the product label. Tigris, LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

The terms of the Warranty Disclaimer cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Tigris, LLC or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer in any manner.

SDS Version: 1.1

Effective Date: 03/07/2018

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