TIGRIS[™] FOMESAFEN

SAFETY DATA SHEET

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

1. IDENTIFICATION

PRODUCT NAME: Tigris Fomesafen
DESCRIPTION: A liquid herbicide

EPA REG. NO.: 92647-18

COMPANY Tigris, LLC

IDENTIFICATION: P.O. Box 250

10025 Hwy. 264 Alternate Middlesex, NC 27557

Category

2A

2. HAZARD IDENTIFICATION

WARNING

None

Causes serious eye irritation (H319)
May cause an allergic skin reaction (H317)

HAZARD CLASSIFICATION

Health HazardsSerious eye damage / irritation

Sensitization, skin 1B
Physical Hazards
Category

None - Category
Environmental Hazards Category

HAZARDS NOT REQUIRING CLASSIFICATION

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

PRECAUTIONARY STATEMENTS

Wash hands and skin thoroughly after handling. (P264)

Wear protective eyewear (goggles, face shield, safety glasses), chemical-resistant gloves, and other protective clothing as described in Section 6 of this SDS. (P280)

Avoid breathing mist/vapors/spray. (P261)

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

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 or attention. (P305+P351+P338+P337+P313)

IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see Section 4 of this document). Take off contaminated clothing and wash it before reuse. (P3 02+P352+P333+P313+P321+P362+P364)

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
Fomesafen, sodium salt	5-(2-chloro-4-(trifluormethyl) phenoxy)-N-(methylfulfonyl)-2-ni- trobenzamide, sodium salt	108731-70-0	22.1%
Sodium hydroxide	Sodium hydroxide	1310-73-2	< 3%

4. FIRST AID MEASURES

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call the poison control center at 1-800-222-1222.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. 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.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage

5. FIREFIGHTING MEASURES

Flash Point: Not applicable.

Fire and Explosion Hazards: None known.

Extinguishing Medium: Fog, foam, dry chemical, or carbon dioxide (CO2).

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. Use foam or dry chemical fire extinguishing systems to prevent environmental damage from excessive water runoff.

Hazardous Combustion Products: If concentrate or spray solution is allowed to dry on flammable objects, the chlorate component can act as oxidizer.

NFPA Ratings: Health - 2 / Flammability - 1 / Reactivity - 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Isolate area and keep unnecessary and unprotected personnel from entering. Wear suitable personal protective clothing and equipment as described in Section 8 of this document.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain or soil. Contain contaminated water.

Spill Cleanup: Clean up spill immediately. **If spill is on land:** Pick up liquid with suitable absorbent material (such as sawdust, clay granules or dirt) and place in chemical waste container for disposal. Wash spill area with soap water and pick up wash liquid using absorbent and dispose of in chemical waste container. **If spill is in water:** Stop the source of the release. Contain and isolate to prevent further release into soil, surface water and ground water. Absorb spill with suitable absorbent material and remove contaminated water for treatment or disposal.

7. HANDLING AND STORAGE

Handling: Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing spray or vapors. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Storage: Storage should be under lock and key and secure from access by unauthorized persons and children. Storage should be in a cool, dry area away from heat or ignition source. Do not stack over 2 pellets high. Move containers by handles or cases. Do not move containers from one area to another unless they are securely sealed. Keep container tightly sealed when not in uses. Keep away from any puncture source. Avoid storage near water supplies, food, feed and fertilizer to avoid contamination. Store in original container only. Unloading storage and work areas must be as clean as possible to prevent contamination if spilled.

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: All mixers, loaders, application, and other handlers must wear: protective eyewear (goggles, face shield, safety glasses), long-sleeved shirt and long pants, shoes plus socks, and chemical-resistant gloves (barrier laminate, nitrile rubber, neoprene rubber, viton).

General: 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. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: transparent yellow liquid

Odor: mild sweet

Melting/freezing point: not available Boiling point/Boiling range: not available

Flammability: not available

Flammability limits (upper/lower): not available

Flashpoint: not available

Auto-ignition temperature: not available **Decomposition temperature:** not available

pH: 6.36 (1% aq.)

Kinematic viscosity: $153\ cP @ 26^{\circ}C$, $82.7\ cP @ 39^{\circ}C$

Solubility: Soluble in water **Partition coefficient:** not available

Vapor pressure: not available

Bulk Density (tap): 1.090 g/cm³, (9.1 lbs/gal)
Relative vapor density: not available
Particle characteristics: not available

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Temperatures over 130°, heat or open flame.

CHEMICAL STABILITY: Stable under normal use and storage conditions.

INCOMPATIBILITY WITH OTHER MATERIALS: Strong acids, strong bases, strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Can include but are not limited to: carbon oxides, sulfur oxides, nitrogen oxides, sodium oxides, ammonia and halogenated compounds.

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): > 5,000 mg/kg
DERMAL TOXICITY (rat LD₅₀): > 5,000 mg/kg

INHALATION TOXICITY (rat LC₅₀): > 2.02 mg/L (4-hour)

EYE IRRITATION: Severely irritating **SKIN IRRITATION:** Slightly irritating

SKIN SENSITIZATION: Positive contact sensitizer

CARCINOGENICITY:
NTP: Not listed
IARC: Not listed

EPA: Not likely to be carcinogenic to humans

MUTAGENIC TOXICITY: No evidence of mutagenic effects for the active ingredient or other components.

REPRODUCTIVE TOXICITY: No evidence of fertility or reproductive effects for the active ingredient or other compounds.

TERATOGENICITY: No evidence of teratogenic effects for the active ingredient or other components.

12. ECOLOGICAL INFORMATION

The active ingredient in this formulation is toxic to non-target terrestrial plants.

The following information is for the active ingredient, fomesafen:

Rainbow Trout: (LC₅₀) 680 ppm Bluegill: (LC₅₀) 1500 ppm

Daphnia Magna: (EC₅₀) 294 ppm

Bee: 100 g/bee

This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow. This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. See container labeling for complete disposal instructions.



14. TRANSPORT INFORMATION

UN Number: Not regulated

Proper Shipping Name: Agricultural herbicide, liquid, n.o.s.

Transport Hazard Class: N/A
Packing Group: N/A
Hazard Zone: N/A
Marine Pollutant: No
Hazardous Substance RQ: None

Labels / Placards: US-DOT: Not regulated IMDG, IATA: Not regulated

Emergency Guide: 171 (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

WARNING: This product contains fomesafen which has been determined to cause tumors in laboratory animals (mice). Risks can be reduced by closely following use directions and precautions and by wearing the protective clothing specified elsewhere on the product label.

Causes substantial but temporary eye injury. Harmful if swallowed. Harmful if absorbed through skin. Harmful if inhaled. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing spray or vapors. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

See inside label booklet for additional precautionary statements.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Do not apply when weather conditions favor drift from target area.

Groundwater advisory: This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where permeable, particularly where the water table is shallow.

Surface water advisory: For Terrestrial Uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Do not apply when weather conditions favor drift from target area. This product may impact surface water quality due to spray drift and runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high

potential for reaching surface water via runoff for several months after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of fomesafen from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. See the manual for "Conservation Buffers to Reduce Pesticide Losses" at the following internet address: http://www.wsi.nrcs.usda.gov/products/W2Q/pest/core4.html.

Non-target Organism Advisory Statement: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

PHYSICAL OR CHEMICAL HAZARDS

Do not mix or allow coming into 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. This product is excluded from listing requirements under EPA/TSCA.

SARA Title III – Section 302 Extremely Hazardous SubstancesNot listed

SARA Title III – Section 311/312 Hazard Categories Immediate

SARA Title III – Section 312 Threshold Planning Quantity

The threshold planning quantity (TPQ) for this product treated as a mixture is 10,000 lbs. This product contains no ingredients with a TPQ of less than 10,000 lbs.

SARA Title III - Section 313 Reportable Ingredients

Fomesafen (CAS No. 72178-02-0) (21%)

CERCLA Reportable Quantity (RQ) -

Sodium hydroxide (CAS No. 1310-73-2): 1000 lbs. (> 5,500 gallons of product)

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 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 Tigris, 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 TIGRIS, 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 TIGRIS, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SDS Version: 1.0 Effective Date: 06/07/2018

