TIGRIS SULFEN FIRST

SAFETY DATA SHEET

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

1. IDENTIFICATION

PRODUCT NAME: Tigris Sulfen First
DESCRIPTION: A granular herbicide.

EPA REG. NO.: 92647-8
COMPANY Tigris, LLC

IDENTIFICATION: 1204 Village Market Place #173

Morrisville, NC 27560

2. HAZARD IDENTIFICATION

WARNING

May cause damage to organs through prolonged or repeated exposure (H373)



Very toxic to aquatic life with long lasting effects (H400+H410)

HAZARD CLASSIFICATION

Health Hazards	Category	Environmental Hazards	Category
Specific target organ toxicity,		Hazardous to the aquatic environment, acute	1
repeated exposure	2	Hazardous to the aquatic environment, chronic	1
Physical Hazards	Category		

None - Category

HAZARDS NOT REQUIRING CLASSIFICATION

Do not store near heat or open flame. Do not mix or allow coming in contact with oxidizing agents. Hazardous chemical reaction may occur.

PRECAUTIONARY STATEMENTS

Do not breath dust/vapors. (P260)

Get medical advice/attention if you feel unwell. (P314)

Avoid release to the environment not in accordance with label instructions. 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
Sulfentrazone	N-[2,4-dichloro-5-[4-(difluoro- methyl)-4,5-dihydro-3-methyl-5- oxo-1H-1,2,4-triazol-1-yl]phenyl] methanesulfonamide	122836-35-5	62.1%
Cloransulam-methyl	Methyl 3-chloro-2-[(5-ethoxy-7-fluoro-[1,2,4]triazolo[1,5-c] pyrimidin-2-yl)sulfonylamino] benzoate	147150-35-4	7.9%

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: Not applicable

Fire and Explosion Hazards: Finely dispersed particles can form explosive mixtures in air.

Extinguishing Medium: Fog, foam, dry chemical, water spray, or carbon dioxide (CO_2).

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: No data available. **NFPA Ratings:** Health – 1 / 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:** Use a wet sweeping compound or water to prevent dust formation. Sweep up and shovel into suitable containers for disposal. Clean and neutralize spill area, tools and equipment by washing with bleach water and soap. Absorb rinsate and add to the collected waste. Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in Section 13. **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 inert material and remove contaminated water for treatment or disposal. Dispose of waste as indicated in Section 13.

7. HANDLING AND STORAGE

Handling: Avoid contact with 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 product in original container only, away from other pesticides, fertilizers, food or feed.

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: protective eyewear, long-sleeved shirt and long pants, waterproof gloves, and shoes plus socks.

General: Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them. 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: light brown granules Odor: mildly bitter Melting/freezing point: not available Boiling point/Boiling range: not available Flammability: not available Flammability limits (upper/lower): not available Flash point: not available **Auto-ignition temperature:** not available **Decomposition temperature:** not available pH: 7.06 (1% aq.) Kinematic viscosity: not available Dispersible in H₂O Solubility: Partition coefficient: not available Vapor pressure: not available Density: 39.1 lbs./ft3 Relative vapor density: not available Particle characteristics: not available

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Heat or open flame.

CHEMICAL STABILITY: Stable under normal use and storage conditions. INCOMPATIBILITY WITH OTHER MATERIALS: None known. HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides, nitrogen oxides, sulfur oxides, hydrogen chloride, hydrogen fluoride.

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): 2,504 mg/kg
DERMAL TOXICITY (rat LD₅₀): > 5,000 mg/kg

INHALATION TOXICITY (rat LC₅₀): > 4.9 mg/L (4-hour)

EYE IRRITATION: Minimally irritating **SKIN IRRITATION:** Slightly irritating

SKIN SENSITIZATION: Not a contact sensitizer

CARCINOGENICITY:

NTP: Not listed Not listed

EPA: Group E – Evidence of non-carcinogenicity for humans (sulfenders and learness that the subsection of the subsecti

trazone, cloransulam-methyl)

CHRONIC TOXICITY: Prolonged exposure to sulfentrazone caused decreased hemoglobin content and hematocrit, and increased spleen weight and splenic extramedullary hematopoiesis at high doses in animals. Formulation may cause damage to organs through prolonged or repeated exposure.

MUTAGENIC TOXICITY: No evidence of mutagenic effects for the active ingredients.

REPRODUCTIVE TOXICITY: No evidence of fertility or reproductive effects for the active ingredients.

TERATOGENICITY: Evidence of teratogenic effects for the sulfentrazone component in animal studies.

12. ECOLOGICAL INFORMATION

This product is toxic to marine/estuarine invertebrates. This product contains chemicals known to leach through soil into groundwater.

The following information is for the active ingredient, sulfentrazone:

Fish: (96h LC₅₀) 94 mg/L; (NOEC) 5.9 mg/L

Crustacea: (48h EC $_{50}$) 60.4 mg/L; (NOEC) 0.51 mg/L

Algae (72h EC₅₀): 32.8 mg/L

The following information is for the active ingredient, cloransulam-methyl:

Fish (LC₅₀): > 86 mg/L

Daphnia Magna (EC₅₀): 98 mg/L Algae (EC₅₀): 3.5-12 μ g/L Bird (LD₅₀): > 2200 mg/kg

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are toxic. 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 you State Pesticide of Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional office for guidance.

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

14. TRANSPORT INFORMATION

UN Number: UN3077

Proper Shipping Name: Environmentally hazardous substance,

solid, N.O.S. (contains sulfentrazone,

cloransulam-methyl)

Transport Hazard Class: 9
Packing Group: III
Hazard Zone: A
Marine Pollutant: Yes¹
Hazardous Substance RQ: None

Labels / Placards: US-DOT: Class 9 Environmentally Haz-

ardous Substance²

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 experting applies (see note 3 below)

emption 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 ≤ 11 lbs. (5 kg).

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. Causes moderate eye irritation. Avoid contact with eyes or clothing.

See inside label booklet for additional precautionary statements.

ENVIRONMENTAL HAZARDS

This product 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 the terrestrial and aquatic plants in neighboring areas. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

Groundwater Advisory:

This product contains chemicals known to leach through soil into ground-water under certain conditions as a result of label use. Use of this product 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 1.0% organic matter.

Surface Water Advisory:

This product can contaminate surface water through spray drift. Under some conditions this product may also have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several to 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 filler strips, and areas over-lying tile drainage systems that drain to surface waters.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame. Do not mix or allow coming in contact with oxidizing agent. 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 Substances
Not listed

SARA Title III - Section 311/312 Hazard Categories

Delayed 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

CERCLA Reportable Quantity (RQ) -

None

CALIFORNIA PROP 65 STATUS -

This product does not contain any chemical known to the State of California to cause cancer or 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: 06/08/2018