

# TIGRIS™

# BIFEN 2 EC

## SAFETY DATA SHEET EMERGENCY CALL: 1-800-424-9300 (CHEMTREC)

### 1. IDENTIFICATION

**PRODUCT NAME:** Tigris Bifen 2 EC

**DESCRIPTION:** A liquid pyrethroid insecticide.

**EPA Reg. No.:** 92647-17

**COMPANY IDENTIFICATION:** Tigris, LLC  
P.O. Box 250  
10025 Hwy. 264 Alternate  
Middlesex, NC 27557

### 2. HAZARD IDENTIFICATION

#### DANGER

Toxic if swallowed (H301)  
Causes serious eye irritation (H319)  
Harmful if inhaled (H332)  
Causes mild skin irritation (H316)  
May be harmful in contact with skin (H313)  
Suspected of causing cancer (H351)  
Combustible liquid (H227)  
Very toxic to aquatic life with long lasting effects (H400+H400)



#### HAZARD CLASSIFICATION

##### Health Hazards

Acute toxicity, oral  
Acute toxicity, inhalation  
Acute toxicity, dermal  
Serious eye damage / eye irritation  
Skin corrosion / irritation  
Carcinogenicity

##### Category

3  
4  
5  
2A  
3  
2

##### Physical Hazards

Flammable liquids

##### Category

4

##### Environmental Hazards

Hazardous to the Aquatic Environment – Chronic (long-term)  
Hazardous to the Aquatic Environment – Acute (short-term)

##### Category

1  
1

#### HAZARDS NOT REQUIRING CLASSIFICATION

None.

### PRECAUTIONARY STATEMENTS

Do not handle until all safety precautions have been read and understood.  
Do not eat, drink or smoke when using this product. (P202+P270)  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)  
Avoid breathing mist / vapors / spray. Use only outdoors in a well-ventilated area. (P261+P271)  
Wear eye protection and protective clothing as described in Section 8 of this document. (P280)  
Wash hands and exposed skin thoroughly after handling. (P264)  
**IF SWALLOWED:** Immediately call a POISON CENTER / doctor for treatment advice. Specific treatment (see Section 4 of this document). Rinse mouth.

(P301+P310+P321+P330)

**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 INHALED:** Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER / doctor if you feel unwell. (P304+P340+P312)

**IF ON SKIN:** Call a POISON CENTER / doctor if you feel unwell. **If skin irritation occurs:** Get medical advice / attention. (P302+P312+P332+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 using instructions in the product label and in accordance with local / Federal regulations. (P501)

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Common Name	Chemical Name	CAS#	Composition
Bifenthrin	(2-methyl[1,1'-biphenyl]-3-yl)methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate	82657-04-3	25.0%
Aromatic solvent:	-	n/a	40.0%
Naphthalene	-	91-20-3	<4.0%
1,2,4-Trimethylbenzene	-	95-63-6	<0.7%

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. 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 5 minutes, then continue rinsing eye. If eye irritation persists: Get medical attention/ advice.

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with water for 15-20 minutes. Call a doctor or poison control center if you feel unwell. If skin irritation occurs: Get medical advice/ attention.

**IF INHALED:** Remove person to fresh air and keep comfortable for breathing. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a doctor or poison control center if you feel unwell.

**IF SWALLOWED:** Immediately call a poison control center or doctor. Rinse mouth out and have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**NOTE TO PHYSICIAN:** This product is a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and should be avoided. This product contains a petroleum distillate. Vomiting may cause aspiration pneumonia.

#### 5. FIREFIGHTING MEASURES

**Flash Point (SCC):** 164°F (73.3°C)

**Flammable Limits:** Not determined

**Fire and Explosion Hazards:** Can burn in fire, releasing irritating and toxic gases due to thermal decomposition or combustion.

**Extinguishing Medium:** Water spray, dry foam, dry chemical or carbon dioxide (CO<sub>2</sub>). Minimize use of water to avoid environmental contamination. Contain all runoff.

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

**Fire Fighting Instructions:** Evacuate the area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Dike and collect fire-extinguishing water to prevent environmental damage with excessive water runoff.

**Hazardous Combustion Products:** Carbon dioxide, carbon monoxide, hydrogen chloride, and hydrogen fluoride

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

#### 6. ACCIDENTAL RELEASE MEASURES

Clean up spills immediately, observing precautions in Section 8 of this SDS. Isolate hazard area. Keep unnecessary personnel from entering.

**Small Spills:** Contain small spill by diking with a suitable absorbent material. Sweep up absorbed spill and place material in appropriate recovery drums for disposal.

**Large Spills:** Contain large spill by diking with a suitable absorbent material and recover for disposal. After removal, neutralize the spill area, tools, and equipment with a dilute alkaline solution (soda ash or lime) followed by an appropriate alcohol (methanol, ethanol or isopropanol). Wash the spill area, tools, and equipment with strong soap and water solution. Absorb any excess liquid and add to the recovery drums of waste already collected. Dispose all wastes as described in Section 13.

#### 7. HANDLING AND STORAGE

**Keep out of reach of children.**

**Handling:** Use only in a well ventilated area. Do not get in eyes or on clothing. Avoid breathing vapor or spray mist. Avoid contact with skin. 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:** Keep in original container, tightly closed, out of reach of children. Keep away from food, drink and animal feeding stuffs. Containers should be stored in a cool, dry, well-ventilated area away from flammable materials and sources of heat or flame. Do not freeze. Do not store below 40°F.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Proper ventilation is required when using this product. Ventilate all transport vehicles prior to unloading. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**Protective Clothing:** Handlers who may be exposed to the dilute through application must wear long-sleeved shirt and long pants, shoes plus socks, and chemical resistant gloves (such as barrier laminate, nitrile rubber, neoprene or Viton).

Handlers who may be exposed to the concentrate through mixing, loading, application or other tasks must wear long-sleeved shirt and long pants, shoes plus socks, chemical resistant gloves (such as barrier laminate, nitrile rubber, neoprene or Viton), and protective eyewear.

**General:** 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. Discard clothing and other absorbent materials that have been heavily contaminated with this product. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.



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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** transparent yellow liquid  
**Odor:** aromatic hydrocarbon  
**Melting / Freezing point:** no data available  
**Boiling Point / Boiling Range:** no data available  
**Flammability:** not flammable  
**Flammability Limits (upper/lower):** not applicable  
**Flash Point (closed cup):** 73.3°C (164°F)  
**Auto-ignition Temperature:** no data available  
**Decomposition Temperature:** no data available  
**pH:** 5–6 (1% aq.)  
**Kinematic Viscosity:** no data available  
**Water Solubility:** emulsifies  
**Partition coefficient:** no data available  
**Vapor Pressure:** no data available  
**Density:** 7.9–8.0 lbs./gal.  
**Relative Vapor Density:** no data available  
**Particle Characteristics:** no data available

## 10. STABILITY AND REACTIVITY

**CONDITIONS TO AVOID:** Avoid excessive heat and fire.  
**CHEMICAL STABILITY:** Stable under all normal use and storage conditions. May decompose if heated.  
**INCOMPATIBILITY WITH OTHER MATERIALS:** None known.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon dioxide, carbon monoxide, hydrogen chloride, and hydrogen fluoride  
**HAZARDOUS POLYMERIZATION:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

**ORAL TOXICITY (rat LD50):** 262 mg/kg  
**DERMAL TOXICITY (rabbit LD50):** > 2,000 mg/kg  
**INHALATION TOXICITY (rat LC50):** 1.86 mg/L (4-hour)  
**EYE IRRITATION:** Rabbit – Mildly irritating  
**SKIN IRRITATION:** Rabbit – Moderately irritating  
**SKIN SENSITIZATION:** Not a contact sensitizer  
**CARCINOGENICITY:**  
**EPA:** Group C – Possible human carcinogen (bifenthrin)  
**ACGIH:** Not Listed **NTP:** Suspected (naphthalene)  
**IARC:** Group 2B (naphthalene) **OSHA:** 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

Extremely toxic to fish and aquatic invertebrates.  
This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds.  
The use of this product is prohibited in areas that may result in exposure of endangered species to bifenthrin.

### The following information is for the active ingredient, Bifenthrin:

Rainbow trout: (96h LC50): 0.15 µg/L  
Daphnia: (48h EC50): 1.6 µg/L (NOAEC): 0.0013 µg/L  
Shrimp: (96h LC50): 0.004 µg/L

## 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 your State Pesticide or 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. Refer to the product label for specific container disposal instructions.

## 14. TRANSPORT INFORMATION

**UN Number:** UN3352

**Proper Shipping Name:** Pyrethroid pesticide, liquid, toxic, N.O.S. (contains Bifenthrin)

**Transport Hazard Class:** 6.1

**Packing Group:** III

**Hazard Zone:** A

**Marine Pollutant:** Yes<sup>1</sup>

**Hazardous Substance RQ:** Naphthalene: RQ 100 lbs. (approx. 312 gallons of this product)

**Labels / Placards:** US-DOT: Class 6.1 Poisonous Material<sup>2</sup>  
IMDG, IATA: Class 6.1 Toxic Substance<sup>3</sup>

**Emergency Guide:** 151 (NAERG – North American Emergency Response Guide)

<sup>1</sup>**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).

<sup>2</sup>**US-DOT Note:** Not regulated when shipped in single or inner packaging ≤ 1.3 gal. (5 L) in strong outer packaging.

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

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.



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## 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:** May be fatal if swallowed. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Harmful if inhaled or absorbed through skin. Avoid breathing vapor or spray mist. Avoid contact with skin. 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. See inside label booklet for additional Precautionary Statements and Directions for Use including Storage and Disposal instructions.

#### ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and aquatic invertebrates.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds.

The use of Battalion 2 EC is prohibited in areas that may result in exposure of endangered species to bifenthrin.

#### PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

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

Immediate, Delayed, Fire

#### SARA Title III – Section 312 Threshold Planning Quantity

N/A

#### SARA Title III – Section 313 Reportable Ingredients

Bifenthrin (CAS #82654-04-3): 25.0%

Naphthalene (CAS #91-20-3): < 4.0%

1,2,4-Trimethylbenzene (CAS #95-63-6): < 0.7%

#### CERCLA Reportable Quantity (RQ) –

Naphthalene (CAS #91-20-3): 100 lbs. (approx. 312 gallons of this product)

#### CALIFORNIA PROP 65 STATUS –

This product contains a chemical (Naphthalene) known to the state of California to cause cancer.

#### 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 TI-GRIS, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, IN-JURIES 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.

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