

1. IDENTIFICATION

Product name: **Bifen XTS Insecticide/Termiticide**

Chemical name of active ingredient(s): 2 methyl[1,1'-biphenyl]-3-yl)methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl-cyclopropanecarboxylate

Manufacturer: Control Solutions Inc.
5903 Genoa-Red Bluff
Pasadena, Texas 77507
Phone: 281-892-2500

For fire, spill, and/or leak emergencies, contact CHEMTREC: Phone: 1-800-424-9300

For medical emergencies and health and safety inquiries, contact SafetyCall Int'l: Phone: 1-866-897-8050

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMMON NAME	CAS NO.	%	OSHA PEL	ACIGH TLV
Bifenthrin	82657-04-3	25.1	Not available	Not available
Inert ingredients including:				
Aromatic hydrocarbons	64742-94-5	74.9	100 ppm	Not available

3. HAZARDS IDENTIFICATIONS

PHYSICAL PROPERTIES

Appearance: Amber liquid
Odor: Aromatic hydrocarbons

EMERGENCY OVERVIEW

- May be fatal if swallowed.
- Harmful if inhaled, or absorbed through skin.
- Avoid contact with skin, eyes, or clothing.
- Extremely toxic to fish and aquatic invertebrates.
- Prohibited in areas that may result in exposure of endangered species
- Highly toxic to bees.

POTENTIAL HEALTH EFFECTS:

Eye: Causes severe eye irritation.

Skin: Harmful if absorbed through the skin. Causes moderate skin irritation. Avoid contact with skin, eyes, or clothing.

Inhalation: Harmful if inhaled; avoid breathing vapor or spray mist.

Ingestion: May be fatal if swallowed.

SYMPTOMS OF ACUTE EXPOSURE

Large doses may cause incoordination, tremor, salivation, vomiting, diarrhea and irritability to sound and touch.

4. FIRST AID MEASURES

FIRST AID

- IF SWALLOWED:**
- Call a poison control center or doctor immediately for treatment advice.
 - Have person sip a glass of water if able to swallow.
 - 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.
- IF IN EYES:**
- Call a poison control center or doctor for further treatment advice.
 - 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.
 - 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.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-866-897-8050 for emergency medical treatment information.

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 so should be avoided. This product contains a petroleum distillate. Vomiting may cause aspiration.

5. FIRE FIGHTING MEASURES

FLASH POINT: 65°C (149° F)

METHOD USED: Pensky-Martens Closed Cup

FLAMMABLE LIMITS

LFL: Not available

UFL: Not available

EXTINGUISHING MEDIA: Foam, CO₂, dry chemical

FIRE & EXPLOSION HAZARDS: Moderately combustible. Found not to be explosive.

FIRE-FIGHTING PROCEDURES: Isolate fire area. Do not breathe smoke, gases or vapors generated.

FIRE-FIGHTING EQUIPMENT: Wear self-contained breathing apparatus and full-protective clothing.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS/LEAKS: Clean up spills immediately, using precautions described in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

Keep material out of lakes, streams, ponds and sewer drains. To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay; if dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

Do not allow material to run off into soil, drainage systems, or bodies of water. Notify and consult with proper regulatory authorities.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Do not freeze or store in extreme heat.

Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use local exhaust at all process locations where vapor or mist may be emitted. Ventilate all transport vehicles prior to unloading.

PERSONAL PROTECTIVE EQUIPMENT

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation and packaging of the product. For commercial application and on-farm applications, consult the product label.

INGESTION PROTECTION: Prevent eating, drinking, tobacco usage, and cosmetic application in areas where there is a potential for exposure to the material.

EYE PROTECTION: For splash, mist or spray exposure, wear protective eyewear.

RESPIRATORY PROTECTION: For splash, mist, or spray exposure wear, as a minimum, a properly fitted half-face or full-face air-purifying respirator, which is approved for pesticides (U.S. NIOSH/MSHA, EU CEN or comparable certification organization). Respirator use and selection must be based on airborne concentrations.

SKIN PROTECTION: To avoid skin contact, wear chemical resistant gloves such as barrier laminate, nitrile rubber, neoprene rubber or Viton, long sleeved shirt, long pants and shoes plus socks. Wash immediately with soap and water after handling and before eating, drinking, or using tobacco.

Applicators and all handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, nitrile rubber, neoprene rubber or Viton
- Shoes plus socks
- Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Amber liquid

ODOR: Aromatic hydrocarbon

FLASH POINT: 65°C (149° F)

METHOD USED: Pensky-Martens Closed Cup

pH: 5.77

STORAGE STABILITY: 2 years in normal warehouse conditions.

VISCOSITY: 4.415(20°C) & 2.739 (40°C)

MISCIBILITY: Product is miscible in oil

BOILING POINT: N/A

VAPOR PRESSURE: N/A

SOLUBILITY IN WATER: Soluble

BULK DENSITY/SPECIFIC GRAVITY: 0.976 g/ml

OXIDIZING OR REDUCING ACTIVITY: Compatible with water, 10% monoammonium phosphate solution, iron powder and Kerosene. Incompatible with 10% potassium permanganate solution

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Excessive heat and fire.

POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ORAL TOXICITY: LD₅₀ is 149.6 mg/kg for body weight in female rats

DERMAL TOXICITY: LD₅₀ is >2000 mg/kg for body weight in male and female rats

INHALATION TOXICITY: LC₅₀ is > 2.06 mg/L for 4-hour exposure in male and female rats.

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Eye Irritation: Severely irritating (rabbit)

Skin Irritation: Moderately irritating (rabbit)

Dermal Sensitization: Not a contact sensitizer (guinea pig)

MUTAGENIC POTENTIAL:

Bifenthrin: None observed.

TERATOGENIC EFFECTS:

Bifenthrin: None observed.

12. ECOLOGICAL INFORMATION

Based on active ingredient-Bifenthrin

ECOTOXICOLOGY:

Bifenthrin is very highly toxic to fish, crustaceans and aquatic animals. Care should be taken to avoid contamination of the aquatic environment. LC₅₀: 0.00015 mg/L (rainbow trout), 0.00035 mg/L (bluegill), 0.0016 mg/L (daphnia).

Bifenthrin is moderately toxic to many species of bird.

: LC₅₀ 1,280 ppm (mallard duck), 4,450 ppm (bobwhite quail).

: LD₅₀ 1,800 mg/kg (bobwhite quail), 2,150 mg/kg (mallard duck).

Bifenthrin is toxic to bees.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Dispose of product containers, waste containers, and residues according to local, state, and federal regulations. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law.

CONTAINER DISPOSAL: Triple-rinse (or equivalent) then offer for recycling or reconditioning, or puncture and dispose in a sanitary landfill, or by other procedures approved by state and local authorities. Do not cut or weld metal containers.

14. TRANSPORT INFORMATION

DOT CLASSIFICATION:

Non-bulk packaging (6x1 qt and 4x1 gallon): Consumer Commodity, ORM-D

Non-bulk packaging (2.5 gallon and greater): UN 3352, Pyrethroid pesticide, liquid, toxic, (bifenthrin 25.1%), 6.1, PG III, Marine Pollutant

Bulk packaging (>119 gallons): UN 3352, Pyrethroid pesticide, liquid, toxic, (bifenthrin 25.1%), 6.1, PG III, Marine Pollutant

B/L FREIGHT CLASSIFICATION: Item: 45617 [Fungicides, Herbicides, Insecticides, or Rodenticides] Class 77.5

INTERNATIONAL TRANSPORTATION:

IMO (vessel): UN 3352, Pyrethroid pesticide, liquid, toxic, (bifenthrin 25.1%), 6.1, PG III, Marine Pollutant

IATA (air): UN 3352, Pyrethroid pesticide, liquid, toxic, (bifenthrin 25.1%), 6.1, PG III

15. REGULATORY INFORMATION

SARA TITLE III CLASSIFICATION:

Section 302: Not applicable.

Section 311/312: Acute health hazard (immediate)

Chronic health hazard (delayed)

Section 313: Bifenthrin (CAS #82657-04-3)

CA PROPOSITION 65: Not applicable

CERCLA RQ: Not applicable

RCRA CLASSIFICATION: Not listed

16. OTHER INFORMATION

MSDS new 08-22-04.

The information herein is given in good faith, but no warrant, express or implied, is made. Consult Control Solutions Inc. for further information.