1. IDENTIFICATION

Product name: BIFEN 2 LB (Alt. Name Bifen XTS Insecticide/Termicide)

Product type: Insecticide/Termiticide

EPA Registration No.: 53883-189

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

3,3,3-trifluoro-1-propenyl)-2,2-dimethyl

cyclopropanecarboxylate Control Solutions, Inc.

Manufacturer/Registrant: Control Solutions, Inc. 5903 Genoa-Red Bluff Pasadena, TX 77507

For fire, spill, and/or leak emergencies,

contact Chemtrec: Phone: 1-800-424-9300

For medical emergencies and health

and safety inquiries, contact Safety Phone: 1-866-897-8050

Call:

Poison Control Center Phone: 1-800-222-1222

2. HAZARDS IDENTIFICATIONS

OSHA HCS CLASSIFICATION (29 CFR 1910.1200)

Acute Toxicity:

	Acute oral	Acute dermal	Acute inhalation	Eye irritation	Skin irritation	Skin Sensitization
Category	Category 3	NC	Category 4	Category 2A	Category 2	NC

NC: Not classified

SIGNAL WORD: DANGER HAZARD STATEMENTS:

- Toxic if swallowed
- Harmful if inhaled
- Causes skin irritation
- Causes serious eye irritation
- Aspiration hazard (containing aromatic hydrocarbons)
- Suspected of causing cancer (Naphthalene Category 2)

PICTOGRAM:



PRECAUTIONARY STATEMENTS:

- Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. If swallowed: Call a poison center if you feel unwell. Rinse mouth.

- Avoid breathing mist, vapors and spray. Use only outdoors or in a well-ventilated area. In inhaled: remove a person to fresh air and keep comfortable for breathing. Call a poison center if you feel unwell.
- Wash hand thoroughly after handling. Wear protective gloves. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice. Take off contaminated clothing and wash it before reuse.
- Wash hand thoroughly after handling. Wear eye or face protection. 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.

Contact Safety Call® International for emergency medical treatment at (866) 897-8050.

PHYSICAL AND CHEMICAL HAZARDS: Combustible. Do not use or store near heat or open flame.

STORAGE AND DISPOSAL: See Section 7 and 13.

OTHER HAZARDS: See Section 11 and 12.

3. COMPOSITION/INFORMATION ON INGREDIENTS

COMMON NAME	CAS NO.	%	OSHA PEL	ACGIH TLV	OTHER	NTP/IARC/OSHA (Carcinogen)
Bifenthrin	82657-04-3	25.1	NE	NE	NE	NA
Aromatic hydrocarbon solvent Containing:	64742-94-5		NE	NE	NE	NA
Naphthalene	91-20-3	>1%	10 ppm 50 mg/m ³	10 ppm 52 mg/m ³	15 ppm 75 mg/m ³ (STEL)	NTP – 2* IARC –2B**

NA: Not applicable; NE: Not established.

4. FIRST AID MEASURES

	EIRCT AID				
FIRST AID					
IF SWALLOWED:	Immediately call a Poison Control Center or doctor.				
	Do no induce vomiting unless told to do so 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 by mouth-to-mouth if possible.				
	Call a poison control center or doctor for further treatment advice.				
IF ON SKIN OR	Take off contaminated clothing.				
CLOTHING:	Rinse skin immediately with plenty of water for 15-20 minutes.				
	Call a poison control center or doctor for treatment advice.				
IF IN EYES:	Hold eye open and rinse slowly and gently with water 15-20 minutes.				
	Remove contact lenses, if present, after the first 5 minutes, then continuing				
	rinsing eye.				
	Call a poison control center or doctor for treatment advice.				
Note to Physician: T	his product is a pyrethroid. This product also contains aromatic hydrocarbons				

Note to Physician: This product is a pyrethroid. This product also contains aromatic hydrocarbons. Because of the risk of hydrocarbon pneumonitis if even tiny amounts are aspirated into the lung during emesis, consideration should be given to gastric lavage with endotracheal tube in place. Treatment is symptomatic and supportive. Animal and vegetable fats, mild, cream and alcohol may increase absorption and should not be administered.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For additional information on this product (including health concerns, medical emergencies, or pesticide incidents), you may call the National Pesticide Information Center at 1-800-858-7378. Monday through Friday from 7:30 AM to 3:30 PM Pacific Time. After 3:30 PM Pacific Time and on weekends, call your poison control center. You may also contact SafetyCall® International at 866-879-8050 for emergency medical treatment information.

5. FIRE FIGHTING MEASURES

FLASH POINT: 65°C (149°F) (Pensky-Martens Closed Cup)

FLAMMABLE LIMITS: Not available.

EXTINGUISHING MEDIA: Foam, CO₂, dry chemical.

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

store near heat or open flame.

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: When heated it may decompose to emit toxic fumes.

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. Soak up with an absorbent material such as sand, sawdust, Fuller's earth, etc. Dispose of with chemical waste.

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: 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.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store upright at room temperature. Avoid exposure to extreme temperatures.

STORAGE TEMPERATURE (MIN/MAX): Normal to ambient temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

SKIN PROTECTION: Long-sleeved shirt and long pants. Shoes plus socks.

HAND PROTECTION: Chemical-resistant and waterproof gloves, such as barrier laminate, nitrile rubber, neoprene rubber, or Viton.

EYE PROTECTION: Protective eyewear.

RESPIRATOR REQUIREMENTS: When required - NIOSH approved respirator with any R, P, or HE filter, or respirator with an organic vapor (OV) cartridge or canister with any R, P or HE prefilter.

ADDITIONAL PROTECTIVE MEASURES: 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.

SAFETY DATA SHEET BIFEN 2 LB

(Alt. Name BIFEN XTS INSECTICIDE/TERMITICIDE)

USER SAFETY RECOMMENDATIONS:

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

EXPOSURE GUIDELINES: Refer to Section 2.

ENGINEERING CONTROLS: Use adequate ventilation to minimize airborne concentrations of this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Amber liquid **ODOR:** Aromatic hydrocarbon

FLASH POINT: 65°C (149° F) (Pensky-Martens Closed Cup)

pH: 5.77

VISCOSITY: 4.415(20°C) & 2.739 (40°C) MISCIBILITY: Product is miscible in oil SOLUBILITY IN WATER: Soluble DENSITY: 0.915 – 0.925 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 under normal conditions.

CONDITIONS TO AVOID: Exposure to extreme temperature.

HAZARDOUS DECOMPOSITION PRODUCTS: When heated it may decompose to emit toxic fumes.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES:

Acute Oral LD50 (Rat): > 149.6 mg/kg
Acute Dermal LD50 (Rabbit): > 2,000 mg/kg
Acute Inhalation LC50 (Rat): > 2.06 mg/L (4 hrs.)
Eye Irritation (Rabbit): Severely irritating
Skin Irritation (Rabbit): Moderately irritating

Dermal Sensitization (Guinea Pig): Not a skin contact sensitizer

POTENTIAL HEALTH EFFECTS:

Ingestion: May be fatal if swallowed.

Eye: Causes eye irritation.

Skin: Harmful if absorbed through the skin. Causes moderate skin irritation.

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

SYMPTOMS OF ACUTE EXPOSURE: Large doses may cause incoordination, tremor, salivation, vomiting, diarrhea and irritability to sound and touch.

CARCINOGENICITY:

Bifenthrin: No evidence of cancer was observed. (EPA listed Bifenthrin as Group C--Possible Human Carcinogen (2003 Report).

Naphthalene: APHTHALENE: Exposure to high concentrations of naphthalene may cause destruction of red blood cells, anemia, and cataracts. Naphthalene caused cancer in laboratory animal studies, but the relevance of these findings to humans is uncertain.

REPRODUCTIVE TOXICITY:

Bifenthrin: Not teratogenic in animal experiments.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: This pesticide is extremely toxic to fish and aquatic invertebrates. Do not apply when weather conditions favor drift from treated areas. Care should be used when spraying to avoid fish and reptile pets in/around ornamental ponds.

This pesticide is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeks. Do not apply BIFEN 2 LB or allow it to drift to crops or weeks on which bees are actively foraging. Additional information may be obtained from your Cooperative Extension Service.

To protect the environment, do not allow pesticides to enter of run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 2 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

ECOTOXICOLOGICAL INFORMATION:

Aquatic Organisms Effects:

Rainbow trout LC₅₀ (96-h): 0.00015 mg/L Bluegill LC₅₀ (96-h): 0.00035 mg/L Daphnia magna EC₅₀: 0.0016 mg/L

Effects on Birds:

Mallard Duck LD50: 2,150 mg/kg; (8-day dietary): 1,280 ppm Bobwhite quail LD50: 1,800 mg/kg; (8-day dietary): 4,450 ppm

Bifenthrin is toxic to bees.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Do not contaminate water, food, or feed by storage or disposal. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. Dispose of excess or waste pesticide by use according to label directions, or contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Dispose of product containers, waste containers, and residues according to label instructions and local, state, and federal health and environmental regulations.

14. TRANSPORT INFORMATION

Ground Domestic (DOT):

>5 liters: UN 3352, Pyrethroid pesticides, liquid, toxic, 6.1, PGIII

<5 liters: Consumer commodity ORM-D

15. REGULATORY INFORMATION

FIFRA INFORMATION:

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 for safety data sheet, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

WARNING May be fatal if swallowed. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if inhaled, or absorbed through skin. Avoid breathing vapor or spray mist and 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.

SARA TITLE III CLASSIFICATION:

Section 302: Not applicable.

Section 311/312: Acute health hazard (immediate)

Chronic health hazard (delayed)

Section 313: Bifenthrin (25.1%) CAS #:82657-04-3

Naphthalene (>1%) CAS#: 91-20-3

CA PROPOSITION 65: Naphthalene RQ=100 lbs.

CERCLA RQ: Naphthalene RQ=100 lbs.

RCRA CLASSIFICATION: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

TSCA STATUS: The ingredients of this product are listed on the TSCA inventory or are exempt.

16. OTHER INFORMATION

HAZARD RATINGS	NFPA	HMIS		
HEALTH:	2	2	0	MINIMAL
FLAMMABILITY:	2	2	1	SLIGHT
REACTIVITY:	0	0	2	MODERATE
			3	HIGH
			4	SEVERE

MSDS DATE: 9-26-2014. Supercedes versions dated: 1-25-2007 and 8-16-2011. Changes made to all sections.

The information and recommendations contained herein are based upon data believed to be correct. However, no warranty of any kind, expressed or implied, is made with respect to the information contained herein.