



SAFETY DATA SHEET

Bifen XTS

SECTION 1: IDENTIFICATION

Product Name: Bifen XTS
EPA Registration No.: 53883-189
Recommended Use: Insecticide; See product label for a complete list of uses and use sites.
Restrictions on Use: See product label for any restrictions on the use of this product.
Chemical Family: Pyrethroid
Chemical Name of Active Ingredient(s): Bifenthrin: 2-Methyl-3-phenylphenyl)methyl (1S,3S)—[(Z)-2-chloro-3,3,3-trifluoroprop-1-enyl]-2,2-dimethylcyclopropane-1-carboxylate
Manufactured for: Control Solutions, Inc.
5903 Genoa-Red Bluff
Pasadena, TX 77507

FOR FIRE, SPILL, AND/OR LEAK EMERGENCIES CONTACT: CHEMTREC 1-800-424-9300

FOR MEDICAL EMERGENCIES AND HEALTH AND SAFETY INQUIRIES CONTACT: Safety Call 1-866-897-8050

SECTION 2: HAZARD(S) IDENTIFICATION

EMERGENCY OVERVIEW: Amber liquid with an aromatic hydrocarbon odor. Causes serious eye irritation. Combustible liquid. Aspiration hazard.

OSHA HCS CLASSIFICATION (29 CFR 1910.1200)

Aspiration Hazard	Category 1
Acute Oral Toxicity	Category 3
Eye Damage/Irritation	Category 2A
Acute Inhalation Toxicity	Category 4
Specific Target Organ Toxicity – Repeated Exposure	Category 2
Flammable Liquids	Category 4

Signal Word: DANGER



Hazard Statement(s): May be fatal if swallowed and enters airways.
Toxic if swallowed.
Causes serious eye irritation.
Harmful if inhaled.
May cause damage to organs (kidneys & liver) through prolonged or repeated exposure.
Combustible liquid.

Precautionary Statement(s):

Prevention: Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves and eye protection.
Do not breathe mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Keep away from flames and hot surfaces. – No smoking.

Response: **IF SWALLOWED:** Immediately call a poison center/doctor. Do NOT induce vomiting. Rinse mouth.

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.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

IN CASE OF FIRE: Use foam, dry chemical, carbon dioxide or water spray to extinguish.

Get medical advice/attention if you fell unwell.

Storage: Store locked up. Store in a well-ventilated place. Keep cool.

Disposal: Dispose of contents/container in accordance with Federal, state and local laws and regulations.

The following percentage of the mixture consists of components with unknown hazards regarding the acute toxicity:

- 10.0% Acute inhalation toxicity
- <5.0% Eye irritation
- <5.0% Skin irritation
- 10.0% Skin sensitization

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight %
Bifenthrin	82657-04-3	25.1%
Heavy aromatic solvent naphtha (contains):	64742-94-5	60.0 – 70.0%
Naphthalene	91-20-3	<0.07%

*Ingredients not listed or listed with a weight % range are considered a trade secret and are withheld under 29 CFR 1910.1200(i).

SECTION 4: FIRST AID MEASURES

IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15 to 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:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.
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. Call a poison control center or doctor for further treatment advice.
IF INGESTED:	Call a poison control center or doctor immediately for treatment advice. 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.

Most important symptoms/effects, acute and delayed: Allergic skin reaction.

NOTE TO PHYSICIAN: This product is a pyrethroid. This product also contains 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, milk, cream and alcohol may increase absorption and should not be administered.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:	Foam, dry chemical, carbon dioxide or water spray
Unsuitable Extinguishing Media:	Water jet
Hazardous Combustion Products:	Thermal decomposition may produce toxic carbon and nitrogen oxides.
Special Protective Equipment & Precautions:	Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Foam and/or dry chemical are preferred to minimize environmental contamination. If water is used, dike and collect water to prevent run-off. Wear self-contained breathing apparatus and full fire-fighting turn-out gear (Bunker gear).
Unusual Fire & Explosion Hazards:	Combustible liquid, do not use or store near heat or open flames.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:	See Section 8 for personal protection equipment.
Environmental Precautions:	Keep spilled material and any rinsate from contaminating soil or from entering sewage and drainage systems and bodies of water.
Methods for Containment:	Isolate the spill area. Keep unnecessary and unprotected personnel from entering. Remove sources of ignition. Absorb small spills with sand, vermiculite or other inert absorbent. Dike large spills using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow absorbed material to solidify and scrape up for disposal.
Methods for Clean-up:	Place contaminated material in appropriate container for disposal. After removal, flush contaminated area thoroughly with water. Pick up wash liquid with additional absorbent and place in a disposable container. Do not put spilled material back in the original container.
Other Information:	None known

SECTION 7: HANDLING AND STORAGE

Handling:	RECOMMENDATIONS ARE INTENDED FOR MANUFACTURING, PACKAGING AND COMMERCIAL BLENDING WORKERS. PESTICIDE APPLICATORS AND WORKERS must refer to the product label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Handle and open container in a manner as to prevent spillage. Do not eat, drink or smoke while handling this product. Immediately wash off accidental splashes of the concentrate or spray mixture from skin, clothing and out of eyes.
Storage:	See pesticide label for full information on product storage. Do not contaminate water, food or feed by storage of this product. Store away from sources of heat, out of direct sunlight and away from incompatible materials. Pesticides should be stored in secured areas away from children and animals.
Storage Temperature (Min/Max):	Not determined but avoid extreme temperatures.
Product Incompatibilities:	Avoid contact with strong oxidizers.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Users of a pesticide product must refer to the product label for personal protective equipment requirements.

Exposure Guidelines:

COMPONENT	OSHA PEL	ACGIH TLV	NIOSH REL
Heavy aromatic solvent naphtha	400 mg/m ³ 100 ppm		400 mg/m ³ 100 ppm

Engineering Controls: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred.

Respiratory Protection: In areas of poor ventilation, use a NIOSH approved respirator with cartridges/canisters approved for pesticides.

Eye Protection: Chemical goggles or safety glasses and face shield.

Protective Gloves: Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile, neoprene rubber, polyvinyl chloride (PVC) or Viton.

Other Protective Clothing: Long-sleeved shirt, long pants and chemical resistant footwear plus socks.

General Safety Measures: Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately after handling this product. Wash outside of gloves before removing. 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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Amber liquid	Upper/Lower Flammability Limits:	Not determined
Odor:	Hydrocarbon	Vapor Pressure:	Not determined
Odor Threshold:	Not determined	Vapor Density:	Not determined
pH (1% dispersion):	5.5 – 6.0	Relative Density (@24°C):	0.915 – 0.925
Melting /Freezing Point:	Not determined	Solubility in Water:	Soluble
Boiling Point/Range:	Not determined	Partition Coefficient:	Not determined
Flash Point:	149°F (65°C)	Auto-ignition Temperature:	Not determined
Evaporation Rate:	Not determined	Decomposition Temperature:	Not determined
Flammability:	Not applicable	Viscosity:	4.415 @ 20°C 2.739 @ 40°C

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No hazardous chemical reactions known.
Chemical Stability: Stable under normal storage and handling conditions.
Possibility of Hazardous Reactions: No potential for hazardous reactions known.
Conditions to Avoid: Extreme temperatures
Incompatible Materials: Strong oxidizers
Hazardous Decomposition Products: Thermal decomposition may produce toxic carbon and nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Eye contact, Skin contact, Inhalation, Ingestion
Symptoms of Exposure: Redness, itching and tearing of the eye. Ingestion of large doses may cause lack of coordination, tremor, salivation, vomiting, diarrhea and irritability to sound and touch.
Oral LD₅₀: >149.6 mg/kg (Based upon similar formulation)
Dermal LD₅₀: >2,100 mg/kg (Estimated based upon component data)
Inhalation LC₅₀: 3.59 mg/L (4-hour)(Estimated based upon component data)
Eye Irritation/Damage: Anticipated to cause serious but temporary eye irritation based upon component data.
Skin Corrosion/Irritation: Not anticipated to be a skin irritant based upon component data.
Skin Sensitization: Not anticipated to be a skin sensitizer based upon component data.
Chronic/Subchronic Toxicity: No data available on the mixture
Mutagenicity: No data available on the mixture
Reproductive Toxicity: No data available on the mixture
Neurotoxicity: No data available on the mixture
Target Organs: Kidneys and liver (based upon component data)
Aspiration Hazard: Presence of the hydrocarbon solvent makes this product a likely aspiration hazard.
Carcinogenicity: The EPA considers bifenthrin to be a possible human carcinogen based upon animal studies.

Chemical Name	ACGIH	IARC	NTP	OSHA
No components present at 0.1% or greater				

SECTION 12: ECOLOGICAL INFORMATION

Environmental Hazards Statement from FIFRA Regulated Pesticide Label:

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 product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow to drift to crops or weeds on which bees are actively foraging. Addition information may be obtained from your Cooperative Extension Service. To protect the environment, do not allow pesticide to enter or 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 24 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.

ECOTOXICITY DATA:

The data presented below is for bifenthrin technical.

Fish Toxicity:

Rainbow trout: 96 hr LC₅₀ = 0.00015 ppm

Bluegill sunfish: 96 hr LC₅₀ = 0.00035 ppm

Aquatic Invertebrate Toxicity:

No data available

Aquatic Plant Toxicity:

No data available

Avian Toxicity:

Bobwhite quail: Oral LD₅₀ = 1,800 mg/kg

Mallard duck: Oral LD₅₀ = 2,150 mg/kg

Honeybee Toxicity:

Highly toxic

ENVIRONMENTAL EFFECTS:

Persistence and Degradability: No data available

Bioaccumulation: No data available

Mobility: No data available

Other Adverse Effects: No data available

SECTION 13: DISPOSAL CONSIDERATIONS**Waste Disposal:**

Refer to the pesticide label for full information on disposal. Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used 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 in proper disposal methods.

Container Disposal:

Refer to the pesticide label for full information on disposal. When possible, triple rinse the container and offer for recycling if available.

RCRA Characteristics:

It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste.

SECTION 14: TRANSPORTATION INFORMATION

DOT UN3352, Pyrethroid Pesticide, Liquid, Toxic, 6.1, PGIII

(Ground): This product qualifies for limited quantity status in packages of less than 5 L (1.3 gallons)

IMDG UN3352, Pyrethroid Pesticide, Liquid, Toxic, 6.1, PGIII, Marine Pollutant

(Sea):

IATA UN3352, Pyrethroid Pesticide, Liquid, Toxic, 6.1, PGIII

(Air):

SECTION 15: REGULATORY INFORMATION

Labeling Requirements Under 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. 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 contaminated clothing and wash before reuse.

TSCA Inventory: This product is exempt from TSCA inventory listing requirements as it is solely for FIFRA regulated use.

SARA Title III Information:

Section 302 – Extremely hazardous substances: None
Section 311/312 – Hazard Categories: Acute (Immediate); Chronic (Delayed); Fire
Section 313 – This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS Number	Weight %
Bifenthrin	82657-04-3	25.1%

CERCLA – This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Chemical Name	CAS Number	RQ	Quantity of Finished Product
Naphthalene	91-20-3	100 lbs	Not reached with any practical quantity

CALIFORNIA PROPOSITION 65:

Chemical Name	CAS Number	Prop 65 Category(ies)
Naphthalene	91-20-3	Cancer

U.S. STATE RIGHT-TO-KNOW REGULATIONS:

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Bifenthrin	X		
Castor oil, ethoxylated (61791-12-6)	X		X

SECTION 16: OTHER INFORMATION

NFPA	Health Hazards 2	Flammability 2	Instability 0	Special Hazards – None
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