



United Phosphorus, Inc.

NFPA	PPE		

Issued Date 22-Nov-2013

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Revision Number: 1

1. PRODUCT AND COMPANY IDENTIFICATION

UPI
630 Freedom Business Center
Suite 402
King of Prussia, PA 19406

Emergency Telephone Number
Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison Control Center
(866) 673-6671 (24hrs)

<u>Company Information</u>	<u>Contact Information</u>	<u>Phone Number</u>	<u>Available Hrs</u>
UPI	R&D Technical Service Customer Service	610-223-2180 1-800-438-6071	8:00 am to 5:00 pm EST 8:00 am - 5:00 pm (EST)
Product Name	Bifenture LFC		
EPA Reg #	70506-305		
Recommended Use	Insecticide		
Product Code	12-LFC		

2. HAZARDS IDENTIFICATION

Emergency Overview		
Highly toxic to fish and aquatic organisms. Keep out of drains and water courses. Slightly combustible. This material may support combustion at elevated temperatures.		
Appearance White, to, off-white.	Physical State Viscous liquid.	Odor Latex. paint like.

Potential Health Effects

Acute Effects Effects from overexposure result from either swallowing, inhaling, or coming into contact with the skin. Symptoms of overexposure include bleeding from the nose, tremors and convulsions. Contact with this product may occasionally produce skin sensations such as rashes, numbing, burning and tingling. These sensations are reversible and usually subside within 12 hours.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients Name

Component	CAS-No	Weight %	OSHA PEL
Bifenithrin technical 82657-04-3 (17.15)	82657-04-3	17.15	N/A
Propylene Glycol 57-55-6 (<10)	57-55-6	<10	N/A

4. FIRST AID MEASURES

Eye Contact	Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Skin Contact	Take off contaminated clothing. Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Call poison control center or doctor for treatment advice.
Inhalation	If breathing is irregular or stopped, administer artificial respiration. May cause allergic respiratory reaction. Call a poison control center or doctor for further treatment advice.
Ingestion	Call a physician or poison control center immediately. May produce an allergic reaction. Never give anything by mouth to an unconscious person. Do not induce vomiting unless told to do so by a poison control center or doctor.
Notes to Physician	This product is a pyrethroid and contains petroleum distillates. Treatment is symptomatic and supportive. Do not induce vomiting. Vomiting may cause aspiration pneumonia. Digestible fats, oils, or alcohol may increase absorption and should be avoided.

5. FIRE-FIGHTING MEASURES

Flammable Explosive Properties

Flash Point	Not available
Autoignition Temperature	Not available
Flammability Limits in Air	Not available
Extnguishing Media	Foam, Carbon dioxide (CO2) Dry chemical.
Fire/Explosion Hazard	Keep product and empty container away from heat and sources of ignition
Hazardous Combustion Products	Carbon monoxide, Carbon dioxide (CO2), Hydrogen chloride, hydrogen fluoride.
NFPA	Health 2 Flammability 1 Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with the skin and the eyes. Use personal protective equipment.
Environmental Precautions	Keep material out of lakes, streams, ponds and sewer drains. Dike to confine spill and absorb with an absorbant such as clay, sand or soil. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.
Methods for Clean-up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Handling	Keep out of reach of children. Keep from freezing. Wear personal protective equipment. Keep away from heat, sparks and open flame. - No smoking. Remove and wash contaminated clothing before re-use.
Storage	Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat and sources of ignition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
Engineering Controls	Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems. PESTICIDE APPLICATORS & WORKERS. THESE WORKERS MUST REFER TO PRODUCT LABELING AND DIRECTIONS FOR USE IN ACCORDANCE WITH EPA WORKER PROTECTION STANDARD 40 CFR PART 170.
Personal Protective Equipment	
Eye/face Protection	Where there is potential for eye contact have eye flushing equipment available. Use eye protection to avoid eye contact.
Skin Protection	Wear protective gloves/clothing. Coveralls. Chemical resistant gloves. Socks and footwear.
Respiratory Protection	Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection programs must comply with 29 CFR 1910.134.

General Hygiene Considerations

Do not eat, drink or smoke when using this product. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White to off-white	Odor	Latex paint like
Physical State	Viscous liquid	pH	8.37
Boiling Point/Range	Not available	Melting Point/Range	Not available
Specific Gravity	1.012 g/mL	Solubility	Not available

Evaporation Rate	Not available	Vapor pressure	Not available
Vapor Density	Not available	VOC Content	Not available
Viscosity	Not available	Molecular Weight	no data available
Bulk Density	no data available	Percent Solids	Not available
Percent Volatiles	Not available		

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions
Conditions to Avoid	Heat, flames and sparks
Incompatible Materials	Strong oxidizing agents Do not mix or allow contact with oxidizing agents as a hazardous chemical reaction may occur.
Hazardous Decomposition Products	None under normal use
Possibility of Hazardous Polymerization	None under normal processing

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information Bifenture LFC: Acute toxicity = Acute Oral 550 mg/kg; Acute dermal >5,000 mg/kg; Acute inhalation >5.06 mg/L; Eye irritation Mildly irritating; Skin irritation Non-irritating; Dermal sensitization Non-sensitizing

Component Information Bifenthrin products may produce skin sensations such as rashes, numbing, burning, or tingling, which are reversible and usually subside in 12 hours.

Chronic Toxicity

Carcinogenicity BIFEN
In studies with laboratory animals, Bifenthrin technical did not cause reproductive toxicity or teratogenicity. Tremors were associated with repeated exposure of laboratory animals to Bifenthrin technical. In lifetime feeding studies conducted with rodents a slight increase in the incidence of urinary bladder tumors at the highest dose in male mice was considered to be an equivocal response, not evidence of a clear compound-related effect. The overall absence of genotoxicity has been demonstrated in mutagenicity tests with Bifenthrin. Chronic exposure to aromatic hydrocarbons may cause headaches, dizziness, loss of sensations or feelings and liver and kidney damage. There is no sufficient evidence to suggest that aromatic hydrocarbons are reproductive toxicants, mutagens or developmental toxicants.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Bifenthrin is highly toxic to fish and aquatic arthropods and LC50 values range from 0.0038 to 17.8 ug/L. In general, the aquatic arthropods are the most sensitive species. Care should be taken to avoid contamination of the aquatic environment. Bifenthrin had no effect on mollusks at its limit of water solubility. Bifenthrin is only slightly toxic to both water fowl and upland game birds (LD50 values range from 1,800 mg/kg to >2,150 mg/kg). Bifenthrin has moderate stability in the soil under aerobic conditions with a half-life ranging from 65 to 125 days depending on soil type. It is stable at a wide range of pH values. Bifenthrin has a high Log Pow (>6.0), a high affinity for organic matter, and is not mobile in soil which indicate little potential for movement into ground water. There is potential for bifenthrin to bioconcentrate (BCF = 11,750).

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method	Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or 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.
Contaminated Packaging	Refer to product label.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s (Bifenthrin)
Hazard Class	9
UN-No	UN3082
Packing Group	PG III
Marine pollutant	Y.

ICAO

UN-No	UN3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s (Bifenthrin)
Hazard Class	9
Packing Group	PG III
Description	Marine pollutant

IATA

UN-No	UN3082
Proper Shipping Name	Environmentally hazardous substances, liquid, n.o.s. (Bifenthrin)
Hazard Class	6.1
Packing Group	PG III
Description	Marine pollutant

IMDG/IMO

Proper Shipping Name	Environmentally hazardous substances, liquid, n.o.s. (Bifenthrin)
Hazard Class	6.1
UN-No	UN3082
Packing Group	PG III
Marine pollutant	yes

15. REGULATORY INFORMATION

International Inventories

12-LFC
Bifenture LFC

Chemical Name	TSCA	DSL	NDSL	EINECS/ ELINCS	ENCS	CHINA	KECL	AICS
Bifenthrin technical					Present	X	Present	
Propylene Glycol	Present	X		X	Present	X	Present	X

USA

Federal Regulations

SARA 313

Y

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values
Bifenthrin technical	82657-04-3	17.15	1.0

SARA 311/312 Hazardous Categorization

Chronic Health Hazard	No
Acute Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Propylene Glycol	57-55-6	<10		Group I		

CERCLA

RCRA

Pesticide Information

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Bifenthrin technical 82657-04-3 (17.15)			X	
Propylene Glycol 57-55-6 (<10)			X	

State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

State Right-to-Know

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Bifenthrin technical		X		X	
Propylene Glycol		X	X		

International Regulations

Mexico - Grade

Mexico - Grade

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

Not determined

16. OTHER INFORMATION

Revision Date 22-Nov-2013

Revision Summary
Add to system

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End of MSDS