

Safety Data Sheet

United Phosphorus, Inc.

Preparation Date 22-Apr-2015

Revision date 25-Mar-2016

Revision Number: 2

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier Product Description:

Bifenture LFC

Other means of identification	
Item#:	1
UN-No	ι
Synonyms	Ν
Registration number(s)	7

12-LFC UN3082 Not Available 70506-305

Recommended use of the chemical and restrictions on useRecommended useInsecticide.Uses advised againstActivities contrary to label recomendation

Details of the Supplier of the Safety Data SheetSupplier AddressUnited Phosphorus Inc.630 Freedom Business CenterSuite 402King of Prussia, PA 19406Emergency telephone numberCompany Phone NumberEmergency telephone numberChemtrec: (800) 424-930Medical: Rocky Mountain

1-800-438-6071 Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887 Medical: Rocky Mountain Poison Control Center (866) 673-6671 (24hrs)

2. Hazards Identification

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Dermal	Category 4
Skin sensitization	Category 1

Label elements

EMERGENCY OVERVIEW

WARNING

hazard statements Harmful in contact with skin May cause an allergic skin reaction



appearance white To Off-white	Physical state viscous liquid	Odor Latex paint like
-------------------------------	-------------------------------	-----------------------

Precautionary Statements - Prevention

Wear protective gloves/protective clothing/eye protection/face protection Do not get in eyes, on skin, or on clothing Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response

IF exposed IF ON SKIN: Wash with plenty of soap and water Call a POISON CENTER or doctor if you feel unwell Wash contaminated clothing before reuse If skin irritation or rash occurs: Get medical advice/attention

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC) OTHER INFORMATION

• Very toxic to aquatic life with long lasting effects

• Very toxic to aquatic life

3. Composition/information on Ingredients

Chemical name	CAS-No	Weight %	Trade secret
Bifenithrin technical	82657-04-3	17.15	
1,2-Benzisothiazolin-3-one	2634-33-5	0.2	
Earth clay	8031-18-3	5	

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. First aid measures		
FIRST AID MEASURES		
Eye contact	Hold eye open and rinse slowly and gently with water for 30 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.	
Skin contact	Rinse skin immediately with plenty of water for 15-20 minutes. Call poison control center or doctor for treatment advice.	
Inhalation	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 physician or poison control center immediately.	
Ingestion	Call a physician or poison control center immediately. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.	
Protection of First-aiders	Use personal protective equipment.	
Most Important Symptoms and Effects, Both Acute and Delayed		
Most Important Symptoms and Effects	No information available.	
Indication of Any Immediate Medica	al Attention and Special Treatment Needed	
Notes to physician	This product contains a pyrethroid. Treatment is symptomatic and supportive.	

5. Fire-fighting measures

<u>Suitable extinguishing media</u> Carbon dioxide (CO2). Water. Foam.

Unsuitable extinguishing media No information available.

<u>Specific hazards arising from the chemical</u> Thermal decomposition can lead to release of irritating gases and vapours.

Hazardous combustion productsCarbon monoxide. Carbon dioxide (CO2). Hydrogen chloride. Hydrogen fluoride.

Explosion data

Protective equipment and precautions for firefighters

Use personal protective equipment. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures		
Personal precautions, protective	equipment and emergency procedures	
Personal Precautions	Provide adequate ventilation. Avoid contact with the skin and the eyes. Wear protective gloves/clothing and eye/face protection.	
Environmental Precautions		
Environmental precautions	Prevent further leakage or spillage if safe to do so. 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 pertinenet environmental permits.	
Methods and material for contain	nment and cleaning up	
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	
Precautions for safe handling		
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.	
Conditions for safe storage, incl	uding any incompatibilities	
Storage	Keep in a dry place. Keep containers tightly closed in a cool, well-ventilated place.	
incompatible materials	Strong oxidizing agents.	
	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.	
Personal protective equipment Eye/Face Protection	Use eye protection to avoid eye contact. Where there is potential for eye contact have eye flushing equipment available. Safety glasses with side-shields. If splashes are likely to	

Skin protection Respiratory protection occur, wear:. Goggles. Wear protective gloves/clothing. Coveralls. Chemical resistant gloves. Socks and footwear. Effective dust mask.

General hygiene considerations

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

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state appearance color	viscous liquid white To Off-white No information available	Odor	Latex paint like
Property	VALUES	Remarks/ • Method	
рН	8.37		
Melting point/freezing point	9.37 °C / 49 °F		
Boiling Point/Range	No information available		
Flash Point	No information available		
Evaporation Rate	No information available		
flammability (solid, gas)	No information available		
Flammability limit in air			
Upper Flammability Limit	No information available		
Lower Flammability Limit	No information available		
vapor pressure	No information available		
Vapor Density	No information available		
Specific gravity	1.012 g/mL		
Water solubility	No information available		
Solubility in Other Solvents	No information available		
Partition coefficient: n-octanol/wate			
Autoignition temperature	No information available		
decomposition temperature	No information available		
Viscosity, kinematic	No information available		
Dynamic viscosity	No information available		
Explosive properties	No information available		
Oxidizing properties	No information available		
OTHER INFORMATION			
Softening point	No information available		
molecular weight	No information available		
VOC Content	No information available		
density	No information available		
Bulk density	No information available		
-			

10. Stability and Reactivity

Reactivity no data available

Chemical stabilityStable under normal conditions.Possibility of hazardous reactionsNone under normal processing.Hazardous polymerizationHazardous polymerization does not occur.

<u>Conditions to avoid</u> Extremes of temperature and direct sunlight. <u>incompatible materials</u> Strong oxidizing agents.

Hazardous decomposition products

Carbon oxides.

11. Toxicological Information

Information on Likely Routes of Exposure

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
Inhalation	May cause irritation of respiratory tract.
Eye contact	May cause slight irritation.
Skin contact	Skin exposure may result in rashes, numbing, burning or tingling sensation which is reversible and usually subsides within 12 hours.
Ingestion	MAY BE HARMFUL IF SWALLOWED.

Information on Toxicological Effects

Symptoms	
----------	--

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

sensitization Mutagenic effects Carcinogenicity	No information available. No information available. 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
Reproductive effects STOT - Single Exposure STOT - repeated exposure Aspiration hazard	suggest that aromatic hydrocarbons are reproductive toxicants, mutagens or developmental toxicants. Not Available. No information available. No information available. No information available.

Numerical Measures of Toxicity - Product information

LD50 Oral	550 mg/kg (rat)
LD50 Dermal	> 5000 mg/kg (rat)
LC50 Inhalation:	> 5.06 mg/l (rat)

12. Ecological Information

Marine Pollutant.

ecotoxicity

Bifenthrin : Highly toxic to fish and aquatic arthropods (LC50 values between 0.0038 to 17.8 ug/L. Slightly toxic to water fowl and upland game birds (LD50 between 1800 to >2150 mg/kg)

Persistence/Degradability No information available.

Bioaccumulation/ Accumulation

Bioaccumulative potential.

Chemical name	Log Pow
1,2-Benzisothiazolin-3-one 2634-33-5	1.3

Other Adverse Effects

No information available

13. Disposal Considerations			
Waste Treatment Methods			
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 UN-No Proper shipping name Hazard class Packing group Marine Pollutant	Not regulated when shipped domestically by highway in non-buk containers as per 49 CFR 171.4 UN3082 Environmentally hazardous substance, liquid, n.o.s (Bifenthrin) 9 PG III Marine Pollutant.
TDG UN-No Proper shipping name Hazard class Packing group Marine Pollutant: Y or N [List Ingredient(s) with %]	When shipped in Canada domestic highway non-bulk this product can be shipped as Not regulated as per TDG 1.45.1 UN3082 Environmentally hazardous substance, liquid, n.o.s. (Bifenthrin) 9 PG III Marine pollutant.
IATA UN-No Proper shipping name Hazard class Packing group Description	UN3082 Environmentally hazardous substances, liquid, n.o.s (Bifenthrin) 6.1 PG III Marine Pollutant
IMDG/IMO UN-No Proper shipping name Hazard class Packing group Marine Pollutant	UN3082 Environmentally hazardous substances, liquid, n.o.s (Bifenthrin) 6.1 PG III Yes

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

signal word CAUTION

Restricted Use Pesticide. Harmful if absorbed through the skin. Harmful if swallowed. Toxic to fish and aquatic organisms.

International Inventories	
USINV	Not determined
DSL/NDSL	Not determined
EINECS/	Does not comply
ELINCS	
ENCS	Does not comply
China	Complies
KECL	Complies
PICCS	Does not comply
AICS	Does not comply
TSCA	Does not comply

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

Chemical name	SARA 313 - Threshold Values
Bifenithrin technical - 82657-04-3	1.0
SARA 311/312 Hazardous	
Categorization	
Acute health hazard	yes
Chronic health hazard	yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No
CERCLA SARA Product RQ 0	
RCRA Pesticide Information	
State Regulations	

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island	
Bifenithrin technical		Х		Х		
International regulations U.S. EPA Label information EPA Pesticide registration number 70506-305						
	16. Other Information					

<u>NFPA</u>	HEALTH 2	flammability 1	Instability 0	Physical hazard -
Preparation Date Revision date Revision Summary Update section 14	22-Apr-2 25-Mar-2			
Disclaimer				
statements) are accura	te as of the date hered	of. NO WARRANTY OF	endations container herei FITNESS FOR ANY PART	

THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with other materials or in any process. Further, since the conditions and methods of use are beyond the control of United Phosphorus, Inc. and United Phosphorus Inc. expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.

End of MSDS