FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

- 1.1 PRODUCT IDENTIFIER: TRADE NAME:
- 1.2 RECOMMENDED USE:

SNIPER® HELIOS® GROUP 3A INSECTICIDE

1.3 SUPPLIER DETAILS:

LOVELAND PRODUCTS, INC.

- P.O. Box 1286 Greeley, CO 80632-1286
- 1.4 24 Hour Emergency Phone: 1-800-424-9300 Medical Emergencies: 1-866-944-8565 Product Information: 1-888-574-2878 (LPI-CUST) U.S. Coast Guard National Response Center: 1-800-424-8802

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to 29 CFR 1910.1200		
Aspiration Hazard	Category 1	H304
Acute Toxicity – Dermal	Category 4	H312
Eye Damage/Irritation	Category 2A	H319
Acute Toxicity – Inhalation (Dusts/Mists)	Category 4	H332
Carcinogenicity	Category 2	H351

2.2 Label elements



Signal word: Hazard Statement: Precautionary	DANGER H304 – May be fatal if swallowed and enters airways. H312 – Harmful in contact with skin. H319 – Causes serious eye irritation. H332 – Harmful if inhaled. H351 – Suspected of causing cancer. H410 – Very toxic to aquatic life with long lasting effects.
(Prevention):	 P201 – Obtain special instructions before use. P202 – Do not handle until all safety precautions have been read and understood. P280 – Wear protective gloves/protective clothing/eye protection/face protection. P261 – Avoid breathing dust/fume/gas/mist/vapors/spray. P271 – Use only outdoors or in a well-ventilated area. P264 – Wash face, hands and any exposed skin thoroughly after handling.
(Flevention).	
Precautionary Statement: (Response):	P301+P310: IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER or doctor/physician. P331 – Do NOT induce vomiting. P302+P352: IF ON SKIN: Wash with soap and water. P312 – Call a POISON CENTER or doctor/physician if you feel unwell. P304+P340: IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing P312 – Call a POISON CENTER or doctor/physician if you feel unwell.
Precautionary Statement: (Storage): Precautionary Statement: (Disposal)	P405 – Store locked up. P501 – Dispose of contents/container to an approved waste disposal to an approved waste disposal facility.

2.3 Other hazards

Pyrethroid pesticide.

Potential Health effects	
Routes of exposure	Ingestion. Inhalation.
Eyes	Causes severe eye irritation.
Skin	Harmful in contact with skin.
Inhalation	Harmful if inhaled.
Ingestion	May be fatal if swallowed.
Target organs	Ingestion.
Signs and symptoms	May be fatal if swallowed and enters airways.
Potential environmental effects	This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large
or frequent spills can have harmfu	I or damaging effect on the environment.

3. COMPOSITION, INFORMATION ON INGREDIENTS

3.1 Substances

3.2 Mixtures

Classification according to 29 CFR 1910.1200

Chemical Name:	CAS No.	Classification	Concentration
Bifenthrin	82657-04-3	Asp. haz. 1; H304	[%] 25
		Dermal tox. 4; H312	
Other ingredients*	n/a	Inh. tox. 4; H332	75
Aromatic Hydrocarbons, contains	64742-94-5	Carcinogenicity; 2; H351	
Naphthalene	91-20-3	Eye Dam/Irrit. 2A; H319	<5
		Aquatic tox. 1; H410	

*Ingredients not specifically listed are non-hazardous or are to be considered proprietary or confidential business information per 29 CFR 1910.1200(i)

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice: Get medical attention if symptoms occur.

If in eyes:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5
If swallowed:	minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. 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 the poison control center or doctor. Do not give anything by mouth to an unconscious person.
If on skin or clothing:	Take of contaminated clothing. Rinse skin immediately with plenty of water for 15-20 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.

4.2 Most Important Symptoms and Effects, Acute and Delayed Symptoms: Central nervous system effects.

4.3 Immediate Medical Attention and Special Treatment

Treatment: This product is a Pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treat symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and should be avoided. FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565 Take container, label or product name with you when seeking medical attention.

NOTES TO PHYSICIAN: This product is a Pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treat symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and should be avoided.

SDS REVISIONS: NEW

5. FIRE FIGHTING MEASURES

5.1	EXTINGUISHING MEDIA:		
	Suitable Extinguishing Media:	Use medium appropriate to surrounding fire. Foam, carbon dioxide (CO ₂), dry chemical, soft stream or water fog only if necessary.	
5.2	SPECIAL HAZARDS ARISING FROM THE	SUBSTANCE OR MIXTURE:	
52	Specific Hazards During Firefighting: SPECIAL PROTECTIVE EQUIPMENT AND		
5.5		 Self-contained breathing apparatus and full protective gear should be worn in fighting large fires involving chemicals. Use water spray to keep fire exposed containers cool. Keep people away. Isolate fire and deny unnecessary entry. 	
6.	ACCIDENTAL RELEASE MEASURES		
6.1 F	PERSONAL PRECAUTIONS, PROTECTIVE I	EQUIPMENT AND EMERGENCY PROCEDURES	
	Personal Precautions:	Avoid inhalation of vapors and spray mist and contact with skin and eyes. Ensure adequate ventilation. Wear suitable protective clothing.	
-	ENVIRONMENTAL PRECAUTIONS Environmental Precautions:		
	METHODS AND MATERIALS FOR CONTAIN	This pesticide is extremely toxic to fish and aquatic invertebrates. Use with care when applying in areas adjacent to any body of water. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not make applications when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters. 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 it to drift to blooming crops or weeds while bees are actively visiting the treatment area. The use of Bifenthrin is prohibited in areas that may result in exposure of endangered species to Bifenthrin. Prior to use in a particular county, contact the local extension service for procedures and precautions to use to protect endangered species.	
	Methods for Clean-Up:	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. After removal flush contaminated area thoroughly with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to Remove residual contamination. Never return spills to original containers for re-use.	
7.	HANDLING AND STORAGE		
7.1	PRECAUTIONS FOR SAFE HANDLING:		
	Advice on Safe Handling:	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. Remove PPE immediately after handling this preduct. Weak the cutside of gloves before removing. As each as	

7.2. CONDITIONS FOR SAFE STORAGE:

7.2 CONDITIONS FOR SAFE STORAGE: Requirements for Storage Areas and Containers:

Store in a cool place, DO NOT store in direct sunlight. Protect from freezing temperatures. Do not contaminate water, food or feed by storage or disposal.

8.	EXPOSURE CONTROLS / PER	SONAL PROTECTION		
8.1 OCC	CONTROL PARAMETERS: CUPATIONAL EXPOSURE LIMITS U.S. Workplace Exposure Level	(ACGIH) TI Vs		
	Components	Туре	Value	
	No listings	TLV		
	-	TLV		
	U.S. Workplace Exposure Level	(OSHA) PELs		
	Components	Туре	Value	
	No listings	TLV	15 mg/m³ (Total dust), Skin	

Biological limit values

ACGIH Biological Exposure Indices

<u>(</u>	Components	Value	Specimen
1	No listings		

8.2 EXPOSURE CONTROLS:

Engineering Measures

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. Individual Protection Measures:

Eye / Face Protection:	Goggles or shielded safety glasses are recommended.
Skin Protection:	Long-sleeved shirt and long pants. Chemical-resistant gloves. Shoes plus socks.
Respiratory Protection:	Not normally required. If respirators are used, a program should be in place to assure compliance with 29 CFR
	1910.134, the OSHA Respiratory Protection standard.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1	APPEARANCE :	Liquid	
	ODOR:	Aromatic hydrocarbon.	
	ODOR THRESHOLD:	No data available.	
	COLOR:	Amber.	
	pH:	5.36	
	MELTING POINT / FREEZIN	G POINT: No data available	
	BOILING POINT:	No data available	
	FLASH POINT:	164°F / 73.3°C.	
	FLAMMABILILITY (solid, gas)	No data available.	
	UPPER / LOWER FLAMMABI	LITY OR EXPLOSIVE LIMITS: No data available.	
	VAPOR PRESSURE:	No data available.	
	SOLUBILITY:	Emulsifies.	
	PARTITION CO-EFFICIENT,	n-OCTANOL / WATER: No data available.	
	AUTO-IGNITION TEMPERATURE: No data available.		
	DECOMPOSITION TEMPERA	ATURE: No data available.	
	VISCOSITY:	No data available.	
	SPECIFIC GRAVITY (Water =	= 1): 0.96 g/ml	
	BULK DENSITY:	8.00 lbs./gal / 0.96 kg/L	
Note:	These physical data are ty	pical values based on material tested but may vary from sample to sample.	
		be construed as a guaranteed analysis of any specific lot or as specification items.	

10. STABILITY AND REACTIVITY

10.1 REACTIVITY

- Stable **10.2 CHEMICAL STABILITY**
- Stable under normal temperature conditions **10.3 POSSIBILITY OF HAZARDOUS REACTIONS**
- No data available. Will not polymerize.
- **10.4 CONDITIONS TO AVOID**
- Heat, flames and sparks.
- **10.5 INCOMPATIBILE MATERIALS**
- None known.
- **10.6 HAZARDOUS DECOMPOSITION PRODUCTS**
 - Oxides of carbon, hydrogen chloride, hydrogen fluoride, and oxides of sulfur.

11 TOXICOLOGICAL INFORMATION

11.3 LIKELY ROUTES OF EXPOSURE

Eye contact. Skin absorption. Skin contact. LC₅₀ (rat): 1.86 mg/L (4 HR) LD₅₀ Oral (rat): 262 mg/kg LD₅₀ Dermal (rat): > 2,000 mg/kg Acute Toxicity Estimates: No data available Skin Irritation (rabbit): Slight irritant. Eye Irritation (rabbit): Moderate eye irritation. Specific Target Organ Toxicity: No data available Aspiration: Fatal if swallowed and enters airways. Skin Sensitization (guinea pig): Sensitizer Carcinogenicity: ACGIH TLV-A4 (Not Classifiable as a Human Carcinogen); IARC-3 (Unclassifiable as to Carcinogenicity in Humans). Germ Cell Mutagenicity: No data available Interactive Effects: None known

12 ECOLOGICAL INFORMATION

12.3 ECOTOXICITY

The product is toxic to fish and aquatic invertebrates. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. Information below is based on the active ingredient Bifenthrin. **Ecotoxicological Data**

	Species	Test Results	
Bifenthrin	Fish	0.1 μg/L – 96-hour LC₅₀	
	Daphnia magna	0.11 µg/L – 96-hour EC ₅₀	

Drift or runoff may adversely affect non-target plants.

Do not apply directly to water.

Do not contaminate water when disposing of equipment wash water.

Do not apply when weather conditions favor drift from target area.

12.2 PERSISTENCE AND DEGRADABILITY

Biodegradability: Moderately persistent. Does not readily hydrolyze. Not readily biodegradable.

12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: Has some potential to bioaccumulate in the environment.

12.4 MOBILITY IN SOIL

Immobile. Not expected to reach groundwater.

12.5 OTHER ADVERSE EFFECTS

Assessment: No data available.

13 DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Wastes may be disposed of on site or at an approved waste disposal facility. Triple rinse (or equivalent), adding rinse water to spray tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by appropriate authorities. Recycling decontaminated containers is the best option of container disposal. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at http://www.acrecycle.org/. Do not contaminate water, food or feed by storage or disposal.

14 TRANSPORT INFORMATION

14.3 LAND TRANSPORT

DOT Shipping Description: UN3352, PYRETHROID PESTICIDE, LIQUID, TOXIC (BIFENTHRIN), 6.1, III ERG GUIDE 151 U.S. Surface Freight Classification: INSECTICIDES OR FUNGICIDES, INSECT OR ANIMAL REPELLENTS, NOI, OR VERMIN EXTERMINATORS, ANIMAL OR POULTRY, NOI; POISON (NMFC 102100; CLASS: 77.5)

REVIEWED BY: Environmental Health and Safety

15 REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS			
NFPA & HMIS Hazard Ratings:	NFPA	HMIS	
SARA Hazard Notification/Reporting	3 Health1 Flammability0 Instability	0Least3Health1Slight0Flammability2Moderate0Reactivity3HighBPPE4Severe	
SARA Title III Hazard Category:	Immediate Y Delayed Y		<u>N_</u>

Reportable Quantity (RQ) under U.S. CERCLA: Naphthalene (CAS: 91-20-3) 100 pounds. SARA, Title III, Section 313: Bifenthrin (CAS: 82657-04-3) 25%; Naphthalene (CAS: 91-20-3) <5%.

RCRA Waste Code: Not listed.

CA Proposition 65: WARNING: This product contains chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

This chemical is a pesticide product registered by the United States 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 (SDS), 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. Wear protective eyewear (goggle, face shield, or safety glasses). Harmful if inhaled or absorbed through skin. Avoid breathing vapor or spray mist Avoid contact with skin, eyes, or clothing. 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.

16 OTHER INFORMATION

SDS STATUS: New.

PREPARED BY: Registrations and Regulatory Affairs

EPA REG. NO.: 34704-858

®Sniper and Helios are registered trademarks of Loveland Products, Inc.

This product is a Restricted Use Pesticide (Toxic to fish and aquatic organisms)

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