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

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

FORMULATED FOR:

	PRODUCTS, INC. 6 • Greeley, CO 80632-1286		/ Phone: 1-800-424-9300 gencies: 1-866-944-8565 e Center: 1-800-424-8802
PRODUCT NAME: CHEMICAL NAME:	SNIPER® INSECTICIDE/MITICIDE Bifenthrin: [1α,3α-(Z)]-(±)-(2-methyl[1,1'-biphenyl]-3-yl) methyl dimethylcyclopropanecarboxylate; Cis isomers 97% minimum,		
CHEMICAL FAMILY: EPA REG. NO.: MSDS Number: 0008	Pyrethroid Insecticide 34704-858 58-09-LPI MSDS Revisions: All sections reviewed	Date of Issue: 02/13/09	Supersedes: 04/06/07

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – WARNING – AVISO - Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detaile (If you do not understand the label, find someone to explain it to you in detail.) May be fatal if swallowed. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear protective eyewear (goggles, 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, or using tobacco. Remove and wash contaminated clothing before reuse.

3. COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Ingredients:	Percentage by Weight:	CAS No.	TLV (Units)
Bifenthrin Inert Ingredients, including	25.00 75.00	82657-04-3	not established
Aromatic Hydrocarbons, contains Naphthalene		64742-94-5 91-20-3	100 mg/m ³ 52 mg/m ³

4. FIRST AID MEASURES

If swallowed:	Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by the poison control center or
If inhaled:	doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person. 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 in eyes:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contract 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 or clothing:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565. Have the product label or container with you when calling a poison control center or doctor, or going for treatment.

NOTE TO PHYSICIAN: This product is a Pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is systematic and supportive. Digestible fats, oils or alcohol may increase absorption and so should be avoided. Contains petroleum distillate – vomiting may cause aspiration pneumonia. This product contains light aromatic hydrocarbons that can produce a severe pneumonitis or fatal pulmonary edema if aspirated during vomiting. Consideration should be given to gastric lavage with an endotracheal tube in place. Reversible skin sensitizations (paresthesia) may occur.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method): FLAMMABLE LIMITS (LFL & UFL): EXTINGUISHING MEDIA: HAZARDOUS COMBUSTION PRODUCTS: SPECIAL FIRE FIGHTING PROCEDURES:	164 ^o F / 73.3 ^o C (CC) Not established Foam, dry chemical, carbon dioxide, water or fog. Carbon monoxide, carbon dioxide, hydrogen chloride and hydrogen fluoride. Wear protective clothing and self-contained breathing apparatus. Do not breathe smoke, gases or vapors. Keep non-essential personnel away from the immediate fire area, and out of any fall-out or run-
UNUSUAL FIRE AND EXPLOSION HAZARDS:	off areas. Moderately combustible. When heated above the flashpoint, this material releases vapors which, when mixed with air, can burn or be explosive.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Small spill or leak: In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Avoid bodily contact. Confine spill by diking with suitable absorbent material. Pick up absorbed spill and place in a suitable container for proper disposal in accordance with all Federal, State and Local regulations.

Large spill or leak: Follow basic procedure as outlined in small spill or leak steps above. To clean and neutralize spill area, tools and equipment, wash with a solution of caustic soda or soda ash, and an appropriate alcohol (methanol, ethanol or isopropanol). Follow this by washing with a strong soap and water solution. Absorb any excess liquid and add to the drums of waste collected. Repeat if necessary. Dispose in accordance with Federal, State and Local regulations. **CAUTION:** Do not allow any spill clean up materials to enter waterways.

7. HANDLING AND STORAGE

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 product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Do not use near heat or open flame.
STORAGE:	Do not freeze. Do not store below 40°F. If crystals are observed, warm material to above 60°F by placing container in warm location. Shake or roll container periodically to re-dissolve solids. Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. 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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:	Worker Protection Stan	,	besticides [40CFR 170.240 (d)(4-	ets with requirements listed in the -6)], the handler PPE
RESPIRATORY PROTECTION: Wear a NIOSH app EYE PROTECTION: Chemical goggles of		oved pesticide respirator with organic vapor cartridge and pesticide prefilter. r shielded safety glasses. hing: coveralls over short-sleeved shirts and pants, shoes plus socks. Wear rubber or chemical-		
	Naphthalene 1,2,4 Trimethylbenzene	OSHA PEL 8 hr TWA 50 mg/m ³ not listed	ACGIH TLV-TWA 52 mg/m ³ 123 mg/m	

Handlers who may be exposed to the dilute through application or other tasks must wear: Long-sleeved shirt and long pants, Chemical-resistant gloves, such as Barrier Laminate or Nitrile Rubber or Neoprene, Rubber or Viton®, Shoes plus socks. Handlers who may be exposed to the concentrate through mixing, loading, application or other tasks must wear: Long-sleeved shirt and long pants, Chemical-resistant gloves, such as Barrier Laminate or Nitrile Rubber or Neoprene, Rubber or Viton®, Shoes plus socks Protective eyewear. 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/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

 APPEARANCE AND ODOR: Amber-colored liquid with aromatic hydrocarbon odor
 SOLUBILITY: Emulsifies

 SPECIFIC GRAVITY (Water = 1): 0.9586 g/ml
 BULK DENSITY: 8.00 lbs/gal.
 pH: 5.36

 VAPOR PRESSURE (mmHg): Not established
 BOILING POINT: Not established
 pH: 5.36

 PERCENT VOLATILE (by volume): Not established
 EVAPOR ATION RATE: Not established
 pH: 5.36

 Note:
 These physical data are typical values based on material tested but may vary from sample to sample.
 Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

STABILITY: Stable INCOMPATIBILITY: None known.

CONDITIONS TO AVOID: Excessive heat and fire.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, hydrogen chloride and hydrogen fluoride. HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

 Acute Oral LD₅₀ (rat): 262 mg/kg
 Acute Dermal LD₅₀ (rat): 262 mg/kg

 Eye Irritation (rabbit): Causes minimal eye irritation.
 Skin Irritation (rabbit)

 Inhalation LC₅₀ (rat): 1.86 mg/L (4 HR)
 Skin Sensitization (g

 Carcinogenic Potential: No components listed in ACGIH, OSHA, NTP, or IARC as a carcinogen.

 $\begin{array}{l} \mbox{Acute Dermal LD}_{50} \mbox{ (rabbit): } > 2000 \mbox{ mg/kg} \\ \mbox{Skin Irritation (rabbit): } \mbox{May cause irritation.} \\ \mbox{Skin Sensitization (guinea pig): Sensitizer} \end{array}$

12. ECOLOGICAL INFORMATION

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.

MATERIAL SAFETY DATA SHEET

SNIPER®

REVIEWED BY: Environmental/ Regulatory Services

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance. CONTAINER DISPOSAL: Non-refillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.acrecycle.org. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. If recycling is not available, puncture and dispose of in a sanitary landfill or incinerate or if allowed by states and local authorities, by burning. If burned stay out of smoke. For packages up to 5 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. For packages greater than 5 gallons and less than 56 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mixtank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. For packages greater than 56 gallons: To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. For refillable containers: Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

14. TRANSPORT INFORMATION

DOT Shipping Description: PYRETHROID PESTICIDE, LIQUID, TOXIC (BIFENTHRIN), 6.1, UN3352, 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)

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:	NFPA	HMIS	HMIS	
	3 Health 2 Flammability 0 Instability	0Least3Health1Slight2Flammabilit2Moderate0Reactivity3HighHPPE4Severe	у	
SARA Hazard Notification/Reporting SARA Title III Hazard Category:	Immediate Y Delayed Y	Fire <u>Y</u> Reactive <u>N</u>	Sudden Release of Pressure <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); Naphthalene (CAS: 91-20-3) <4%; 1,2,4 Trimethylbenzene (CAS: 95-63-6) <1% 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.

16. OTHER INFORMATION

MSDS STATUS: All sections reviewed and/or revised. **PREPARED BY:** Registrations and Regulatory Affairs

U.S. Patent No. 4,238,505

®Sniper is a registered trademark of Loveland Products, Inc.

®Viton is a registered trademark of DuPont Performance Elastomers L.L.C.

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

Disclaimer and Limitation of Liability: This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and LOVELAND PRODUCTS, Inc. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.