34704 - 858



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

> OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Mr. John Tice Loveland Products, Inc. P.O. Box 1286 Greeley, CO 80632-1286

JUL 2 4 2009

SUBJECT: Application for Pesticide Notification (PRN 98-10) Request Add Pest and Warranty Statement Change EPA Reg. No. 34704-858 Application Dated June 29, 2009

Dear Registrant:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated 06/29/09 for the above product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action(s) requested fall within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" received and will be placed in our records.

If you have any questions, please call me directly at 703-305-6249 or Owen F. Beeder of my staff at 703-308-8899.

Sincerely,

Linda Arrington Notifications & Minor Formulations Team Leader Registration Division (7505P) Office of Pesticide Programs

Please read instructions on reverse before com	pleting form	Form Appro	ved 0MB No 207(	2-(34 0-0060, Approval expires 2-28-95
	United States tal Protection Age schington, DC 20460		Registratio Amendmen	OPP Identifier Number
	Application for	Pesticide - Sectio	on I	<u>l</u>
1. Company/Product Number 34704-858		2. EPA Product Manage George LaRocca	91	3. Proposed Classification
4. Company/Product (Name) Sniper		<b>РМ#</b> 13		
5. Name and Address of Applicant <i>linclude ZIP</i> Loveland Products, Inc. P.O. Box 1286 Greeley, Colorado 80632-1286 <i>Check if this is a new address</i>	Code)		similar or identical NOTIFI	
	Sec	ction - II		
Amendment - Explain below.          Resubmission in response to Agency lei         V         Notification - Explain below.		Agency letter Me Too" App Other - Explain	blication.	
Explanation: Use additional page(s) if neces Notification in accordance with F pests to the already registered s with Section II (J). See EPA App	PN 98-10. Under Se oybean use. It als	ection II (B) Adding o changes the Mai		
	Sec	tion - III		
1. Material This Product Will Be Packaged In:         Child-Resistant Packaging         Yes         Yes         ✓         No         * Certification must	No. per If "Ye			letal lastic lass aper
be submitted	vgt. container Packa	age wgt container		ther (Specify)
3. Location of Net Contents Information	4. Size(s) Retail Conta 1	ainer 5. gal	Location of Label C	
6. Manner in Which Label is Affixed to Product	Lithograph Paper glued Stenciled	✓ Other	Self adhesive, pres	sure sensitive booklet
	Sec	tion - IV		
1. Contact Point (Complete items directly belo	w for identification of indi	vidual to be contacted, if i	necessary, to proces	ss this application.)
Name John T. Tice John Tice@cpsagu.c	com Title Man	ager Registrations		ephone No. (Include Area Code) 0-534-3415
I certify that the statements I have made I acknowledge that any knowlingly false both under applicable law.		-	• ,	
2. Signature John Lice	3. Title	Manager Registrations	, <b>, , ,</b> ,	· · · · · · · · · · · · · · · · · · ·
4. Typed Name John T. Tice	5. Date	June 29, 2009	· · · · · · · · · · · ·	



Performance

Quality

Value

June 29, 2009

Document Processing Desk (NOTIF) U. S. Environmental Protection Agency OPP, Registration Division (7504-P) 2777 S. Crystal Drive Arlington, VA 22202

Subject: Notification Change to Sniper, EPA Reg. No. 34704-858,

Dear Notification Desk:

The attached notification is submitted in accordance with PRN 98-10. This action requests two changes:

- PRN 98-10 (Section II B) permits adding or deleting pests to a registered site. This action adds pests to the already-registered "Soybean" site. These pests do occur on soybeans; the pests match the type of product (Insecticide/Miticide); the dosage, frequency, concentration or method of application did not change; this change does not increase exposure to humans or the environment, and is not subject to quarantine by USDA/APHIS.
- 2) Change in Warranty Statement (Section II J): current statement was approved by EPA in a May 11, 2009 letter (see copy enclosed)

To support this action, please find the following documents:

- EPA form 8570-1, Application for Notification,
- Copy of the EPA Letter Dated May 11, 2009 with regarding the warranty,
- E-label Certificaiton,
- CD ROM containing pdf file of changed label for approval.
- Two (2) copies of the amended label.

Please contact me if you have any questions, concerns or additional data needs by calling 970-347-1484 or e-mail at <u>JOHN.TICE@UAP.COM</u>.

Sincerely,

John T. Tice Manager Registrations Loveland Products, Inc.

Enclosures



	RESTRICTED USE PESTICIDE Toxic to fish and aquatic organisms. to and use only by certified applicators, or persons nd only for the uses covered by the certified applica	tor's certif	ication.
<b>m</b> ,		ŀ	OTIFICATIO
	VIPER		JUL 242009
	Insecticide/Miticide		
ACTIVE INGRE Bifenthrin: (2	DIENT: methyl[1, 1'-biphenyl]-3-yl) methyl 3-		BYWT
	3-trifluoro-1-propenyl)-2,2-dimethyl-cyclopropaneca	rboxylate*	
		TOTAL	100.0%
	'% minimum, trans isomers 3% maximum. pleum distillates.	· · · ·	I.
This product co	ntains 2 pounds active ingredient per gallon. Patent No. 4,238,505	ن پ ` ⊃َ` دې د	2 2 2 4 2 2 3
	KEEP OUT OF REACH OF CHILDREN WARNING—AVISO	` ت و	5 5 0 6 5 4 5
Si usted no en (If you do not	tiende la etiqueta, busque a siguien para que se la ex understand this label, find someone to explain it to y	plique a us	sted en detall
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(ii you do not	FIRST AID		

<ul> <li>Do not give any liquids to the person.</li> </ul>
A Do not alive envithing by mouth to an unconce

÷.

<ul> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>
• Remove contact lenses, if present, after the first 5 minutes, then continue
rinsing eye.
<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
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.
Move person to fresh air.
<ul> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
-

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565.

**NOTE TO PHYSICIAN:** This product is a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided. Contains petroleum distillate vomiting may cause aspiration pneumonia.

> EPA REG. NO. 34704-858 EPA EST. NO. 5905-IA-001 NET CONTENTS 1 GAL. (3.78 L)

IHT

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS & DOMESTIC ANIMALS WARNING

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.

### **Personal Protective Equipment (PPE):**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category E on an EPA chemical resistance category selection chart.

### 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 clean-ing/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Users should:

### USER SAFETY RECOMMENDATIONS

- 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.

### **ENVIRONMENTAL HAZARDS**

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.

### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

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. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**Resistance.** Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your local or state agricultural authorities for details.

If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for your area.

### **Application Instructions**

Rate of application is variable according to pest pressure, timing of sprays, and field scouting. Use lower rates under light to moderate infestations; higher rates under heavy insect pressure and for mite control. Arid climates generally require higher rates.

Cultivation within 10 feet of water body is prohibited to allow for the growth of a vegetated filter strip.

In New York State this product may not be applied within 100 feet (using ground equipment) to 300 feet (using aerial equipment) of coastal marshes or streams that drain into coastal marshes.

**California Special Equipment and Restrictions:** The use of Sniper® on corn is prohibited in all coastal counties. Sniper must be used in closed systems that meet the criteria for closed systems as established by the California Department of Food and Agriculture. The criteria and a list of the closed systems meeting the criteria are available through the California Department of Food and Agriculture.

## AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Coveralls

- Chemical-resistant gloves, such as Barrier Laminate or Nitrile Rubber or Neoprene Rubber or Viton
- Shoes plus socks.

### CHEMIGATION USE DIRECTIONS

Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand-move irrigation systems. Do not apply this product through any other type of irrigation system. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system.

For LEPA irrigation a minimum of 0.75 inch of water per acre is recommended. Where non-emulsified oils are used as the diluent, 1 to 2 pints per acre is recommended.

Results from utilizing chemigation have been variable and depend upon the set up and calibration of equipment. Crop injury, lack of effectiveness, or illegal residues in the crop can result from nonuniform distribution of treated water. Contact your State Agricultural Extension Service specialist, equipment manufacturers or other experts for consultation on the suitability of the equipment set up to obtain effective control of the target insect pests.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. Failure to cease application during a mechanical stoppage may result in undesirable residues to adjacent areas.

The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional automatic, guick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Sniper insecticide/miticide should be applied continuously for the duration of the water application. This product should be diluted in sufficient volume to ensure accurate application over the area to be treated. When using chemigation, a minimum of 0.5 inch per acre of irrigation water is recommended. Agitation generally is not required when a suitable diluent is used. A diluent test should be conducted to ensure that phase separation will not occur during dilution and application. Failure to achieve a uniform dilution throughout the time of application may result in undesirable residues or less than desirable control.

### **Rotational Crops**

Crops for which bifenthrin tolerances exist may be rotated at any time. All other crops may be rotated 30 days following the final application of bifenthrin.

### **Tank-Mixture**

This product may be applied in tank mixtures with other products approved for use on registered crops. Observe all restrictions and precautions which appear on the labels of these products. Test for compatibility of products before mixing.

### **BUFFER ZONES**

#### **Vegetative Buffer Strip**

Construct and maintain a minimum 10-foot-wide vegetative filter strip of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries; and commercial fish farm ponds).

Only apply products containing bifenthrin onto fields where a maintained vegetative buffer strip of at least 10 feet exists between the field and down gradient aquatic habitat.

For guidance, refer to the following publication for information on constructing and maintaining effective buffers:

Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. USDA, NRCS. 2000. Fort Worth, Texas. 21 pp.

http://www.in.nrcs.usda.gov/technical/agronomy/newconbuf.pdf

### Buffer Zone for Ground Application (groundboom, overhead chemigation, or airblast)

Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

### Buffer Zone for ULV Aerial Application

Do not apply within 450 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

### **Buffer Zone for Non-ULV Aerial Application**

Do not apply within 150 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

### SPRAY DRIFT REQUIREMENTS

### Wind Direction and Speed

Only apply this product if the wind direction favors on-target deposition.

Do not apply when the wind velocity exceeds 15 mph.

### **Temperature Inversion**

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Do not make aerial or ground applications into temperature inversions.

Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

### **Droplet Size**

Use only Medium or coarser spray nozzles (for ground and non-ULV aerial application) according to ASAE (S572) definition for standard nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser droplet size.

### **Additional Requirements for Ground Applications**

Wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.

For ground boom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy.

For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.

### **Additional Requirements for Aerial Applications**

The spray boom should be mounted on the aircraft as to minimize drift caused by wingtip or rotor vortices. The minimum practical boom length should be used and must not exceed 75% of the wing span or 80% rotor diameter.

Flight speed and nozzle orientation must be considered in determining droplet size.

Spray must be released at the lowest height consistent with pest control and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.

When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

COTTON			
	DOS	AGE	
PEST	LB AI/A	FL OZ/A	
European corn borer	0.02-0.10	1.3-6.4	
Soybean (banded) thrips			
Tobacco thrips			
Boll weevil	0.04-0.10	2.6-6.4	
Bollworm			
Cabbage looper			
Cotton aphid			
Cotton fleahopper			
Cotton leafperforator			
Cutworms			
Fall armyworm			
<i>Lygus</i> spp. (California only)			
Plant bugs			
Saltmarsh caterpillar			
Southern garden leafhopper			
Stink bugs			
Tobacco budworm			
Whitefly			
Yellow striped armyworm			
Beet armyworm	0.06-0.10	3.8-6.4	
Carmine spider mite			
Lygus Spp. (except California)			
Pink bollworm			
Twospotted spider mite			

### **Restrictions - Cotton**

Do not apply more than 0.5 pound active ingredient per acre per season.

In California, do not apply more than 0.3 pound active ingredient per acre per season and do not make more than 3 applications per growing season.

Do not apply within 14 days of harvest.

Do not graze livestock in treated areas or cut treated crops for feed.

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Do not make more than 10 synthetic pyrethroid applications (of one product or combination of products) to a cotton crop in one growing season. Synthetic pyrethroid products include Ambush<sup>®</sup>, Ammo<sup>®</sup>, Asana<sup>®</sup> XL, Baythroid<sup>®</sup>, Danitol<sup>®</sup>, Karate<sup>®</sup>, Mustang<sup>®</sup>, Scout X-TRA<sup>®</sup> and Sniper<sup>®</sup>.

### **Remarks - Cotton**

This product may be applied in water or refined vegetable oil (soybean/cottonseed).

**Application in Water:** Apply in a minimum of 5 gallons per acre with ground equipment or 1 gallon per acre by aircraft. When applying by air, one quart of emulsified oil may be substituted for one quart of water in the finished spray.

**ULV Application:** Apply the recommended rate of this product in refined vegetable oil in a minimum of 1 quart of finished spray per acre with aircraft calibrated to give adequate coverage.

**To Control Boll Weevil:** Apply this product at an interval of 3 to 4 days until pest numbers are reduced to acceptable levels.

**To Control Mites and Aphids:** Apply when pests first appear. Repeat as necessary to maintain control. Higher rates will be required once a damaging threshold is established.

PEST	DOSA	AGE	REMARKS
PEST Corn rootworm larvae Northern Southern Western Army cutworm Cutworm spp. Grubs Seed corn beetle Seed corn maggot True armyworm or Armyworm spp. Wireworm	DOSA .0046 lb. active per 1,000 linear ft. .0023 to .0046 lb. active per 1,000 linear ft. of row	AGE           0.30           fl. oz. per           1,000           linear ft.           of row           0.15 to           0.30 fl. oz.           per 1,000           linear ft.           of row	Apply as a 5 to 7 inch T-band treatment over an open seed furrow. Position the spray nozzle behind the planter shoe, in front of the press wheel centered over the row. Use the table below to determine this product's needs per acre. Apply in a minimum of 3 gals. of finished spray per acre. Mix this product with water or fertilizer in the following manner. Fill the spray tank, approximately one-half full with water or liquid fertilizer, add the proper amount of this product then add the rest of the water or fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform spray mixture. Applications of this product alone or in recommended tank mixtures, in conjunction with in-furrow pop-up fertilizers may be used. A jar compatibility test should be performed with appropriate ratio of this product and fertilizer to ensure mixture will stay in solution. Constant agitation should be maintained during mixing and application. Do not apply to soil where there is greater than 30% cover of crop residue remaining. Do not apply within 30 days of harvest. Do not graze livestock in treated area or cut treated crops for feed within 30 days of treatment. Do not apply more than 0.1 lb. active per
			acre per season as an at plant application.

FIELD CORN (GRAIN AND SIL	AGE), POPCORN, FIELD	CORN GROWN FOR SEED (AT
PLANT USE)		

Row Spacings (inches)	40	38	36	30	
Sniper (lbs. ai per acre)	0.060	0.064	0.069	0.080	
Sniper (formulated oz. per acre)	3.9	4.1	4.4	5.12	

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FIELD CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED (PRE & PPI)

PEST	DOSA	GE	REMARKS
Black cutworm White grub Wireworm Seedcorn maggot Armyworm spp. Stalkborer	0.047 to 0.062 lb. ai/A Pre- Plant Incorpor- ated (PPI)	3 to 4 fl. oz./A Pre- Plant Incor- porated (PPI)	The 3-4 oz/A rate must be applied as PPI and can be tankmixed and applied with PPI herbicides. Incorporation of this product should not be any deeper than the intended planting depth and no deeper than 3 inches. Incorporation depth should be close to the intended seed planting depth.
Black cutworm Armyworm spp. Stalkborer	0.040 lb. ai/A Pre- Emergence (PRE)	2.56 fl. oz./A Pre- Emergence (PRE)	The 2.56 oz/A rate may be applied PRE and can be tankmixed and applied with PRE herbicides.

### FIELD CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED (FOLIAR USE)

	DOSAGE			
PEST	LB AI/A	FL OZ/A		
Aphids	0.033-0.10	2.1-6.4		
Army cutworm				
Beet armyworm				
Cereal leaf beetle				
Chinch bug				
Common stalk borer				
Corn earworm				
Corn rootworm adults				
Cucumber beetle adult				
Cutworm spp.				
Southwestern corn borer				
European corn borer				
Fall armyworm				
Flea beetle				
Grasshoppers				
Greenbug				
Japanese beetle adult				
Sap beetle				
Southern armyworm				
Southern corn leaf beetle				
Stink bug				
Tarnished plant bug				
True armyworm or Armyworm species				
Webworms				
Western bean cutworm				
Yellowstriped armyworm				
Banks grass mite	0.08-0.10	5.12-6.4		
Carmine mite				
Twospotted spider mite				

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### **Restrictions - Corn**

Do not apply more than 0.3 lb. active ingredient per acre per season including pre & PPI, at plant, plus foliar applications. In California the maximum rate of 0.2 lb. ai/A/season.

Do not apply within 30 days of harvest.

Do not graze livestock in treated areas or cut treated crops for feed within 30 days of the last application.

Use of ultra low volume (ULV) application on corn is prohibited.

Do not make aerial or ground applications to corn if heavy rainfall is imminent.

Use of this product on corn is prohibited in all coastal counties.

### Remarks - Corn

**General:** Apply in a minimum of 2-5 gallons of finished spray per acre by aircraft or in a minimum of 10 gallons per acre with ground equipment. To improve control by aircraft, use 5 gallons of finished spray per acre particularly when initial populations are heavier than normal. When applying by air, 1-2 quarts of emulsified oil may be substituted for 1-2 quarts of water in the finished spray. Thorough coverage is essential to achieve control.

To control ear-attacking pests: Apply this product just before silking and repeat as necessary to maintain control but do not exceed maximum application rates and reapplication intervals listed elsewhere in this section.

**Southwestern corn borer, European corn borer:** Make application for corn borer control with initial application at or shortly before egg hatch.

For control of other insect pests: Apply when pests first appear and repeat as necessary but do not exceed maximum application rates and reapplication intervals listed elsewhere in this section.

### For Control of Mite:

Apply for Banks grass mite control when colonies first form prior to leaf damage or discoloration and before dispersal above the bottom third of the plant.

For Twospotted spider mite and Carmine mite control, apply when colonies first form prior to leaf damage or discoloration and before widespread mite dispersal throughout the canopy.

Higher rates will be necessary for heavier initial populations and corn under heat or drought stress. Field experience with dimethoate at 0.5 lb. active per acre in tank mixture has demonstrated good control under these conditions.

For mite control in Texas, New Mexico, Oklahoma, Arizona: Apply in a minimum of 5 gallons of finished spray per acre by aircraft or in a minimum of 10 gallons per acre with ground equipment.

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# SNIPER® EPA REG. NO. 34704-858

PEST	DOSA	<b>IGE</b>	REMARKS
Corn rootworm larvae Northern Southern Western <u>Mexican (California)</u> Army cutworm Cutworm spp. Grubs Seed corn beetle Seed corn maggot True armyworm or Armyworm spp. Wireworm	.0046 lb. active per 1,000 linear ft. of row .0023 to .0046 lb. active per 1,000 linear ft. of row	0.30 fl.oz. per 1,000 linear ft. of row 0.15 to 0.30 fl. oz. per 1,000 linear ft. of row	Apply as a 5 to 7 inch T-band treatment over an open seed furrow. Position the spray nozzle behind the planter shoe, in front of the press wheel centered over the row. Use the table below to determine the Sniper needs per acre. Apply in a minimum of 3 gals. of finished spray per acre. Mix this product with water or fertilizer in the following manner. Fill the spray tank approximately one-half full with water or or liquid fertilizer, add the proper amount Sniper then add the rest of the water or fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform spray mixture. Applications of this product alone or in recommended tank mixtures, in conjunction with in-furrow pop-up fertilizer may be used. A jar compatibility test shou be performed with appropriate ratio of this product and fertilizer to ensure mixture w stay in solution. Constant agitation should be maintained during mixing and application Do not apply to soil where there is greate than 30% cover of crop residue remaining Do not apply within 30 days of harvest. Do not graze livestock in treated area or cut treated crops for feed within 30 days of treatment. Do not apply more than 0.1 lb. active per

Row Spacings (inches)	40	38	36	30	
Sniper (lbs. ai per acre)	0.060	0.064	0.069	0.080	
Sniper (formulated oz. per acre)	3.9	4.1	4.4	5.12	

### SWEET CORN (GRAIN AND SILAGE) SWEET CORN GROWN FOR SEED (FOLIAR USE)

	DOS	AGE	
PEST	LB AI/A	FL OZ/A	
Aphids	0.033-0.10	2.1-6.4	
Army cutworm			
Aster leafhopper (California)			
Beet armyworm			
Cereal leaf beetle			
Chinch bug			
Common stalk borer			
Corn earworm			
Corn rootworm adults			
Corn silk fly (California)			
Cucumber beetle adult			
Cutworm spp.			
European corn borer			
Fall armyworm			
Flea beetle			
Grasshoppers			
Greenbug			
Japanese beetle adult			
Leafhoppers			
Sap beetle			
Southern armyworm			
Southern corn leaf beetle			
Southwestern corn borer			
Stinkbugs			
Tarnished plant bug			
Thrips			
True armyworm or Armyworm spp.			
Webworms			
Western bean cutworm			
Yellowstriped armyworm	0.00.0.10	E 10 C 1	
Banks grass mite Carmine mite	0.08-0.10	5.12-6.4	
Pacific spider mite (California)			
Twospotted spider mite			
Restrictions - Sweet Corn			

Do not apply more than 0.2 lb.s active ingredient (12.8 ounces formulated) per acre per season.

Do not apply within one day of harvest.

Do not graze livestock in treated areas or cut treated crops for feed within 1 day of the last application.

Use of ultra low volume (ULV) application on corn is prohibited.

Do not make aerial or ground applications to corn if heavy rainfall is imminent.

Use of this product on corn is prohibited in all coastal counties.

### **Remarks - Sweet Corn**

**General:** Apply in a minimum of 2 gallons of finished spray per acre by air in a minimum of 10 gallons per acre with ground equipment. When applying by air, 1-2 quarts of emulsified oil may be substituted for 1-2 quarts of water in the finished spray. Thorough coverage is essential to achieve control.

**To control ear-attacking pests:** Apply this product when silking begins and repeat as necessary to maintain control but do not exceed maximum application rates and reapplication intervals listed elsewhere in this section.

**Southwestern corn borer, European corn borer:** Make 2 applications for corn borer control with initial application at or shortly before egg hatch.

For control of other insect pests: Apply when pests first appear and repeat as necessary but do not exceed maximum application rates and reapplication intervals listed elsewhere in this section.

### For Control of Mites:

Apply for Banks grass mite control when colonies first form prior to leaf damage or discoloration and before dispersal above the bottom third of the plant.

For Twospotted spider mite and Carmine mite control, apply when colonies first form prior to leaf damage or discoloration and before widespread mite dispersal throughout the canopy.

Higher rates will be necessary for heavier initial populations and corn under heat or drought stress.

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# SUCCULENT PEAS AND BEANS

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DOSAGE				
CROP	PEST	LB AI/A	FL OZ/A	REMARKS
Pea ( <i>Pisum</i> spp.):	Flea beetle	0.025-0.10	1.6-6.4	Apply in a minimum of 2 gals.
Dwarf pea, Edible ped pea	Grasshoppers			of finished spray per acre by air or in a minimum of 10 gals.
Edible-pod pea, English pea,	Aster leafhopper Leafhoppers			•
	Aphids	0.033-0.10	2.1-6.4	_ per acre with ground
Garden pea, Green pea	•	0.033-0.10	2.1-0.4	equipment. When applying by
Green pea, Snow pea,	Beet armyworm Fall armyworm			air, 1-2 qts. of emulsified oil may be substituted for 1-2
Sugar snap pea,	Southern			qts. of water in the finished
Pigeon pea	armyworm			spray. Thorough coverage is
Bean ( <i>Phaseolus</i>	Yellowstriped			essential to achieve control.
spp.):	armyworm			Do not apply more than
Broadbean	Bean leaf beetle			0.2 lb. active ingredient
(succulent)	Cucumber beetles			(12.8 oz. formulated) per
Lima bean (green)	Japanese beetle			acre per season.
Runner bean,	adult			Do not apply within 3 days of
Snap bean,	Sap beetle			harvest.
Wax bean	Plant bug			
Bean (Vigna spp.):	Stink bugs			
Asparagus bean,	Tarnished plant bug			
Blackeyed pea	Alfalfa Caterpillar			
Chinese longbean,	Cloverworm			
Cowpea	European corn			
Moth bean,	borer			
Southern pea	Cutworms			
Yardlong bean,	Western bean			
Jackbean,	cutworm			
Soybean	Corn earworm			
(immature seed)	Loopers			
Sword bean	Corn rootworm			
	adult			
	Thrips			
	Webworms			
	Pea weevil Pea leaf weevil			
	Whitefly			
	Banks grass mite	0.08-0.10	5.12-6.4	
	Twospotted spider	0.00-0.10	0.12-0.4	
	mite			
	Carmine mite			
<del></del>	Lygus spp.			·

BRASSICAS				
		DOS	AGE	
CROP	PEST	LB AI/A	FL OZ/A	REMARKS
Head and Stem Brassica Vege- tables including: Broccoli Chinese Broccoli (gailon, white flowering broccoli) Brussels Sprouts Cauliflower Cavalo broccolo Kohlrabi Cabbage Chinese Cabbage (napa) Chinese Mustard Cabbage (gai choy)	Cutworms Corn earworm Tobacco budworm Saltmarsh caterpillar Leafhoppers Flea beetles Imported cabbageworm Cucumber beetles Aphids Whitefly Armyworms spp. Loopers Stink bugs Crickets Ground beetles Thrips Wireworm (adults) Diamondback moth	0.033-0.10	2.1-6.4	Apply in a minimum of 2 gals. of finished spray per acre by air or in a minimum of 10 gals. per acre with ground equipment. When applying by air, 1-2 qts. of emulsified oil may be substituted for 1-2 qts. of water in the finished spray. Thorough coverage is essential to achieve control. Do not apply more than 0.5 lb. active ingredient (1 qt.) per acre per season. Do not make more than 5 applications after bloom. Do not make applications less than 7 days apart. Do not apply within 7 days of harvest.
	Banks grass mite Twospotted spider mite Carmine mite Pacific spider mite Lygus spp.		5.12-6.4	

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## SNIPER® EPA REG. NO. 34704-858

		DOS	AGE	
CROP	PEST	LB AI/A	FL OZ/A	REMARKS
Canola Crambe Rapeseed	Aphids Cutworms Diamondback moths Loopers Other Lepidopterous larvae Flea beetle Flea hopper Grasshopper Plant bug Stink bugs Seedpod weevil Thrips Whitefly Armyworms	0.033-0.04		Apply in a minimum of 2 gals. of finished spray per acre by air or in a minimum of 10 gals. per acre with ground equipment. When applying by air, 1-2 qts. of emulsified oil may be substituted for 1-2 qts. of water in the finished spray. Thorough coverage is essential to achieve control. Do not apply more than 0.08 lb. active ingredient (5.12 oz.) per acre per season. Do not make applications less than 14 days apart. Do not apply within 35 days of harvest.

# CANOLA, CRAMBE, RAPESEED

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		DOS	AGE	
CROP	PEST	LB AI/A	FL OZ/A	REMARKS
CROP Chayola (fruit) Chinese waxgourd (Chinese preserving melon) Citron Melon Cucumber Gherkin Gourd, edible (includes hyotan, cuouzza) ( <i>Lulla</i> spp.) (includes hechima, Chinese okra) ( <i>Momordica</i> spp.)	PEST Aphids Cutworms Cabbage looper Leafhoppers Cucumber beetles Squash bugs Melonworm Pickleworm Plant bug Stink bugs Rindworm Squash vine borer Armyworms Corn earworm	LB AI/A 0.04-0.10	FL OZ/A 2.6-6.4	<b>REMARKS</b> Apply in a minimum of 5 gals. of finished spray per acre by air or in a minimum of 20 gals. per acre with ground equipment. When applying by air, 1-2 qts. of emulsified oil may be substituted for 1-2 qts. of water in the finished spray. Thorough coverage is essential to achieve control. Do not apply more than 0.3 lb. active ingredient (19.2 oz. formulated) per acre per
(includes balsam	Tobacco budworm			season.
apple, balsam	Grasshopper			Do not make more than two
pear, bitter melon, Chinese cucumber) Muskmelon (hybrids and/or cultivars of Cucumis melon) (includes true cantalope, cantalope casaba, crenshaw melon, golden pershaw melon, honeydew melon, honeydew melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon). Pumpkin ( <i>Cucurbita</i> spp.) Squash, summer (includes crook neck squash, scallop squash, straightneck squash, vegetable marrow, zucchini) Squash, winter (includes butternut squash, calabaza, hubbard squash (C. mixia; C. pepo) includes acorn squash, spaghetti squash)		0.08-0.10	5.12-6.4	applications after bloom. Do not make applications less than 7 days apart. Do not apply within 3 days of harvest.
Watermelon				
(includes hybrids and/or varieties of				
<u>Citrullus spp.).</u>				

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# FRUITING VEGETABLES

		DOS	AGE	
CROP	PEST	LB AI/A	FL OZ/A	REMARKS
Eggplant Pepper (bell & non-bell), Groundcherry, Pepino	Armyworms spp. including Beet armyworm, Fall armyworm, Southern yellowstriped armyworm, Cabbage looper, Colorado potato beetle, Corn Earworm, Cucumber beetle, Cutworms, European corn borer, Flea beetle, Leafminers, Loopers, Pepper weevil, Plant bug, Stink bug, Thrips, Tomato hornworm, Vegetable leafminer, Whitefly		2.1-6.4	Apply in a minimum of 2 gals. of finished spray per acre by air or in a minimum of 10 gals. per acre with ground equipment. When applying by air, 1-2 qts. of emulsified oil may be substituted for 1-2 qts. of water in the finished spray. Thorough coverage is essential to achieve control. Do not make applications less than 7 days apart. Do not apply more than 0.2 lb. active ingredient (12.8 oz. formulated) per acre per season. Do not apply within 7 days of harvest.
	Banks grass mite, Broad mite, Carmine mite, <i>Lygus</i> spp., Pacific spider mite Two spotted spide mite	,	5.12-6.4	

# LETTUCE, HEAD

DOSAGE						
PEST	LB AI/A	FL OZ/A	REMARKS			
Aphids	0.033-0.10	2.1-6.4	Apply in water as necessary for			
Armyworms			insect control using a minimum of			
Corn earworm			15 gals. of finished spray per acre			
Cucumber beetles			with ground equipment and 5 gals.			
Cutworms			per acre by air.			
Diamondback moth			When applying by air, 1-2 qts. of			
Flea beetles			emulsified oil may be substituted for			
Imported cabbageworm			1-2 qts. of water in the finished			
Leafhoppers			spray. Thorough coverage is			
Loopers			essential to achieve control.			
Salt marsh caterpillar			Do not make applications less than			
Stinkbug spp.			7 days apart.			
Tobacco budworm			A maximum of 0.5 lb. active			
Whitefly			ingredient may be applied per acre			
<i>Lygus</i> spp.	0.08-0.10	5.12-6.4	per season.			
Carmine mite			Do not apply within 7 days of harvest.			
Twospotted spider mite	. <u> </u>					

### ARTICHOKE

DOSAGE					
PEST	LB AI/A	FL OZ/A	REMARKS		
Cribrate weevil Artichoke plume moth	0.10	6.4	Apply when pest population reaches damaging threshold and repeat as necessary to maintain control, but not more often than 15-day intervals. <b>Application by ground:</b> Apply a full cover spray in a minimum of 75 gals. of finished spray per acre. <b>Application by air:</b> Apply specified dosage in a minimum of 10 gals. per acre. Do not exceed 0.5 lb active ingredient per acre per season. A 5-day pre-harvest interval must be observed.		

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# CANEBERRIES

	DOSAGE			
CROP	PEST	LB AI/A	FL OZ/A	REMARKS
Caneberries including: Blackberries	Leafrollers Orange tortrix Root weevils	0.05-0.10	3.2-6.4	Apply by air or ground equipment using sufficient water to obtain full coverage
		0.10	6.4	<ul> <li>water to obtain full coverage of foliage (minimum of 10 gals. per acre by air and 50 gals. per ace by ground).</li> <li>One application may be made pre-bloom and a second application may be made post-bloom.</li> <li>For <b>Crown borer</b>, apply 0.1 lb. ai per acre post-harvest (fall) or pre-bloom (spring) as a drench application directed at the crown of plants in a minimum of 200 gallons of water per acre.</li> <li>Greater efficacy is observed at higher water gallonages</li> </ul>
				<ul> <li>(up to 400 gallons) or in an application prior to a significant rainfall event. Do not make both pre-bloom foliar and pre-bloom drench applications.</li> <li>Do not apply within 3 days of harvest.</li> <li>Do not exceed 0.2 lb. active ingredient per acre per season.</li> </ul>

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HOPS

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DOSAGE					
PEST	LB AI/A	FL OZ/A	REMARKS		
Aphids Armyworms Cutworms Leafrollers Loopers	0.06-0.1	3.8-6.4	Do not exceed 0.1 lb. ai per acre per application. Do not exceed 0.3 lb. ai per acre per season. <u>A spray interval of</u> 21 days between		
Root weevils	0.05-0.1	3.2-6.4	applications must be maintained.		
Twospotted spider mite	0.1	6.4	<ul> <li>A 14-day pre-harvest interval must be observed.</li> <li>Use of ultra low volume (ULV) application on hops is prohibited.</li> <li>Application by ground: For best results, full coverage is essential.</li> <li>Early season recommend 100-150 gals. of spray per acre. Late season recommend 200-250 gals. of spray per acre.</li> <li>For Root weevil control, make a directed spray to the base of the plant. Spray up the vine 3 ft. and the soil surface 1.5 to 2 ft. on either side of plant.</li> <li>Application by air for late season control of Twospotted spider mites: Apply no less than 6.4 oz. (0.1 lb. ai) per application in a minimum of 10 gals. per acre.</li> </ul>		

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	DOS	SAGE	
PEST	LB AI/A	FL OZ/A	REMARKS
Aphids	0.04-0.2	2.6-12.8	Application by ground: Apply as a
Codling moth			dilute (minimum of 200 gals. of
Cutworms			finished spray per acre) or
Green fruitworm			concentrate (minimum of 50 gals. of
Leafhoppers			finished spray per acre) spray in
Leafminers			sufficient water to provide thorough
Leafrollers			coverage.
Lygus spp.			Application by air: Apply the
Plant bugs			specified dosage in a minimum of
Plum curcullo			10 gals. per acre by air.
San Jose scale (crawlers)			Do not apply more than 0.5 lb.
Stink bugs			active per acre per season with
Tarnished plant bugs			<u>no more than 0.45</u> lb. active per
Yellow mite	0.06-0.2	3.8-12.8	acre applied after petal fall.
European red mite	0.08-0.2	5.12-12.8	Apply as necessary to maintain
Twospotted spider mite			control using a minimum of 30-day
			spray interval. Apply up to 14 days
			prior to harvest. Do not graze
			livestock in treated orchards or cut
		· ·	treated cover crops for feed.

CITRUS (1 day	/ phi)*	
	RATE OF	
PEST	APPLICATION	METHOD OF APPLICATION
	: 16-32 oz. (0.25-0.50	The use of this product protects citrus tree roots from
weevil	lb. active) per acre	Diaprepes and other citrus root weevil feeding by creating
(Diaprepes		a barrier. As Citrus root weevil eggs hatch, the newly
abbreviatus)		hatched larvae (neonates) fall to the soil surface beneath
Southern blue		the tree and come into contact with this product as they
green citrus		attempt to burrow into the root zone. Disturbance of the
root weevil		soil beneath the tree should be minimized.
(Pachnaeus		Timing of application is very important. Peak emergence
_litus)		of Diaprepes adults varies by citrus growing region, and
Blue green		environmental factors such as soil moisture can affect
citrus root		emergence.
weevil		Usually, two peaks occur for <i>Diaprepes</i> , first in the spring
(Pachnaeus		then late summer or early fall. Southern blue green and
_opalus),		Blue green citrus weevils and Fuller rose beetle usually
Brown leaf		have a single emergence peak in the spring. Brown and
notcher		Little leaf notchers usually have three emergence peaks,
(Epicacrus		spring, summer and fall. Since emergence varies by
mexicanus),		region and season, the best way to time application is to
Little leaf		observe the adults. By trapping adults when they are most
notcher		active (in the morning or and late afternoon) during the
(Artipus		spring and summer emergence periods an estimation of
floridanus)	· · · · · · · · · · · · · · · · · · ·	numbers can be obtained. Eggs are laid 8 to 10 weeks

# PEARS

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<u>Citrus (1 day</u>	phi)* cont'd.:	
PEST	RATE OF APPLICATION	METHOD OF APPLICATION
Fire ant (Solenopsis spp.), Asian cockroach (Blattelia asahinae)	6.4 to 16 fi. oz. (0.1 to 0.25 lb. ai) per acre	following the adult emergence from the soil; larvae invasion into the soil will begin 2 to 3 weeks following adult emergence. This product must be applied prior to the dropping of the neonates. Consult local university extension personnel for current information to protect citrus trees from Citrus root weevils and other pests. Apply this product by ground equipment to bare soil beneath citrus trees. This product must be uniformly applied from the trunk to the drip line of the tree, apply in a minimum of 40 gallons of dilute spray per acre. Greater spray volume should insure greater uniformity of coverage. A pre and post-application irrigation may aid in the uniformity of coverage as well. Apply to individual citrus resets, when not in solid planted rows, using hand-gun or shielded sprayer. Peak emergence of <i>Diaprepes</i> root weevil generally occurs in the spring. Depending on weather conditions, a minor emergence of <i>Diaprepes</i> root weevil may also occur in the fall. If the citrus grove to be treated is in an area where weather conditions are conducive to primary emergence occurring in the spring, 32 fl. oz. formulated product should be used to obtain the longest residual manage- ment of <i>Diaprepes</i> root weevil. If the citrus grove to be treated is in an area where weather conditions will promote more than one peak of pest emergence, 16 fl. oz. formulated product can be applied later in the season. If emergence extends beyond the residual protection of this product, grower is advised to use additional manage- ment strategies (i.e. foliar adult control or soil larvae control such as nematodes). Contact your state agricultural Extension Specialist as to the recommendation suited for local conditions.

\*Not for use in California

Do not apply through irrigation systems. Do not allow any application of this product to contact fruit or foliage. Do not apply more than a total of 32 fl. oz. of formulated product (0.5 lb. a.i.) per acre per year.

Apply the specified dosage in a minimum of 40 gals. of finished spray per acre. Ground application only. Do not apply by air.

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### **GRAPES\***

Apply as directed using the rates in the table below.

PEST	RATE	APPLICATION INSTRUCTIONS
Cutworms,	3.2 to 6.4 fi. oz. (0.05	Apply in a minimum of 10 gallons of finished
Eastern grape leafhopper,	to 0.10 lb. ai) per acre	spray by air or in a minimum of 25 gallons of finished spray with ground equipment.
Grape berry moth,		When applying by air, 1 to 2 quarts of emulsified
Japanese beetles adults,		oil may be substituted for 1 to 2 quarts of water in the finished spray.
Variegated leafhopper,		Thorough coverage is essential to achieve control. When pest pressure is moderate to severe, use
Western grape		higher rate.
leafhopper		
Black vine weevil,	6.4 fi. oz. (0.10 lb. ai)	
Glassywinged	per acre	
Sharpshooter,		
Twospotted spider	mite	
<b>RESTRICTIONS: *</b>	Not for use in CA.	

Do not apply more than 0.10 lb. ai per acre per season. Do not apply within 30 days of harvest.

# TOMATOES/TOMATILLO (1 day phi)

TOWATOLOTTOWAT		
	RATE OF	
PESTAphidsArmyworms Including:Beet armyworm,Fall armyworm,Southern yellow-striped armywormBean leaf beetleCabbagewormCarmine miteCloverwormCorn earwormCorn rootwormCucumber beetlesCutwormsDiamondback mothEuropoean corn borerFlea beetlesFlea hopperGrasshopperJapanese beetle(adult)LeafhoppersLoopersLygus spp.MelonwormPea weevilPea leaf weevilPicklewormPlant bug	APPLICATION 2.1-5.2 fl. oz. (0.033-0.08 lb. active)per acre	METHOD OF APPLICATION Apply in water as necessary for insect control using a minimum of 15 gals. of finished spray per per acre with ground equipment. Thorough coverage is essential to achieve control.

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Tomatoes/Tomatillo (1 day phi) cont'd.:						
	RATE OF					
PEST	APPLICATION	METHOD OF APPLICATION				
Rindworm	2.1-5.2 fl. oz.	Apply in water as necessary for insect control				
Salt march caterpillar	(0.033-0.08 lb.	using a minimum of 15 gals. of finished spray per				
Sap beetle	active)per acre	per acre with ground equipment.				
Seedpod weevil	doille/por doile	Thorough coverage is essential to achieve control.				
Squash bugs		Thereagn coverage to occerniar to admitte contien				
Stink bug spp.						
Tobacco Budworm						
Tarnished plant bug						
Thrips						
Whitefly						
Twospotted spider mite	5.12-6.4 fl. oz.					
	(0.08-0.1 lb. active)					
	per acre					
Do not make application	ns less than 10 days	apart.				
A maximum of 4 application						

# SPINACH (40 day phi)

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or inviori ( to day prin)		
5-0-	RATE OF	
PEST	APPLICATION	METHOD OF APPLICATION
Colorado potato beetle		For control of Whiteflies apply foilar treatments of
Tomato pinworm	0.10 lb. active) per	this product by ground or air at rates of up to 0.4 pt.
Tomato hornworm	acre	(0.1 lb. active) per acre at minimum 7-day intervals
Armyworms		up to a maximum of 4 applications. Do not apply
Corn earworm		within 40 days of harvest.
Cucumber beetles		For control of Fire ants, apply this product to the
Cutworms		soil (at planting) or as a foliar treatment by ground
European corn borer		or air at rates of up to 0.4 pt. (0.1 lb. active) per
Flea beetles		acre at minimum 7-day intervals up to a maximum
Leafminers		of 4 applications.
Loopers		Do not apply within 40 days of harvest.
Pepper weevil		Apply the specified dosage in 5-50 gals. of finished
Thrips		spray per acre by air or 10-50 gals. finished spray
Whitefly		per acre by ground.
Broad mite	5.12-6.4 oz. (0.08-	_ per acre by ground.
Banks grass mite	0.10 lb. active) per	
Twospotted spider mite		
Carmine mite	acie	
Pacific spider mite		
<i>Lygus</i> spp.		
Fire ants	· · · · ·	· · · · · · · · · · · · · · · · · · ·
Do not make application		
Do not apply more than	0.4 lb.s active ingre	dient per acre per season.

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PEST	DOS	SAGE	REMARKS
	LB/AI/A	FL OZ/A	
Armyworms, Corn earworm, Cucumber beetles, Cutworms, European corn borer, Flea beetles, Leafminers, Loopers, Thrips, Whitefly, Aphids, Japanese beetle (adult), Stink bugs	0.033 to 0.1	2.1 to 6.4	Apply using sufficient water to obtain uniform coverage. Apply as needed. Apply with ground equipment using a minimum of 10 gallons of finished spray per acre or a minimum of 2 gallons per acre by aircraft.
Lygus spp., Broad	0.08 to	5.12 to	_
mite, Carmine mite, Twospotted spider mite	0.10	6.4	

Do not make applications less than 7 days apart.

Do not apply more than 0.2 pound active ingredient per acre per season.

Do not apply within 7 days of harvest.

### CILANTRO, CORIANDER

PEST	DOSAGE		REMARKS
	LB/AI/A	FL OZ/A	
Spotted cucumber beetle, Beet armyworm, Cabbage looper aphids, Whitefly, Flea beetle, Thrips, Leafminers, Cutworms, Grasshoppers, Saltmarsh caterpillar	0.033 to 0.10	2.1 to 6.4	Apply using sufficient water to obtain uniform coverage. Apply as needed. Apply with ground equipment using a minimum of 10 gallons of finished spray per acre or a minimum of 2 gallons per acre by aircraft.
Twospotted spider mite	0.08 to	5.12 to	_
	0.10	6.4	

Do not make applications less than 7 days apart.

Do not apply more than 0.50 pound active ingredient per acre per season. Do not apply within 3 days of harvest.

### **DRIED BEANS AND PEAS such as:**

Dried cultivars of: Bean (*Lupinus*); Bean (*Phaseolus*), Field bean, Kidney bean, Lima bean (dry), Navy bean, Pinto bean, Tepary bean; Bean (*Vigna*), Adzuki bean, Blackeyed pea, Catjang, Cowpea, Crowder pea, Moth bean, Mung bean, Rice bean, Southern pea, Urd bean; Broad bean (dry), Chickpea, Guar, Lablab bean, Lentil; Pea (*Piscum*), Field pea; Pigeon pea.

PEST	DOS	SAGE	REMARKS
	LB/AI/A	FL OZ/A	
Flea beetle,	0.025 to	1.6 to	Apply in a minimum of 2 gallons of
Grasshoppers,	0.10	6.4	finished spray per acre by air or in a
Aster leafhopper,			minimum of 10 gallons per acre with
Leafhoppers			_ ground equipment.
Aphids, Beet	0.033 to	2.1 to	When applying by air, 1-2 quarts of
armyworm, Fall	0.10	6.4	emulsified oil may be substituted for 1-2
armyworm, Southern			quarts of water in the finished spray.
armyworm, Yellowstriped			Thorough coverage is essential to achieve
armyworm, Bean			control.
eaf beetle, Cucumber			
peetles, Japanese			
peetle (adult), Sap			
beetle, Plant bug,			
Stink bugs, Tarnished			
plant bug, Alfalfa			
caterpillar, Cloverworm,			
European corn borer,			
Cutworms, Western			
bean cutworm, Corn			
earworm, Loopers,			
Corn rootworm,			
Thrips (adults),			
Webworms, Pea weevil,			
Pea leaf weevil,			
Whitefly, Imported			
cabbageworm,			
Saltmarsh caterpillar,			
Tobacco budworm,			
Leaf miner			_
Banks grass mite,	0.08 to	5.12 to	
Twospotted spider	0.10	6.4	
nite, Carmine mite,			
<i>Lygus</i> spp.			

ingredient (19.2 ounces formulated) to beans per acre per season.

Do not apply within 14 days of harvest.

Do not make applications less than 7 days apart.

### **LEAFY BRASSICAS such as:**

Broccoli raab, Bok choy, Collards, Kale, Mizuna, Mustard greens, Mustard spinach, Rape greens.

PEST	DO	SAGE	REMARKS
	LB/AI/A	FL OZ/A	
Cutworms, Corn earworm, Tobacco budworm, Saltmarsh caterpillar, Leafhoppers, Flea beetles, Imported cabbageworm, Cucumber beetles, Aphids, Whitefly, Armyworms, Loopers, Stink bugs, Crickets, Ground beetles, Thrips, Wireworm (adults), Diamondback moth, Japanese beetle (adult), Grasshoppers, Aphids	0.033 to 0.10	2.1 to 6.4	Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons per acre with ground equipment. When applying by air, 1- 2 quarts of emulsified oil may be substituted for 1- 2 quarts of water in the finished spray. Thorough coverage is essential to achieve control.
Banks grass mite, Twospotted spider mite, Carmine mite, Pacific spider mite, Lygus spp.	0.08 to 0.10	5.12 to 6.4	
Do not apply more than (	0.4 lb. active	ingredient per	acre per season.

Do not apply more than 0.4 lb. active ingredient per acre per season. Do not make applications less than 7 days apart.

Do not apply within 7 days of harvest.

## **TUBEROUS AND CORM VEGETABLES:**

Potato; sweet potato; Arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; canna, edible; cassava, bitter and sweet; chayote (root); chufa; dasheen (taro); ginger; leren; tanier; turmeric; bean, yam; yam, true.

PEST	DOSAGE		REMARKS	
	LB/AI/A	FL OZ/A		
Corn wireworm,	0.30	19.2	Sniper may be applied as an in-furrow	
Tobacco wireworm	(at-plant)	(at-plant)	_ planting time treatment for the control of	
Southern potato	0.05	3.2	wireworms, rootworms wireworm, and	
Japanese beetle	(layby)	(layby)	white grubs. Apply Sniper at the rate of	
grubs,			0.3 pounds active per acre as an in-furrow	
June beetle		· · · · · · · · · · · · · · · · · · ·	spray or T-band spray at planting time.	
Sweet potato flea	0.033 to	2.1 to	Sniper may be applied as a layby treat-	
beetle, Cucumber	0.10	6.4	ment for the control of wireworms, root-	
beetle, Sweet potato	(foliar)	(foliar)	worms and white grubs. Apply Sniper to	
weevil, Banded			the drill area and cover with soil utilizing	
cucumber beetle,			cultivation equipment set to throw soil to	
Black flea beetle,			the drill area. Apply Sniper as a banded	
Whitefringed beetle,			spray over the row at a rate of 0.05 to 0.15	
White grub,			pounds active per acre (3.2 to 9.6 ounces	
Sugarcane beetle,			formulated) in 10 gallons per acre of spray.	
Rootworms			Sniper may be applied as a foliar spray for	

### Tuberous and Corm Vegetables cont'd.:

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Potato; sweet potato; Arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; canna, edible; cassava, bitter and sweet; chayote (root); chufa; dasheen (taro); ginger; leren; tanier; turmeric; bean, yam; yam, true.

PEST	DOSAGE		REMARKS
	LB/AI/A	FL OZ/A	
			the control of the adult life stages of flea beetles, click beetles (wireworms), cucumber beetles (rootworms), white fringed beetles and May/June beetles (white grubs). Apply Sniper at the rate of 0.1 lbs active per acre (6.4 ounces formulated) in 10 gallons of spray by ground and 3 gallons o spray by air.

Do not make more than 2 foliar applications per season no sooner than 21 days apart. Do not apply more than 0.5 lb active ingredient per acre per season, including soil application. Do not apply within 21 days of harvest.

PEST	DOSAGE		REMARKS
	LB/AI/A	FL OZ/A	
Cutworm spp., Tobacco flea beetle (larvae), White grubs, Wireworm, Mole cricket, Armyworm spp., Stalkborers	0.0625 - 0.10	4.0 - 6.4	Pre transplant soil applications: Apply 0.0625 to 0.1 lb ai/A in a minimum of 10 gal/A to control soil pests. Use of suitable equipment to incorporate into top 4" of the soil is required to control below ground pests. At transplant water treatment application: Apply 0.0625 to 0.1 lb ai/A ir a water treatment application volume of 1 to 200 gal/A.
Aphid spp., Armyworm spp., Flea beetle (adults), Chinch bugs, Stink bugs, Japanese beetles, Grasshoppers, Cutworms spp., Tarnished plant bugs, Green bugs, Thrips, Whiteflies	0.04 - 0.10	2.56 - 6.4	<b>Foliar applications:</b> Apply 0.04 to 0.10 I ai/A per foliar application up to, and including, layby in a minimum of 10 gal/A.
Spider mites Lygus spp.	0.1	6.4	-

May be tank mixed with other herbicides approved for tobacco use.

Do not make more than 2 foliar applications per season.

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SOYBEANS PEST	DOS	AGE	REMARKS	
	LB/AI/A	FL OZ/A		
Alfalfa Caterpillar Aphids Aster Leafhopper Bean Leaf Beetle Beet Armyworm* Cloverworm Corn Earworm Corn Rootworm Adult Cucumber Beetles Cutworms European Corn Borer Fall Armyworm Flea Beetle Grasshoppers Imported cabbageworm Japanese beetle Adult Leafhoppers Leafminer Loopers Mexican Bean Beetle Adult Pea Leaf Weevil Pea Weevil Plant Bug Saltmarsh caterpillar Sap Beetle Southern Armyworm Stink Bugs Tarnished Plant Bug Thrips Tobacco budworm* Webworms Western Bean Cutworm Whitefly Yellowstriped Armyworm Lygus Species Whitefly	LB/AI/A 0.033-0.10	2.1-6.4	Apply in a minimum of 10 gallons per acre with ground equipment or 2 gallons per acre by aircraft at a minimum of 30 day intervals. Do not apply more than 0.3 lb ai per acre per season. Do not apply within 18 days of harvest.	
Two Spotted Spider Mite				

\* Use not permitted in CA.

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MAYHAW				
PEST	DOSAGE		REMARKS	
	LB/AI/A	FL OZ/A		
Plum curculio	0.08-0.10	5.12-6.4	Apply foliar treatments in at least 28 gallons per acre. Apply no more than once every 7 days. Do not apply more than 0.2 lb ai per acre per season. Do not apply within 30 days of harvest.	

PEANUT			
PEST	DOSAGE		REMARKS
	LB/AI/A	FL OZ/A	
Beet armyworm, Corn earworm, Cutworm spp., Fall armyworm, Grasshoppers, Green cloverworm, Leafhoppers, Lesser cornstalk borer, Loopers, Rednecked peanut worm, Southern armyworm, Southern corn rootworm, Stink bugs, Threecornered alfalfa hopper, Velvetbean caterpillar, Yellowstriped armyworm	0.033-0.10	2.1-6.4	Apply foliar treatments in at least 10 gallons per acre at the rate of 6.4 fl. oz./A (0.1 lb. active) per acre at a minimum of 14 day intervals. Do not apply more than 0.5 lb. ai per acre per season. Do not apply within 14 days of harvest. Do not feed green immature plants and peanut hay to livestock.
Aphids, Spider mites, Thrips, Whitefly	0.08-0.10	5.12-6.4	

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# ROOT CROPS

		DOS	AGE	
CROP	PEST	LB AI/A	FL OZ/A	REMARKS
Burdock,	Aphids,	0.08-0.10	5.12-6.4	Apply foliar treatments in at least 25
edible	Beet armyworm			gallons water per acre.
Carrot	Celery leaf tier,			Apply no more than once every
Celeriac	Corn earworm,			7 days.
Chervil,	Cross-striped			Do not apply more than 0.5 lb ai
turnip	cabbageworm,			per acre per season.
rooted	Cutworms,			Do not apply within 21days of
Chicory	Diamondback moth,			harvest.
Ginseng	European corn borer	,		
	n Fall armyworm,			
Parsley,	Fire ants,			
turnip	Flee beetles,			
rooted	Green cloverworm,			
Parsnip	Hornworms,			
Radish	Imported			
Radish,	cabbageworm,			
oriental	Loopers,			
Rutabaga	Southern			
Salsify Salsify,	armyworm, Spider mites,			
black	Tobacco			
Salsify,	budworm,			
Spanish	Velvetbean			
Skirret	caterpillar,			
Turnip	Whitefly,			
ramp	Yellowstriped			
	armyworm			
Garden	Aphids,	0.08-0.10	5.12-6.4	Apply foliar treatments in at least
beet	Fire Ants,	· · · · · · ·		28 gallons per acre.
	Flea Beetles,			Apply no more than once every 7
	Lepidopterous			days.
	larvae,			Do not apply more than 0.2 lb ai
	Spider mites,			per acre per season.
	Whitefly			Do not apply within 1 day of harvest.
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Dealers Should Sell In Original Packages Only.

### STORAGE AND DISPOSAL

**PESTICIDE 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.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills.

**TO CONFINE SPILL:** If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

**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: Nonrefillable 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

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**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

### Storage & Disposal cont'd.:

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. For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC - 1-800-424-9300.

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**BEFORE BUYING OR USING THIS PRODUCT**, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

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