



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs  
Registration Division (7505P)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg. Number:

34704-1118

Date of Issuance:

1/3/18

NOTICE OF PESTICIDE:

Registration  
 Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

LPI Bifenazate 50 WDG

Name and Address of Registrant (include ZIP Code):

Loveland Products  
c/o Arianna Shorey  
Regulatory Consultant  
Pyxis Regulatory Consulting, Inc.  
4110 136<sup>th</sup> St CT NW  
Gig Harbor, WA 98332

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.
2. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one year study is required to satisfy these data requirements. You have 18 months from the date of registration to provide these data.

Signature of Approving Official:

Venus Eagle, Product Manager 01  
Invertebrate-Vertebrate Branch 3, Registration Division (7505P)

Date:

1/3/18

3. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, “EPA Reg. No. 34704-1118.”
4. Submit one copy of the revised final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 08/08/2017
- Alternate CSF 1 dated 08/08/2017

If you have any questions, please contact Jacquelyn Herrick by phone at 703-347-0559, or via email at [herrick.jacquelyn@epa.gov](mailto:herrick.jacquelyn@epa.gov).

Enclosure

[Note to reviewer: [Text] in brackets denotes optional text].  
 [Note to reviewer: {Text} in braces denotes where in the final label text will appear.]

**{BOOKLET FRONT PANEL LANGUAGE}**

BIFENAZATE	GROUP	20D	ACARICIDE
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Contains bifentazate, the active ingredient used in Acramite®-50WS.

**LPI Bifenazate 50WDG**

[Alternate Brand Name: Bizate 50WDG]  
 For Agricultural Use Only

<b>ACTIVE INGREDIENT:</b>	(% by weight)
bifenazate: hydrazine carboxylic acid, 2-(4-methoxy-[1,1'-biphenyl]-3-yl) 1-methylethyl ester .....	50.0%
<b>OTHER INGREDIENTS:</b> .....	50.0%
<b>TOTAL:</b> .....	100.0%

Contains 0.50 pound active ingredient bifentazate per pound of product.

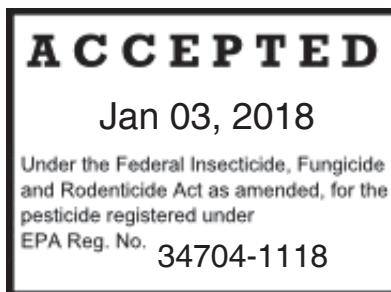
**KEEP OUT OF REACH OF CHILDREN  
 CAUTION**

<b>FIRST AID</b>	
<b>IF ON SKIN</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOT LINE NUMBERS</b>	
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For additional information on this pesticide product, including health concerns, medical emergencies, or pesticide incidents, you may call 1-866-944-8565, 24 hours per day, 7 days per week.</p>	

See inside booklet for additional Precautionary Statements and Directions for Use.

LPI Bifenazate 50WDG is not manufactured or distributed by Arysta Life Science, seller of Acramite®-50WS.

**Manufactured For:**  
 Loveland Products, Inc.  
 P.O. Box 1286  
 Greeley, CO 80632-1286



**EPA Reg. No.:** 34704-xx  
**EPA Est. No.:**

**Net Contents:**

## {LANGUAGE INSIDE BOOKLET}

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

##### Applicators and Other Handlers Must Wear:

- Protective eyewear,
- long-sleeved shirt and long pants,
- shoes plus socks, and
- Chemical resistant gloves made of: barrier laminate, polyethylene, butyl rubber ( $\geq 14$  mils), nitrile rubber ( $\geq 14$  mils), neoprene rubber ( $\geq 14$  mils), natural rubber ( $\geq 14$  mils), polyvinyl chloride ( $\geq 14$  mils), or Viton ( $\geq 14$  mils).

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and change into clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing them. As soon as possible, wash thoroughly and change into clean clothing.

#### ENVIRONMENTAL HAZARDS

This pesticide is toxic to birds, estuarine/marine invertebrates and fish. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate. This product is moderately toxic to bees and other pollinating insects exposed to direct treatment or to residues in/on blooming crops or weeds. Protect pollinating insects by following label directions intended to minimize drift and to reduce pesticide risk to these organisms. Do not apply this product while bees are foraging the treatment area.

#### PHYSICAL OR CHEMICAL HAZARDS

Do not mix or allow to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

## 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.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 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), notification to workers, 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. Exceptions are listed under the USE INSTRUCTIONS associated with each crop. Notify workers of the exception (including when entry is permitted for each of the tasks named in the exception).

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; shoes plus socks; chemical-resistant gloves made of: barrier laminate, polyethylene, butyl rubber ( $\geq 14$  mils), nitrile rubber ( $\geq 14$  mils), neoprene rubber ( $\geq 14$  mils), natural rubber ( $\geq 14$  mils), polyvinyl chloride ( $\geq 14$  mils), or Viton ( $\geq 14$  mils).

### USE INFORMATION

LPI Bifenazate 50WDG provides both knockdown and residual control of the following mites when applied directly to foliage as directed by this label:

Avocado red spider	Clover	Pecan leaf scorch	Spruce spider mite
Banks grass	European red*	Persea	Strawberry spider
Brown almond	McDaniel	Six-spotted	Two-spotted spider
Citrus red	Pacific spider	Southern red mite	Willamette

\* using maximum rate specified for the crop or crop group

This product is appropriate for use in IPM and resistance-management programs. The carbazate chemistry, mode of action, and selective nature of bifenazate make LPI Bifenazate 50WDG relatively inactive against beneficial and/or predaceous mites and insects. Because this product is *not* systemic, effective control requires complete coverage of both upper and lower leaf surfaces.

### MIXING INSTRUCTIONS

This product is a granular formulation. Stir or shake this product well prior to use.

- 1) Fill spray tank with 1/2 the specified amount of water.
- 2) Begin agitation and add the required amount of LPI Bifenazate 50WDG.
- 3) Fill the tank with the remaining amount of required water and continue agitation until product is fully dispersed.

NOTE: The stability of this product can be affected by high pH and high temperature. Keep/maintain spray mixtures containing LPI Bifenazate 50WDG within pH 5.5 - 6.5.

**Tank Mixes:** To increase the number of insect and/or mite species controlled, this product may be tank-mixed with other insecticides. *It is strongly recommended that compatibility with other tank-mix partners be confirmed prior to broad-scale applications.* Tank mixtures are only permitted in States where all of the pesticide products used as tank-mix partners are registered. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

### USE RESTRICTIONS

- Do NOT plant another crop within 30 days after last application of this product. Planting within 30 days of last application increases the likelihood of bifenazate residues appearing in rotational crops.
- Do NOT exceed the maximum amount of bifenazate allowed per crop per year. This applies to all product(s) containing bifenazate that are applied to the crop in a year.
- When applying to Golden Delicious apples, do NOT tank-mix oil with this product.

## USE RATES AND DIRECTIONS

LPI Bifenazate 50WDG controls the mite species listed above and is especially effective against grass, red and spider mites, primarily in the motile stage of development but does provide ovicidal control of spider mites (*Tetranychus* spp.) as well. Note that this product does NOT control broad, flat or rust mites. If mite pressure is not heavy use the lowest specified rates listed. If mite pressure is significant or to provide extended residual control use the highest specified rates listed. In order to maximize residual control, apply the product as soon as mites are detected. For specific application rates, application numbers, and Pre-Harvest Intervals (PHI), refer to the appropriate USE INSTRUCTIONS tables below.

For ground applications, apply this product using typical equipment: air-blast sprayers, compressed air, or hydraulic ground booms. The **USE INSTRUCTIONS** tables below indicate the minimum numbers of gallons of spray solution to apply per acre for ground applications.

For aerial applications, apply this product on certain crops using either a fixed-wing aircraft or a helicopter. A minimum spray volume that ensures complete canopy coverage must be used. Refer to the appropriate **USE INSTRUCTIONS** table for the minimum numbers of gallons of spray solution to apply per acre (or apply the minimum gallons/acre allowed by your State, which may not be less than the minimum gallons/acre shown on this label).

Human flagging is prohibited. Flagging to support aerial application is limited to use of the Global Positioning System (GPS) or mechanical flaggers.

**For Chemigation Applications (Cranberry and Mint, only):** Only one chemigation application may be made per year, and the system must be operated at 80% to 100% during the application to apply the minimum amount of water possible. Refer to the **USE INSTRUCTIONS - BEARING CROPS** tables for the ranges in application rates permitted for these crops and to the **CHEMIGATION USE PRECAUTIONS AND INSTRUCTIONS FOR CRANBERRY AND MINT**.

### SPRAY DRIFT

#### **Aerial Applications:**

- Do not release spray at a height greater than 10 ft above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use Fine or coarser droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

#### **Ground Boom Applications:**

- Apply with the nozzle height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use Fine or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

## SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.  
BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

## IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

### **Controlling Droplet Size – Ground Boom**

- Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

### **Controlling Droplet Size – Aircraft**

- Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

### **BOOM HEIGHT – Ground Boom**

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

### **RELEASE HEIGHT - Aircraft**

Higher release heights increase the potential for spray drift. When applying aurally to crops, do not release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.

### **SHIELDED SPRAYERS**

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

### **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

### **WIND**

Drift potential generally increases with wind speed. **AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.** Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

### **CHEMIGATION USE PRECAUTIONS AND INSTRUCTIONS FOR CRANBERRY AND MINT**

- Apply this product only through sprinkler systems, 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.
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- If you have questions about calibration, contact the State Extension Service specialists equipment manufactures or other experts.
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.



- 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 the necessary adjustments should the need arise.
- 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, quick-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.
- Maintain constant agitation in the supply tank for the duration of the application.
- To insure complete mixing of the irrigation water, use a positive displacement pump to inject the product mixture before a right angle turn in the main line.
- Applying more than the specified amount of irrigation water per acre may result in decreased performance due to the chemical being flushed from leaf surfaces.
- Do NOT apply this product if there are leaks in any of the fittings or connections, if nozzles do not provide uniform distribution, or if lines containing this product will be drained and dismantled.
- Apply this product for the entire duration of the irrigation process. Calibration accuracy and product distribution will be improved if a larger volume of a more dilute mixture is injected.
- Poor control of mites may result if sprinkler application patterns do not sufficiently overlap. Excessive overlap may result in crop injury.
- Contact state lead agencies for pesticide regulation for State-specific requirements pertaining to chemigation.



## USE INSTRUCTIONS - BEARING CROPS

If mite pressure is not heavy use the lowest specified rates . If mite pressure is significant or to provide extended residual control use the highest specified rates.

### AVOCADO

Application Rate (Pounds / Acre)	Minimum Gallons of Water per Acre		Acre Inches of Water for Chemigation	Maximum Number of Applications per Year	Minimum Number of Days Between Applications	Pre-Harvest Interval (PHI) in Days
	Ground	Air				
0.75 – 1.0 (0.375 – 0.5 lbs. ai)	50	-	-	2 (max 1.0 lb. ai/A)	21 *	7

\* Use a miticide with a different mode of action between 2 applications of LPI Bifenazate 50WDG.

### CANEBERRY SUBGROUP 13-07A: Blackberry; loganberry; red and black raspberry and cultivars and/or hybrids of these; Wild Raspberry

Application Rate (Pounds / Acre)	Minimum Gallons of Water per Acre		Acre Inches of Water for Chemigation	Maximum Number of Applications per Year	Minimum Number of Days Between Applications	Pre-Harvest Interval (PHI) in Days
	Ground	Air				
0.75 – 1.0 (0.375 – 0.5 lbs. ai)	50	-	-	2 (max 1.0 lb. ai/A)	30 *	1

\* Use a miticide with a different mode of action between 2 applications of LPI Bifenazate 50WDG.

**CUCURBIT VEGETABLES:** Chayote (fruit); Chinese waxgourd; Citrus melon; Cucumber; Gherkin; Gourd (edible); Balsam apple; Balsam pear; Bitter melon; Chinese cucumber; Muskmelon (*Mormordica* spp.); hybrids and/or cultivars of *Cucumis melo* including cantaloupe, true cantaloupe, casaba, crenshaw, golden pershaw, honeydew, honey ball melon, mango melon, Persian melon, pineapple melon, Santa Clause melon & snake melon; Pumpkin; Squash (summer and winter, includes crookneck, scallop squash, straight neck, vegetable marrow, zucchini, butternut, Calabaza, hubbard squash, acorn squash, and spaghetti squash); Watermelon

Application Rate (Pounds / Acre)	Minimum Gallons of Water per Acre		Acre Inches of Water for Chemigation	Maximum Number of Applications per Year	Minimum Number of Days Between Applications	Pre-Harvest Interval (PHI) in Days
	Ground	Air				
0.75 – 1.0 (0.375 – 0.5 lbs. ai)	50	10 *	-	1 (max 0.5 lb. ai/A)	-	3

\* Minimum gallons per acre OR the minimum permitted by your state, *but not less than shown*.

**FRUITING VEGETABLES, GROUP 8-10:** Eggplant (including African, pea, scarlet), Cocona, Garden huckleberry, Goji berry, Groundcherry, Martynia, Naranjilla, Okra, Pepino, Pepper (bell, non-bell, chili, cooking, hot, pimento, sweet), Roselle, Sunberry, Tomato (including bush, currant, tree), Tomatillo and cultivars, varieties and/or hybrids of these.

Application Rate (Pounds / Acre)	Minimum Gallons of Water per Acre		Acre Inches of Water for Chemigation	Maximum Number of Applications per Year	Minimum Number of Days Between Applications	Pre-Harvest Interval (PHI) in Days
	Ground	Air				
0.75 – 1.0 (0.375 – 0.5 lbs. ai)	50	10 *	-	1 (max 0.5 lb. ai/A)	-	3

\* Minimum gallons per acre OR the minimum permitted by your state, *but not less than shown*.

**Grape<sup>1</sup>; Amur River Grape; Gooseberry; Kiwifruit, hardy; Maypop; Schisandra Berry;** Cultivars, varieties and/or hybrids of these.

Application Rate (Pounds / Acre)	Minimum Gallons of Water per Acre		Acre Inches of Water for Chemigation	Maximum Number of Applications per Year	Minimum Number of Days Between Applications	Pre-Harvest Interval (PHI) in Days
	Ground	Air				
0.75 – 1.0 (0.375 – 0.5 lbs. ai)	50	-	-	1 (max 0.5 lb. ai/A)	-	14

<sup>1</sup>For cane turning, tying, and girdling of table grapes, the REI is 5 days.

**HERBS within Sub-Group 19A (except Chives & Chervil): Angelica, Balm, Basil (fresh, dried), Borage, Burnet, Chamomile, Catnip, Clary, Coriander (leaf), Costmary, Cilantro (leaf), Curry (leaf), Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Savory (summer and winter), Sweet bay, Tansy, Tarragon, Thyme, Wintergreen, Woodruff, and Wormwood**

Application Rate (Pounds / Acre)	Minimum Gallons of Water per Acre		Acre Inches of Water for Chemigation	Maximum Number of Applications per Year	Minimum Number of Days Between Applications	Pre-Harvest Interval (PHI) in Days
	Ground	Air				
0.75 – 1.0 (0.375 – 0.5 lbs. ai)	50	-	-	1 (max 0.5 lb. ai/A)	-	3

### HOPS

Application Rate (Pounds / Acre)	Minimum Gallons of Water per Acre		Acre Inches of Water for Chemigation	Maximum Number of Applications per Year	Minimum Number of Days Between Applications	Pre-Harvest Interval (PHI) in Days
	Ground	Air				
0.75 – 1.5 (0.375 – 0.75 lbs. ai)	50	-	-	1 (max 0.75 lb. ai/A)	-	14

**EDIBLE-PODDED LEGUME VEGETABLES SUBGROUP 6A (succulent) SUCCULENT PEAS and BEANS SUBGROUP 6B; SUCCULENT SHELLED SOYBEAN: Bean (*Lupinus* spp.) (includes grain lupin, sweet lupin, white lupin, and white sweet lupin); Bean (*Phaseolus* spp.) (includes field bean, kidney bean, lima beans, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean); Bean (*Vigna* spp.) (includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean); broadbean (fava); chickpea (garbanzo); guar; jackbean; lablab bean; lentil; Pea (*Pisum* spp.) (includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea); Pigeon pea; soybean (immature seed); Sword bean.**

Application Rate (Pounds / Acre)	Minimum Gallons of Water per Acre		Acre Inches of Water for Chemigation	Maximum Number of Applications per Year	Minimum Number of Days Between Applications	Pre-Harvest Interval (PHI) in Days
	Ground	Air				
1.0 – 1.5 (0.50 – 0.75 lbs. ai)	20	10 *	-	2 (max 1.5 lb. ai/A)	14 **	3

\* Minimum gallons per acre OR the minimum permitted by your state, *but not less than shown*.

\*\* Use a miticide with a different mode of action between 2 applications of LPI Bifenazate 50WDG.

### MINT

Application Rate (Pounds / Acre)	Minimum Gallons of Water per Acre		Acre Inches of Water for Chemigation	Maximum Number of Applications per Year	Minimum Number of Days Between Applications	Pre-Harvest Interval (PHI) in Days
	Ground	Air				
0.75 – 1.5 (0.375 – 0.75 lbs. ai)	50	10 *	0.1 – 0.2 **	1 (max 0.75 lb. ai/A)	-	7

\* Minimum gallons per acre OR the minimum permitted by your state, *but not less than shown*.

\*\* Refer to USE RATES AND DIRECTIONS and CHEMIGATION USE PRECAUTIONS AND INSTRUCTIONS sections.

**POME FRUIT, GROUP 11-10: Apples; Crabapples; Pears; Quince; azarole; medlar; pear, Asian; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties and/or hybrids of these.**

Application Rate (Pounds / Acre)	Minimum Gallons of Water per Acre		Acre Inches of Water for Chemigation	Maximum Number of Applications per Year	Minimum Number of Days Between Applications	Pre-Harvest Interval (PHI) in Days
	Ground	Air				
0.75 – 1.0 (0.375 – 0.5 lbs. ai)	50	-	-	1 (max 0.5 lb. ai/A)	-	7

**Strawberry; Bearberry; Bilberry; Blueberry, lowbush; Cloudberry; Cranberry; Lingonberry; Muntries; Partridgeberry; Cultivars, varieties, and/or hybrids of these.**

Application Rate (Pounds / Acre)	Minimum Gallons of Water per Acre		Acre Inches of Water for Chemigation	Maximum Number of Applications per Year	Minimum Number of Days Between Applications	Pre-Harvest Interval (PHI) in Days
	Ground	Air				
0.75 – 1.0 (0.375 – 0.5 lbs. ai)	100	-	0.1 – 0.2 * (Cranberry ONLY)	2 (For strawberry only, see footnote 1) (max 1.0 lb. ai/A)	21 **	1

\* Refer to USE RATES AND DIRECTIONS and CHEMIGATION USE PRECAUTIONS AND INSTRUCTIONS sections.

\*\* Use a miticide with a different mode of action between 2 applications of LPI Bifenazate 50WDG.

<sup>1</sup>For strawberry, 2 sprays per crop cycle with up to two cycles per year are permitted. For other crops in this subgroup, no more than 2 applications per year are permitted.

**STONE FRUIT: Apricots; Cherries (sweet & tart); Nectarines; Peaches; Plums & Prunes (fresh) (*Prunus domestica*, *Prunus* spp.), Chickasaw Plum (*Prunus augustifolia*), Damson Plum (*Prunus domestica* spp. *insititia*), Japanese Plum (*Prunus salicina*), and Plumcot (*Prunus armeniaca* X *P. domestica*)**

Application Rate (Pounds / Acre)	Minimum Gallons of Water per Acre		Acre Inches of Water for Chemigation	Maximum Number of Applications per Year	Minimum Number of Days Between Applications	Pre-Harvest Interval (PHI) in Days
	Ground	Air				
0.75 – 1.0 (0.375 – 0.5 lbs. ai)	50	-	-	1 (max 0.5 lb. ai/A)	-	3

**TREE NUTS: Almonds**

Application Rate (Pounds / Acre)	Minimum Gallons of Water per Acre		Acre Inches of Water for Chemigation	Maximum Number of Applications per Year	Minimum Number of Days Between Applications	Pre-Harvest Interval (PHI) in Days
	Ground	Air				
0.75 – 1.5 (0.375 – 0.75 lbs. ai)	50	-	-	1 (max 0.75 lb. ai/A)	-	7

**TREE NUTS: Beech nut; Brazil nut; Butternut; Cashew; Chestnut; Chinquapin; Filbert (Hazelnut); Hickory nut; Macadamia nut (bush nut); Pecans; Pistachios; Walnuts (black & English)**

Application Rate (Pounds / Acre)	Minimum Gallons of Water per Acre		Acre Inches of Water for Chemigation	Maximum Number of Applications per Year	Minimum Number of Days Between Applications	Pre-Harvest Interval (PHI) in Days
	Ground	Air				
0.75 – 1.5 (0.375 – 0.75 lbs. ai)	50	-	-	1 (max 0.75 lb. ai/A)	-	14

**TROPICAL FRUIT: Papaya; Star Apple; Black Sapote; Mango; Sapodilla; Canistel; Mamey Sapote; Lychee; Longan; Spanish Lime; Rambutan; Pulasan; Guava; Feijoa; Jaboticaba; Wax Jambu; Starfruit (Carambola); Passionfruit; Acerola; Sugar Apple; Cherimoya; Atemoya; Custard Apple; Ilama; Soursop; Biriba**

Application Rate (Pounds / Acre)	Minimum Gallons of Water per Acre		Acre Inches of Water for Chemigation	Maximum Number of Applications per Year	Minimum Number of Days Between Applications	Pre-Harvest Interval (PHI) in Days
	Ground	Air				
0.75 – 1.0 (0.375 – 0.5 lbs. ai)	50	-	-	2 (max 1.0 lb. ai/A)	21 *	1

\* Use a miticide with a different mode of action between 2 applications of LPI Bifenazate 50WDG.

## USE INSTRUCTIONS - NON-BEARING CROPS

This product may be used on non-bearing crops (defined as crops that will not bear fruit within one year of application), including all crops listed in the USE INSTRUCTIONS - BEARING CROPS section as well as the Additional Crops listed below. This use includes application to non-bearing fruit trees and berries in commercial nurseries and tree plantations.

Non-bearing crop applications may be used to control the following mites:

Banks grass	European red*	Southern red mite	Willamette
Brown almond	McDaniel	Spruce spider mite	
Citrus red	Pacific spider	Strawberry spider	
Clover	Pecan leaf scorch	Two-spotted spider	

\* using maximum rate specified for the crop or crop group

## USE RESTRICTIONS FOR NON-BEARING CROPS

- Applications may be made using ground equipment ONLY.
- The non-bearing crops listed below have a 12-hour restricted entry interval (REI).

**Additional Crops: Berries** (blueberry, highbush; elderberry; huckleberry); **Citrus** (grapefruit, lemons, limes, oranges, tangerines, etc.); **Currants; Dates; Figs; Persimmons**

Additional Crops	Mites Controlled	Application Rate (Pounds / Acre)	Minimum Gallons of Water per Acre	Maximum Number of Applications per Year
<b>Berries</b> (blueberry, highbush; elderberry; huckleberry); <b>Citrus</b> (grapefruit, lemons, limes, oranges, tangerines, etc.); <b>Currants;</b> <b>Dates;</b> <b>Figs;</b> <b>Persimmons</b>	Banks grass Brown almond Citrus red Clover European red (use maximum rate) McDaniel Pacific spider Pecan leaf scorch Strawberry spider Southern red mite Spruce spider mite Two-spotted spider Willamette	0.75 – 1.0 (0.375 – 0.5 lbs. ai)	50	1 (max 0.5 lb. ai/A)

## STRATEGIES FOR RESISTANCE MANAGEMENT

For resistance management, LPI Bifenazate 50WDG contains a Group 20D acaricide. Any mite population may contain individuals naturally resistant to LPI Bifenazate 50WDG and other Group 20D insecticides/acaricides. The resistant individuals may dominate the mite population if this group of insecticides/acaricides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed. To delay insecticide/acaricide resistance, take the following steps:

- Rotate the use of LPI Bifenazate 50WDG or other Group 20D insecticides/acaricides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides/acaricides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues for the targeted pests between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
  - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
  - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
  - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).

- Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
- The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- Because of its selectivity, LPI Bifenazate 50WDG can be used in conjunction with most biological control organisms available for mite control. LPI Bifenazate 50WDG, when used as directed, does not adversely affect populations of beneficial/predaceous mites and insects including:
 

Common lacewing ( <i>Chrysopa carnea</i> )	Seven-spotted lady beetle ( <i>Coccinella septempunctata</i> )
Insidious flower bug ( <i>Orius insidiosus</i> )	Six-spotted thrips ( <i>Scolothrips sexmaculatus</i> )
Predatory mite ( <i>Amblyseius fallacis</i> )	Spider mite destroyer ( <i>Stethorus punctum</i> )
Predatory mite ( <i>Typhlodromus pyri</i> )	Western flower thrips ( <i>Frankliniella occidentalis</i> )
Predatory mite ( <i>Zetzellia mali</i> )	Western predatory mite ( <i>Typhlodromus occidentalis</i> )
Predatory mite ( <i>Phytoseiulus persimilis</i> )	

The use of these organisms in conjunction with LPI Bifenazate 50WDG is encouraged as a means of reducing the number of chemical applications.

## STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in a dry location.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER HANDLING:**

[For rigid, non-refillable containers (≤ 5 gallons):] Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. 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 container 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. Then, offer container for recycling, if available, or puncture and dispose of container in a sanitary landfill, or by incineration.

[For rigid, non-refillable containers (> 5 gallons):] Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty remaining contents into application equipment or a mix tank. 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. Turn the container over onto its other 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. Then, offer container for recycling, if available, or puncture and dispose of container in a sanitary landfill, or by incineration.

### **Conditions of Sale and Limitation of Warranty and Liability**

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials, resistant strains or other influencing factors in the use of the product, which are beyond the control of Loveland Products, Inc. or Seller. To the extent allowed by applicable laws all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Loveland Products, Inc. and Seller harmless for any claims relating to such factors.

To the extent allowed by applicable laws, Loveland Products, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Loveland Products, Inc. and Buyer and User assume the risk of any such use. TO THE EXTENT ALLOWABLE BY APPLICABLE LAW, LOVELAND PRODUCTS, INC. MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent allowed by applicable laws, in no event shall Loveland Products, Inc. or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT ALLOWABLE BY APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF LOVELAND PRODUCTS, INC. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF LOVELAND PRODUCTS, INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.

To the extent allowed by applicable laws Loveland Products, Inc. and Seller offer this product, and Buyer and User accept it, subject to foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of Loveland Products, Inc.

Acramite®-50WS is a trademark of Arysta Life Science.

[EPA Approval Date]



**{LANGUAGE ON LABEL AFFIXED TO CONTAINER}**

**LPI Bifenazate 50WDG**

**For Agricultural Use Only**

**ACTIVE INGREDIENT:** (% by weight)

bifenazate: hydrazine carboxylic acid, 2-(4-methoxy-[1,1'-biphenyl]-3-yl) 1-methylethyl ester..... 50.0%

**OTHER INGREDIENTS:** ..... 50.0%

**TOTAL:** ..... 100.0%

Contains 0.50 pound active ingredient bifenazate per pound of product.

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

FIRST AID	
<b>IF ON SKIN</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<p><b>HOT LINE NUMBERS</b></p> <p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For additional information on this pesticide product, including health concerns, medical emergencies, or pesticide incidents, you may call 1-866-944-8565, 24 hours per day, 7 days per week.</p>	

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
CAUTION**

Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing.

**PHYSICAL OR CHEMICAL HAZARDS**

Do not mix or allow to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

**STORAGE AND DISPOSAL**

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**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

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incineration.

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**See label booklet for additional Precautionary Statements and Directions for Use.**

**Manufactured For:**  
Loveland Products, Inc.  
P.O. Box 1286  
Greeley, CO 80632

**EPA Reg. No.:** 34704-xx  
**EPA Est. No.**

**Net Weight:**

**Batch No.**