



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460**

**OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION**

August 30, 2022

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

**Subject:** PRIA CSF and Label Amendment – Revise Basic CSF, add Alternate CSFs #1 and #2 and update label  
Product Name: LPI Bifenazate 50 WSB  
EPA Registration Number: 34704-1148  
Application Date: October 21, 2021  
Decision Number: 579231

Dear Ms. Shorey:

The amended label and Confidential Statements of Formula (CSFs) referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, are acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. “To distribute or sell” is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Please note that the record for this product currently contains the following CSF(s):

- Basic CSF dated 10/21/2021
- Alternate CSF 1 dated 10/21/2021
- Alternate CSF 2 dated 12/20/2021

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 FIFRA 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) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced

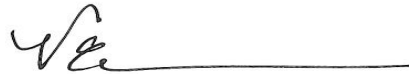
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on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Kevin Ulrich by phone at (202) 566-2944 or via email at [Ulrich.kevin@epa.gov](mailto:Ulrich.kevin@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read 'Venus Eagle', followed by a horizontal line extending to the right.

Venus Eagle, Product Manager 01  
Invertebrate and Vertebrate Branch 3  
Registration Division (7505T)  
Office of Pesticide Programs

Enclosure: Stamped Label

[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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**LPI Bifenazate 50 WSB**  
**[Alternate Brand Name: Bizate 50 WSP]**  
Miticide in Water Soluble Bags  
For Agricultural Use Only

<b>ACTIVE INGREDIENT:</b>	<b>(% by weight)</b>
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%

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

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

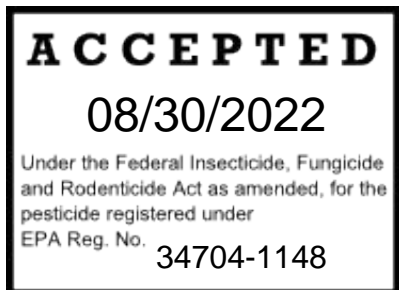
<b>FIRST AID</b>	
<b>If in eyes:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
<b>HOTLINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact Rocky Mountain Poison and Drug Safety at <b>1-866-944-8565</b> for emergency medical treatment information.	

**For Chemical Emergency:**  
**Spill, Leak, Fire, Exposure, or Accident,**  
**Call CHEMTREC Day or Night**  
**Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)**

Contains bifenazate, the active ingredient used in Acramite® 50 WS.  
LPI BIFENAZATE 50 WSB is not manufactured or distributed by Macdermid Agricultural Solutions, Inc., seller of Acramite® 50 WS.

EPA Reg. No. 34704-1148  
EPA Est. No.  
Net Weight:  
[Print Code to be placed here]

MANUFACTURED FOR:  
LOVELAND PRODUCTS, INC.  
P.O. BOX 1286  
GREELEY, [COLORADO][CO] 80632-1286 USA



## {LANGUAGE INSIDE BOOKLET}

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

Causes moderate eye irritation. Wear protective eyewear. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Avoid contact with eyes or clothing.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

- Protective eyewear,
- Long-sleeved shirt and long pants, and
- Shoes plus socks.

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. As soon as possible, wash thoroughly and change 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-CHEMICAL HAZARDS

Do not mix or allow coming in 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 any waterproof material such as nitrile rubber  $\geq$  14 mils, neoprene rubber  $\geq$  14 mils, barrier laminate  $\geq$  14 mils, polyvinyl chloride (PVC)  $\geq$  14 mils, or viton  $\geq$  14 mils.

### ENGINEERING CONTROLS STATEMENT

Water soluble bags, when used correctly, qualify as a closed mixing/loading system under the Worker Protection Standard [40 CFR 170.607(d)]. Mixers and loaders handling this product while it is enclosed in intact water soluble bags may elect to wear reduced PPE of long-sleeved shirt, long pants, shoes, socks, a chemical-resistant apron, and chemical-resistant gloves. When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for “applicators and other handlers” and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.

### USE INFORMATION

LPI BIFENAZATE 50 WSB provides both knockdown and extended 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	Sixspotted	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 50 WSB 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.

**The water soluble bags are NOT to be sold individually.**

### Instructions for Using Water Soluble Bags Directly into Spray Tanks:

Water Soluble Bags (WSBs) are designed to dissolve in water. Agitation may be used, if necessary, to help dissolve the WSB. Failure to follow handling and mixing instructions can increase your exposure to the pesticide products in WSBs. WSBs, when used properly, qualify as a closed mixing/loading system under the Agricultural Worker Protection Standard [40 CFR 170.607(d)].

#### Handling Instructions

Follow these steps when handling pesticide products in WSBs.

1. Mix in spray tank only.
2. Handle WSB(s) in a manner that protects bag from breakage and/or unintended release of contents. If bag is broken, put on PPE required for clean-up and then continue with mixing instructions.

3. Keep the WSB(s) in outer packaging until just before use.
4. Keep the WSB dry prior to adding to the spray tank.
5. Handle with dry gloves and according to the label instructions for PPE.
6. Keep WSB intact. Do not cut or puncture WSB.
7. Reseal the WSB outer packaging to protect any unused WSB(s).

### Mixing Instructions

Follow the steps below when mixing this product, including if tank mixed with other pesticide products. If being tank mixed, the mixing directions 1 through 9 below take precedence over the mixing directions of the other tank mix products. WSBs may, in some cases, be mixed with other pesticide products so long as the directions for use of all mixed products do not conflict. Do not tank mix this product with products that prohibit tank mixing or have conflicting mixing directions.

1. If a basket or strainer is present in the tank hatch, remove prior to adding the WSB to the tank.
2. Fill tank with water to approximately one-third to one-half of the desired final volume of spray.
3. Stop adding water and stop any agitation.
4. Place intact/unopened WSB(s) into the tank.
5. Do not spray water from a hose or fill pipe to break or dissolve the WSB(s).
6. Start mechanical and recirculation agitation from the bottom of tank without using any overhead recirculation, if possible. If overhead recirculation cannot be turned off, close the hatch before starting agitation.
7. Dissolving the WSB(s) may take up to 5 minutes or longer, depending on water temperature, water hardness and intensity of agitation.
8. Stop agitation before tank lid is opened.
9. Open the lid to the tank, exercising caution to avoid contact with dusts or spray mix, to verify that the WSBs have fully dissolved and the contents have been thoroughly mixed into the solution.
10. Do not add other allowed products or complete filling the tank until the bags have fully dissolved and pesticide is thoroughly mixed.
11. Once the WSB have fully dissolved and any other products have been added to the tank, resume filling the tank with water to the desired level, close the tank lid, and resume agitation.
12. Use the spray solution when mixing is complete.
13. Maintain agitation of the diluted pesticide mix during transport and application.
14. It is unlawful to use any registered pesticide, including WSBs, in a manner inconsistent with its label.

**IMPORTANT:** The stability of this product can be affected by high pH and high temperature. Keep spray mixtures containing LPI BIFENAZATE 50 WSB 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 pesticide products used in the tank mix are registered for the intended use. When tank-mixing, follow the most restrictive of all of the labeled use directions, use restrictions, and use limitations for the tank-mix partners.

If tank mixing with other products, be sure to thoroughly mix in the water soluble LPI BIFENAZATE 50 WSB bags first, and then add other products in the following order: water soluble bags, wettable powders, dry flowables, liquid flowables, liquids and finally other emulsifiable concentrates. Be sure to let each added product thoroughly disperse before adding another product to the mix.

## 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.

## USE RATES AND DIRECTIONS

LPI BIFENAZATE 50 WSB 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 as mites are detected. For specific application rates, application numbers, and Pre-Harvest Intervals (PHI), refer to the appropriate USE INSTRUCTIONS tables below.

This product may be ground-applied using the following types of 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.

This product may be applied aerially 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).

**Chemigation (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.**

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

## 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. **IMPORTANT:** Each water-soluble bag contains 0.5 pounds of product (0.25 pounds of active ingredient).



## 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	50	-	-	2	21 *	7

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

## 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	50	-	-	2	30 *	1

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

## CUCURBIT VEGETABLES: Chayote (fruit); Chinse 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	50	10 *	-	1	-	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	50	10 *	-	1	-	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	50	-	-	1	-	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	50	-	-	1	-	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	50	-	-	1	-	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	20	10 *	-	2	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 50 WSB.

**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	50	10 *	0.1 – 0.2 **	1	-	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 – 1.5	50	-	-	1	-	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	100	-	0.1 – 0.2 * (Cranberry ONLY)	2 (For strawberry only, see footnote 1)	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 50 WSB.

<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 (*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	50	-	-	1	-	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	50	-	-	1	-	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	50	-	-	1	-	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	50	-	-	2	21 *	1

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

## 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 tables 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**

Crop	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 (0.375-0.50 lbs ai/A)	50	1 (maximum 0.50 lbs ai/A)

## 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, you should contact State Extension Service specialists, equipment manufacturers 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 with 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 recommended 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.

## RESISTANCE MANAGEMENT

For resistance management, LPI BIFENAZATE 50 WSB contains a Group 20D acaricide. Any insect/mite population may contain individuals naturally resistant to LPI BIFENAZATE 50 WSB and other Group 20D insecticides/acaricides. The resistant individuals may dominate the insect/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 50 WSB or other Group 20D insecticides/acaricides within a growing season, or among growing seasons, with different groups that control the same pests. Avoid application of more than 1.5 lbs/A and consecutive sprays of LPI BIFENAZATE 50 WSB or other insecticides in the same group in a season.
- 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.
- For further information or to report suspected resistance contact Loveland Products, Inc. retailer, representative or call 1-888-LPI-CUST [(574-2878)]. You can also contact your pesticide distributor or university extension specialist to report resistance.

### **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:**

**[PE Bags]** Nonrefillable container. Do not reuse or refill this container. Empty residue into application equipment. Offer container and foil bag for recycling, if available, or dispose of container and/or foil bag in a sanitary landfill or by incineration, if allowed by State and local authorities.

### **CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

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.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

To the extent consistent with applicable law, 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 when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL AND TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS PRODUCT IS SOLD "AS IS," AND LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE USAGE.

IN THE UNLIKELY EVENT THAT BUYER OR USER BELIEVES THAT LOVELAND PRODUCTS, INC. HAS BREACHED A WARRANTY CONTAINED IN THIS LABEL AND TO THE EXTENT REQUIRED BY APPLICABLE LAW, BUYER OR USER MUST SEND WRITTEN NOTICE OF ITS CLAIM TO THE FOLLOWING ADDRESS: LOVELAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, P.O. BOX 1286, GREELEY, CO 80632-1286.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE BUYER'S OR USER'S EXCLUSIVE REMEDY FOR ANY INJURY, LOSS, OR DAMAGE RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT, INCLUDING BUT NOT LIMITED TO CLAIMS OF BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHER TORTS, SHALL BE LIMITED TO ONE OF THE FOLLOWING, AT THE ELECTION OF LOVELAND PRODUCTS, INC. OR THE SELLER: DIRECT DAMAGES NOT EXCEEDING THE PURCHASE PRICE OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, LOVELAND PRODUCTS, INC. AND THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR USER OF THIS PRODUCT FOR ANY CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES, OR DAMAGES IN THE NATURE OF A PENALTY.

Acramite® is registered trademark of Macdermid Agricultural Solutions, Inc.

LPI BIFENAZATE 50 WSB is not manufactured or distributed by Macdermid Agricultural Solutions, Inc., seller of Acramite® 50 WS.

[EPA APPROVAL DATE]

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

BIFENAZATE	GROUP	20D	ACARICIDE
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**LPI BIFENAZATE 50 WSB**

**Miticide in Water Soluble Bags  
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 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>
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact Rocky Mountain Poison and Drug Safety at <b>1-866-944-8565</b> for emergency medical treatment information.	

**For Chemical Emergency:  
Spill, Leak, Fire, Exposure, or Accident,  
Call CHEMTREC Day or Night  
Within USA and Canada: 1-800-424-9300 or +1 703-527-3887  
(collect calls accepted)**

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

Causes moderate eye irritation. Harmful if absorbed through the skin. Avoid contact with skin, eyes, or 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-CHEMICAL HAZARDS**

Do not mix or allow coming in contact with Oxidizing agents. Hazardous Chemical reaction may occur.

STORAGE AND DISPOSAL
Do not contaminate water, food or feed by storage or disposal.
<b>PESTICIDE STORAGE:</b> Store in a dry location.
<b>PESTICIDE DISPOSAL:</b> Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.
<b>CONTAINER HANDLING:</b> [PE Bags] Nonrefillable container. Do not reuse or refill this container. Empty residue into application equipment. Offer container and foil bag for recycling, if available, or dispose of container and/or foil bag in a sanitary landfill or by incineration, if allowed by State and local authorities.

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

EPA Reg. No. 34704-1148

EPA Est. No.

Net Weight:

[Print Code to be placed here]

MANUFACTURED FOR:

LOVELAND PRODUCTS, INC.

P.O. BOX 1286

GREELEY, [COLORADO][CO] 80632-1286 USA