

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

November 29, 2019

Kerly Pastor Regulatory Specialist Albaugh, LLC P.O. Box 2127 Valdosta, GA 31604

Subject: PRIA Label and CSF Amendment – Replace the Basic CSF and minor label edits Product Name: Bifenazate 50DF EPA Registration Number: 42750-322 Application Date: April 25, 2019 Decision Number: 550751

Dear Ms. Pastor:

The amended label and CSF referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, 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:

• Basic CSF dated 06/19/2019

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

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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 703-347-0464, or via email at ulrich.kevin@epa.gov.

Sincerely,

la larr

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

Enclosed: Stamped label

EDITOR'S NOTE: 7/1/19 "clean" label resubmittal in response to Agency 6/28/19 comment label for Interim Decision label amendment

BIFENAZATE GROUP 20D

ACARICIDE

## BIFENAZATE 50DF

For Agricultural Use Only

ACTIVE INGREDIENT: (% by	v 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					
	•	Hold eye open and rinse slowly and gently with water for 15-20 minutes.					
IF IN EYES	•	Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.					
	•	Call a poison control center or doctor for treatment advice.					
	•	Take off contaminated clothing.					
IF ON SKIN	•	Rinse skin immediately with plenty of water for 15-20 minutes.					
	•	Call a poison control center or doctor for treatment advice.					
HOT LINE NU	JME	3ERS - Have the product container or label with you when calling a poison control center or doctor, or					
going for trea	going for treatment. For chemical emergency: spill, leak, fire, exposure or accident, call CHEMTREC: 1-800-424-						
9300.							

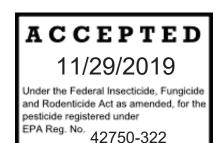
See inside booklet for additional Precautionary Statements and Directions for Use.

EPA Reg. No.: 42750-322

EPA Est. No. XXXXXX-XX-XXX

NET WEIGHT: \_\_\_\_\_ Lbs.

Manufactured For: ALBAUGH, LLC 1525 NE 36<sup>th</sup> Street ANKENY, IA 50021



#### 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.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and Other Handlers Must Wear:

1. Protective eyewear,

Users should:

- 2. long-sleeved shirt and long pants,
- 3. Shoes plus socks, and
- Waterproof gloves made of barrier laminate, polyethylene, butyl rubber (≥14 mils), nitrile rubber (≥14 mils), neoprene rubber (≥ 14 mils), natural rubber (≥ 14 mils), polyvinyl chloride (≥14 mils), or Viton (≥ 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

- 1. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- 2. Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and change into clean clothing.
- 3. 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:

- 1. Coveralls,
- 2. Shoes plus socks,
- 3. Chemical-resistant gloves made of any waterproof material.

#### USE INFORMATION

BIFENAZATE 50DF 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
Banks grass	European red*	Persea
Brown almond	McDaniel	Six-spotted
Citrus red	Pacific spider	Southern red mite
* using maximum rate sp	ecified for the crop or crop g	roup

Spruce spider mite Strawberry spider Two-spotted spider Willamette

This product is appropriate for use in IPM and resistance-management programs. The carbazate chemistry, mode of action, and selective nature of bifenazate make BIFENAZATE 50DF 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.

SPRAY DRIFT

Aerial Applications:

- Do not release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a coarse 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 1/2 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

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 aerially 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.

#### 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 BIFENAZATE 50DF.
- 3) Fill the tank with the remaining amount of required water and continue agitation until spraying is completed.

NOTE: The stability of this product can be affected by high pH and high temperature. Keep spray mixtures containing BIFENAZATE 50DF 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.

#### USE RATES AND DIRECTIONS

BIFENAZATE 50DF 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, applications should be made 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.

This product may be ground-applied 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.

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 listed. If mite pressure is significant or to provide extended residual control, use the highest specified rates listed.

#### AVOCADO

Application Rate (Pounds / Acre)	-	Gallons of per Acre	Acre Inches of Water for	Maximum Number of Applications per Year	Minimum Number of	Pre-Harvest Interval
	Ground	Air	Chemigation		Days Between Applications	(PHI) in Days
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 any 2 applications of BIFENAZATE 50DF.

#### 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	Maximum Number of Applications per	Minimum Number of	Pre-Harvest Interval
	Ground	Air	Chemigation	Year	Days Between Applications	(PHI) in Days
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 any 2 applications of BIFENAZATE 50DF.

#### 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)	-	Gallons of Der Acre	Acre Inches of Water for	Maximum Number of Applications per Year	Minimum Number of	Pre-Harvest Interval
	Ground	Air	Chemigation		Days Between Applications	(PHI) in Days
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)	-	Gallons of Der Acre	Acre Inches of Water for Chemigation	Maximum Number of Applications per Year	Minimum Number of	Pre-Harvest Interval
	Ground	Air			Days Between Applications	(PHI) in Days
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.

#### GRAPES & SMALL FRUIT VINE CLIMBING SUBGROUP 13-07F, EXCEPT FUZZY KIWIFRUIT:

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

ſ	Application Rate (Pounds / Acre)	-	Gallons of Der Acre	Acre Inches of Water for	Maximum Number of Applications per	Minimum Number of	Pre-Harvest Interval
		Ground	Air	Chemigation	Year	Days Between Applications	(PHI) in Days
	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	Maximum Number of Applications per	Minimum Number of Davs Between	Pre-Harvest Interval (PHI)	
	Ground	Air	Chemigation	Year	Applications	in Days
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	Maximum Number of Applications per	Minimum Number of	Pre-Harvest Interval
	Ground	Air	Chemigation	Year	Days Between Applications	(PHI) in Days
0.75 – 1.0 (0.375 – 0.5 lbs. ai)	50	-	-	1 (max 0.5 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)	-	Gallons of Der Acre	Acre Inches of Water for	Maximum Number of Applications per Year	Minimum Number of	Pre-Harvest Interval
	Ground	Air	Chemigation		Days Between Applications	(PHI) in Days
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 any 2 applications of BIFENAZATE 50DF.

#### MINT

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

#### LOW GROWING BERRY SUBGROUP 13-07G;

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

Application Rat	e		Gallons of er Acre	Acre Inches of Water for	Maximum Number of	Minimum Number of	Pre-Harvest Interval
(Pounds / Acre	2)	Ground	Air	Chemigation	Applications per Year	Days Between Applications	(PHI) in Days
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 any 2 applications of BIFENAZATE 50DF.
 <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 salcina*), and Plumcot (*Prunus armeniaca X P. domestica*)

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

#### TREE NUTS: Almonds

Application Rate	-	Gallons of er Acre	Acre Inches of Water for	Maximum Number of Applications per Year	Minimum Number of	Pre-Harvest Interval (PHI) in Days
(Pounds / Acre)	Ground	Air	Chemigation		Days Between Applications	
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	Minimum Gallons of Water per Acre		Acre Inches of Water for	Maximum Number of Applications per	Minimum Number of	Pre-Harvest Interval
	(Pounds / Acre)	Ground	Air	Chemigation Year	Days Between Applications	(PHI) in Days	
ſ	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; Soursap; Biriba

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

\*A miticide with a different mode of action should be used between any 2 applications of BIFENAZATE 50DF.

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

\* 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

Application Rate	Minimum Gallons of	Maximum Number of
(Pounds / Acre)	Water per Acre	Applications per Year
0.75 - 1.0	50	1
(0.375 – 0.5 lbs. ai)		(max 0.5 lb. 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 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 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 RECOMMENDATIONS

For resistance management, BIFENAZATE 50DF contains a Group 20D acaricide. Any insect/mite population may contain individuals naturally resistant to BIFENAZATE 50DF and other Group 20D acaricides. The resistant individuals may dominate the insect/mite population if this group of 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 BIFENAZATE 50DF or other Group 20D 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 BIFENAZATE 50DF 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 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.
- Because of its selectivity, BIFENAZATE 50DF can be used in conjunction with most biological control organisms available for mite control. BIFENAZATE 50DF, when used as directed, does not adversely affect populations of beneficial/predaceous mites and insects including:

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

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

- 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 resistancemanagement and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact Albaugh, LLC at 1-800-247-8013.

#### 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 must be disposed of on site or at an approved waste disposal facility.

#### CONTAINER HANDLING:

[For rigid, non-refillable containers ( $\leq$  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 1/4 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. Turn the container over onto its other end and tip it back and forth several 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 Albaugh, LLC or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Albaugh, LLC and Seller harmless for any claims relating to such factors.

To the extent allowed by applicable laws, Albaugh, LLC 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 Albaugh, LLC and Buyer and User assume the risk of any such use. TO THE EXTENT ALLOWABLE BY APPLICABLE LAW, ALBAUGH, LLC 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 Albaugh, LLC 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 ALBAUGH, LLC 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 ALBAUGH, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

Albaugh, LLC 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 Albaugh.

#### {LANGUAGE ON LABEL AFFIXED TO CONTAINER} BIFENAZATE 50DF For Agricultural Use Only

ACTIVE INGREDIENT:	(% by Weight)
bifenazate: hydrazine carboxylic acid, 2	
(4-methoxy-[1,1'-biphenyl]-3-yl) 1-me	thylethyl ester 50.0%
OTHER INGREDIENTS:	<u>50.0%</u>
TOTAL:	
Contains 0.50 pound active ingredient product.	bifenazate per pound of

#### KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID				
IF IN EYES	•	Hold eye open and rinse slowly and		
		gently with water for 15-20 minutes.		
	•	Remove contact lenses, if present,		
		after the first 5 minutes, then continue		

	<ul> <li>rinsing.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>			
IF ON SKIN:	<ul> <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>			
	HOT LINE NUMBER			
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For chemical emergency: spill, leak, fire, exposure or accident, call CHEMTREC: 1-800-424-9300.				

#### 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.

#### PHYSICAL OR CHEMICAL HAZARDS

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

#### 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 must be disposed of on site orat an approved waste disposal facility.

#### **CONTAINER HANDLING:**

[For rigid, non-refillable containers ( $\leq$  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.

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

Manufactured For: Albaugh, LLC 1525 NE 36<sup>th</sup> Street Ankeny, IA 50021 EPA Reg. No.: 42750-EPA Est. No.:

**Net Weight:** 

Batch No.