

#### OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

February 27, 2025

Kayla Ward Regulatory Associate Atticus, LLC 940 NW Cary Parkway, Suite 200 Cary, NC 27513-3792

Subject: Notification per PRN 2017-1 – Correction of Mode of Action Classification &

**Updated Company Address** 

Product Name: Avalaire Pyriproxyfen 35 WSP

EPA Registration Number: 93930-77 Application Date: June 21, 2024

Case Number: 618266

## Dear Kayla Ward:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

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 (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 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.

Page 2 of 2 EPA Reg. No. 93930-77 Case No. 618266

If you have any questions, please contact Carmen Rodia via e-mail at <u>Rodia.Carmen@epa.gov</u>.

Sincerely,

Janvice Caux
Tamica L. Cain, Product Manager 10
Invertebrate-Vertebrate Branch 2
Registration Division (7505T)

Enclosure: Master Label Stamped "NOTIFICATION", dated February 27, 2025

[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}**

**PYRIPROXYFEN GROUP INSECTICIDE** 

## **Avalaire Pyriproxyfen 35 WSP**

[Alternate Brand Name: Cibola 35 WSP, Positron 35 WSP]

#### [Insect Growth Regulator]

ACTIVE INGREDIENT:	(% by weight)
*Pyriproxyfen	35.0%
OTHER INGREDIENTS:	<u>65.0%</u>
TOTAL:	100.0%
*2-[1-methyl-2-(4-nhenovynhenovy) ethovylnyridine	

'2-[1-methyl-2-(4-phenoxyphenoxy) ethoxy]pyridine

Avalaire Pyriproxyfen 35 WSP is a wettable powder formula containing 35% active ingredient.

Contains pyriproxyfen, the active ingredient used in [Seize® 35 WP] [and] [Esteem® 36 WP IGR].

#### **KEEP OUT OF REACH OF CHILDREN**

## **CAUTION**

See [below] [inside label booklet] for [additional] [First Aid,] [Precautionary Statements] [and] [Directions for Use].

#### NOTIFICATION

93930-77 EPA Reg. No.: 93930-77 The applicant has certified that no

changes, other than those reported to the Agency have been made to the **EPA Est. No.:** labeling. The Agency acknowledges this notification by letter dated:

02/27/2025 Net Weight:

> Manufactured for: Avalaire, LLC

1705 Towanda Ave Bloomington, IL 61701

[Avalaire Pyriproxyfen 35 WSP] is not manufactured, or distributed by Valent U.S.A. Corporation, seller of [Seize® 35 WP] [and] [Esteem® 36 WP IGR].

## **{LANGUAGE INSIDE BOOKLET}**

	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 rinsing eye.				
	Call a poison control center or doctor for treatment advice.				
If inhaled:	Move person to fresh air.				
	• If person is not breathing, call 911 or an ambulance, then give artificial respiration,				
	preferably by mouth-to-mouth, if possible.				
	Call a poison control center or doctor for further treatment advice.				
If swallowed:	Call a poison control center or doctor immediately for treatment advice.				
	Have person sip a glass of water if able to swallow.				
	Do not induce vomiting unless told to do so by the poison control center or doctor.				
	Do not give anything by mouth to an unconscious person.				
If on skin or	Take off contaminated clothing.				
clothing:	Rinse skin immediately with plenty of water for 15 - 20 minutes.				
	Call a poison control center or doctor for further treatment advice.				
1	HOT LINE ALIMPED				

#### **HOT LINE 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 SafetyCall at **1-844-685-9173** 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. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Wear long-sleeved shirt and long pants, shoes plus socks.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear:

- Long-sleeved shirt,
- Long pants,
- Socks plus shoes.

Follow manufacturer's instructions for cleaning/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 put on clean clothing.

• Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water by disposing of equipment washwaters or rinsate. Avoid direct application and/or spray drift to bee hives.

#### PHYSICAL OR CHEMCIAL HAZARDS

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

### **DIRECTIONS FOR USE**

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

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

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), and Restricted-Entry Interval (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

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

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

- Coveralls over long-sleeved shirt and long pants,
- Waterproof gloves,
- Socks plus shoes

#### **TANK MIXES**

NOTICE: Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of the user, applicator and/or applicator advisor, to the extent allowable by applicable law.

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.

#### **RESISTANCE MANAGEMENT**

For resistance management, **Avalaire Pyriproxyfen 35 WSP** contains a Group 7 Insecticide. Any insect population may contain individuals naturally resistant to **Avalaire Pyriproxyfen 35 WSP** and other Group 7 insecticides. The resistant individuals may dominate the insect population if this group of insecticide are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance, take the following steps:

- Rotate the use of **Avalaire Pyriproxyfen 35 WSP** or other Group 7 insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides 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):
  - o 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 insecticides 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 resistancemanagement and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact your Avalaire, LLC representative.

Refer to specific crop sections for "Managing Insect Resistance" language applicable to that crop.

#### 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 fine or coarser droplet size (ASABE S572.1), except for when applying ultra-low volume applications.
- 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 15 miles per hour at the application site.

- If the windspeed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- Do not apply during temperature inversions.

#### **Airblast Applications**

- All sprays must be directed into the canopy.
- Nozzles directed out of the orchard must be turned off when treating the outer row, or when making turns between rows.
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

#### **Groundboom Applications**

- User must only 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 a fine or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 15 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 manufacturer's recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

#### **BOOM HEIGHT - Ground Boom**

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.

#### **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.

#### WATER SOLUBLE PACKAGING

#### [MULTIPLE PACKAGING

This bag contains multiple water-soluble packets of **Avalaire Pyriproxyfen 35 WSP**. Do not handle the packets with wet gloves or allow the packets to become wet prior to addition to spray tank. Do not break open packets. Refer to the Tables of Equivalents to calculate the number of packets to use. If all packets are not used, close and reseal outer container to protect remaining packet(s).]

#### **[SINGLE PACKAGING**

This bag contains one water soluble packet of **Avalaire Pyriproxyfen 35 WSP**. Do not handle the packet with wet gloves or allow the packet to become wet prior to addition to spray tank. Do not break open packet. Refer to the Table of Equivalents to calculate the number of packets to use. Open outer bag by pulling perforated tearstrip and drop the unopened inner packet of **Avalaire Pyriproxyfen 35 WSP** into spray tank.]

[Note to reviewer: only the 4- or 5-acre column will appear on the final label. The 4-acre column corresponds with the 4 oz. container size. The 5-acre column corresponds with the 5 oz. container size.]

TABLE OF EQUIVALENTS				
RATES OF AVALAIRE PYRIPROXYFEN 35 WSP PER ACRE	# OF WATER SOLUBLE PACKETS TO TREAT 5 ACRES			
3 oz	3	3		
4 oz	4	4		
5 oz	5	5		

#### PRODUCT INFORMATION

Avalaire Pyriproxyfen 35 WSP is intended for use in Integrated Pest Management (IPM) or Insect Resistance Management (IRM) programs. Avalaire Pyriproxyfen 35 WSP will not control insect adults, and it is recommended

to be used in combination and/or rotation with other IPM or IRM materials. Contact your local state extension service for details.

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

#### **Restriction:**

Do not apply this product through any type of irrigation system.

## **ARTICHOKE (GLOBE)**

[Not for Use in] [California] [New York]

Avalaire Pyriproxyfen 35 WSP acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Avalaire Pyriproxyfen 35 WSP has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Avalaire Pyriproxyfen 35 WSP is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

**Avalaire Pyriproxyfen 35 WSP** does exhibit translaminar movement which means that **Avalaire Pyriproxyfen 35 WSP** applied to the upper surfaces of the leaves will move to the lower surface of the leaf. This translaminar movement is very important to chemical control of whiteflies since one of the major obstacles is getting the product to the underside of the leaves where whiteflies are present.

PESTS	PRODUCT RATES PER ACRE	APPLICATION INSTRUCTIONS
Artichoke Plume Moth Bandedwinged Whitefly Greenhouse Whitefly Silverleaf Whitefly	2.5 to 3 oz	Apply with ground equipment in adequate water for uniform coverage (10 to 50 gals/A).  HIGHER WATER VOLUMES MAY PROVIDE IMPROVED INSECT CONTROL.
Sweetpotato Whitefly		Begin applications when whiteflies reach threshold levels per University/Extension recommendations (e.g., 3 to 5 adults per leaf and/or equivalent levels of immatures).  Under severe pressure, use the higher specified rates.
		Only whole fields should be treated but is not required.

**Avalaire Pyriproxyfen 35 WSP** may be mixed and/or alternated with commonly used insecticides to comply with local Integrated Pest Management (IPM) and Insect Resistance Management (IRM) programs.

#### **Restrictions:**

- Do not apply within 7 days of harvest.
- Do not make more than 2 Avalaire Pyriproxyfen 35 WSP applications per growing season.
- Do not exceed 6 oz of **Avalaire Pyriproxyfen 35 WSP** per acre per season.
- Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP treatment.
- Regardless of formulation, do not apply more than 0.134 lb pyriproxyfen per acre per season.
- Do not plant any crop other than those with registered pyriproxyfen uses in treated areas sooner than 30 days after the last application.

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides or insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than two applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Avalaire, LLC also does not recommend using rates below 2.5 oz per acre for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

#### **ASPARAGUS**

[Not for Use in] [California] [New York]

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

**Avalaire Pyriproxyfen 35 WSP** does exhibit translaminar movement which means that **Avalaire Pyriproxyfen 35 WSP** applied to the upper surfaces of the leaves will move to the lower surface of the leaf. This translaminar movement is very important to chemical control of whiteflies since one of the major obstacles is getting the product to the underside of the leaves where whiteflies are present.

PESTS	PRODUCT RATES PER ACRE	APPLICATION INSTRUCTIONS
Whiteflies	2.5 to 3 oz	Apply with ground equipment in adequate water for uniform coverage (10 to 50 gals/A).
		HIGHER WATER VOLUMES MAY PROVIDE IMPROVED INSECT CONTROL.
		Begin applications when whiteflies reach threshold levels per University/Extension recommendations (e.g., 3 to 5 adults per leaf and/or equivalent levels of immatures).
		Under severe pressure, use the higher specified rates.
		Only whole fields should be treated but is not required.

#### **Restrictions:**

- Do not apply within 7 days of harvest.
- Do not make more than 2 **Avalaire Pyriproxyfen 35 WSP** applications per growing season.
- Do not exceed 6 oz of Avalaire Pyriproxyfen 35 WSP per acre per season.
- Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP treatment.
- Regardless of formulation, do not apply more than 0.134 lb pyriproxyfen per acre per season.
- Do not plant any crop other than those with registered pyriproxyfen uses in treated areas sooner than 30 days after the last application.

**MANAGING WHITEFLY RESISTANCE:** Repeated use of the same class of insecticides or insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Avalaire, LLC is restricting **Avalaire Pyriproxyfen 35 WSP** to no more than two applications per growing season. **Avalaire Pyriproxyfen 35 WSP** may be used in alternation with other IGR materials possessing dissimilar modes of

action and/or with other chemical classes of insecticides. Avalaire, LLC also does not recommend using rates below 2.5 oz per acre for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

#### **BANANAS AND PLANTAIN**

[Not for Use in] [California] [New York]

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

**Avalaire Pyriproxyfen 35 WSP** does exhibit translaminar movement which means that **Avalaire Pyriproxyfen 35 WSP** applied to the upper surfaces of the leaves will move to the lower surface of the leaf. This translaminar movement is very important to chemical control of whiteflies since one of the major obstacles is getting the product to the underside of the leaves where whiteflies are present.

PESTS	PRODUCT RATES PER ACRE	APPLICATION INSTRUCTIONS
Bandedwinged Whitefly Greenhouse Whitefly Silverleaf Whitefly Sweetpotato Whitefly	4 to 5 oz	Apply with air or ground equipment in adequate water for uniform coverage:  By air: 3 to 10 gals/A  By ground: 10 to 50 gals/A
		HIGHER WATER VOLUMES MAY PROVIDE IMPROVED INSECT CONTROL.
		Begin applications when whiteflies reach threshold levels per University/Extension recommendations (e.g., 3 to 5 adults per leaf and/or equivalent levels of immatures).
		Only whole fields should be treated but is not required.

#### **Restrictions:**

- Do not apply within 14 days of harvest.
- Do not make more than 3 Avalaire Pyriproxyfen 35 WSP applications per growing season.
- Do not exceed 15 oz of Avalaire Pyriproxyfen 35 WSP per acre per season.
- Regardless of formulation, do not apply more than 0.327 lb pyriproxyfen per acre per season.
- Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP treatment.
- Do not plant any crop other than those with registered pyriproxyfen uses in treated areas sooner than 30 days after the last application.

**MANAGING WHITEFLY RESISTANCE:** Repeated use of the same class of insecticides or insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Avalaire, LLC is restricting **Avalaire Pyriproxyfen 35 WSP** to no more than three applications per growing season. **Avalaire Pyriproxyfen 35 WSP** may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Avalaire, LLC also does not recommend using rates below 4 oz per acre for whitefly control because reduced rates can lead to a greater potential for resistance development.

Follow local, state and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

#### **BERRY**

#### Low Growing, Except Strawberry (Subgroup 13-07H)

[Not for Use in] [California] [New York]

CROPS	PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS
Bearberry Bilberry Blueberry, Lowbush Cloudberry Cranberry Lingonberry Muntries	Cherry Fruitworm Cranberry Fruitworm Lecanium Scales	5 oz	Apply with ground or air equipment as a full coverage spray (minimum of 5 gals/A by air or 50 gals/A by ground). Thorough coverage is critical for adequate control. It is essential to use adequate water volume to ensure thorough coverage.
Partridgeberry Cultivars, varieties, and/or hybrids of these			Fruitworms: Apply when egg laying begins and again at petal fall. Additional applications of another insecticide, at 10 to 14-day intervals, may be needed under high population pressure or sustained moth flight.
			Lecanium Scales: Apply at either dormant, delayed dormant or an inseason cover spray. At dormant or delayed dormant use a spray oil at the manufacturer's recommended oil rate. In a cover spray make applications when scales crawlers first emerge. Follow local recommendations regarding in-season use and rates of oil in your area.
		with local Integra	ed and/or alternated with commonly used ted Pest Management (IPM) and Insect
	Do not make m growing season	١.	vest.  re Pyriproxyfen 35 WSP applications per  Pyriproxyfen 35 WSP per acre per season.
	treatment.	ormulation, do not	after last <b>Avalaire Pyriproxyfen 35 WSP</b> t apply more than 0.218 pyriproxyfen per

#### **BRASSICA LEAFY VEGETABLES**

(Crop Group 5)

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

CROPS	PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS
Broccoli	Bandedwinged	2.5 to 3 oz	Apply with ground equipment in
Broccoli Raab (rapini)	Whitefly		adequate water for uniform coverage (10
Brussels Sprouts	Greenhouse Whitefly		to 50 gals/A).
Cabbage	Silverleaf Whitefly		
Cauliflower	Sweetpotato Whitefly		HIGHER WATER VOLUMES MAY
Cavalo Broccolo			PROVIDE IMPROVED INSECT CONTROL.
Chinese Broccoli (gailon)			
Chinese Cabbage (bok choy			Begin applications when whiteflies
and napa)			reach threshold levels per
Chinese Mustard (gai choy)			University/Extension recommendations
Collards			(e.g., 3 to 5 adults per leaf and/or or
Kale			equivalent levels of immatures).
Kohlrabi			Under severe pressure, use the higher
Mizuna			specified rates.
Mustard Greens			Only whole fields should be treated but
Mustard Spinach Rape Greens			Only whole fields should be treated but is not required.
kape dreens	Restrictions:		is not required.
		ithin 7 days of ham	unst.
		ithin 7 days of harv	
			ire Pyriproxyfen 35 WSP applications per
	growing season		very few 25 WSD nev core nev cooss
			roxyfen 35 WSP per acre per season.
	<ul> <li>Do not apply e treatment.</li> </ul>	ariier than 14 days	s after last <b>Avalaire Pyriproxyfen 35 WSP</b>

- Regardless of formulation, do not apply more than 0.134 pyriproxyfen per acre per season.
  - Do not plant any crop other than those with registered pyriproxyfen uses in treated areas sooner than 30 days after the last application.

MANAGING WHITEFLY RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than two applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Avalaire, LLC also does not recommend using rates below 2.5 oz/A for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

#### **BULB VEGETABLES**

(Crop Group 3-07)

	1		T T
		PRODUCT	
CROPS	PESTS	RATE	APPLICATION INSTRUCTIONS
		PER ACRE	
Garlic	Onion Thrips	2.5 oz	FOR SUPPRESSION OF THRIPS: Apply
Garlic, Great Headed	Western Flower Thrips		with ground equipment in adequate
Leek			water for uniform coverage (20 to 50
Onion, Dry Bulb			gals/A). Begin applications when thrips
Onion, Green			reach threshold levels per
Onion, Welsh			University/Extension. Thorough
Shallot			coverage is critical for adequate water
			volume to ensure thorough coverage.
		-	ed and/or alternated with commonly used
		_	ted Pest Management (IPM) and Insect
	Resistance Management	t (IRM) programs.	
	Restrictions:		
	<ul> <li>Do not apply w</li> </ul>	ithin 3 days of har	vest.
	1	•	re Pyriproxyfen 35 WSP applications per
	growing season		
	<ul> <li>Do not exceed !</li> </ul>	5 oz of <b>Avalaire Py</b>	riproxyfen 35 WSP per acre per season.
		=	after last Avalaire Pyriproxyfen 35 WSP
	treatment.	•	
	Regardless of form	ormulation, do not	t apply more than 0.134 pyriproxyfen per
	acre per seasor		
	Do not plant an	y crop other than	those with registered pyriproxyfen uses in
			s after the last application.

#### **BUSHBERRY**

#### (Subgroup 13-07B)

CROPS	PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS
Aronia Berry Blueberry, Highbush Blueberry, Lowbush Buffalo Currant Chilean Guava Cranberry, Highbush Currant, Black Currant, Red Elderberry European Barberry Gooseberry Honeysuckle, Edible Huckleberry Jostaberry Juneberry Saskatoon	Cherry Fruitworm Cranberry Fruitworm Lecanium Scales	5 oz	Apply with ground or air equipment as a full coverage spray (minimum of 5 gals/A by air or 50 gals/A by ground). Thorough coverage is critical for adequate control. It is essential to use adequate water volume to ensure thorough coverage.  Fruitworms: Apply when egg laying begins and again at petal fall. Additional applications of another insecticide, at 10 to 14 day intervals, may be needed under high population pressure or sustained moth flight.  Lecanium Scales: Apply at either
Berry) Lingonberry Native Currant Salal Sea Buckthorn Cultivars, varieties, and/or hybrids of these	Avalaire Pyrinroxyfen 3	<b>5 WSP</b> may be mix	dormant, delayed dormant or an inseason cover spray. At dormant or delayed dormant use a spray oil at the manufacturer's recommended oil rate. In a cover spray make applications when scale crawlers first emerge. Follow local recommendations regarding in-season use and rates of oil in your area.
	· · ·	with local Integra	ted Pest Management (IPM) and Insect
	Restrictions:	ithin 7 days of har	west
	- Do not apply w	itimi / days of flat	VCJI.

- Do not make more than 2 **Avalaire Pyriproxyfen 35 WSP** applications per growing season.
- Do not exceed 10 oz of Avalaire Pyriproxyfen 35 WSP per acre per season.
- Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP treatment.
- Regardless of formulation, do not apply more than 0.218 pyriproxyfen per acre per season.

#### **CANEBERRY**

#### (Subgroup 13-07A)

[Not for Use in] [California] [New York]

CROPS	PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS
Blackberry including: Bingleberry Black Satin Berry Boysenberry Cherokee Blackberry Chesterberry Cheyenne Blackberry Coryberry Darrowberry Dirksen Thornless Berry Himalayaberry Hullberry Lavacaberry Lowberry Lucretiaberry Mammoth Blackberry Marionberry Oregon Evergreen berry	Cherry Fruitworm Cranberry Fruitworm Lecanium Scales	5 OZ	Apply with ground or air equipment as a full coverage spray (minimum of 5 gals/A by air or 50 gals/A by ground). Thorough coverage is critical for adequate control. It is essential to use adequate water volume to ensure thorough coverage.  Fruitworms: Apply when egg laying begins and again at petal fall. Additional applications of another insecticide, at 10 to 14 day intervals, may be needed under high population pressure or sustained moth flight.  Lecanium Scales: Apply at either dormant, delayed dormant or an inseason cover spray. At dormant or delayed dormant use a spray oil at the manufacturer's recommended oil rate. In a cover spray make applications when scale crawlers first emerge. Follow local recommendations

Phenomenalberry			regarding in-season use and rates of oil		
Rangerberry			in your area.		
Ravenberry	Avalaire Pyriproxyfen 35	Avalaire Pyriproxyfen 35 WSP may be mixed and/or alternated with commonly used			
Rossberry	• •	_	ted Pest Management (IPM) and Insect		
Shawnee Blackberry Loganberry Raspberry, including: Bababerry Black raspberry Blackcap Caneberry Framboise Frambueso Himbeere Keriberry Mayberry Red raspberry Thimbleberry Tulameen Yellow raspberry Wild raspberry Youngberry Cultivars, varieties, and/or hybrids of these	<ul> <li>Do not make m growing season</li> <li>Do not exceed in</li> <li>Do not apply eatreatment.</li> </ul>	ithin 7 days of harv nore than 2 <b>Avalai</b> i 10 oz of <b>Avalaire P</b> arlier than 14 days ormulation, do not	vest.  re Pyriproxyfen 35 WSP applications per  Pyriproxyfen 35 WSP per acre per season.  after last Avalaire Pyriproxyfen 35 WSP  apply more than 0.218 pyriproxyfen per		

## CITRUS FRUIT (Crop Group 10-10)

CROPS	PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS
Australian Desert Lime Australian Finger-lime Australian Round Lime Brown River Finger Lime Calamondin Citron Citrus hybrids Grapefruit	Black Scale Brown Soft Scale California Red Scale Florida Red Scale Citrus Snow Scale	5 oz	Apply with ground equipment in 200 to 1500 gals/A. Apply in sufficient water volume for tree size. Thorough coverage is critical for control. It is essential to use adequate water volume to ensure thorough coverage.  Apply any time prior to fruit becoming
Japanese Summer Grapefruit Kumquat			infested when scale is in the crawler stage. Thorough coverage is essential for good control.
Lemon Lime Mediterranean Mandarin Mount White Lime New Guinea Wild Lime			Avalaire Pyriproxyfen 35 WSP may be applied with superior spray oils at ½ to 1%. Follow the manufacturer's directions and recommendations on timing and rates.
Orange, Sour Orange, Sweet Pummelo Russell River Lime Satsuma Mandarin			NOTE: For scale apply only one application during emergence of scale crawlers per calendar year.
Sweet Lime Tachibana Orange Tahiti Lime Tangelo			
Tangerine (mandarin) Tangor Trifoliate Orange Uniq Fruit Cultivars, varieties,			
and/or hybrids of these		with local Integra	ed and/or alternated with commonly used ted Pest Management (IPM) and Insect
	Restrictions:  Do not apply w  Do not make n growing seasor  Do not exceed	ithin 1 day of harve nore than 1 <b>Avala</b> i n. 5 oz of <b>Avalaire Py</b> ormulation, do not	est.  ire Pyriproxyfen 35 WSP application per  riproxyfen 35 WSP per acre per season. t apply more than 0.134 pyriproxyfen per

CROPS	PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS
Australian Desert Lime Australian Finger-lime Australian Round Lime Brown River Finger Lime Calamondin Citron Citrus hybrids Grapefruit Japanese Summer Grapefruit Kumquat Lemon Lime Mediterranean Mandarin Mount White Lime New Guinea Wild Lime Orange, Sour Orange, Sweet Pummelo Russell River Lime Satsuma Mandarin Sweet Lime Tachibana Orange Tahiti Lime Tangelo Tangerine (mandarin) Tangor Trifoliate Orange Uniq Fruit Cultivars, varieties, and/or hybrids of these	Citrus Blackfly Citrus Leafminer Citrus Whitefly	3 oz	Apply with ground application in 200 to 1500 gals/A. Apply in sufficient water volume for tree size. Thorough coverage is critical for control. It is essential to use adequate water volume to ensure thorough coverage.  Apply when pests are just beginning to build and before infestation has occurred. Thorough coverage is essential for good control.
	= = =	comply with loc	mixed and/or alternated with commonly al Integrated Pest Management (IPM) ment (IRM) programs.
	<ul> <li>Do not make n growing seasor</li> <li>Do not exceed</li> <li>Regardless of for acre per seasor</li> </ul>	n. 6 oz of <b>Avalaire Py</b> ormulation do not a n.	est.  re Pyriproxyfen 35 WSP applications per  riproxyfen 35 WSP per acre per season.  apply more than 0.134 lb pyriproxyfen per  s after last Avalaire Pyriproxyfen 35 WSP

#### COTTON

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

**Avalaire Pyriproxyfen 35 WSP** does exhibit translaminar movement which means that **Avalaire Pyriproxyfen 35 WSP** applied to the upper surfaces of the leaves will move to the lower surface of the leaf. This translaminar movement is very important to chemical control of whiteflies since one of the major obstacles is getting the product to the underside of the leaves where whiteflies are present.

PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS
Bandedwinged Whitefly Greenhouse Whitefly	2.5 to 3 oz	Apply with air or ground equipment in adequate water for uniform coverage:
Silverleaf Whitefly Sweetpotato Whitefly	Do not apply less than 2.5 oz/A	By Air: 3 to 10 gals/A By Ground: 10 to 50 gals/A
	·	HIGHER WATER VOLUMES MAY PROVIDE IMPROVED INSECT CONTROL.
		Make only one application per growing season.
		Begin application when whiteflies reach threshold levels per University/Extension recommendations (e.g., 3 to 5 adults per leaf and/or equivalent levels of immatures).
		Under severe pressure, use the higher specified rates.
		Only whole fields should be treated but is not required.

#### **Restrictions:**

- Do not apply within 28 days of harvest.
- Do not make more than 1 Avalaire Pyriproxyfen 35 WSP application per growing season.
- Do not exceed 3 oz Avalaire Pyriproxyfen 35 WSP per acre per season.
- Regardless of formulation, do not apply more than 0.067 pyriproxyfen per acre per season.
- Do not plant any crop other than those with registered pyriproxyfen uses in treated areas sooner than 30 days after last application.

**MANAGING WHITEFLY RESISTANCE:** Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Avalaire, LLC is restricting **Avalaire Pyriproxyfen 35 WSP** to no more than one application per growing season. **Avalaire** 

**Pyriproxyfen 35 WSP** may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Avalaire, LLC also does not recommend using rates below 2.5 oz per acre for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

#### **CUCURBITS**

#### (Crop Group 9)

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

		PRODUCT	
CROPS	PESTS	RATE	APPLICATION INSTRUCTIONS
		PER ACRE	
Balsam Apple	Bandedwinged	2.5 to 3 oz	Apply with air or ground equipment in
Balsam Pear	Whitefly		adequate water for uniform coverage:
Bitter Melon	Greenhouse Whitefly		By Air: 3 to 10 gals/A
Cantaloupe	Silverleaf Whitefly		By Ground: 10 to 50 gals/A
Chayote	Sweetpotato Whitefly	Do not apply	by Ground. 10 to 30 gais/A
Chinese Cucumber		less than	HIGHER WATER VOLUMES MAY
Chinese Waxgourd		2.5 fl ozs/A	PROVIDE IMPROVED INSECT CONTROL.
Citron Melon			Begin application when whiteflies
Cucumber			reach threshold levels per
Edible Gourd			University/Extension recommendations
Gherkin			(e.g., 3 to 5 adults per leaf and/or
Momordica spp.			equivalent levels of immatures).
Muskmelon			Under source prossure, use the higher
Pumpkin			Under severe pressure, use the higher specified rates.
Summer Squash Watermelon			specified rates.
Winter Squash			Only whole fields should be treated but
willter Squasii			is not required.
	Restrictions:		
		ithin 7 days of harv	
			re Pyriproxyfen 35 WSP applications per
	growing season		
		•	riproxyfen 35 WSP per acre per season.
	<ul> <li>Do not apply eatreatment.</li> </ul>	arlier than 14 days	after last Avalaire Pyriproxyfen 35 WSP
	Regardless of form	ormulation, do not	apply more than 0.134 pyriproxyfen per
	acre per season	ı <b>.</b>	

 Do not plant any crop other than those with registered pyriproxyfen uses in treated areas sooner than 30 days after the last application.

MANAGING WHITEFLY RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than two applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Avalaire, LLC also does not recommend using rates below 2.5 oz per acre for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

#### FRUITING VEGETABLES

(Crop Group 8-10)

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

CROPS	PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS
African Eggplant Bush Tomato Bell Pepper Cocona Currant Tomato Eggplant Garden Huckleberry Goji Berry Ground Cherry Martynia Naranjilla Okra Pea Eggplant Pepino Pepper, Bell Pepper, Nonbell Roselle Scarlet Eggplant	Bandedwinged Whitefly Greenhouse Whitefly Silverleaf Whitefly Sweetpotato Whitefly	2.5 to 3 oz  Do not apply less than 2.5 oz/A of Avalaire Pyriproxyfen 35 WSP when used as a stand-alone application.	Apply with air or ground equipment in adequate water for uniform coverage:  By Air: 3 to 10 gals/A By Ground: 10 to 50 gals/A  HIGHER WATER VOLUMES MAY PROVIDE IMPROVED INSECT CONTROL.  Begin application when whiteflies reach threshold levels per University/Extension recommendations (e.g., 3 to 5 adults per leaf and/or equivalent levels of immatures).  Under severe pressure, use the higher specified rates.  Only whole fields should be treated but is not required.

Sunberry Tomatillo Tomato Tree Tomato Cultivars, varieties, and/or hybrids or these	Bandedwinged Whitefly Cabbage Looper Green Peach Aphid Greenhouse Whitefly (immatures & adults) Silverleaf Whitefly Sweetpotato Whitefly Tobacco Hornworm	1.8 to 2.5 oz	Apply as a tank mix with ground equipment for uniform coverage (25 to 150 gals/A by ground). Make application when eggs or insects first appear. If control is needed during this period use an alternate insecticide registered for the target pest.  Avalaire Pyriproxyfen 35 WSP may also be mixed or alternated with commonly used insecticides to comply with local IPM programs.  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.
CROPS	PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS
Tomato	Bandedwinged Whitefly Beet Armyworm Fruitworms Greenhouse Whitefly (immatures & adults) Potato Aphid Silverleaf Whitefly Sweetpotato Whitefly Thrips Tomato Pinworm Yellowstriped Armyworm	1.8 to 2.5 oz  +  Label specified amount of Danitol* 2.4 EC Spray	EARLY SEASON WHITEFLY CONTROL PROGRAM FOR REDUCTION OF GEMINIVIRUS: Apply as a tank mix with ground equipment for uniform coverage (10 to 120 gals/A). Make application when scouting first indicates adult whiteflies are on young plants. NOTE: This may result in treatment immediately following transplanting.  MID TO LATE SEASON WHITEFLY CONTROL PROGRAM FOR PREVENTION OF IRREGULAR FRUIT RIPENING: Apply as a tank mix with ground equipment for uniform coverage (20 to 120 gals/A by ground). Make application when scouting indicates whiteflies are present.  Avalaire Pyriproxyfen 35 WSP may also be mixed or alternated with commonly used insecticides to comply with local IPM programs.  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

	pr Us dir	mitations and directions for use on all roduct labels involved in tank mixing. sers must follow the most restrictive rections for use and precautionary atements of each product in the tank
	mi	ixture.

#### **Restrictions:**

- Do not apply within 14 days of harvest.
- Do not make more than 2 Avalaire Pyriproxyfen 35 WSP applications per growing season.
- Do not exceed 5 oz Avalaire Pyriproxyfen 35 WSP per acre per season.
- Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP treatment.
- Regardless of formulation do not apply more than 0.109 lb pyriproxyfen per acre per season.
- Do not plan any crop other than those with registered pyriproxyfen uses in treated areas sooner than 30 days after the last application.

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than two applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Avalaire, LLC also does not recommend using rates below 2.5 oz/A for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

## GRAPE

[Not for Use in New York]

PESTS	PRODUCT RATE	APPLICATION INSTRUCTIONS
PESIS	PER ACRE	APPLICATION INSTRUCTIONS

Glassy-Winged Sharpshooter Grape Berry Moth Lecanium Scales	5 oz	Apply with ground equipment as a full coverage spray (50 to 200 gals/A). Thorough coverage is critical for adequate control. It is essential to use adequate water volume to ensure thorough coverage.
		Lecanium Scales: Apply at either dormant, delayed dormant or an in-season cover spray. At dormant, delayed dormant you may use a spray oil at the manufacturer's recommended oil rate. Do not use oil in an in-season spray. In a cover spray make applications when scale crawlers first emerge.
		Follow local recommendations regarding in-season use and rates of oil in your area.

#### **Restrictions:**

- Do not apply within 21 days of harvest.
- Do not make more than 2 Avalaire Pyriproxyfen 35 WSP applications per growing season.
- Do not exceed 10 oz **Avalaire Pyriproxyfen 35 WSP** per acre per season.
- Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP treatment.
- Regardless of formulation, do not apply more than 0.218 pyriproxyfen per acre per season.

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than two applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

#### **HERB**

#### (Subgroup 19A)

[Not for Use in] [California] [New York]

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

		PRODUCT	
CROPS	PESTS	RATE	APPLICATION INSTRUCTIONS
		PER ACRE	

Angelica Balm Basil Borage Burnet Chamomile Catnip	Whiteflies, including: BandedwingedWhitefly Greenhouse Whitefly Silverleaf Whitefly Sweetpotato Whitefly	2.5 to 3 oz	Apply with ground equipment in adequate water for uniform coverage. A minimum of 20 gallons per acre for ground applications.  HIGHER WATER VOLUMES MAY PROVIDE IMPROVED INSECT CONTROL.
Chervil (dried) Chive Chive, Chinese Clary Coriander (leaf) Costmary Cilantro (leaf) Curry (leaf)			Begin application when whiteflies reach threshold levels. Under severe pressure, use the higher specified rates. Treat only whole fields.
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 Wormwood	growing season.  Do not exceed 6 oz  Do not apply earlie treatment.  Regardless of form season.  Do not plant any cro	e than 2 Avalaire of Avalaire Pyripi er than 14 days af ulation do not exc op other than thos	Pyriproxyfen 35 WSP applications per roxyfen 35 WSP per acre per season. Iter last Avalaire Pyriproxyfen 35 WSP seed 0.134 lb pyriproxyfen per acre per e with registered Avalaire Pyriproxyfen than 30 days after the last application.

MANAGING WHITEFLY RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than two applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Avalaire, LLC also does not recommend using rates below 2.5 oz/A for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

#### **LEAFY VEGETABLES**

**Except Brassica Vegetables (Crop Group 4)** 

#### [Not for Use in] [California] [New York]

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

**Avalaire Pyriproxyfen 35 WSP** does exhibit translaminar movement which means that **Avalaire Pyriproxyfen 35 WSP** applied to the upper surfaces of the leaves will move to the lower surface of the leaf. This translaminar movement is very important to chemical control of whiteflies since one of the major obstacles is getting the product to the underside of the leaves where whiteflies are present.

CROPS	PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS
Amaranth (Chinese Spinach) Arugula (Roquette)	Bandedwinged Whitefly Greenhouse Whitefly	2.5 to 3 oz	Apply with ground equipment in adequate water for uniform coverage (10 to 50 gals/A).
Cardoon Celery Celery, Chinese Celtuce	Silverleaf Whitefly Sweetpotato Whitefly		HIGHER WATER VOLUMES MAY PROVIDE IMPROVED INSECT CONTROL.
Chervil Chrysanthemum, Edible- leaved Chrysanthemum, Garland			Begin applications when whiteflies reach threshold levels per University/Extension recommendations.
Corn Salad Cress, Garden Cress, Upland			Under severe pressure, use the higher specified rates.
Dandelion Dock (Sorrel)			Only whole fields should be treated but is not required.
Endive (Escarole) Fennel, Florence Lettuce, Head and Leaf Orach Parsley Purslane, Garden Purslane, Winter Radicchio (Red Chicory) Rhubarb Spinach New Zealand Spinach Vine Spinach	<ul> <li>Do not make m growing season</li> <li>Do not exceed 6</li> <li>Do not apply eatreatment.</li> <li>Regardless of foacre per season</li> <li>Do not plant and</li> </ul>	5 oz <b>Avalaire Pyrip</b> arlier than 14 days ormulation, do not y crop other than t	rvest. re Pyriproxyfen 35 WSP applications per roxyfen 35 WSP per acre per season. after last Avalaire Pyriproxyfen 35 WSP apply more than 0.134 pyriproxyfen per those with registered pyriproxyfen uses in after the last application.

MANAGING WHITEFLY RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than two applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action

and/or with other chemical classes of insecticides. Avalaire, LLC also does not recommend using rates below 2.5 oz/A for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

#### **LEAVES OF ROOT & TUBER VEGETABLES**

#### **Human Food or Animal Feed (Crop Group 2)**

[Not for Use in] [California] [New York]

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

CROPS	PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS
Beet, Garden Burdock, Edible Carrot	Bandedwinged Whitefly Greenhouse Whitefly	2.5 to 3 oz	Apply with ground equipment in adequate water for uniform coverage (10 to 50 gals/A).
Cassava, Bitter Cassava, Sweet Celeriac Chervil, Turnip-Rooted	Silverleaf Whitefly Sweetpotato Whitefly		HIGHER WATER VOLUMES MAY PROVIDE IMPROVED INSECT CONTROL.
Chicory Dasheen (Taro) Parsnip Radish Radish, Oriental (daikon)			Begin application when whiteflies reach threshold levels per University/Extension recommendations (e.g., 3 to 5 adults per leaf and/or equivalent levels of immatures).
Rutabaga Salsify, Black Sugar Beet			Under severe pressure, use the higher specified rates.
Sweet Potato Tanier			Only whole fields should be treated but is not required.
Turnip Yam, True	<ul> <li>Do not make m growing season</li> <li>Do not exceed!</li> <li>Do not apply extreatment.</li> </ul>	i. 5 oz <b>Avalaire Pyrip</b> arlier than 14 days ormulation, do not	vest.  re Pyriproxyfen 35 WSP applications per proxyfen 35 WSP per acre per season. s after last Avalaire Pyriproxyfen 35 WSP t apply more than 0.109 pyriproxyfen per

- Do not plant any crop other than those with registered pyriproxyfen uses in treated areas sooner than 30 days after the last application.
  - Do not allow livestock to graze on treated areas.

MANAGING WHITEFLY RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than two applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Avalaire, LLC also does not recommend using rates below 2.5 oz/A for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

#### **LEGUME VEGETABLES**

#### Succulent or Dried (Crop Group 6)

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

		PRODUCT	
CROPS	PESTS	RATE	APPLICATION INSTRUCTIONS
		PER ACRE	
Beans (Lupinus):	Bandedwinged	2.5 to 3 oz	EARLY SEASON WHITEFLY PROGRAM:
Grain Lupin	Whitefly		Apply with ground equipment in
Sweet Lupin	Greenhouse Whitefly		adequate water for uniform coverage
White Lupin	Silverleaf Whitefly		(10 to 50 gals/A). Thorough coverage
White Sweet Lupin	Sweetpotato Whitefly		is critical for adequate control. It is
Beans (Phaseolus):			essential to use adequate water
Field Bean			volume to ensure thorough coverage.
Kidney Bean			Begin application when whiteflies
Lima Bean			
Navy Bean			reach threshold levels per University/Extension recommendations
Pinto Bean			(e.g., 3 to 5 adults per leaf and/or
Runner Bean			
Snap Bean			equivalent levels of immatures).
Tepary Bean			Under severe pressure, use the higher
Wax Bean			specified rates.
Bean (Vigna):			Only whole fields should be treated but
Adzuki Bean			Only whole fields should be treated but is not required.
Asparagus Bean			is not required.
Blackeyed Pea	Restrictions:	·	

Crowder Pea Moth Bean Mung Bean Rice Bean Southern Pea Urd Bean Broad Bean (fava) Chickpea (garbanzo) Guar Jackbean Lablab Bean Lentil Pea (Pisum): Dwarf Pea Edible-podded Pea English Pea Field Pea Garden Pea Garden Pea Snowpea Sugar Snap Pea Pigeon Pea		
<ul> <li>Cowpea</li> <li>Crowder Pea</li> <li>Moth Bean</li> <li>Mung Bean</li> <li>Rice Bean</li> <li>Southern Pea</li> <li>Urd Bean</li> <li>Yardlong Bean</li> <li>Broad Bean (fava)</li> <li>Chickpea (garbanzo)</li> <li>Guar</li> <li>Jackbean</li> <li>Lablab Bean</li> <li>Lentil</li> <li>Pea (Pisum):</li> <li>Dwarf Pea</li> <li>Edible-podded Pea</li> <li>English Pea</li> <li>Field Pea</li> <li>Garden Pea</li> <li>Green Pea</li> <li>Snowpea</li> <li>Sugar Snap Pea</li> <li>Pigeon Pea</li> </ul> <ul> <li>Do not make more than 2 Avalaire Pyriproxyfen 35 WSP applications per growing season.</li> <li>Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP per acre per season.</li> <li>Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP applications per growing season.</li> <li>Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP applications per growing season.</li> <li>Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP applications per growing season.</li> <li>Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP applications per growing season.</li> <li>Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP applications per growing season.</li> <li>Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP applications</li> <li>Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP applications</li> <li>Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP applications</li> <li>Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP applications</li> <li>Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP application</li> <li>Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 25 WSF application</li> <li>Do not apply earlier than 10 days after last Avalaire Pyriproxyfen 25 WSF application</li> <li>Do not apply earlier than 10 days after last Avalaire Pyriproxyfen 25 WSF application<td></td><td></td></li></ul>		
Crowder Pea Moth Bean Mung Bean Rice Bean Southern Pea Urd Bean Broad Bean (fava) Chickpea (garbanzo) Guar Jackbean Lablab Bean Lentil Pea (Pisum): Dwarf Pea Edible-podded Pea English Pea Field Pea Garden Pea Snowpea Sugar Snap Pea Pigeon Pea	Chinese Longbean	<ul> <li>Do not apply within 7 days of harvest.</li> </ul>
Moth Bean Mung Bean Rice Bean Southern Pea Urd Bean Broad Bean (fava) Chickpea (garbanzo) Guar Jackbean Lablab Bean Lentil Pea (Pisum): Dwarf Pea Edible-podded Pea English Pea Field Pea Garden Pea Garden Pea Snowpea Sugar Snap Pea Pigeon Pea	·	<ul> <li>Do not make more than 2 Avalaire Pyriproxyfen 35 WSP applications per</li> </ul>
Mung Bean Rice Bean Southern Pea Urd Bean Yardlong Bean Broad Bean (fava) Chickpea (garbanzo) Guar Jackbean Lablab Bean Lentil Pea (Pisum): Dwarf Pea Edible-podded Pea English Pea Field Pea Garden Pea Green Pea Snowpea Sugar Snap Pea Pigeon Pea	Crowder Pea	growing season.
Rice Bean Southern Pea Urd Bean Yardlong Bean Broad Bean (fava) Chickpea (garbanzo) Guar Jackbean Lablab Bean Lentil Pea (Pisum): Dwarf Pea Edible-podded Pea English Pea Field Pea Garden Pea Green Pea Snowpea Sugar Snap Pea Pigeon Pea	Moth Bean	<ul> <li>Do not exceed 6 oz Avalaire Pyriproxyfen 35 WSP per acre per season.</li> </ul>
Rice Bean Southern Pea Urd Bean Yardlong Bean Broad Bean (fava) Chickpea (garbanzo) Guar Jackbean Lablab Bean Lentil Pea (Pisum): Dwarf Pea Edible-podded Pea English Pea Field Pea Garden Pea Green Pea Snowpea Sugar Snap Pea Pigeon Pea	Mung Bean	<ul> <li>Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP</li> </ul>
Urd Bean Yardlong Bean Broad Bean (fava) Chickpea (garbanzo) Guar Jackbean Lablab Bean Lentil Pea (Pisum): Dwarf Pea Edible-podded Pea English Pea Field Pea Garden Pea Green Pea Snowpea Sugar Snap Pea Pigeon Pea	Rice Bean	treatment.
<ul> <li>Urd Bean Yardlong Bean Broad Bean (fava)</li> <li>Chickpea (garbanzo) Guar Jackbean Lablab Bean Lentil Pea (Pisum): Dwarf Pea Edible-podded Pea English Pea Field Pea Garden Pea Green Pea Snowpea Sugar Snap Pea Pigeon Pea</li> <li>Do not plant any crop other than those with registered pyriproxyfen uses in treated areas sooner than 30 days after the last application.</li> <li>Do not allow livestock to graze on treated areas.</li> <li>Do not use on legume vegetables varieties grown for livestock feed.</li> </ul>	Southern Pea	<ul> <li>Regardless of formulation, do not apply more than 0.134 pyriproxyfen per</li> </ul>
Broad Bean (fava) Chickpea (garbanzo) Guar Jackbean Lablab Bean Lentil Pea (Pisum): Dwarf Pea Edible-podded Pea English Pea Field Pea Garden Pea Green Pea Snowpea Sugar Snap Pea Pigeon Pea	Urd Bean	
Broad Bean (fava) Chickpea (garbanzo) Guar Jackbean Lablab Bean Lentil Pea (Pisum): Dwarf Pea Edible-podded Pea English Pea Field Pea Garden Pea Green Pea Snowpea Sugar Snap Pea Pigeon Pea	_	<ul> <li>Do not plant any crop other than those with registered pyriproxyfen uses in</li> </ul>
Chickpea (garbanzo) Guar Jackbean Lablab Bean Lentil Pea (Pisum): Dwarf Pea Edible-podded Pea English Pea Field Pea Garden Pea Green Pea Snowpea Sugar Snap Pea Pigeon Pea	, ,	, , , , , , , , , , , , , , , , , , , ,
• Do not use on legume vegetables varieties grown for livestock feed.  Lablab Bean Lentil Pea (Pisum): Dwarf Pea Edible-podded Pea English Pea Field Pea Garden Pea Green Pea Snowpea Sugar Snap Pea Pigeon Pea	Chickpea (garbanzo)	
Jackbean Lablab Bean Lentil Pea (Pisum): Dwarf Pea Edible-podded Pea English Pea Field Pea Garden Pea Green Pea Snowpea Sugar Snap Pea Pigeon Pea		_
Lentil Pea (Pisum): Dwarf Pea Edible-podded Pea English Pea Field Pea Garden Pea Garden Pea Green Pea Snowpea Sugar Snap Pea Pigeon Pea	Jackbean	
Pea (Pisum): Dwarf Pea Edible-podded Pea English Pea Field Pea Garden Pea Green Pea Snowpea Sugar Snap Pea Pigeon Pea	Lablab Bean	
Dwarf Pea Edible-podded Pea English Pea Field Pea Garden Pea Green Pea Snowpea Sugar Snap Pea Pigeon Pea	Lentil	
Edible-podded Pea English Pea Field Pea Garden Pea Green Pea Snowpea Sugar Snap Pea Pigeon Pea	\ '	
English Pea Field Pea Garden Pea Green Pea Snowpea Sugar Snap Pea Pigeon Pea	Dwarf Pea	
Field Pea Garden Pea Green Pea Snowpea Sugar Snap Pea Pigeon Pea	•	
Garden Pea Green Pea Snowpea Sugar Snap Pea Pigeon Pea	English Pea	
Green Pea Snowpea Sugar Snap Pea Pigeon Pea	Field Pea	
Snowpea Sugar Snap Pea Pigeon Pea	Garden Pea	
Sugar Snap Pea Pigeon Pea	Green Pea	
Pigeon Pea	1	
Soyhean		
Joysean	Soybean	
Sword Bean	Sword Bean	

MANAGING WHITEFLY RESISTANCE: Repeated use of the same class of insecticides or insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than two applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Avalaire, LLC also does not recommend using rates below 2.5 oz per acre for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state, and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

#### **OLIVE**

PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS
Black Scale	4 to 5 oz	Apply with ground equipment in 100 to 400 gals/A. Apply
San Jose Scale		in sufficient water volume for tree size. Thorough
		coverage is critical for adequate control. It is essential to

use adequate water volume to ensure thorough coverage.
Apply at either dormant, delayed dormant or an inseason cover spray. At dormant, delayed dormant use a spray oil at the manufacturer's recommended oil rate. In a cover spray make applications when scale crawlers first emerge. Follow local recommendations regarding inseason use and rates of oil in your area.
Under heavy scale pressure, use the higher rate of Avalaire Pyriproxyfen 35 WSP.

#### **Restrictions:**

- Do not apply within 7 days of harvest.
- Do not make more than 2 Avalaire Pyriproxyfen 35 WSP applications per growing season.
- Do not exceed 10 oz Avalaire Pyriproxyfen 35 WSP per acre per season.
- Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP treatment.
- Regardless of formulation, do not apply more than 0.218 pyriproxyfen per acre per season.

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than two applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state, and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

#### **PASTURE GRASS AND RANGELAND**

[Not for Use in] [California] [New York]

PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS	
Crickets Grasshoppers Locusts	2.5 to 3 oz	Apply with air or ground equipment in adequate water for uniform coverage:  By air 3 to 10 gals/A By ground 10 to 50 gals/A  HIGHER WATER VOLUMES PROVIDE IMPROVED INSECT CONTROL.  Begin application when pests reach threshold levels per University/Extension recommendations.  Under severe pressure, use the higher specified rates.	

#### **Restrictions:**

- Do not make more than 2 **Avalaire Pyriproxyfen 35 WSP** applications per growing season.
- Do not exceed 6 oz **Avalaire Pyriproxyfen 35 WSP** per acre per season.
- Regardless of formulation, do not apply more than 0.134 pyriproxyfen per acre per season.
- Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP treatment.
- Do not plant any crop other than those with registered pyriproxyfen uses in treated areas sooner than 30 days after the last application.

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than two applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state, and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

#### **PAWPAW**

[Not for Use in] [California] [New York]

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS
Scales Whiteflies	4 to 5 oz	Apply 100 to 400 gals/A with ground equipment. Coverage is essential for good control. Apply in sufficient water volume for tree size. Use of higher water volume will assure better coverage.
		<b>Scales:</b> Apply at either dormant, delayed dormant or an in-season cover spray. At dormant or delayed dormant use a spray oil at the manufacturer's recommended oil rate. Do not use oil in an in-season spray.
		In a cover spray make applications when scale crawlers first emerge.
		Under heavy scale pressure, use the higher rate of <b>Avalaire Pyriproxyfen 35 WSP</b> .
In-season sprays of Avalaire Pyriproxyfen 35 WSP may not protect fruit from blemishes by scale.		

#### **Restrictions:**

- Do not apply within 14 days of harvest.
- Do not make more than 3 Avalaire Pyriproxyfen 35 WSP applications per growing season.
- Do not exceed 15 oz of Avalaire Pyriproxyfen 35 WSP per acre per season.
- Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP treatment.
- Regardless of formulation, do not apply more than 0.327 lb pyriproxyfen per acre per season.

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than three applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Avalaire, LLC also does not recommend using rates below 4 oz per acre for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state, and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

#### **PINEAPPLE**

[Not for Use in] [California] [New York]

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS
Black Scale Brown Soft Scale California Red Scale Florida Red Scale Citrus Snow Scale	5 oz	Apply with ground equipment in 20 to 50 gals/A. Apply in sufficient water volume for plant size. Thorough coverage is critical for control. It is essential to use adequate water volume to ensure thorough coverage.  Apply any time prior to fruit becoming infested when scale is in the crawler stage. Application at the 2 <sup>nd</sup> or 3 <sup>rd</sup> generation of scale may result in excessive dead scale remaining on the fruit at harvest. Thorough coverage is essential for good control.
		<b>Avalaire Pyriproxyfen 35 WSP</b> may be applied with superior spray oils at ½ to 1%. Follow the manufacturer's directions and recommendations on timing and rates.

**Avalaire Pyriproxyfen 35 WSP** may be mixed and/or alternated with commonly used insecticides to comply with local Integrated Pest Management (IPM) and Insect Resistance Management (IRM) programs.

#### **Restrictions:**

- Do not apply within 1 day of harvest.
- Do not make more than 2 Avalaire Pyriproxyfen 35 WSP applications per calendar year.
- Do not exceed 5 oz of Avalaire Pyriproxyfen 35 WSP per acre per season.
- Do not apply earlier than 21 days after last **Avalaire Pyriproxyfen 35 WSP** treatment.
- Regardless of formulation, do not apply more than 0.134 pyriproxyfen per acre per season.

#### **POME FRUIT**

#### (Crop Group 11-10)

		PRODUCT	
CROPS	PESTS	RATES	APPLICATION INSTRUCTIONS
		PER ACRE	
Apple	Codling Moth	4 to 5 oz	Apply by ground with airblast
Azarole	_		equipment in a minimum of 50 gals/A.
Crabapple	Suppression of:		Thorough coverage is critical for
Loquat	Obliquebanded		control. It is essential to use adequate
Mayhaw	Leafroller		water volume to ensure thorough
Medlar	Pandemis Leafroller		coverage.
Quince			1st Generation Codling Moth: Apply at
Quince, Chinese			Biofix plus 100 degree days (this is
Quince, Japanese			usually close to petal fall). Make a
Tejocote			second application 14 to 21 days later
Cultivars, varieties,			or timed to coincide with peak moth
and/or hybrids of these			flights. For subsequent applications, if
			needed, apply other insecticides
			registered for Codling Moth control.
			The addition of oil has been shown to
			increase Codling Moth activity of
			Avalaire Pyriproxyfen 35 WSP. Follow
			local recommendations regarding in-
			season use and rates of oil in your area.
			scuson use and races of on my your area.
			Obliquebanded and Pandemis
			<b>Leafroller:</b> Apply to the overwintering
			larvae at pink to petal fall tree growth
			stage. Avalaire Pyriproxyfen 35 WSP
			does not directly control the larvae but
			inhibits normal pupation and adult
			emergence.
	Florida Red Scale	4 to 5 oz	Apply by ground with airblast
	Lecanium Scales		equipment in a minimum of 50 gals/A.
	San Jose Scale		Thorough coverage is critical for
			control. It is essential to use adequate

CROPS	PESTS	PRODUCT RATES PER ACRE	APPLICATION INSTRUCTIONS
			water volume to ensure thorough coverage.
			Apply at delayed dormant through pink. For delayed dormant use a superior spray oil at the manufacturer's recommended rate of oil.
			Under heavy scale pressure, use the higher rate of <b>Avalaire Pyriproxyfen 35 WSP</b> .
			Scales: For control in-season, make application in cover sprays when scale crawlers first emerge. The use of oil at the crawler emergence stage has been shown to improve control. Follow local recommendations regarding in-season use and rates of oil in your area.
Apple Azarole Crabapple Loquat Medlar Mayhaw Quince Quince, Chinese Quince, Japanese Tejocote Cultivars, varieties, and/or hybrids of these	Apple Aphid Rosy Apple Aphid Spirea Aphid Spotted Tentiform Leafminer Western Tentiform Leafminer	3 to 5 oz	Apply by ground with airblast equipment in a minimum of 50 gals/A. Thorough coverage is critical for control. It is essential to use adequate water volume to ensure thorough coverage.
			Leafminers: Apply at peak moth flight for control of 1 <sup>st</sup> or 2 <sup>nd</sup> generation.  This usually occurs at pre-pink to pink apple stage for 1 <sup>st</sup> generation and 2 <sup>nd</sup> cover for 2 <sup>nd</sup> generation.
			Rosy Apple Aphid: Apply at ½" green apple growth stage.
			Green Apple & Spirea Aphid: Apply when aphids first appear, but before aphids are colonized.
			TIMING IS CRITICAL FOR ACCEPTIABLE APHID CONTROL.
Pear Pear, Asian	Pear Psylla	4 to 5 oz	Apply by ground with airblast equipment in 75 to 400 gals/A with a superior spray oil at manufacturer's recommended rates for the stage of growth. It is essential to use adequate water volume to ensure thorough coverage.
			Apply a single application during the delayed dormant to pink stage of growth at 5 oz/A or make two

CROPS	PESTS	PRODUCT RATES PER ACRE	APPLICATION INSTRUCTIONS
			applications from delayed dormant through petal fall stage of growth at 4 to 5 oz/A. Make application just before sustained egg lay is anticipated.
			DO NOT SKIP ROWS DURING APPLICATION.
			For in-season control of pear psylla, use an insecticide recommended for this use.
	Lecanium Scales San Jose Scale	4 to 5 oz	Apply by ground with airblast equipment in 100 to 400 gals/A at delayed dormant with a superior spray oil at the manufacturer's recommended rates. Under heavy scale pressure, use the higher rate.
			Apply in sufficient water volume for tree size. Thorough coverage is critical for control. It is essential to use adequate water volume to ensure thorough coverage.
			For control of scale in-season make application in cover sprays when scale crawlers first emerge. The use of oil at the crawler emergence stage has been shown to improve performance. Follow local recommendations regarding in-season use and rates of oil in your area.
CROPS	PESTS	PRODUCT RATES PER ACRE	APPLICATION INSTRUCTIONS
Pear Pear, Asian	Codling Moth  Suppression of: Obliquebanded Leafroller Pandemis Leafroller	4 to 5 oz	Apply by ground with airblast equipment in 100 to 400 gals/A.  1st Generation Codling Moth: Apply at Biofix plus 100 degree days. Make a second application 14 to 21 days later or timed to coincide with peak moth flights. For subsequent applications, if needed, apply other insecticides registered for Codling Moth control. The addition of oil has been shown to increase Codling Moth activity of Avalaire Pyriproxyfen 35 WSP. Follow local recommendations regarding inseason use and rates of oil in your area.

CROPS	PESTS	PRODUCT RATES PER ACRE	APPLICATION INSTRUCTIONS
			For additional generations apply other insecticides registered for Codling Moth control.

**Avalaire Pyriproxyfen 35 WSP** may be mixed and/or alternated with commonly used insecticides to comply with local Integrated Pest Management (IPM) and Insect Resistance Management (IRM) programs. **Restrictions:** 

- Do not apply within 45 days of harvest.
- Do not make more than 2 Avalaire Pyriproxyfen 35 WSP applications per growing season.
- Do not exceed 10 oz of **Avalaire Pyriproxyfen 35 WSP** per acre per season.
- Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP treatment.
- Regardless of formulation, do not apply more than 0.218 lb pyriproxyfen per acre per season.

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than two applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state, and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

#### **POMEGRANATE**

[Not for Use in] [California] [New York]

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

**Avalaire Pyriproxyfen 35 WSP** does exhibit translaminar movement which means that **Avalaire Pyriproxyfen 35 WSP** applied to the upper surfaces of the leaves will move to the lower surface of the leaf. This translaminar movement is very important to chemical control of whiteflies since one of the major obstacles is getting the product to the underside of the leaves where whiteflies are present.

DECTC	PRODUCT RATE	APPLICATION INSTRUCTIONS
PESIS	PER ACRE	APPLICATION INSTRUCTIONS

Bandedwinged Whitefly Greenhouse Whitefly	4 to 5 oz	Apply with air or ground equipment in adequate water for uniform coverage:
Silverleaf Whitefly Sweetpotato Whitefly		By air: 3 to 10 gals/A By ground: 10 to 50 gals/A
		HIGHER WATER VOLUMES MAY PROVIDE IMPROVED INSECT CONTROL.
		Begin applications when whiteflies reach threshold levels per University/Extension recommendations (e.g., 3 to 5 adults per leaf and/or equivalent levels of immatures).
		Only whole fields should be treated but is not required.

#### **Restrictions:**

- Do not apply within 14 days of harvest.
- Do not make more than 3 Avalaire Pyriproxyfen 35 WSP applications per growing season.
- Do not exceed 15 oz of Avalaire Pyriproxyfen 35 WSP per acre per season.
- Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP treatment.
- Regardless of formulation, do not apply more than 0.327 pyriproxyfen per acre per season.
- Do not plant any crop other than those with registered pyriproxyfen uses in treated areas sooner than 30 days after the last application.

MANAGING WHITEFLY RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than three applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Avalaire, LLC also does not recommend using rates below 4 oz per acre for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state, and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

# **ROOT AND TUBER VEGETABLES**

(Crop Group 1)

[Not for Use in] [California] [New York]

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

**Avalaire Pyriproxyfen 35 WSP** does exhibit translaminar movement which means that **Avalaire Pyriproxyfen 35 WSP** applied to the upper surfaces of the leaves will move to the lower surface of the leaf. This translaminar movement is very important to chemical control of whiteflies since one of the major obstacles is getting the product to the underside of the leaves where whiteflies are present.

		PRODUCT	
CROPS	PESTS	RATE	APPLICATION INSTRUCTIONS
		PER ACRE	

Arracacha	Bandedwinged Whitefly	2.5 oz	Apply with ground equipment in
Arrowroot	Greenhouse Whitefly	2.5 02	adequate water for uniform coverage
Artichoke, Chinese	Silverleaf Whitefly		(20 to 50 gals/A).
Artichoke, Jerusalem	Sweetpotato Whitefly		(20 to 30 gais/A).
Beet, Garden	Sweetpotato Willeny		HIGHER WATER VOLUMES MAY
Beet, Sugar			PROVIDE IMPROVED INSECT
Burdock, Edible			CONTROL.
Canna, Edible			Begin applications when whiteflies
Carrot			reach threshold levels per
Cassava, (bitter and			University/Extension
sweet)			recommendations (e.g., 3 to 5 adults
Celeriac			per leaf and/or equivalent levels of
Chaoyote (root)			immatures).
Chervil, Turnip-rooted			,
Chicory			Under severe pressure, use the higher
Chufa			specified rates.
Dasheen (taro)			Only whole fields should be treated
Ginger			but is not required.
Ginseng	Restrictions:		
Horseradish	<ul> <li>Do not apply with</li> </ul>	in 7 days of harv	vest.
Leren	Do not make more	re than 2 <b>Avalai</b>	re Pyriproxyfen 35 WSP applications per
Parsley, Turnip-rooted	growing season.		
Parsnip	Do not exceed 5 co	z of <b>Avalaire Py</b>	riproxyfen 35 WSP per acre per season.
Potato	<ul> <li>Do not apply earl</li> </ul>	ier than 14 days	after last Avalaire Pyriproxyfen 35 WSP
Radish	treatment.	•	
Radish, Oriental Rutabaga	<ul> <li>Regardless of forr</li> </ul>	mulation, do not	apply more than 0.109 pyriproxyfen per
Salsify	acre per season.		
Salsify, Black	· ·	crop other than t	hose with registered pyriproxyfen uses in
Salsify, Spanish		•	s after the last application.
Skirret	<ul> <li>Do not allow lives</li> </ul>	tock to graze on	treated areas.
Sweet Potato		-	
Tanier			
Turmeric			
Turnip			
Yam, Bean			
Yam, True			

MANAGING WHITEFLY RESISTANCE: Repeated use of the same class of insecticides or insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than two applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Avalaire, LLC also does not recommend using rates below 2.5 oz per acre for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state, and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

# SMALL FRUIT VINE CLIMBING CROPS (EXCEPT GRAPE)

(Subgroup 13-07E)

[Not for Use in] [New York]

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

CROPS	PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS
Berry, Schisandra* Gooseberry* Grape, Amur River* Kiwifruit, Fuzzy Kiwifruit, Hardy Maypop* Cultivars, varieties and/or	Scales Whiteflies	5 oz	Apply with ground or air equipment as a full coverage spray (minimum of 5 gals/A by air or 50 gals/A by ground). Thorough coverage is critical for adequate control. It is essential to use adequate water volume to ensure thorough coverage.
*Not for use in CA			Apply at either dormant, delayed dormant or an in-season cover spray. At dormant or delayed dormant use a spray oil at the manufacturer's recommended oil rate. In a cover spray make applications when scale crawlers first emerge. Follow local recommendations regarding in-season use and rates of oil in your area.
	insecticides to comply Resistance Management  Restrictions:  Do not apply with Do not make migrowing season	with local Integra (IRM) programs. (Ithin 30 days of ha nore than 2 <b>Avalai</b>	rvest.  re Pyriproxyfen 35 WSP applications per
	<ul> <li>Do not apply eatreatment.</li> </ul>	arlier than 14 days	t apply more than 0.218 lb pyriproxyfen

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than two applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state, and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

#### STONE FRUIT

(Crop Group 12)

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

CROPS	PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS
Apricot Cherry Chickasaw Plum Damson Plum Fresh Prune Japanese Plum Nectarine Peach Plum Plumcot Prune	Lecanium Scales San Jose Scale  Suppression of: Peach Twig Borer Oriental Fruit Moth	4 to 5 oz	Apply in 100 to 400 gals/A with ground equipment. Coverage is essential for good control. Apply in sufficient water volume for tree size. Use of higher water volume will assure better coverage.  Scales: Apply at dormant, delayed dormant or as an in-season cover spray: At dormant, delayed dormant, use a spray oil at the manufacturer's recommended oil rate.  Under heavy scale pressure, use the higher rate of Avalaire Pyriproxyfen 35 WSP.  Peach Twig Borer: Avalaire Pyriproxyfen 35 WSP.  Peach Twig Borer: Avalaire Pyriproxyfen 35 WSP has provided good suppression of Peach Twig Borer when applied delayed dormant through bloom sprays. Use a spray oil at the manufacturer's recommended rate for the stage of crop growth.

In-season sprays of Avalaire Pyriproxyfen 35 WSP may not protect fruit from blemishes by scale.

**Avalaire Pyriproxyfen 35 WSP** may be mixed and/or alternated with commonly used insecticides to comply with local Integrated Pest Management (IPM) and Insect Resistance Management (IRM) programs.

### **Restrictions:**

- Do not apply within 14 days of harvest.
- Do not make more than 3 Avalaire Pyriproxyfen 35 WSP applications per growing season.
- Do not exceed 15 oz of Avalaire Pyriproxyfen 35 WSP per acre per season.
- Do not apply earlier than 14 days after last **Avalaire Pyriproxyfen 35 WSP** treatment.

Regardless of formulation, do not apply more than 0.327 lb pyriproxyfen per acre per season.

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than three applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action

and/or with other chemical classes of insecticides. Follow local, state, and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

#### **STRAWBERRY**

[Not for Use in New York]

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

**Avalaire Pyriproxyfen 35 WSP** does exhibit translaminar movement which means that **Avalaire Pyriproxyfen 35 WSP** applied to the upper surfaces of the leaves will move to the lower surface of the leaf. This translaminar movement is very important to chemical control of whiteflies since one of the major obstacles is getting the product to the underside of the leaves where whiteflies are present.

PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS
Bandedwinged Whitefly Greenhouse Whitefly Silverleaf Whitefly Sweetpotato Whitefly	3 oz	Apply with ground equipment as a full coverage spray (100 to 400 gals/A). Thorough coverage is critical for adequate control. It is essential to use adequate water volume to ensure thorough coverage.  Begin applications when whiteflies reach threshold levels per University/Extension recommendations (e.g., 3 to 5 adults per leaf and/or equivalent levels of immatures).  Under severe pressure, use the higher specified rates.  Only whole fields should be treated but is not required.

# Restrictions:

- Do not apply within 2 days of harvest.
- Do not make more than 2 Avalaire Pyriproxyfen 35 WSP applications per growing season.
- Do not exceed 6 oz **Avalaire Pyriproxyfen 35 WSP** per acre per season.
- Do not apply earlier than 30 days after last **Avalaire Pyriproxyfen 35 WSP** treatment.
- Do not plant any crop other than those with registered pyriproxyfen uses in treated areas sooner than 30 days after the last application.
- Regardless of formulation, do not apply more than 0.134 pyriproxyfen per acre per season.

MANAGING WHITEFLY RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than two applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Avalaire, LLC also does not recommend using rates below 3 oz per acre for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state, and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

#### TREE NUTS

# (Crop Group 14)

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

CROPS	PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS		
Almond	Black Scale San Jose Scale  Suppression of: Peach Twig Borer	4 to 5 oz	Apply with ground equipment in 100 to 400 gals/A. Coverage is essential for good control. Apply in sufficient water volume for tree size. Use of higher water volume will assure better coverage.  Apply at either dormant, delayed dormant or an in-season cover spray. At dormant, delayed dormant use a spray oil at the manufacturer's recommended oil rate. In a cover spray make applications when scale crawlers first emerge. Follow local recommendations regarding in-season use and rates of oil in your area.  Avalaire Pyriproxyfen 35 WSP has provided good suppression of Peach Twig Borer when applied delayed dormant through bloom sprays.		
	Restrictions:				
	Do not make if growing season		aire Pyriproxyten 35 wap application per		
		• Do not exceed 5 oz of <b>Avalaire Pyriproxyfen 35 WSP</b> per acre per season.			
	<ul> <li>Regardless of formulation, do not apply more than 0.109 lb pyriprox per acre per season.</li> </ul>				

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than one application per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state, and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

TREE NUTS (Crop Group 14) - continued

CROPS	PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS
Beechnut Brazil Butternut Cashew Chestnut Chinquapin	Codling Moth Dusky Veined Aphid Walnut Aphid	5 oz	Apply with ground equipment in 100 to 400 gals/A. Apply in sufficient water volume for tree size. Thorough coverage is critical for control. It is essential to use adequate water volume to ensure thorough coverage.
Filbert (Hazelnut) Hickory Macadamia Pecan Pistachio Walnut			1st Generation Codling Moth: Apply at Biofix plus 100-degree days. Make a second application 14 to 21 days later or timed to coincide with peak moth flights. For subsequent applications, if needed, apply other insecticides registered for Codling Moth control. The addition of oil has been shown to increase Codling Moth activity of Avalaire Pyriproxyfen 35 WSP. Follow local recommendations regarding inseason use and rates of oil in your area.
	Black Scale Brown Soft Scale Italian Scale Lecanium Scales San Jose Scale Walnut Scale  Suppression of: Peach Twig Borer	4 to 5 oz	Apply with ground equipment in 100 to 400 gals/A at either dormant, delayed dormant or an in-season cover spray. The addition of a superior spray oil at dormant or delayed dormant may improve scale control. However, do not use a spray oil in oil sensitive crops such as Walnut. Follow manufacturer's recommendations regarding use and rates of oil for your area.  In a cover spray make applications when scale crawlers first emerge. Follow local recommendations regarding in-season use and rates of oil
			in your area.  Under heavy scale pressure, use the higher rate.  Coverage is essential for good control. Apply in sufficient water volume for tree size. Use of higher water volume will assure better coverage.
	• • •	ly with local Inte	red and/or alternated with commonly grated Pest Management (IPM) and
	Restrictions:	, ,, -0	

- Do not apply within 21 days of harvest.
- Do not make more than 2 Avalaire Pyriproxyfen 35 WSP applications per growing season.
- Do not exceed 10 oz of Avalaire Pyriproxyfen 35 WSP per acre per season.
- Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP treatment.
- Regardless of formulation do not apply more than 0.218 lb pyriproxyfen per acre per season.

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than two applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state, and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

# **TROPICAL & SUBTROPICAL FRUIT**

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

		PRODUCT	
CROPS	PESTS	RATE	APPLICATION INSTRUCTIONS
		PER ACRE	
Acerola	Scales	5 oz	Apply with ground or air equipment as a full
Atemoya			coverage spray (minimum of 5 gals/A by air or 50
Avocado			gals/A by ground). Thorough coverage is critical
Biriba			for adequate control. It is essential to use
Black Sapote			adequate water volume to ensure thorough
Canistel			coverage.
Cherimoya			Apply at either dormant, delayed dormant or an
Custard Apple			in-season cover spray. At dormant or delayed
Feijoa			dormant use a spray oil at the manufacturer's
Guava			recommended oil rate. In a cover spray make
Ilama			applications when scale crawlers first emerge.
Jaboticaba			Follow local recommendations regarding in-
Longan			season use and rates of oil in your area.
Lychee	Avalaina Dunian	overfore 2F WCD r	
Mamey Sapote		-	nay be mixed and/or alternated with commonly
Mango			n local Integrated Pest Management (IPM) and
Passionfruit	Insect Resistant	Le ivianagement	(IRM) programs.
Papaya	Restrictions:		
Pulasan	Do not	apply within 14	days of harvest.
Rambutan	Do not	make more tha	n 2 <b>Avalaire Pyriproxyfen 35 WSP</b> applications per
Sapodilla		ig season.	
Soursop	Do not	exceed 10 oz of	Avalaire Pyriproxyfen 35 WSP per acre per season.
Spanish Lime			

Star Apple Starfruit Sugar Apple Wax Jambu	<ul> <li>Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP treatment.</li> <li>Regardless of formulation do not apply more than 0.218 lb pyriproxyfen per acre per season.</li> </ul>
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MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than two applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state, and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

### **WATERCRESS**

[Not for Use in] [California] [New York]

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

**Avalaire Pyriproxyfen 35 WSP** does exhibit translaminar movement which means that **Avalaire Pyriproxyfen 35 WSP** applied to the upper surfaces of the leaves will move to the lower surface of the leaf. This translaminar movement is very important to chemical control of whiteflies since one of the major obstacles is getting the product to the underside of the leaves where whiteflies are present.

PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS
Sharpshooters Whiteflies	2.5 to 3 oz	Apply with ground equipment as a full coverage spray (10 to 50 gals/A). Thorough coverage is critical for adequate control. It is essential to use adequate water volume to ensure thorough coverage.  Begin applications when whiteflies reach threshold levels per University/Extension recommendations.
		Under severe pressure, use the higher specified rates.  Only whole fields should be treated but is not required.

**Avalaire Pyriproxyfen 35 WSP** may be mixed and/or alternated with commonly used insecticides to comply with local Integrated Pest Management (IPM) and Insect Resistance Management (IRM) programs.

#### **Restrictions:**

- Do not apply within 7 days of harvest.
- Do not make more than 2 **Avalaire Pyriproxyfen 35 WSP** applications per growing season.
- Do not exceed 6 oz Avalaire Pyriproxyfen 35 WSP per acre per season.
- Do not apply earlier than 14 days after last Avalaire Pyriproxyfen 35 WSP treatment.
- Regardless of formulation, do not apply more than 0.134 lb of pyriproxyfen per acre per season.
- Do not plant any crop other than those with registered pyriproxyfen uses in treated areas sooner than 30 days after the last application.

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than two applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Avalaire, LLC also does not recommend using rates below 2.5 oz per acre for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state, and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

#### WHITE SAPOTE

[Not for Use in New York]

**Avalaire Pyriproxyfen 35 WSP** acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. **Avalaire Pyriproxyfen 35 WSP** has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since **Avalaire Pyriproxyfen 35 WSP** is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

PESTS	PRODUCT RATE PER ACRE	APPLICATION INSTRUCTIONS
Black Scale Brown Soft Scale California Red Scale Florida Red Scale Citrus Snow Scale	5 oz	Apply with ground equipment in 200 to 1500 gals/A. Apply in sufficient water volume for tree size. Thorough coverage is critical for control. It is essential to use adequate water volume to ensure thorough coverage.  Apply any time prior to fruit becoming infested when scales are in the crawler stage. Application at the 2 <sup>nd</sup> or 3 <sup>rd</sup> generation of scale may result in excessive dead scale remaining on the fruit at harvest. Thorough coverage is essential for good control.
		Avalaire Pyriproxyfen 35 WSP may be applied with superior spray oils at $\frac{1}{2}$ to 1%. Follow the manufacturer's directions and recommendations on timing and rates.
		NOTE: For scale apply only one application during emergence of scale crawlers per calendar year.

**Avalaire Pyriproxyfen 35 WSP** may be mixed and/or alternated with commonly used insecticides to comply with local Integrated Pest Management (IPM) and Insect Resistance Management (IRM) programs.

#### Restrictions:

• Do not apply within 1 day of harvest.

- Do not make more than 1 Avalaire Pyriproxyfen 35 WSP application per growing season.
- Do not exceed 5 oz of **Avalaire Pyriproxyfen 35 WSP** per acre per season.
- Regardless of formulation do not apply more than 0.134 lb pyriproxyfen per acre per season.

Citrus Blackfly	3 oz	Apply with ground application equipment in 200 to 1500
Citrus Leafminer		gals/A. Apply in sufficient water volume for tree size.
Citrus Whitefly		Thorough coverage is critical for control. It is essential to
		use adequate water volume to ensure thorough coverage.
		Apply when pests are just beginning to build and before
		infestation has occurred. Thorough coverage is essential
		for good control.

**Avalaire Pyriproxyfen 35 WSP** may be mixed and/or alternated with commonly used insecticides to comply with local Integrated Pest Management (IPM) and Insect Resistance Management (IRM) programs.

#### **Restrictions:**

- Do not apply within 1 day of harvest.
- Do not make more than 2 Avalaire Pyriproxyfen 35 WSP applications per growing season.
- Do not exceed 6 oz of **Avalaire Pyriproxyfen 35 WSP** per acre per season.
- Do not apply earlier than 21 days after last Avalaire Pyriproxyfen 35 WSP treatment.
- Regardless of formulation, do not apply more than 0.134 lb of pyriproxyfen per acre per season.

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Avalaire, LLC is restricting Avalaire Pyriproxyfen 35 WSP to no more than two applications per growing season. Avalaire Pyriproxyfen 35 WSP may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state, and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

#### STORAGE AND DISPOSAL

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

#### **PESTICIDE STORAGE**

Store in a cool, dry place. Keep pesticide in original container. Keep container closed when not in use. Do not put concentrate or dilute into food or drink containers. Not for use or storage in or around the home.

#### **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**

NOTE TO REVIEWER: One of the below statements will be chosen to match packaging.

[Nonrefillable outer bag. Do not reuse or refill the outer bag. Completely empty bag into application equipment. Then dispose the empty bag in a sanitary landfill or by other procedures allowed by State and local authorities.

[LINED FIBER DRUM Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Then offer for recycling if available or dispose of empty bag in a sanitary landfill or by other procedures allowed by State and local authorities. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.]

#### LIMITATION OF WARRANTY AND LIABILITY

IMPORTANT: READ BEFORE USE. Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Disclaimer of Warranties and Limitations of Liability. CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of AVALAIRE, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, AVALAIRE, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, neither AVALAIRE, LLC the manufacturer, nor the Seller shall be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

Danitol is a registered trademark of Sumitomo Chemical Company, Ltd.

Danitol is a restricted use product.

[Seize] [and] [Esteem] [is a] [are] registered trademark[s] of Valent U.S.A. Corporation.

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

PYRIPROXYFEN GROUP 7C INSECTICIDE

# Avalaire Pyriproxyfen 35 WSP[™]

[Alternate Brand Name: Cibola 35 WSP, Positron 35 WSP]
Contains pyriproxyfen, the active ingredient used in [Seize® 35 WP] [and]
[Esteem® 36 WP IGR].

#### [Insect Growth Regulator]

ACTIVE INGREDIENT:	(% by weight)
*Pyriproxyfen	35.0%
OTHER INGREDIENTS:	<u>65.0%</u>
TOTAL	100.0%

<sup>\*2-[1-</sup>methyl-2-(4-phenoxyphenoxy) ethoxy]pyridine

[Avalaire Pyriproxyfen 35 WSP] is a wettable powder formula containing 35% active ingredient.

# KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

explain it to you in detail.)			
	FIRST AID		
If in eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>		
	<ul> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>		
	Call a poison control center or doctor for treatment advice.		
If inhaled:	Move person to fresh air.		
	<ul> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> </ul>		
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>		
If swallowed:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> </ul>		
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>		
	<ul> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> </ul>		
	<ul> <li>Do not give anything by mouth to an unconscious person.</li> </ul>		
If on skin or	Take off contaminated clothing.		
clothing:	Rinse skin immediately with plenty of water for 15-20 minutes.		
	Call a poison control center or doctor for treatment advice.		

#### **HOT LINE 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 SafetyCall at 1-844-685-9173 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. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking,

chewing gum, using tobacco or using the toilet. Wear long-sleeved shirt and long pants, shoes plus socks.

**ENVIRONMENTAL HAZARDS:** This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water by disposing of equipment washwaters or rinsate. Avoid direct application and/or spray drift to bee hives.

**PHYSICAL OR CHEMICAL HAZARDS:** Do not mix or allow to come in contact with oxidizing agents. Hazardous chemical reaction will occur.

#### STORAGE AND DISPOSAL

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

#### **PESTICIDE STORAGE**

Store in a cool, dry place. Keep pesticide in original container. Keep container closed when not in use. Do not put concentrate or dilute into food or drink containers. Not for use or storage in or around the home.

#### 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

**NOTE TO REVIEWER:** One of the below statements will be chosen to match packaging.

[Nonrefillable outer bag. Do not reuse or refill the outer bag. Completely empty bag into application equipment. Then dispose the empty bag in a sanitary landfill or by other procedures allowed by State and local authorities.

[LINED FIBER DRUM Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Then offer for recycling if available or dispose of empty bag in a sanitary landfill or by other procedures allowed by State and local authorities. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.]

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

[Avalaire Pyriproxyfen 35 WSP] is not manufactured, or distributed by Competitor Company, seller of [Seize® 35 WP] [and] [Esteem® 36 WP IGR].

Manufactured for:

Avalaire, LLC

1705 Towanda Ave
Bloomington, IL 61701

EPA Reg. No.: 93930-77 EPA Est. No.:

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