



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

November 8, 2020

Christina M. Dubas  
Regulatory Manager  
Nichino America, Inc.  
4550 Linden Hill Rd. Suite 501  
Wilmington, DE 19808

Subject: Registration Review Label Mitigation for Buprofezin  
Product Name: Applaud 70 WP Insect Growth Regulator  
EPA Registration Number: 71711-15  
Application Dates: April 3, 2020  
Decision Numbers: 561423

Dear Ms. Dubas:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Buprofezin Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

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If you have any questions about this letter, please contact Jaclyn Pyne by phone at 703-347-0445, or via email at [pyne.jaclyn@epa.gov](mailto:pyne.jaclyn@epa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Linda Arrington".

Linda Arrington, Branch Chief  
Risk Management and Implementation Branch 4  
Pesticide Re-Evaluation Division  
Office of Pesticide Programs

Enclosure

## APPLAUD® 70WP Insect Growth Regulator

### ACTIVE INGREDIENT:

Buprofezin: [2-tert-butylimino-3-isopropyl-5-phenyl-1,3,5-thiadiazinan-4-one].....**70.00%**

**OTHER INGREDIENTS:**.....**30.00%**

**TOTAL**.....**100.00%**

Contains 0.70 lb. buprofezin per lb. of product

EPA Reg. No. 71711-15

EPA Est. No. [ \_\_\_\_\_ ]

[Alternate Brand Names: Applaud® Insect Growth Regulator, Courier Insect Growth Regulator, Centaur® WDG Insect Growth Regulator, and Talus® 70DF Insect Growth Regulator]

## KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-348-5832 for emergency medical treatment information.	

**NOTE TO PHYSICIAN:** There is no specific antidote. All treatment should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.

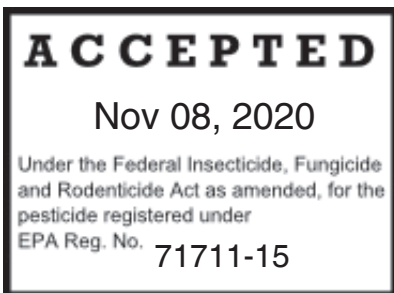
In case of fire or spills, information may be obtained by calling 1-800-424-9300.

{Note to Reviewer: This language will be on the front of the booklet;} See inside booklet for Precautionary Statements and Directions for Use

{Note to Reviewer: This language will be on the label permanently affixed to the jug;} See attached booklet for Precautionary Statements and Directions for Use

**Net Contents:** \_\_\_\_\_

[Manufactured in \_\_\_\_\_,] [formulated in \_\_\_\_\_,] [and] [packaged in \_\_\_\_\_] for:



**NICHINO AMERICA, INC.**

4550 Linden Hill Road  
Wilmington, DE 19808  
888-740-7700

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

**CAUTION**

Harmful if swallowed. Wash thoroughly with soap and water after handling. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Harmful if inhaled. Avoid breathing spray mist. Remove contaminated clothing and wash before reuse.

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

**STATEMENTS FOR CONTAMINATED PPE**

Follow the 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.

**ENGINEERING CONTROLS**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4–6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

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

**USER SAFETY RECOMMENDATIONS**

Users should: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

**ENVIRONMENTAL HAZARDS**

For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

Important: Read the entire Directions for Use and Disclaimer of Warranties before using this product.

**DIRECTIONS FOR USE**

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

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

**AGRICULTURAL USE REQUIREMENTS**

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

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

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

- Coveralls over long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

## GENERAL INFORMATION

**APPLAUD® 70WP** insect growth regulator contains the active ingredient, buprofezin. It is effective against the nymph stages of leafhoppers and planthoppers, mealybugs, pear psylla, scales, and whiteflies by inhibiting chitin biosynthesis, suppressing oviposition of adults, and reducing viability of eggs. Treated susceptible pests may remain alive on the plant for 3-7 days but, feeding damage during this time is typically very low.

Good coverage is essential. Apply by ground or air in sufficient water volume. Orient nozzles to assure good coverage. Use of higher volume of water will assure better coverage, especially under adverse conditions such as hot, dry weather, and/or a dense canopy. The entire field should be treated. Apply when economic infestations occur based on local information.

When using backpack sprayer and mechanically-pressurized-handgun applications to greenhouse and ornamental: Apply by ground with 100 gallons of water per acre.

**APPLAUD® 70WP is not for sale, sale into, distribution, and or use in Nassau and Suffolk counties of New York State.**

### INSECTS CONTROLLED

**Whiteflies:** Ash whitefly; Greenhouse whitefly; Silverleaf whitefly; Sweet potato whitefly

**Mealybugs:** Grape mealybug; Vine mealybug; Citrus mealybug; Comstock mealybug; Gilli mealybug, Longtailed mealybug; Mexican mealybug; Obscure mealybug; Striped mealybug

**Leafhoppers and Planthoppers:** Eastern grape leafhopper; Glassy-winged sharpshooter; Variegated leafhopper; Western grape leafhopper; Cherry leafhop- per; Potato leafhopper; Brown planthopper

### Scales:

**Soft Scales:** Citricola scale; Barnacle scale; Black scale; Brown soft scale; False oleander scale; Hemispherical scale; Indian wax scale and other wax scales; Tessella- ted scale; White peach scale

**Armored Scales:** Boisduval scale; Cactus scale; California red scale; Coconut scale; Fern scale; Florida red scale; Oystershell scale; San Jose scale

**Margarodid Scale:** Cottony cushion scale

## MIXING, LOADING, AND HANDLING INSTRUCTIONS

### USE RESTRICTIONS

- DO NOT use APPLAUD 70WP water-soluble bags in a tankmix with products that contain boron, chromium, or other micronutrients.
- Apply in a minimum finished spray volume of 5 gallons per acre by air or 20 gallons per acre by ground, unless otherwise specified in Directions for Use.
- Do not apply this product through any type of irrigation system.
- Do not apply this product in residential areas.
- Do not apply this product by aerial application to orchards and vineyards.
- Do not apply this product to orchards/vineyards and typical field crops by mechanically pressurized handgun.
- Do not use anionic surfactants with this product.

### ROTATIONAL CROPS RESTRICTIONS

CROP GROUP	PLANTBACK TIMING
All crops registered for use with Buprofezin	0 days following application
Cereal grains	30 days following application
All other crops	60 days following application

### RESISTANCE MANAGEMENT

For resistance management, APPLAUD 70WP contains a Group 16 insecticide. Any population may contain individuals naturally resistant to APPLAUD 70WP and other Group 16 insecticides. The resistant individuals may dominate the insect population if this group of insecticides 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 APPLAUD 70WP or other Group 16 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):
  - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
  - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
  - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
  - Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
  - The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact Nichino America representatives at 1-888-740-7700.

## GENERAL HANDLING INSTRUCTIONS

APPLAUD 70WP insect growth regulator is sealed in water-soluble bags. Do not open the foil-lined outer packaging until time of use. Do not use a knife or other sharp object to open the foil-lined outer packaging. Once the outer protective packaging has been opened, the water-soluble bag inside can be dropped into the spray tank at the appropriate time.

**SPECIFIC MIXING INSTRUCTIONS:** To ensure proper mixing of the soluble bags, follow the instructions below:

1. **APPLAUD 70WP ALONE:** Begin by filling the spray tank with clean water to prime the system (about 6 to 8 inches for most sprayers). Turn off the fill valve and drop the recommended number of soluble bags into the tank, distributing them across the bottom but not covering the circulation and outlet holes. After the bags have **soaked for 2 minutes**, start the agitation and **agitate thoroughly for 2 minutes**. With the agitation on, continue to fill the spray tank to the desired level. Agitate during spraying. If spraying must be stopped before emptying the sprayer, resume agitation before spraying the remainder of the load.
2. **APPLAUD 70WP TANK MIXTURES:** Follow all use directions as listed above under **APPLAUD 70WP ALONE** with the following exception: after the APPLAUD 70WP bags are thoroughly mixed and the **water is added to fill the tank  $\frac{1}{2}$  full**, add the recommended amount of wettable powder, soluble powder, flowable, emulsifiable concentrate, or soluble liquid product, **while maintaining agitation**. If a spray additive is needed, add a liquid fertilizer (**except** fertilizers containing boron, chromium, or other micronutrients: see **USE PRECAUTIONS**), surfactant, or crop oil concentrate to the spray tank. Then continue adding water to the tank to achieve the desired level, while maintaining agitation.

Refer to the charts below for the proper application rate of APPLAUD 70WP insect growth regulator.

### Instructions for Introducing Water Soluble Packages Directly into Spray tanks:

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

### Handling Instructions

**Follow these steps when handling pesticide products in WSPs.**

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

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

### Mixing Instructions

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

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

### SPRAY DRIFT MANAGEMENT

Do not apply when wind speed favors drift beyond the area intended for treatment. The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions. Avoiding spray drift is the responsibility of the applicator.

#### Ground Applications

##### MANDATORY SPRAY DRIFT

###### Ground Boom Applications:

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

###### Boomless Ground Applications:

- **Applicators are required to use a medium or coarser droplet size (ASABE S572.1) for all applications.**
- **Do not apply when wind speeds exceed 10 miles per hour at the application site.**
- **Do not apply during temperature inversions.**

## **SPRAY DRIFT ADVISORIES**

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.

BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

### **IMPORTANCE OF DROPLET SIZE**

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

#### **Controlling Droplet Size - Ground Boom**

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

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

For ground equipment, the boom should remain level with the crop and have minimal bounce.

### **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.

### **SPRAY DRIFT**

#### **Boom-less Ground Applications:**

Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

### **SPRAY DRIFT**

#### **Handheld Technology Applications**

Take precautions to minimize spray drift.



**APPLICATION RATE CHART FOR APPLAUD 70WP INSECT GROWTH REGULATOR**

Crop	Insects Controlled	Ounces Formulated Product/A	Comments and Restrictions
Almonds Pistachios	Mealybugs	9 to 12 oz.	<ul style="list-style-type: none"> <li>• Treatment should be applied when peak crawler emergence occurs. Consult local and State agricultural authorities for details.</li> <li>• Good coverage is essential. Apply by ground application using a minimum of 400 gallons of water per acre.</li> <li>• Apply no more than one application per season.</li> <li>• Do not apply more than 34.5 oz. per acre per year.</li> <li>• Do not apply within 60 days of harvest.</li> </ul>
	Scales	34.5 oz.	
Apples Crabapple Loquat Mayhaw Quince	Leafhoppers Scales	34.5 oz.	<ul style="list-style-type: none"> <li>• Treatment should be made when peak crawler emergence occurs. Consult local and State agricultural authorities for details.</li> <li>• Good coverage is essential. Apply by ground application using a minimum of 20 gallons of water per acre.</li> <li>• Apply no more than one application per year.</li> <li>• Do not apply more than 34.5 oz. per acre per year.</li> <li>• Do not apply within 14 days of harvest.</li> </ul>
Bananas	Whiteflies Leafhoppers Mealybugs scales	7 oz.	<ul style="list-style-type: none"> <li>• Treatment should be applied when population level reaches economic threshold</li> <li>• Consult local and State agricultural authorities for details.</li> <li>• Good coverage is essential. Apply by ground application using a minimum of 15 gallons of water per acre.</li> <li>• Use of a higher volume of water will ensure better coverage, especially under adverse conditions, such as hot, dry weather and/or a dense canopy.</li> <li>• Do not make more than 4 applications per growing season.</li> <li>• Allow at least 14 days between applications.</li> <li>• Do not apply within 1 day of harvest.</li> </ul>
Citrus	California red scale Citricola scale Cottony cushion scale Glassy-winged sharpshooter	35 to 46.0 oz.	<ul style="list-style-type: none"> <li>• Treatment should be made when peak crawler emergence occurs. Consult local and State agricultural authorities for details.</li> <li>• Good coverage is essential.</li> <li>• Apply by ground application using a minimum of 700-3000 gallons of water per acre.</li> <li>• Do not make more than 2 applications per growing season.</li> <li>• Allow at least 60 days between applications.</li> <li>• Do not apply within 60 days of harvest.</li> </ul>
Cotton	Whiteflies	6 to 8 oz.	<ul style="list-style-type: none"> <li>• Do not apply within 21 days of harvest in California</li> <li>• And 14 days of harvest outside of California.</li> <li>• Treatment should be applied when population level reaches economic threshold. Consult local and state agricultural authorities for details.</li> <li>• Good coverage is essential. Orient nozzles to assure good coverage.</li> <li>• Use of a higher volume of water will assure better coverage, especially under adverse conditions, such as hot, dry weather and/or a dense canopy. Use the higher application rate and spray volume when treating a rapidly increasing insect population. The entire field should be treated.</li> <li>• For ground application, use 10 to 50 gallons of water per acre.</li> <li>• Do not make more than 2 applications per crop cycle.</li> <li>• Allow at least 28 days between applications.</li> </ul>

Cucurbits (including cucumbers; melons)	Whiteflies	6 to 9 oz.	<ul style="list-style-type: none"> <li>Do not make more than 2 applications per crop cycle.</li> <li>Allow at least 7 days between applications.</li> <li>Do not apply within 7 days of harvest in cucumbers.</li> <li>Do not apply within 10 days of harvest in California and 7 days outside of California in melons, pumpkins and squash.</li> <li>Do not make more than 4 applications per year.</li> </ul>
Grapes	Leafhoppers Mealybugs	9 to 12 oz.	<ul style="list-style-type: none"> <li>Treatment should be applied when population level reaches economic threshold. Consult local and state agricultural authorities for details.</li> <li>Good coverage is essential. Apply by ground using a minimum of 50 to 200 gallons of water per acre, depending on size of the grapes. Orient nozzles to assure good coverage.</li> <li>Use of a higher volume of water will assure better coverage, especially under adverse conditions, such as hot, dry weather and/or a dense canopy.</li> <li>Apply no more than 2 applications per crop cycle</li> <li>Allow at least 14 days between applications.</li> <li>Do not apply within 30 days of harvest.</li> </ul>
Lettuce	Whiteflies	6 to 9 oz.	<ul style="list-style-type: none"> <li>Do not apply within 10 days of harvest in California and 7 days of harvest outside of California.</li> <li>Do not make more than 2 applications per crop cycle.</li> <li>Allow at least 7 days between applications.</li> <li>Do not make more than 4 applications per year.</li> </ul>
Longan, Lychee, Pulasan, rambutan, Spanish Lime	Scales	36 oz.	<ul style="list-style-type: none"> <li>Apply by ground application using a minimum of 75 gallons per acre spray volume.</li> <li>Allow at least 14 days between applications.</li> <li>Do not make more than 2 applications per year.</li> <li>Do not exceed more than 72 oz/A (3.16 lbs. ai/A) per year.</li> <li>Do not apply within 21 days of harvest.</li> </ul>
Peaches	Mealybugs	9 to 12 oz.	<ul style="list-style-type: none"> <li>Treatment should be made when peak crawler emergence occurs. Consult local and State agricultural authorities for details.</li> <li>Good coverage is essential. Apply by ground application using a minimum of 50 gallons of water per acre.</li> <li>Apply no more than two applications per year.</li> <li>Allow at least 14 days between applications.</li> <li>Do not apply more than 69 oz per acre per year.</li> <li>Do not apply within 14 days of harvest.</li> </ul>
	Scales	34.5 to 46 oz.	
Pear Oriental Pear	Pear psylla	34.5 oz	<ul style="list-style-type: none"> <li>Treatment should be made when peak crawler emergence occurs. Consult local and State agricultural authorities for details.</li> <li>Good coverage is essential. Apply by ground application using a minimum of 20 gallons of water per acre.</li> <li>Apply no more than two applications per year.</li> <li>Allow at least 7 days between applications.</li> <li>Do not apply more than 69 oz per acre per year.</li> <li>Do not apply within 14 days of harvest.</li> </ul>
	Scales	34.5 to 46 oz	
Snap Bean	Whiteflies	9 oz.	<ul style="list-style-type: none"> <li>Allow at least 14 days between applications.</li> <li>Do not exceed more than (0.76 lb. ai) per acre per crop cycle.</li> <li>Do not plant rotational crops others than those listed on this label for 120 days after the last application of Applaud 70DF.</li> <li>Do not apply within 14 days of harvest.</li> </ul>

Tomatoes	Whiteflies	6 to 9 oz.	<ul style="list-style-type: none"> <li>• Treatment should be applied when population level reaches economic threshold. Consult local and state agricultural authorities for details.</li> <li>• Good coverage is essential. Apply by ground using a minimum of 5 gallons of water per acre by air or 20 gallons of water per acre by ground to accommodate size of tomato plants. Orient nozzles to assure good coverage.</li> <li>• Use of a higher volume of water will assure better coverage, especially under adverse conditions, such as hot, dry weather and/or a dense canopy. The entire field should be treated.</li> <li>• Apply no more than 2 applications per crop cycle</li> <li>• Allow at least 28 days between applications.</li> <li>• Do not apply within 7 days of harvest.</li> </ul>
	Mealybugs	9 oz.	
	Leafhoppers	9 oz.	
Greenhouse Tomatoes	Whiteflies	6 to 9 oz.	<ul style="list-style-type: none"> <li>• Apply no more than 2 applications per crop cycle</li> <li>• Allow at least 28 days between applications.</li> <li>• Do not apply within 7 days of harvest. For greenhouse tomatoes, apply by ground on 2 acres minimum with 20 gallons of water per acre.</li> <li>• Treatment should be applied when population level reaches economic threshold. Consult local and state agricultural authorities for details.</li> <li>• Apply in sufficient water to obtain complete coverage of all plant parts. Good coverage is essential.</li> <li>• Applications may be made with high volume, low volume or ultra-low volume (thermal and non-thermal foggers, misters, etc.) ground equipment only. Follow the spray equipment manufacturer's directions to determine the amount of spray solution required to obtain thorough coverage. Consult the spray equipment manufacturer's operator's manual, spray nozzle catalogs and/or your crop advisor for more information.</li> </ul>
	Mealybugs	9 oz.	
	Leafhoppers	9 oz.	
Ornamental plants in greenhouses; lath and shadehouses; nurseries; landscape ornamentals; ground covers; field- and container-grown ornamentals; non-bearing fruit and nut trees in nurseries; Christmas trees	Whiteflies	6 oz.	<ul style="list-style-type: none"> <li>• Apply the specified dosage as a foliar spray in sufficient water for complete, uniform coverage, including stems and underside of leaves.</li> <li>• Spray to the point of runoff.</li> <li>• For Whiteflies or Leafhoppers control: Make first application as soon as adult insects begin to appear. For Mealybugs control: Make first application as soon as insect activity is observed. For Scales control: Make first application when crawlers are emerging.</li> <li>• Make no more than 2 applications per crop per growing season.</li> <li>• If additional insecticide applications are required for control, use another class of chemistry or a different Insect Growth Regulator (IGR) with a different mode of action before making subsequent applications of buprofezin.</li> <li>• Consult local or state agricultural authorities for details concerning economic thresholds for each target pest.</li> </ul>
	Mealybugs Leafhoppers	12 oz.	
	Scales	14 oz.	

**Application Chart for Determining Dosage Rate of Applaud 70WP**

Rate lb. ai/A	lb. Formulated/A	Number of 1.06 lb. Packages (containing 3 x 0.36 lb. water-soluble bags)	Numbers of Acres Treated
0.25	0.36		2.8 8.4 14.0
		1 3 5	3.0 9.0 15.0
			2.3 6.8 11.4
		1 3 5	2.5 7.4 12.3
0.31	0.44		2.0 6.0 10.0
		1 3 5	2.2 6.5 10.8
			1.8 5.5 9.2
		1 3 5	2.0 6.0 10.0
0.35	0.50		1.4 4.2 7.0
		1 3 5	1.5 4.6 7.5
			0.5 1.4 2.3
		1 3 5	0.5 1.5 2.5
0.38	0.54		0.4 1.1 1.8
		1 3 5	
		1 3 5	
0.50	0.71		
		1 3 5	
		1 3 5	
1.5	2.14		
		1 3 5	
		1 3 5	
2.0	2.86		
		1 3 5	
		1 3 5	

**Application Chart for Applaud 70WP using 2 oz. water soluble bags (Greenhouse uses)**

Rate a.i./100 gal	Oz. formulated/100 gal	Number of 2 oz. Water Soluble Bags
0.25	6	3
0.50	12	6
0.60	14	7

**Application Chart for Applaud 70WP using 0.6 oz. water soluble bags (Greenhouse uses)**

Rate a.i./100 gal	Oz. formulated/100 gal	Number of 0.6 oz. Water Soluble Bags <sup>1</sup>
0.25	0.36	10 bags in 100 gal 5 bags in 50 gal 1 bag in 10 gal
0.50	0.71	20 bags in 100 gal 10 bags in 50 gal 2 bags in 10 gal
0.60	0.86	24 bags in 100 gal 12 bags in 50 gal 3 bags in 10 gal 1 bag in 4 gal

<sup>1</sup> 0.6 oz. water soluble bags (packaged 25 x 0.6 oz water soluble bags per 0.9 lb. container) in water

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Store in original container, unopened, in a cool, dry place.

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

**CONTAINER HANDLING:**

Remove inner water-soluble bag from outer packaging and place inner bag into application equipment. Then dispose of empty outer packaging in a sanitary landfill, or by incineration, or other methods allowed by state and local authorities.

**IMPORTANT: READ BEFORE USE**

By using this product, user or buyer accepts the following conditions, warranty, disclaimer of warranties, and limitations of liability.

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