



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

September 11, 2018

Mr. John Wright, Agent  
Aceto Agricultural Chemicals Corporation  
c/o Product & Regulatory Associates, LLC  
8595 Collier Boulevard, Suite 107-51  
Naples, FL 34114

Subject: Label Amendment – Correcting Rate Error on Page 15 for Recently Registered Product  
Product Name: Buprofezin 70WDG IGR  
EPA Registration Number: 2749-587  
Application Date: September 11, 2018  
Decision Number: 544097

Dear Mr. Wright:

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

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

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.

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

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with FIFRA section 6. If you have any questions, please contact me by phone at (703) 308-2972, or via email at [walsh.michael@epa.gov](mailto:walsh.michael@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read 'Michael Walsh', with a stylized flourish at the end.

Michael Walsh  
Product Manager 11  
Invertebrate & Vertebrate Branch 2  
Registration Division  
Office of Pesticide Programs

Attachment

## Buprofezin 70WDG IGR

Insect Growth Regulator for use on Bananas, Coffee, Citrus Fruits, Grapes, Olives, Pears, Asian Pears, Persimmon, Pistachios, Pome Fruit, Pomegranates, Stone Fruits, Tomatoes (greenhouse), Tree Nuts, Tropical Crops, Ornamentals (greenhouse and outdoor) and Christmas Trees.

	% BY WT
<b>ACTIVE INGREDIENT:</b>	
Buprofezin: 2- <i>tert</i> -butylimino-3-isopropyl-5-phenyl-1,3,5-thiazinan-4-one.....	70.0%
<b>OTHER INGREDIENTS:</b> .....	30.0%
Total	100.0%

Contains 0.70 lb. buprofezin per pound of product.

EPA Reg. No. 2749-587  
EPA Est. No.

Net Contents:



Manufactured for:  
Aceto Agricultural Chemicals Corporation  
4 Tri Harbor Court  
Port Washington, NY 11050

Read "LIMIT OF WARRANTY AND LIABILITY" before buying or using. If terms are not acceptable, return at once unopened.

### KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
<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>
<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 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 in eyes</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<p>Have the product container or label with you when calling a poison control center or doctor or going for treatment. FOR EMERGENCY MEDICAL HELP, CALL CHEMTREC® TOLL FREE 1-800-424-9300 or 1-703-527-3887.</p> <p><b>NOTE TO PHYSICIAN:</b> 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.</p>	

FOR CHEMICAL SPILL, LEAK, FIRE, EXPOSURE OR MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL CHEMTREC® TOLL FREE 1-800-424-9300 or 1-703-527-3887.

See [inside booklet] [back panel] for [First Aid], [Precautionary Statements] [and] [Directions for use]

**PRECAUTIONARY STATEMENTS**  
**Hazards to Humans and Domestic**

**CAUTION**

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

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**Applicators and other handlers must wear:**

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

**STATEMENTS FOR CONTAMINATED PPE**

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.

**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.

**USER SAFETY RECOMMENDATIONS**

Users should:

- 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 clothing.

**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.

**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 it 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, 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 notification to workers.

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

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

- Coveralls
- Waterproof gloves
- Shoes plus socks

### NONAGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, or greenhouses. For other uses, including golf courses and other nonagricultural uses, do not enter treated areas without protective clothing until sprays have dried.

### PRODUCT INFORMATION

This product is an insect growth regulator effective against the nymphal stages of whitefly, scales, psylla, mealybugs, planthoppers, and leafhoppers by inhibiting chitin biosynthesis, suppressing oviposition of adults, and reducing viability of eggs. This product is not an adulticide. Evidence of activity may be slower than typical contact insecticides as treated susceptible pests may remain alive on the plant for 3-7 days; however, pests have stopped feeding and any feeding damage during this time is typically very low.

This product is not disruptive to beneficial insects and mites.

This product is a contact insecticide, so through spray coverage is essential. Apply by ground or air in sufficient water volume. Orient nozzles to ensure 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.

**Not for Sale, Sale into, Distribution, and/or Use in Nassau and Suffolk Counties of New York State.**

### INSECTS CONTROLLED

**whiteflies:** ash whitefly, banded winged whitefly, greenhouse whitefly, silverleaf whitefly, sweet potato whitefly

**mealybugs:** apple mealybug, citrus mealybug, comstock mealybug, Gill's mealybug, grape mealybug, longtailed mealybug, madeira mealybug, Mexican mealybug, obscure mealybug, striped mealybug, vine mealybug

**leafhoppers and planthoppers:** brown planthopper, cherry leafhopper, Eastern grape leafhopper, glassy-winged sharpshooter, potato leafhopper, variegated leafhopper, Western grape leafhopper, white apple leafhopper

**pear psylla**

**scales:**

**soft scales:** barnacle scale, black scale, brown soft scale, citricola scale, European fruit lecanium scale, false oleander scale, frosted scale, hemispherical scale, Indian wax scale and other wax scales, tessellated 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, walnut scale

margarodid scale: cottony cushion scale

### USE RESTRICTIONS

- This product is not for sale, sale into, distribution, and or use in Nassau and Suffolk counties of New York state.
- Do not apply this product through any type of irrigation system.
- Use of this product in residential areas is prohibited.

Crop Rotational Restrictions:

CROP	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

### USE PRECAUTIONS

- Apply in a minimum finished spray volume of 5 gallons per acre by air. For gallonage per acre by ground, refer to Application Instruction section.
- Phytotoxicity may occur in Asian Pear varieties, normally limited to applications made prior to petal fall.

### RESISTANCE MANAGEMENT

For resistance management, this product contains a Group 16 insecticide. Any insecticide population may contain individuals naturally resistant to this product 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/acaricide resistance, take the following steps:

- Rotate the use of this product 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/acaricide 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 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 Aceto representatives at 516-627-6000.

See specific crop Use Directions for maximum single application rate, annual maximum number of applications and amount of active ingredient.

### **APPLICATION DIRECTIONS**

Applications should be made immediately after the spray solution is prepared. Thorough spray coverage is essential for effective control. Applications may be made with high or low volume spray equipment that provides thorough coverage of the plant. Apply with properly calibrated spray equipment. For best results, apply when pest populations are beginning to build, before reaching economic thresholds.

Consult your local agricultural advisor, or state cooperative extension service for guidance.

### **MIXING DIRECTIONS**

Keep agitation running during filling and spraying operations. If spraying must be stopped before emptying the sprayer, resume agitation before spraying the remainder of the load. Mix only as much spray solution as can be sprayed within four hours. Storage and use of the previous day's spray mix may result in reduced activity.

**THIS PRODUCT ALONE:** Fill spray tank with  $\frac{3}{4}$  of the amount of water needed for the intended application and then turn on agitation. Pour recommended amount of product on the surface of water in the spray tank. Add the balance of the water to the spray tank with agitation running.

**THIS PRODUCT TANK MIXTURES:** Begin with clean equipment. Fill spray tank with  $\frac{3}{4}$  of the amount of water needed for the intended application and turn on agitation. If using a buffering agent, add after filling the tank with  $\frac{3}{4}$  amount of water. Do not use oil as carrier or include other additives in the finished spray.

Add the recommended amount of tankmix products in the following order while maintaining agitation:

1. Products in water soluble packets
2. Wettable powders
3. Water-dispersible granulars and/or soluble powders
4. Flowable liquids
5. Emulsifiable concentrates
6. Adjuvants and/or oils
7. Remaining amount of water to achieve the desired level

Note: It is recommended that the compatibility of this product in any tankmix combination be tested before use. To determine the physical compatibility with other products, use a jar test, as described below:

Using a quart (qt) jar, add the proportionate amounts of the products to 1 qt. of water. Add wettable powders and water-dispersible granular products first, then flowable liquids, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure to adding required ingredients to the spray tank.

**Read and follow all label direction for each tankmix product. Always use in accordance with the most restrictive of label precautions and limitations.**

### **SPRAY DRIFT REDUCTION 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.

#### **Importance of Droplet Size:**

An important factor influencing drift is droplet size. Small droplets (<150 - 200 microns) drift to a greater extent than large droplets. Within typical equipment specifications, applications should be made to deliver the largest droplet spectrum that provides sufficient control and coverage. Use only Medium or coarser spray nozzles (for ground and non-ULV aerial application) according to ASAE (S572) definition for standard

nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser droplet size.

**Ground Applications:**

Wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application. For ground boom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two (2) rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.

**Aerial Applications:**

The spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used and must not exceed 75% of the wingspan or 80% rotor diameter. Flight speed and nozzle orientation must be considered in determining droplet size. Spray must be released at the lowest height consistent with pest control and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind. Making applications at the lowest height that is safe reduces the exposure of the droplets to evaporation and wind.

**Wind Speed Restrictions:**

Drift potential increases at wind velocities of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy and equipment specifications determine drift potential at any given wind speed. Only apply this product if the wind direction favors on-target deposition. Do not apply when wind velocity exceeds 15 mph and avoid gusty and windless conditions. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

**Restrictions During Temperature Inversions:**

Do not make ground applications during temperature inversions. Drift potential is high during temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by stable air and increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by mist or ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source. Smoke that layers and moves laterally near the ground surface in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical mixing.

The use rate for this product is expressed in terms of the oz. of this product per acre, lb. of this product per acre and lb. ai/acre.

The pre-harvest interval (PHI) is the required number of days between the last application of this product and the harvesting of the crop.

The application spray volume is expressed as the number of gallons of liquid applied per acre (GPA).

**Bananas**

Pest	Rate oz./acre	Rate of This Product lb./acre (lb. ai/acre)	Application Instructions
leafhoppers mealybugs scales whiteflies	7.0	0.438 (0.31)	Apply by ground application using a minimum of 15 gallons of water per acre. For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.  <b>RECOMMENDATIONS</b> <ul style="list-style-type: none"> <li>• Treatments should be applied when population level reaches economic threshold. Consult local or</li> </ul>



			<p>state agricultural authorities for details.</p> <ul style="list-style-type: none"> <li>• Through spray coverage is essential. Use of a higher volume of spray will ensure better coverage especially under adverse conditions, such as hot, dry weather and/or a dense canopy.</li> </ul>
<p><b>Restrictions:</b></p> <p>Do not apply more than 4 applications per growing season.</p> <p>The minimum spray interval is 14 days.</p> <p>Do not use more than 27 oz. of this product per acre per growing season (1.18 lb. a.i. per acre per growing season).</p> <p>Pre-Harvest Interval (PHI) is 1 day.</p>			

**Citrus Fruits (Crop Group 10) calamondin; citrus; citron; citrus hybrids (including chironja, tangelo, tangor); clementine; grapefruit; kumquat; lemon; lime; mandarin; orange, sour; orange, sweet; pummelo; satsuma mandarin; tangerine.**

Pest	Rate oz./acre	Rate of This Product lb./acre (lb. ai/acre)	Application Instructions
black scales California red scale citricola scale cottony cushion scale glassy-winged sharpshooter mealybugs wax scale	34.5 – 46.0	2.156 – 2.875 (1.5 – 2.0)	<p>Apply by ground application using a minimum spray solution of 500 gallons of water per acre.</p> <p>Apply with sufficient water volume according to tree size. Thorough spray coverage of the fruit, foliage, and wood is essential for maximum results.</p> <p>When using the minimum water volume, trees must not exceed 10 feet tall, tree canopy must be opened up, and tractor speed must not exceed 1.5 miles per hour.</p> <p>For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.</p> <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> <li>• <b>red scale:</b> Applications should begin at early crawler emergence.</li> <li>• <b>citricola scale:</b> Apply after complete crawler hatch. Spring applications can provide suppression and minimize honeydew accumulation.</li> <li>• <b>cottony cushion scale:</b> Applications should occur after complete crawler hatch.</li> <li>• <b>all other pests:</b> Applications should be made when early crawler emergence occurs</li> <li>• Through spray coverage is essential.</li> </ul>

<p><b>Restrictions:</b></p> <p>Do not apply more than 2 applications per growing season.</p> <p>The minimum spray interval is 60 days.</p> <p>Do not use more than 92.0 oz. of this product per acre per growing season (4.0 lb. a.i. per acre per growing season).</p> <p>Pre-Harvest Interval (PHI) is 3 days.</p>
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**Citrus Fruits (Crop Group 10) (Texas & Florida Only) calamondin; citrus; citron; citrus hybrids (including chironja, tangelo, tangor); clementine; grapefruit; kumquat; lemon; lime; mandarin; orange, sour; orange, sweet; pummelo; satsuma mandarin; tangerine.**

Pest	Rate oz./acre	Rate of This Product lb./acre (lb. ai/acre)	Application Instructions
soft scales armored scales	34.5 – 46.0	2.156 – 2.875 (1.5 – 2.0)	<p>Apply by ground application using a minimum of 250 gallons of water per acre. For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.</p> <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> <li>• Thorough coverage is essential for optimum control.</li> <li>• Choice of water volume should be based on tree canopy size and location of the scale insect within the tree canopy.</li> <li>• Applications should be made at beginning of crawler hatch and emergence.</li> </ul>

**Restrictions:**  
**Limited to Florida and Texas Only**  
 Do not apply more than 2 applications per growing season.  
 The minimum spray interval is 60 days.  
 Do not use more than 92.0 oz. of this product per acre per growing season (4.0 lb. a.i. per acre per growing season).  
 Pre-Harvest Interval (PHI) is 3 days.

**Coffee**

Pest	Rate oz./acre	Rate of This Product lb./acre (lb. ai/acre)	Application Instructions
mealybugs scales	23.0	1.43 (1.0)	<p>Apply by ground application using a minimum of 50 gallons of water per acre. For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.</p> <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> <li>• Apply when population level reaches economic threshold.</li> <li>• Use a sufficient volume of water to ensure thorough coverage of fruit and leaf surfaces.</li> </ul>

**Restrictions:**  
 Do not apply more than 4 applications per growing season.  
 The minimum spray interval is 14 days.  
 Do not use more than 92.0 oz. of this product per acre per growing season (4.0 lb. a.i. per acre per growing season).  
 Pre-Harvest Interval (PHI) is 0 day.

## Grapes

Pest	Rate oz./acre	Rate of This Product lb./acre (lb. ai/acre)	Application Instructions
European fruit lecanium scale	12.0	0.75 (0.53)	<p>Apply by ground application using a minimum of 50 gallons of water per acre. Water volumes should be adjusted based on the size of the grape canopy. Higher water volumes should be used for dense canopies.</p> <p>For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.</p> <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> <li>• <b>leafhoppers</b>, apply when majority of the population is at early nymphal stage.</li> <li>• <b>mealybugs</b>, begin applications at early crawler emergence. Good spray coverage is essential. Orient nozzles to assure good coverage. Use a higher volume of spray will ensure better coverage especially under adverse conditions, such as hot, dry weather and/or a dense canopy.</li> </ul>
leafhopper mealybugs	9.0 – 12.0	0.56 – 0.75 (0.4 – 0.53)	
<p><b>Restrictions:</b></p> <p>Do not apply more than 2 applications per growing season.</p> <p>The minimum spray interval is 14 days.</p> <p>Do not use more than 24.0 oz. of this product per acre per growing season (1.05 lb. a.i. per acre per growing season).</p> <p>Pre-Harvest Interval (PHI) is 7 days.</p>			
mealybugs	24.0	1.5 (1.05)	<p>Apply by ground application using a minimum of 50 gallons of water per acre. Water volumes should be adjusted based on the size of the grape canopy. Higher water volumes should be used for dense canopy.</p> <p>For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.</p> <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> <li>• <b>mealybugs</b>, begin applications at early crawler emergence.</li> <li>• Good spray coverage is essential. Orient nozzles to assure good coverage. Use a higher volume of spray will assure better coverage especially under adverse conditions, such as hot, dry weather and/or a dense canopy.</li> </ul>
<p><b>Restrictions:</b></p> <p><b>Limited to Arizona and California Only</b></p> <p>Do not use more than 24.0 oz. of this product per acre per growing season (1.05 lb. a.i. per acre per growing season).</p> <p>Pre-Harvest Interval (PHI) is 30 days.</p>			

## Olives

Pest	Rate oz./acre	Rate of This Product lb./acre (lb. ai/acre)	Application Instructions
scales	34.5 – 46.0	2.156 - 2.875 (1.5 – 2.0)	<p>Apply by ground application using 110 to 500 per acre spray volume. Apply in sufficient water volumes to provide adequate coverage for tree size. Through coverage is critical for adequate control.</p> <p>For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.</p> <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> <li>• <b>black scale:</b> Applications should occur after complete crawler hatch.</li> <li>• <b>all other scales:</b> Apply at early crawler emergence.</li> <li>• Thorough spray coverage is essential. Orient nozzles to assure good coverage. Use a higher volume of spray will assure better coverage especially under adverse conditions, such as hot, dry weather and/or a dense canopy.</li> </ul>
<p><b>Restrictions:</b></p> <p>Do not apply more than 2 applications per growing season.</p> <p>The minimum spray interval is 50 days.</p> <p>Do not use more than 92.0 oz. of this product per acre per growing season (4.0 lb. a.i. per acre per growing season).</p> <p>Pre-Harvest Interval (PHI) is 21 days.</p>			

## Pears pear; Asian pear

Pest	Rate oz./acre	Rate of This Product lb./acre (lb. ai/acre)	Application Instructions
mealybugs pear psylla scales	34.5 – 46.0	2.156 - 2.875 (1.5 – 2.0)	<p>Apply by ground application using a minimum of 80 gallons of water per acre.</p> <p>For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.</p> <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> <li>• <b>pear psylla</b>, for best results of controlling 1<sup>st</sup> and 2<sup>nd</sup> instars, apply pre-bloom or at petal fall. In-season, apply when smaller pear psylla nymphs are present. Tank mix with adulticide for optimum control.</li> <li>• <b>mealybugs or San Jose scale</b>, apply pre-bloom or at first crawler emergence.</li> <li>• <b>other scales</b>, apply at early crawler emergence.</li> <li>• Use a sufficient volume of water to ensure thorough coverage of fruit and leaf surfaces. Adjust volume based on size of the tree canopy, Use higher volumes for dense canopies.</li> <li>• Phytotoxicity may occur in Asian pear</li> </ul>

			varieties but is normally limited to applications made prior to petal fall.
<p><b>Restrictions:</b>  Do not apply more than 2 applications per growing season.  The minimum spray interval is 7 days.  Do not use more than 69.0 oz. of this product per acre per growing season (3.0 lb. a.i. per acre per growing season).  Pre-Harvest Interval (PHI) is 14 days.</p>			

**Persimmons**

Pest	Rate oz./acre	Rate of This Product lb./acre (lb. ai/acre)	Application Instructions
mealybugs soft scales European fruit lecanium scales frosted scale	34.5	2.156 (1.5)	<p>Apply by ground application using a minimum of 100 gallons of water per acre.  For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.</p> <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> <li>• <b>mealybugs</b>, apply at beginning of crawler emergence. This product is most effective on early developmental stage of mealybugs.</li> <li>• <b>scales</b>, apply a beginning of crawler emergence of the scale generation being targeted.</li> </ul> <p>Good spray coverage is essential.</p>
<p><b>Restrictions:</b>  Do not apply more than 2 applications per growing season.  The minimum spray interval is 14 days.  Do not use more than 69.0 oz. of this product per acre per growing season (3.0 lb. a.i. per acre per growing season).  Pre-Harvest Interval (PHI) is 14 days.</p>			

**Pome Fruits (Crop Group 11-10) except pear and Asian pear (see separate directions for pear and Asian pear) apple, azarole, crabapple, loquat, mayhaw, medlar, quince, Chinese quince, Japanese quince, tejocote; cultivars, varieties, and/or hybrids of these.**

Pest	Rate oz./acre	Rate of This Product lb./acre (lb. ai/acre)	Application Instructions
leafhoppers	9.0 - 12.0	0.56 – 0.75 (0.4 – 0.53)	<p>Apply by ground application using a minimum of 80 gallons of water per acre. For low-volume sprayers, use a minimum of 20 gallons of water per acre.  For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.</p> <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> <li>• <b>San Jose scale</b>, apply at dormant, delayed dormant, pre- bloom or in-season at early crawler emergence.</li> <li>• <b>other scales</b>, apply at early crawler emergence.</li> <li>• <b>mealybugs</b>, apply at dormant, delayed</li> </ul>

			dormant to petal fall when nymphs are present. Apply in-season at early crawler emergence.
mealybugs scales	34.5	2.156 (1.5)	<ul style="list-style-type: none"> <li>Through spray coverage is essential</li> </ul>
<p><b>Restrictions:</b> Do not apply more than 1 application per growing season. Do not use more than 34.5 oz. of this product per acre per growing season (1.5 lb. a.i. per acre per growing season). Pre-Harvest Interval (PHI) is 14 days.</p>			

### Pomegranates

Pest	Rate oz./acre	Rate of This Product lb./acre (lb. ai/acre)	Application Instructions
whiteflies	12.0– 34.5	0.75 – 2.156 (0.53 – 1.5)	<p>Apply by ground application using a minimum of 50 gallons of water per acre. For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.</p> <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> <li><b>brown soft scale</b>, apply at dormant timing targeting the overwintering population or at crawler emergence during the summer.</li> <li><b>San Jose scale</b>, apply at dormant, delayed dormant, pre- bloom or in-season at early crawler emergence.</li> <li><b>whiteflies</b>, apply at early nymph threshold,</li> <li><b>other scales</b>, apply at early crawler emergence.</li> <li><b>mealybugs</b>, apply when early crawler emergence occurs.</li> <li>Thorough spray coverage is essential.</li> </ul>
mealybugs scales	34.5 – 46.0	2.16 – 2.875 (1.5 – 2.0)	
<p><b>Restrictions:</b> Do not apply more than 2 applications per growing season. The minimum spray interval is 14 days. Do not use more than 69.0 oz. of this product per acre per growing season (3.0 lb. a.i. per acre per growing season). Pre-Harvest Interval (PHI) is 14 days.</p>			

**Stone Fruits (Crop Group 12) apricot, sweet cherry, tart cherry, nectarines, peach, plum, chickasaw plum, damson plum, Japanese plum, plumcot, prunes (fresh).**

Pest	Rate oz./acre	Rate of This Product lb./acre (lb. ai/acre)	Application Instructions
mealybugs scales	34.5	2.156 (1.5)	Apply by ground application using a minimum of 50 gallons of water per acre. For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.  RECOMMENDATIONS <ul style="list-style-type: none"> <li>• <b>San Jose scale</b>, apply at dormant, delayed dormant, pre- bloom when scale is in the black cap stage or in-season at early crawler emergence.</li> <li>• <b>other scales</b>, apply at early crawler emergence.</li> <li>• <b>mealybugs</b>, apply when early crawler emergence occurs.</li> <li>• Thorough spray coverage is essential.</li> </ul>
<p><b>Restrictions:</b>                      Do not apply more than 2 applications per growing season.                      The minimum spray interval is 14 days.                      Do not use more than 69.0 oz. of this product per acre per growing season (3.0 lb. a.i. per acre per growing season).                      Pre-Harvest Interval (PHI) is 14 days.</p>			

**Tree Nuts (Crop Group 14) Plus Pistachios: almonds, beechnuts, Brazil nuts, butternuts, cashews, chestnuts, chinquapins, filberts, hickory nuts, macadamia nuts, pecans, walnuts {black and English} and pistachios.**

Pest	Rate oz./acre	Rate of This Product lb./acre (lb. ai/acre)	Application Instructions
mealybugs scales	34.5 – 46.0	2.156 – 2.875 (1.5 – 2.0)	Apply by ground application using a minimum of 100 gallons of water per acre. For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.  RECOMMENDATIONS <ul style="list-style-type: none"> <li>• <b>San Jose scale</b>, application can be made at dormant, delayed dormant, pre- bloom when scale is in the black cap stage or in-season at early crawler emergence.</li> <li>• <b>other scales</b>, apply at early crawler emergence or when scales are of a susceptible early nymphal stage.</li> <li>• <b>mealybugs</b>, Application should be made when early crawler emergence occurs.</li> <li>• Thorough spray coverage is essential.</li> </ul>
<p><b>Restrictions:</b>                      Do not apply more than 1 application per growing season.                      Do not use more than 46.0 oz. of this product per acre per growing season (2.0 lb. a.i. per acre per growing season).                      Pre-Harvest Interval (PHI) is 60 days.</p>			

### Tomatoes (Greenhouse Only)

Pest	Rate oz./acre	Rate of This Product lb./acre (lb. ai/acre)	Application Instructions
leafhopper mealybugs planthoppers	9.0	0.56 (0.4)	For greenhouse tomatoes, apply by ground on 2 acre minimum with 20 gallons of water per acre.  <b>RECOMMENDATIONS</b> <ul style="list-style-type: none"> <li>• Apply when populations level reaches economic threshold. Consult local and state agricultural authorities for specific details.</li> <li>• Good spray coverage is essential.</li> <li>• Apply in sufficient water to obtain complete coverage of all plant parts.</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>
whiteflies	6.0 – 9.0	0.38 – 0.56 (0.26 – 0.4)	
<b>Restrictions:</b> Do not apply more than 2 applications per growing cycle. The minimum spray interval is 5 days. Do not use more than 18.0 oz. of this product per acre per growing cycle (0.8 lb. a.i. per acre) per growing cycle. Pre-Harvest Interval (PHI) is 1 day.			

### Tropical Crops; acerola, atemoya, avocado, binda, chermoya, custard apple, feijoa, guava, ilama, jaboticaba, passion fruit, soursop, starfruit, sugar apple and wax jambu.

Pest	Rate oz./acre	Rate of This Product lb./acre (lb. ai/acre)	Application Instructions
scales	34.5	2.156 (1.5)	Apply by ground application using a minimum of 20 gallons of water per acre. For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.  <b>RECOMMENDATIONS</b> <ul style="list-style-type: none"> <li>• <b>scale and mealybugs</b>, begin applications at early crawler emergence.</li> <li>• Good spray coverage is essential.</li> </ul>
leafhoppers mealybugs whiteflies	9.0 - 12.0	0.56 – 0.75 (0.4 – 0.53)	
<b>Restrictions:</b> <b>Limited to Florida, Hawaii and Puerto</b> Do not apply more than 2 applications per growing season. The minimum spray interval is 14 days. Do not use more than 69.0 oz. of this product per acre per growing season (3.0 lb. a.i. per acre per growing season).			



Pre-Harvest Interval (PHI) is 21 days.

**Tropical Crops; black sapote, canistel, mamey sapote, mango, papaya, sapodilla, star apple.**

Pest	Rate oz./acre	Rate of This Product lb./acre (lb. ai/acre)	Application Instructions
leafhoppers mealybugs scales whiteflies	9.0 - 12.0	0.56 – 0.75 (0.40 – 0.53)	Apply by ground application using a minimum of 20 gallons of water per acre. For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.  RECOMMENDATIONS <ul style="list-style-type: none"> <li>• <b>mealybugs and scales</b>, apply at early crawler emergence for best control.</li> <li>• Good spray coverage is essential.</li> </ul>
<p><b>Restrictions:</b>  <b>Limited to Florida, Hawaii and Puerto</b>  Do not apply more than 5 applications per growing season.  The minimum spray interval is 14 days.  Do not use more than 45 oz. of this product per acre per growing season (1.97 lb. a.i. per acre per growing season).  Pre-Harvest Interval (PHI) is 3 days.</p>			

**Tropical Crops; longan, pulasan, rambutan, Spanish lime.**

Pest	Rate oz./acre	Rate of This Product lb./acre (lb. ai/acre)	Application Instructions
scales	34.5	2.156 (1.5)	Apply by ground application using a minimum of 75 gallons per acre spray volume. For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.
<p><b>Restrictions:</b>  Do not apply more than 2 applications per growing season.  The minimum spray interval is 14 days.  Do not use more than 69.0 oz. of this product per acre per growing season (3.0 lb. a.i. per acre per growing season).  Pre-Harvest Interval (PHI) is 21 days.</p>			

**Ornamental Plants in greenhouses; lath and shadehouses; nurseries; landscape ornamentals; ground covers; field-and container-grown ornamentals; non-bearing fruit and nut trees and vines in nurseries; Christmas trees.**

Pest	Rate oz./acre	Rate of This Product lb./acre (lb. ai/acre)	Application Instructions
leafhoppers mealybugs planthoppers	12.0	0.75 (0.53)	RECOMMENDATIONS For best results, apply when population level reaches economic threshold. Apply in sufficient water to obtain complete, uniform coverage of all plant parts including stems and underside of leaves. Spray to point of runoff. 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.
scales	14.0	0.88 (0.61)	For optimum control of <ul style="list-style-type: none"> <li>• <b>whiteflies, leafhoppers or planthopper</b>, apply as soon as adult insects begin to appear.</li> <li>• <b>scales</b>, apply at early crawler emergence.</li> <li>• <b>mealybugs</b>, apply as soon as insect activity is observed.</li> </ul>
whiteflies	6.0	0.38 (0.26)	Good spray coverage is essential. 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. Consult local and state agricultural authorities for specific details.
<p><b>Restrictions:</b> Do not apply this product in residential areas. Do not apply more than 2 applications per growing season. Do not use more than 28.0 oz. of this product per acre per growing season (1.22 lb. a.i. per acre per growing season).</p>			

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in original container in a cool, dry and secure location.

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

[Plastic bottle packaging:]

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

[Fiber Drums with Liners:]

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into the handling or application equipment. Then offer for recycling if available, or dispose of liner in a sanitary landfill, or by incineration, or by burning, if allowed by state and local authorities. If burned, stay out of smoke. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

Batch Code: \_\_\_\_\_

## WARRANTY DISCLAIMER AND NOTICE

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### IMPORTANT: READ BEFORE USE

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Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, 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. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Aceto Agricultural Chemicals Corporation. To the extent consistent with applicable law all such risks shall be assumed by the user or buyer.

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