



BUPROFEZIN

GROUP

16

INSECTICIDE

# CENTAUR® WDG

## INSECT GROWTH REGULATOR

**ACTIVE INGREDIENT:**

**Buprofezin:** 2-[(1,1-dimethylethyl)imino]tetrahydro-3-(1-methylethyl)-5-phenyl-4H-1,3,5-thiadiazin-4-one..... 70.00%

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

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

Contains 0.70 lb buprofezin per lb of product

GM

E

AYE

EPA Reg. No. 71711-21

EPA Est. No. 67545-AZ-1 39578-TX-1 54675-MEX-001

superscript corresponds to lot number

## KEEP OUT OF REACH OF CHILDREN

## CAUTION

### FIRST AID

<b>If swallowed</b>	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 by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
<b>If on skin or clothing</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
<b>If inhaled</b>	Move person to fresh air. If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
<b>If in eyes</b>	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. Call a poison control center or doctor for treatment advice.

### HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For additional information on this pesticide product, including human health concerns and medical emergencies, call 1-800-348-5832.

**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.

*See inside booklet for Precautionary Statements and Directions for Use*

**NET CONTENTS: 4.32 pounds**



**NICHINO**

650524 04/24

# **PRECAUTIONARY STATEMENTS**

## **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

### **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

**Applicators applying this product by airblast application must apply using an enclosed cab or must wear:**

- Chemical-resistant gloves made of barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, neoprene  $\geq 14$  mils, natural rubbers  $\geq 14$  mils, polyethylene, polyvinyl chloride (PVC)  $\geq 14$  mils, or Viton™  $\geq 14$  mils
- Chemical-resistant headgear if overhead exposure

Mixers and loaders must use **Engineering Controls** for mixing and loading when applying this product aerially to orchards and vineyards.

#### **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.

#### **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 will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirement 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.

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
- Waterproof gloves
- Socks plus shoes

### PRODUCT INFORMATION

**CENTAUR® WDG** Insect Growth Regulator is effective against the nymphal stages of scales, psylla, mealybugs, and leafhoppers by inhibiting chitin biosynthesis, suppressing/inhibiting molting of immatures, suppressing oviposition of adults, and reducing viability of eggs. **CENTAUR WDG** 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.

**CENTAUR WDG** is a contact insecticide, so thorough 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 ensure 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

**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:** Cherry leafhopper, Eastern grape leafhopper, Glassy-winged sharpshooter, Potato leafhopper, Variegated leafhopper, Western grape leafhopper, White apple leafhopper

### **Pear Psylla**

#### **Scales:**

**Armored Scales:** Boisdual scale, Cactus scale, California red scale, Coconut scale, Fern scale, Florida red scale, Oystershell scale, Putnam scale, San Jose scale, Walnut scale

**Margarodid Scale:** Cottony cushion scale

**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

## USE RESTRICTIONS

- Do not apply this product in residential areas.
- Do not apply this product through any type of irrigation system.
- Fogging is prohibited on orchards and vineyards.
- Do not apply this product to orchards/vineyards and typical field crops by mechanically pressurized handgun.
- For aerial applications, do not apply this product within 10 feet of residential areas including schools, homes, playgrounds, recreational areas, athletic fields, residential lawns, gardens, and other areas where children may be present when using a medium droplet size.
- Do not use anionic surfactants with this product.

## ROTATIONAL CROP 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

## RESISTANCE MANAGEMENT

For resistance management, **CENTAUR WDG** contains a Group 16 insecticide. Any insect population may contain individuals naturally resistant to **CENTAUR WDG** 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 **CENTAUR WDG** 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, recordkeeping, 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 advisor 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.

## SPRAY DRIFT MANAGEMENT

### Mandatory Spray Drift – Aerial Applications

- Do not release spray at a height greater than 10 feet above the ground or vegetative canopy unless a greater application height is necessary for pilot safety.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- The boom length must not exceed 75% of the wingspan for airplanes or 90% of the rotor blade diameter for helicopters.
- Do not apply during temperature inversions.

## **Mandatory Spray Drift – Ground Applications**

### **Airblast Applications**

- Sprays must be directed into the canopy.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- User must turn off outward pointing nozzles at row ends and when spraying outer rows.
- Do not apply during temperature inversions.

### **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 NONTARGET SITES AND ENVIRONMENTAL CONDITIONS.

### **Importance of Droplet Size**

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

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

**Volume** - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.

**Pressure** - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.

**Spray Nozzle** - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

### **Controlling Droplet Size - Aircraft**

Adjust nozzles. Follow nozzle manufacturers' recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

### **Boom Height - Ground Boom**

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.

### **Spray Drift - Boomless 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 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. Apply when pest populations are beginning to build, before reaching economic thresholds. Consult your local agricultural advisor or state cooperative extension service for recommendations.

## **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.

**CENTAUR WDG 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.

**CENTAUR WDG Tank Mixtures:** 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.

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.

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 **CENTAUR WDG** 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 for adding required ingredients to the spray tank.



## APPLICATION RATE CHART FOR CENTAUR WDG

### **Bushberry (Crop Subgroup 13-07B) – Not for Use in California**

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 berry); lingonberry, native currant; salal; sea buckthorn; cultivars, varieties, and/or hybrids of these

<b>Pest</b>	<b>Rate/Acre</b>	<b>Use Directions</b>
Scales Leafhoppers	34.5 oz (1.5 lb ai)	<ul style="list-style-type: none"> <li>• Apply by ground application using a minimum of 30 gallons of water per acre.</li> </ul> <p><b>USE RESTRICTIONS</b></p> <ul style="list-style-type: none"> <li>• Do not make more than 1 application per growing season.</li> <li>• Do not apply more than 34.5 oz of product per acre per growing season.</li> <li>• Preharvest Interval (PHI): 60 days</li> </ul> <p><b>RECOMMENDATIONS</b></p> <ul style="list-style-type: none"> <li>• Thorough spray coverage is essential.</li> <li>• <b>San Jose scale:</b> Application can be made at dormant or delayed dormant 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 at a susceptible early nymphal stage.</li> <li>• <b>Leafhoppers:</b> Apply when majority of the population is at the early nymphal stage.</li> </ul>

*(continued)*

## APPLICATION RATE CHART FOR CENTAUR WDG *(continued)*

<b>Citrus Fruits (Crop Group 10-10)</b>		
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		
<b>Pest</b>	<b>Rate/Acre</b>	<b>Use Directions</b>
Black scale California red scale Citricola scale Cottony cushion scale Glassy-winged sharpshooter Mealybugs Wax scale	34.5 to 46.0 oz (1.5 to 2.0 lb ai)	<ul style="list-style-type: none"> <li>• Apply by ground application using a minimum of 500 gallons of water per acre.</li> <li>• Apply with sufficient water volume according to tree size.</li> <li>• Thorough spray coverage of the fruit, foliage, and wood is essential for maximum results.</li> <li>• 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.</li> <li>• For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.</li> </ul> <p><b>USE RESTRICTIONS</b></p> <ul style="list-style-type: none"> <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 more than 92.0 oz of product per acre per growing season.</li> <li>• Do not apply more than 4.0 lb ai per acre per growing season.</li> <li>• Preharvest Interval (PHI): 3 days</li> </ul> <p><b>RECOMMENDATIONS</b></p> <ul style="list-style-type: none"> <li>• Thorough spray coverage is essential.</li> <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> Application should be made when early crawler emergence occurs.</li> </ul>

*(continued)*

## APPLICATION RATE CHART FOR CENTAUR WDG *(continued)*

### Citrus Fruits (Crop Group 10-10) - For Florida, Hawaii, and Texas Only

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

Pest	Rate/Acre	Use Directions
Soft scales Armored scales	34.5 to 46.0 oz (1.5 to 2.0 lb ai)	<ul style="list-style-type: none"> <li>• Apply by ground application using a minimum of 250 gallons of water per acre.</li> <li>• For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.</li> </ul> <p><b>USE RESTRICTIONS</b></p> <p><b>Limited to Florida, Hawaii, and Texas Only</b></p> <ul style="list-style-type: none"> <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 more than 92.0 oz of product per acre per growing season.</li> <li>• Do not apply more than 4.0 lb ai per acre per growing season.</li> <li>• Preharvest Interval (PHI): 3 days</li> </ul> <p><b>RECOMMENDATIONS</b></p> <ul style="list-style-type: none"> <li>• Thorough coverage is essential for 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 the beginning of crawler hatch and emergence.</li> </ul>

*(continued)*

## APPLICATION RATE CHART FOR CENTAUR WDG *(continued)*

### Citrus Fruits (Crop Group 10-10) – Nonbearing Trees (Less Than 2 Years Old)

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

Pest	Rate/Acre	Use Directions
Black scale California red scale Citricola scale Cottony cushion scale Glassy-winged sharpshooter Mealybugs Wax scale	34.5 to 46.0 oz (1.5 to 2.0 lb ai)	<ul style="list-style-type: none"> <li>• Apply by ground application using a minimum of 50 gallons of water per acre.</li> <li>• For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.</li> </ul> <p><b>USE RESTRICTIONS</b></p> <ul style="list-style-type: none"> <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 more than 92.0 oz of product per acre per growing season.</li> <li>• Do not apply more than 4.0 lb ai per acre per growing season.</li> <li>• Preharvest Interval (PHI): 3 days</li> </ul> <p><b>RECOMMENDATIONS</b></p> <ul style="list-style-type: none"> <li>• Thorough coverage is essential for 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>• <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> Application should be made when early crawler emergence occurs.</li> </ul>

*(continued)*

## APPLICATION RATE CHART FOR CENTAUR WDG *(continued)*

Fig		
Pest	Rate/Acre	Use Directions
Scales	46.0 oz (2.0 lb ai)	<ul style="list-style-type: none"> <li>• For ground application, use a minimum of 15 gallons of water per acre.</li> <li>• For aerial application, use a minimum of 5 gallons of water per acre.</li> </ul> <p><b>USE RESTRICTIONS</b></p> <ul style="list-style-type: none"> <li>• Do not make more than 2 applications per crop cycle.</li> <li>• Allow at least 14 days between applications.</li> <li>• Do not apply more than 92.0 oz (4.0 lb ai) per acre per crop cycle.</li> <li>• Do not make more than 2 applications per year.</li> <li>• Preharvest Interval (PHI): 14 days</li> </ul> <p><b>RECOMMENDATIONS</b></p> <ul style="list-style-type: none"> <li>• Good coverage is essential. 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>• Use the higher application rate and spray volume when treating a rapidly increasing insect population.</li> </ul>

*(continued)*

## APPLICATION RATE CHART FOR CENTAUR WDG *(continued)*

Pear; Asian Pear		
Pest	Rate/Acre	Use Directions
Mealybugs Pear psylla Scales	34.5 to 46.0 oz (1.5 to 2.0 lb ai)	<ul style="list-style-type: none"> <li>• Apply by ground application using a minimum of 80 gallons of water per acre.</li> <li>• For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.</li> </ul> <p><b>USE RESTRICTIONS</b></p> <ul style="list-style-type: none"> <li>• Do not make more than 2 applications per growing season.</li> <li>• Allow at least 7 days between applications.</li> <li>• Do not apply more than 69.0 oz of product per acre per growing season.</li> <li>• Do not apply more than 3.0 lb ai per acre per growing season.</li> <li>• Preharvest Interval (PHI): 14 days</li> </ul> <p><b>RECOMMENDATIONS</b></p> <ul style="list-style-type: none"> <li>• Thorough spray coverage is essential.</li> <li>• Phytotoxicity may occur in Asian pear varieties, normally limited to applications made prior to petal fall.</li> <li>• <b>Pear Psylla:</b> To control 1st and 2nd instars, apply prebloom or at petal fall. In-season, apply early when smaller pear psylla nymphs are present. Tank mix with an adulticide as needed.</li> <li>• <b>Mealybugs or San Jose scale:</b> Apply prebloom or at first crawler emergence.</li> <li>• <b>Other scales:</b> Apply at first crawler emergence.</li> </ul>

*(continued)*

## APPLICATION RATE CHART FOR CENTAUR WDG *(continued)*

### Pome Fruits (Crop Group 11-10) – Except Pear and Asian Pear (See Application Rate Chart For Pear and Asian Pear)

apple; azarole; crabapple; loquat; mayhaw; medlar; quince; quince (Chinese); quince (Japanese); tejocote; cultivars, varieties and/or hybrids of these

Pest	Rate/Acre	Use Directions
Leafhoppers	9.0 to 12.0 oz (0.40 to 0.53 lb ai)	<ul style="list-style-type: none"> <li>• 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.</li> <li>• For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.</li> </ul>
Mealybugs Scales	34.5 oz (1.5 lb ai)	<p><b>USE RESTRICTIONS</b></p> <ul style="list-style-type: none"> <li>• Do not make more than 1 application per growing season.</li> <li>• Do not apply more than 34.5 oz of product per acre per growing season.</li> <li>• Do not apply more than 1.5 lb ai per acre per growing season.</li> <li>• Preharvest Interval (PHI): 14 days</li> </ul> <p><b>RECOMMENDATIONS</b></p> <ul style="list-style-type: none"> <li>• Thorough spray coverage is essential.</li> <li>• <b>Mealybugs:</b> Application should be made from dormant, delayed dormant to petal fall when nymphs are present. Apply in-season at early crawler emergence.</li> <li>• <b>San Jose scale:</b> Application can be made at dormant, delayed dormant, prebloom, or in-season at early crawler emergence.</li> <li>• <b>Other scales:</b> Apply at early crawler emergence.</li> </ul>

*(continued)*

## APPLICATION RATE CHART FOR CENTAUR WDG *(continued)*

### Stone Fruits (Crop Group 12-12)

apricot; apricot, Japanese; capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; Jujube, Chinese; nectarine; peach; plum; plum, American; plum, beach; plum, Canada; plum, cherry; plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; sloe; cultivars, varieties, and/or hybrids of these

Pest	Rate/Acre	Use Directions
Mealybugs Scales	34.5 oz (1.5 lb ai)	<ul style="list-style-type: none"> <li>• Apply by ground application using a minimum of 50 gallons of water per acre.</li> <li>• For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.</li> </ul> <p><b>USE RESTRICTIONS</b></p> <ul style="list-style-type: none"> <li>• Do not make more than 2 applications per growing season.</li> <li>• Allow at least 14 days between applications.</li> <li>• Do not apply more than 69.0 oz of product per acre per growing season.</li> <li>• Do not apply more than 3.0 lb ai per acre per growing season.</li> <li>• Preharvest Interval (PHI): 14 days</li> </ul> <p><b>RECOMMENDATIONS</b></p> <ul style="list-style-type: none"> <li>• Thorough spray coverage is essential.</li> <li>• <b>Mealybugs:</b> Application should be made when early crawler emergence occurs.</li> <li>• <b>San Jose scale:</b> Application can be made at dormant, delayed dormant, or prebloom 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> </ul>

*(continued)*



## APPLICATION RATE CHART FOR CENTAUR WDG *(continued)*

### Tree Nuts (Crop Group 14-12)

African nut-tree; almond; beechnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; Cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; coquito nut; dika nut; ginkgo; Guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut; mongongo nut; monkey-pot; monkey puzzle nut; Okari nut; Pachira nut; peach palm nut; pecan; pequi; Pili nut; pine nut; pistachio; Sapucaia nut; tropical almond; walnut, black; walnut, English; yellowhorn; cultivars, varieties, and/or hybrids of these

Pest	Rate/Acre	Use Directions
Mealybugs Scales	34.5 to 46.0 oz (1.5 to 2.0 lb ai)	<ul style="list-style-type: none"> <li>• Apply by ground application using a minimum of 100 gallons of water per acre.</li> <li>• For aerial applications, apply in a minimum finished spray volume of 5 gallons per acre.</li> </ul> <p><b>USE RESTRICTIONS</b></p> <ul style="list-style-type: none"> <li>• Do not make more than 1 application per growing season.</li> <li>• Do not apply more than 46.0 oz of product per acre per growing season.</li> <li>• Do not apply more than 2.0 lb ai per acre per growing season.</li> <li>• Preharvest Interval (PHI): 60 days</li> </ul> <p><b>RECOMMENDATIONS</b></p> <ul style="list-style-type: none"> <li>• Thorough spray coverage is essential.</li> <li>• <b>Mealybugs:</b> Application should be made when early crawler emergence occurs.</li> <li>• <b>San Jose scale:</b> Application can be made at dormant or delayed dormant 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 at a susceptible early nymphal stage.</li> </ul>

## 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:** Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment; then offer for recycling if available, or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill or by incineration, or other methods allowed by state and local authorities.

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

## IMPORTANT: READ BEFORE USE

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

**CONDITIONS:** The directions for use of this product are believed to be accurate and must be followed carefully. However, because of extreme weather and soil conditions, use methods and other factors beyond the control of Nichino America, Inc. (NAI), it is impossible for NAI to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. To the extent consistent with applicable law, all such risks are assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, WHICH EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of NAI is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, NAI disclaims any liability whatsoever for incidental or consequential damages, including, but not limited to, liability arising out of breach of contract, express or implied warranty (including warranties of merchantability and fitness for a particular purpose), tort, negligence, strict liability, or otherwise.

**LIMITATIONS OF LIABILITY:** 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 OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT THE ELECTION OF NICHINO AMERICA, THE REPLACEMENT OF PRODUCT.

©2024 Nichino America, Inc. Centaur is a registered trademark of Nichino America, Inc. Viton is a trademark of The Chemours Company.

Nichino America, Inc.  
4550 Linden Hill Road, Suite 501  
Wilmington, DE 19808  
888-740-7700

559-3-113022  
10/30/2023