



# Arena<sup>®</sup>

## 50 WDG

### INSECTICIDE<sup>1</sup>



**FOR FOLIAR AND SYSTEMIC CONTROL OF LISTED INSECTS IN COMMERCIAL AND RESIDENTIAL LANDSCAPES AND INTERIORSAPES, NON-BEARING FRUIT AND NUT TREES, RESIDENTIAL APPLE AND PEAR TREES, TURFGRASS AND SITES WHERE PLANTS ARE GROWN FOR ORNAMENTAL, AESTHETIC AND CLIMATE MODIFICATION PURPOSES**

Active Ingredient	By Wt
*Clothianidin.....	50.0%
Other Ingredients.....	50.0%
Total	100.0%

\*(E)-1-(2-chloro-1,3-thiazol-5-ylmethyl)-3-methyl-2-nitroguanidine

EPA Reg. No. 59639-152  
 EPA Est. 39578-TX-1©, 67545-AZ-1®  
 Superscript is first letter in lot number.

## KEEP OUT OF REACH OF CHILDREN CAUTION

SEE BELOW FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

**FIRST AID**

**If swallowed:** Call 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 the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**If on skin or clothing:** 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.

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**FIRST AID (continued)**

**If inhaled:** Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**If in eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**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 **800-892-0099** for emergency medical treatment information.

## 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 eyes, skin or clothing. Avoid breathing spray mist or vapor.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

**Applicators and other handlers must wear:** long-sleeved shirt and long pants, shoes and socks and chemical-resistant gloves such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride ≥ 14 mils, or viton ≥ 14 mils.

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 or enclosed cabs 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.

**IMPORTANT:** 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 a spill or equipment break-down.

### USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates. Do not apply when weather conditions favor drift from treated areas. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not apply where runoff is likely to occur. 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 cleaning equipment or disposing of equipment washwater or rinsate.

This product is toxic to bees exposed to treatment and for more than 5 days following treatment. Do not apply this product to blooming, pollen-shedding, or nectar-producing parts of plants if bees may forage on plants during this time period.

#### PROTECTION OF POLLINATORS

**APPLICATION RESTRICTIONS EXIST FOR THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS**



Look for the bee hazard icon in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

**This product can kill bees and other insect pollinators.**

Bees and other insect pollinators will forage on plants when they flower, shed pollen or produce nectar.

Bees and other insect pollinators can be exposed to this pesticide from:

- Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications.
- Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications.

When Using This Product Take Steps To:

- Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.

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#### PROTECTION OF POLLINATORS (continued)

- Minimize drift of this product on to beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at: <http://pesticidestewardship.org/pollinatorprotection/Pages/default.aspx>.

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state/tribe, go to: [www.aapco.org](http://www.aapco.org). Pesticide incidents should also be reported to the National Pesticide Information Center at: [www.npic.orst.edu](http://www.npic.orst.edu) or directly to EPA at: [beekill@epa.gov](mailto:beekill@epa.gov)

### DIRECTIONS FOR USE

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

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

Do not apply this product in any way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### BEE HAZARD

**See individual crops/use sites for specific pollinator protection application restrictions. If none exist under the specific crop/use site for foliar applications, follow these application directions for crops that are for food/feed and commercially grown ornamentals that are attractive to pollinators and non-agricultural uses:**



**FOR FOOD CROPS AND COMMERCIALY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS**

**This product is toxic to bees exposed to treatment for more than 5 days following treatment.**

**Do not apply this product to blooming, pollen-shedding or nectar-producing parts of plants if bees may forage on the plants during this time period.**



**NON-AGRICULTURAL USES:**

**Do not apply Arena® 50 WDG Insecticide<sup>1</sup> while bees are foraging. Do not apply Arena 50 WDG Insecticide<sup>1</sup> to plants that are flowering. Only apply after all flower petals have fallen off.**

### **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 on this label about personal protective equipment (PPE), notification to workers and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow 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 is: coveralls, shoes and socks, chemical-resistant gloves made of any waterproof material.

### **NON-AGRICULTURAL 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, nurseries, or greenhouses.

Keep children and pets off treated area until dry.

### **DISCLAIMER, RISKS OF USING THIS PRODUCT, LIMITED WARRANTY AND LIMITATION OF LIABILITY**

**IMPORTANT: Read the entire Label including this Disclaimer, Risks of Using this Product, Limited Warranty, and Limitation of Liability before using this product. If the terms are not acceptable THEN DO NOT USE THE PRODUCT; rather, return the unopened product within 15 days of purchase for a refund of the purchase price.**

#### **RISKS OF USING THIS PRODUCT**

The Buyer and User (referred to collectively herein as "Buyer") of this product should be aware that there are inherent unintended risks associated with the use of this product which are impossible to eliminate. These risks include, but are not limited to, injury to plants and crops to which this product is applied, lack of control of the target pests or weeds, resistance of the target pest or weeds to this product, injury caused by drift, and injury to rotational crops caused by carryover in the soil. Such risks of crop injury, non-performance, resistance or other unintended consequences are unavoidable and may result because of such factors as weather, soil conditions, disease,

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moisture conditions, irrigation practices, condition of the crop at the time of application, presence of other materials either applied in the tank mix with this product or prior to application of this product, cultural practices or the manner of use or application, (or a combination of such factors) all of which are factors beyond the control of Valent. The Buyer should be aware that these inherent unintended risks may reduce the harvested yield of the crop in all or a portion of the treated acreage, or otherwise affect the crop such that additional care, treatment and expense are required to take the crop to harvest. If the Buyer chooses not to accept these risks, THEN THIS PRODUCT SHOULD NOT BE APPLIED. By applying this product Buyer acknowledges and accepts these inherent unintended risks AND TO THE FULLEST EXTENT ALLOWED BY LAW, AGREES THAT ALL SUCH RISKS ASSOCIATED WITH THE APPLICATION AND USE ARE ASSUMED BY THE BUYER.

Valent shall not be responsible for losses or damages (including, but not limited to, loss of yield, increased expenses of farming the crop or such incidental, consequential or special damages that may be claimed) resulting from use of this product in any manner not set forth on the label. Buyer assumes all risks associated with the use of this product in any manner or under conditions not specifically directed or approved on the label.

#### **LIMITED WARRANTY**

Valent warrants only that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the label, under average use conditions, when used strictly in accordance with the label and subject to the Risks of Using This Product as described above. To the extent consistent with applicable law AND AS SET FORTH ABOVE, VALENT MAKES NO OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED. No agent or representative of Valent or Seller is authorized to make or create any other express or implied warranty.

#### **LIMITATION OF LIABILITY**

**To the fullest extent allowed by law, Valent or Seller is not liable for any incidental, consequential, indirect or special damages resulting from the use or handling of this product. The limitation includes, but is not limited to, loss of yield on all or any portion of the treated acreage, increased care, treatment or other expenses required to take the crop to harvest, increased finance charges or altered finance ratings, emotional or mental distress and/or exemplary damages. TO THE FULLEST EXTENT ALLOWED BY LAW, THE EXCLUSIVE REMEDY OF THE BUYER, AND THE EXCLUSIVE MAXIMUM LIABILITY OF VALENT OR SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH**

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**OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT OR, AT THE ELECTION OF VALENT OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

#### **PROMPT NOTICE OF CLAIM**

To the extent consistent with applicable law allowing such requirements Valent must be provided notice as soon as Buyer has reason to believe it may have a claim, but in no event later than twenty-one days from date of planting, or twenty-one days from the date of application, whichever is latter, so that an immediate inspection of the affected property and growing crops can be made.

To the extent consistent with applicable law if Buyer does not notify Valent of any claims, in such period, it shall be barred from obtaining any remedy.

#### **NO AMENDMENTS**

Valent and Seller offer this product, and Buyer accepts it, subject to the foregoing **Disclaimer, Risks of Using This Product, Limited Warranty and Limitation of Liability**, which may not be modified by any oral or written agreement.

### **TANK MIXES**

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

Read and follow the entire label of each product to be used in the tank mix with this product.

#### **RESISTANCE MANAGEMENT**

*Arena 50 WDG Insecticide*<sup>1</sup> contains a Group 4A insecticide. Insect biotypes with acquired resistance to Group 4A insecticides may eventually dominate the insect population if Group 4A insecticides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by *Arena 50 WDG Insecticide*<sup>1</sup> or other Group 4A insecticides.

To delay insecticide resistance consider:

- Avoiding the consecutive use of *Arena 50 WDG Insecticide*<sup>1</sup> or other Group 4A insecticides that have a similar target site of action on the same insect species.
- Using tank mixtures or premixes with insecticides from a different target site of action Group as long as the involved products are all registered for the same use and have different sites of action.

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- Basing insecticide use on a comprehensive Integrated Pest Management (IPM) program.
- Monitoring treated insect populations for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors and/or manufacturer for insecticide resistance management or IPM recommendations for the specific site and resistant pest problems.
- For further information or to report a suspected resistance, you may contact Valent U.S.A. LLC at 800-898-2536.

#### **USE INFORMATION**

*Arena 50 WDG Insecticide*<sup>1</sup> is a broad spectrum insecticide, for control of a wide spectrum of insects infesting turfgrass, ornamental plants, interior landscapes and non-bearing fruit and nut trees (in landscapes). When applied as directed, *Arena 50 WDG Insecticide*<sup>1</sup> provides excellent and long residual insect control.

#### **RESTRICTIONS**

- Do not use a foliar application of clothianidin (*Arena 50 WDG Insecticide*<sup>1</sup>) following a soil application of clothianidin.
- Regardless of the application method, do not apply more than 0.4 lb active ingredient clothianidin per acre per year for turf, landscape, ornamentals and non-bearing fruits and nuts.
- If the maximum limit (0.4 lb active ingredient clothianidin per acre per year) has been applied and pest populations require additional treatments, use another registered pesticide that is not in the neonicotinoid class of chemistry.
- Do not apply by air.
- Do not apply this product, by any application method, to linden, basswood or other *Tilia* species.

#### **PLANT TOLERANCE**

Neither the manufacturer nor the seller has determined whether or not *Arena 50 WDG Insecticide*<sup>1</sup> can be used safely on cultivars of plants registered for use. *Arena 50 WDG Insecticide*<sup>1</sup> has been tested on many cultivars with no phytotoxicity observed at label rates. Since all plant species and their varieties and cultivars have not been tested for tolerance, it is recommended that a small number of plants be sprayed to make certain that no phytotoxicity occurs, prior to any large scale application to plants. The end user assumes all risks arising from application of *Arena 50 WDG Insecticide*<sup>1</sup> in a manner inconsistent with its labeling.

*Arena 50 WDG Insecticide*<sup>1</sup> can be tank mixed. However, all plant species and their varieties and cultivars have not been tested with possible tank mix combinations, sequential pesticide treatments and adjuvants and surfactants. Conduct a spray mix compatibility and phytotoxicity trial under local conditions to ensure compatibility prior to any large scale use.

It is the pesticide user's responsibility to ensure that all products in the mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture.

### **MIXING INSTRUCTIONS**

1. Begin with clean equipment.
2. Add sufficient clean water to the spray tank for 1/2 of the mix load.
3. Start tank agitation.
4. Add and properly suspend the necessary amount of *Arena 50 WDG Insecticide*<sup>1</sup> before adding any other products. Agitate to ensure thorough mixing while adding the remaining required water. A high quality wetting agent or other spray adjuvant, approved for use on your crop, may be added to spray solutions according to the manufacturer's use instructions. Be sure to suspend and dilute *Arena 50 WDG Insecticide*<sup>1</sup> properly prior to the addition of any adjuvant. Consult adjuvant label or manufacturer for crop tolerance and safety information when used with this product.
5. Maintain agitation during mixing and application.
6. Apply with properly calibrated spray equipment.

### **SPRAY DRIFT MANAGEMENT**

Do not allow this product to drift onto neighboring crops or non-crop areas or use in a manner or at a time other than in accordance with label directions because animal, plant or crop injury, illegal residues or other undesirable results may occur.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making decisions where states have more stringent regulations.

### **APPLICATION PROCEDURES**

#### **Foliar Application**

Select spray nozzles which will provide accurate and uniform spray deposition. Use spray nozzles which provide medium sized droplets and reduce drift. To help insure accuracy, calibrate sprayer before each use. For information on spray equipment and calibration, consult nozzle manufacturers and/or State and County Extension Service.

Apply *Arena 50 WDG Insecticide*<sup>1</sup> using sufficient water volume to provide thorough and uniform coverage. In situations where a dense canopy exists and/or pest pressure is high, use greater water volumes. The use of a spray adjuvant may improve spray coverage. Do not make applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

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### **Ornamentals in Commercial and Residential Outdoor Landscape and Interior Plantscapes where plants are grown for aesthetic and climate modification purposes.**

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*Arena 50 WDG Insecticide*<sup>1</sup> is for use on ornamentals for insect control in commercial and residential landscapes and interior plantscapes. To assure optimum effectiveness, good spray coverage of the target plant is essential. Application can be made by foliar application or soil applications including soil injection, drenches, and broadcast sprays. For optimum control, make applications prior to anticipated pest infestation.

Apply *Arena 50 WDG Insecticide*<sup>1</sup> when threshold populations are observed. Do not wait until population beyond threshold has been established. Apply *Arena 50 WDG Insecticide*<sup>1</sup> in sufficient water to ensure uniform and thorough coverage of foliage. Thorough coverage is required for optimum control. To achieve adequate coverage, use proper spray pressures, nozzles, nozzle spacing and water volume per acre.

Choose lower rate for light infestations and/or smaller plants and higher rate for heavy infestations and/or larger plants.

### **RESTRICTIONS**

- Regardless of the application method do not apply more than 0.4 lb active ingredient clothianidin per acre per year.
- Drench or broadcast applications will provide control of insects feeding on the plants, however, control will not be achieved until the product has been taken up by the plant vascular system and translocated to the area where the insects are feeding.
- If making broadcast applications, water in with enough irrigation or rainfall to move the product into the zone where insects are active.
- For drench applications, use enough water to move the product into the zone where the insects are active.

**FOLIAR APPLICATION ON ORNAMENTALS IN OUTDOOR LANDSCAPES**

<b>PLANTS</b>	<b>PESTS</b>	<b>ARENA 50 WDG INSECTICIDE<sup>1</sup> APPLICATION RATES (Per 100 Gals of Water)</b>	<b>SPECIAL INSTRUCTIONS</b>
Bedding Plants Evergreens Flowering Plants Foliage Plants Ground Covers Non-Bearing Fruit Trees Non-Bearing Nut Trees Non-Bearing Vines Ornamental Trees Shrubs	Aphids	0.63 to 1.26 oz	Uniformly apply the spray solution to the point of drip. Reapply as needed.  The amount of spray solution needed per acre will depend on the ornamental size and the density of the leaf canopy.
	Mealybugs Whiteflies	0.9 to 1.26 oz	
<b>RESTRICTION</b>			
<ul style="list-style-type: none"> <li>Regardless of the application method do not apply more than 0.4 lb active ingredient clothianidin per acre per year.</li> </ul>			

**FOLIAR APPLICATION ON ORNAMENTALS IN INTERIOR PLANTSCAPES**

<b>PLANTS</b>	<b>PESTS</b>	<b>ARENA 50 WDG INSECTICIDE<sup>1</sup> APPLICATION RATES (Per 100 Gals of Water)</b>	<b>SPECIAL INSTRUCTIONS</b>
Bedding Plants Evergreens Flowering Plants Foliage Plants Ground Covers Non-Bearing Fruit Trees Non-Bearing Nut Trees Non-Bearing Vines Ornamental Trees Shrubs	Aphids	0.63 to 1.26 oz	Uniformly apply the spray solution to the point of drip. Reapply as needed.  The amount of spray solution needed per acre will depend on the ornamental size and the density of the leaf canopy.
	Mealybugs Whiteflies	0.9 to 1.26 oz	
<b>RESTRICTION</b>			
<ul style="list-style-type: none"> <li>Regardless of the application method do not apply more than 0.4 lb active ingredient clothianidin per acre per year.</li> </ul>			

**SOIL APPLICATIONS TO ORNAMENTALS IN OUTDOOR LANDSCAPES  
AND INTERIOR PLANTSCAPES**

For systemic insect control on ornamental plants grown in-ground and outdoor landscapes (commercial, industrial, recreational and residential)

PLANTS	PESTS	<b>ARENA 50 WDG INSECTICIDE<sup>1</sup> APPLICATION RATES</b>	<b>DIRECTIONS</b>
<b>Ornamental Plants including:</b> Bedding Plants Evergreens Flowering Plants Foliage Plants Ground Covers Non-Bearing Fruit Trees Non-Bearing Nut Trees Non-Bearing Vines Ornamental Trees Shrubs	Aphids Mealybugs Whiteflies White Grubs including: Asiatic Garden Beetle European Chafer Green June Beetle Japanese Beetle Northern Masked Chafer Oriental Beetle Southern Masked Chafer	<p align="center"><b>Shrubs</b></p> 1.2 to 2.4 grams per foot of height  11.2 to 22.8 grams per 10 cumulative feet of height  (0.38 to 0.78 oz per 10 cumulative feet of height)	<p><b>Soil Drench:</b> Mix required dose in water and uniformly apply to soil around base of shrub or tree. Pull back mulch before drenching. For optimal performance, apply at least 2 quarts of dilute solution per foot of height. If lower drench volume is used, apply 1/2 inch of irrigation immediately after application to move product into root zone. Keep soil moist for at least 7 days.</p> <p><b>Soil Injection:</b> Mix required dose in water and make at least four injections per shrub. For optimal performance, inject at least 2 qts of dilute solution per foot of height. Keep soil moist for at least 7 days.</p>
		<p><b>Multi-Trunk Trees</b>                      1.2 to 4.8 grams per cumulative inch of trunk diameter at breast height (DBH)                      11.2 to 48 grams per 10 cumulative inches of trunk diameter at breast height (DBH)                      0.38 to 1.6 oz per 10 cumulative feet of trunk diameter at breast height (DBH)</p> <p><b>Single-Trunk Trees</b>                      1.2 to 4.8 grams per inch of trunk diameter at breast height (DBH)                      11.2 to 48 grams per 10 inches of trunk diameter at breast height (DBH)                      0.38 to 1.6 oz per 10 inches of trunk diameter at breast height (DBH)</p>	<p><b>Soil Drench:</b> Mix required dose in water and uniformly apply to soil around base of tree, directed at the root zone. Pull back plastic or mulch before drenching. For optimal performance, apply at least 2 quarts of dilute solution per inch of trunk diameter. If lower drench volume is used, apply 1/2 inch of irrigation immediately after application to move product into root zone. Keep soil moist for at least 7 days.</p> <p><b>Soil Injection:</b> Mix required dose in water and make at least four injections per tree with a low-pressure applicator. Use same amount of solution per hole. Injections can be made using the following methods:</p> <p><b>Grid System</b> – Space injections on a 2.5 ft center extending to drip line.</p> <p><b>Circle System</b> – Make injections in concentric circles extending inward from drip line.</p> <p><b>Basal System</b> – Space injections evenly around trunk no more than 12 inches out from the base. Keep soil moist for at least 7 days after application.</p>

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**SOIL APPLICATIONS TO ORNAMENTALS IN OUTDOOR LANDSCAPES  
AND INTERIOR PLANTSCAPES (continued)**

<b>PLANTS</b>	<b>PESTS</b>	<b>ARENA 50 WDG INSECTICIDE<sup>1</sup> APPLICATION RATES</b>	<b>DIRECTIONS</b>
<b>Ornamental Plants including:</b> Bedding Plants Evergreens Flowering Plants Foliage Plants Ground Covers Non-Bearing Fruit Trees Non-Bearing Nut Trees Non-Bearing Vines Ornamental Trees Shrubs	Aphids Mealybugs Whiteflies White Grubs including: Asiatic Garden Beetle European Chafer Green June Beetle Japanese Beetle Northern Masked Chafer Oriental Beetle Southern Masked Chafer	<b>Broadcast Rates for Plants Grown in Beds:</b> 4.3 to 8.3 grams per 1,000 sq ft (6.4 to 12.8 oz/A)	Make an application in such a manner as to maximize spray contact with soil. Use a sufficient water volume to incorporate the product into the soil, either during application or soon thereafter. Overhead irrigation immediately after application is recommended to move product off of plant foliage and to the soil surface.  For established bedding plants, flowering plants and ground cover apply prior to bloom or after flowering is complete and all petals have fallen off.

*Arena 50 WDG Insecticide<sup>1</sup>* is a systemic insecticide and must move to the area of the plant where the target pest is feeding. Control of pests may be delayed following an application for one or more weeks as *Arena 50 WDG Insecticide<sup>1</sup>* moves to the feeding site. Factors such as plant size, soil type, and water demands will impact the time between application and obvious insect control.

**RESTRICTION**

- Regardless of the application method do not apply more than 0.4 lb active ingredient clothianidin per acre per year.

**Note:** *Arena 50 WDG Insecticide<sup>1</sup>* may be tank mixed or co-applied with other compatible insecticides. Please confirm product compatibility using the water volumes planned with a jar test prior to mixing up a large amount of material.



**RESIDENTIAL APPLE AND PEAR TREES**  
**(Not for use in commercial production sites) Post Bloom Application Only**

Apply *Arena 50 WDG Insecticide*<sup>1</sup> when threshold populations are observed. Do not wait until population beyond threshold has been established. Apply *Arena 50 WDG Insecticide*<sup>1</sup> in sufficient water to ensure uniform and thorough coverage of foliage. Thorough coverage is required for optimum control. To achieve optimum coverage, use proper spray pressures, nozzles, nozzle spacing and water volume per acre.

<b>FOLIAR POST BLOOM APPLICATION RATES FOR USE ON RESIDENTIAL BEARING APPLE AND PEAR TREES</b>			
<b>USE SITES</b>	<b>PESTS</b>	<b>ARENA 50 WDG INSECTICIDE<sup>1</sup> APPLICATION RATES</b>	<b>SPECIAL INSTRUCTIONS</b>
<b>Residential bearing:</b> Apple Crabapple Pear	Aphids Leafhoppers Apple Maggot Leafminers Plum Curculios Codling Moths Leafrollers (suppression) Oriental Fruit Moth Soft Scales Pear Psylla	2 to 3 oz per 100 gallons of spray solution or 4 to 6 oz/A (2 to 3 oz ai/A) Rates per 100 gallons assume a spray rate of 200 gallons per acre. Adjust <i>Arena 50 WDG Insecticide</i> <sup>1</sup> rate per 100 gallons so as not to exceed 6 oz <i>Arena 50 WDG Insecticide</i> <sup>1</sup> per acre.	Apply <i>Arena 50 WDG Insecticide</i> <sup>1</sup> when threshold populations are observed. Do not wait until large insect populations have been established. The amount of <i>Arena 50 WDG Insecticide</i> <sup>1</sup> required per acre will depend on tree size and pest pressure. Choose lower rate for light infestation and/or small trees, and the higher rate for heavy infestations and/or larger trees. Apply by ground in 200 gallons per acre as a full coverage spray.
<b>RESTRICTIONS</b> <ul style="list-style-type: none"> <li>• Do not apply treatments less than ten (10) days apart.</li> <li>• Do not apply within seven (7) days of harvest.</li> <li>• Regardless of the application method do not apply more than 0.4 lb active ingredient clothianidin per acre per year.</li> <li>• Do not feed or allow livestock to graze on cover crops from treated orchards.</li> <li>• Applications must be made post bloom.</li> </ul>			

**NON-BEARING FRUIT AND NUT TREES (IN LANDSCAPES WHICH ARE NOT INTENDED FOR USE IN COMMERCIAL PRODUCTION) (POST-BLOOM APPLICATIONS)**

Apply *Arena* 50 WDG Insecticide<sup>1</sup> when threshold populations are observed. Do not wait until population beyond threshold has been established. Apply *Arena* 50 WDG Insecticide<sup>1</sup> in sufficient water to ensure uniform and thorough coverage of foliage. Thorough coverage is required for optimum control. To achieve optimum coverage, use proper spray pressures, nozzles, nozzle spacing and water volume per acre.

<b>APPLICATION RATES (POST-BLOOM APPLICATIONS) ON NON-BEARING FRUIT AND NUT TREES</b>		
<b>PESTS</b>	<b>ARENA 50 WDG INSECTICIDE<sup>1</sup> APPLICATION RATES</b>	<b>SPECIAL INSTRUCTIONS</b>
Aphids Apple Maggots Codling Moths Leafhoppers Plum Curculios Oblique-banded Leafrollers (suppression) Oriental Fruit Moths Spotted Tentiform Leafminers Western Tentiform Leafminers	2 to 3 oz per 100 gallons of spray solution  or  4 to 6 oz/A (0.125 to 0.187 lb ai/A)	Non-bearing fruit, including apples and pears, and nut trees in landscapes are only for ornamental use. <b>FRUITS FROM THESE TREES ARE NOT TO BE USED AS FOOD AT ANY TIME.</b>  The amount of <i>Arena</i> 50 WDG Insecticide <sup>1</sup> per acre will depend on tree size, pest pressure and the volume of foliage present. The rate of water carrier per acre is based on a standard of 400 gallons of dilute spray per acre for large trees. <b>For Control of Codling Moth and Oriental Fruit Moth:</b> Apply <i>Arena</i> 50 WDG Insecticide <sup>1</sup> in a program of rotational sprays with other labeled insecticides. When using the 3 oz rate of <i>Arena</i> 50 WDG Insecticide <sup>1</sup> to control codling moth and/or oriental fruit moth, do not apply treatments in less than a 14 day interval.  Apply <i>Arena</i> 50 WDG Insecticide <sup>1</sup> in a full coverage spray in 200 gallons per acre to the point of drip. The spray volume will depend on tree size and density of the canopy.  A single application may result in suppression only.
<b>RESTRICTIONS</b>		
<ul style="list-style-type: none"> <li>• Regardless of the application method do not apply more than 0.4 lb active ingredient clothianidin per acre per year.</li> <li>• Do not apply treatments less than 10 days apart.</li> <li>• Do not harvest or consume fruits or nuts from trees.</li> </ul>		

## TURFGRASS

*Arena 50 WDG Insecticide*<sup>1</sup> can be used as directed on grass grown in industrial, commercial and residential landscapes including, airports, athletic fields, cemeteries, commercial sod farms, golf courses, home lawns, parks and playgrounds.

*Arena 50 WDG Insecticide*<sup>1</sup> has sufficient residual activity to provide high levels of control when applications are made preceding or during the egg laying activity of the target pests. The need for an application can be based on historical monitoring of the site, previous records or experiences, current season adult trapping or other methods. Follow application with sufficient irrigation or rainfall to move the active ingredient through the thatch.

Apply *Arena 50 WDG Insecticide*<sup>1</sup> to turf at 6.4 to 12.8 oz per acre. The rate is dependent on the target pest(s), their stage of development and the desired length of control. Multiple applications can be made but do not exceed the maximum amount per year (12.8 oz per acre). Consult your local State Agricultural Experiment Station, State Extension Turf Specialists or other turf experts for specific information concerning the timing of application(s). When targeting multiple pests, make application to earliest egg lay or adult flight. The high end of the rate range may be needed if extended control of secondary pests is desired.

Apply *Arena 50 WDG Insecticide*<sup>1</sup> in sufficient water volume (1 to 5 gallons per 1,000 sq ft) to provide optimal distribution in the treated area. The use of properly calibrated equipment normally used for the application of turfgrass insecticides is required. Use equipment that will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off target drift. Check calibration periodically to ensure that equipment is working properly.

<b>APPLICATION ON TURFGRASS</b>		
<b>PESTS</b>	<b>ARENA 50 WDG INSECTICIDE<sup>1</sup> APPLICATION RATES</b>	<b>TIMING INSTRUCTIONS</b>
Annual Bluegrass Weevils (larval stages) Billbugs Black Turfgrass Ataenius <i>Phyllophaga</i> spp. (May or June Beetles) Spittle Bugs White Grubs Asiatic Garden Beetle European Chafer Green June Beetle Japanese Beetle Northern Masked Chafer Oriental Beetle Southern Masked Chafer	6.4 to 12.8 oz/A (0.2 to 0.4 lb ai/A)  0.14 to 0.29 oz/ 1,000 sq ft 4 to 8.3 grams per 1,000 sq ft	<b>Preventative Applications:</b> Make applications through peak egg hatch of target species. Use the upper end of the rate range if application is made 60 days or more prior to peak adult flight and/or egg lay.  <b>Post egg hatch application:</b> After egg hatch of the target species has occurred or there is obvious turf damage from the current generation use the upper end of the rate range.
Armyworms Chinch Bugs including: Hairy Southern Crane Fly including: American European Cutworms Nuisance Ants (excluding Fire, Harvester, Carpenter, Pharaoh) Sod Webworms	9.6 to 12.8 oz/A (0.3 to 0.4 lb ai/A)  0.22 to 0.29 oz/ 1,000 sq ft 6.2 to 8.3 grams/ 1,000 sq ft	<b>Cranefly:</b> Apply in the spring, when larvae are mature but prior to pupation or in the fall prior to egg hatch.  <b>Other pests:</b> Apply when pest first appears.
Mole Crickets (suppression)	12.8 oz/A (0.4 lb ai/A)  0.29 oz/1,000 sq ft 8.3 grams/1,000 sq ft	Time application to peak egg lay or early instars. Suppression can either mean control that is not commercially acceptable or inconsistent, ranging from poor to good.

(continued)

**APPLICATION ON TURFGRASS** (continued)

1 level teaspoon contains 3 grams and one cup (8 fl oz) contains 5 oz of *Arena* 50 WDG Insecticide<sup>1</sup>.

**RESTRICTIONS**

- Regardless of the application method do not apply more than 0.4 lb active ingredient clothianidin per acre per year.
- Do not allow this product to contact plants in bloom if bees are foraging the turf area.
- Do not allow children and pets to enter treatment area until sprays have dried.

**Reduced Rate Application for Summer White Grub Control in Turf**

<b>PESTS</b>	<b>ARENA 50 WDG INSECTICIDE APPLICATION RATES</b>	<b>TIMING INSTRUCTIONS</b>
White Grubs European Chafer Japanese Beetle Northern Masked Chafer	4.5 oz/A (0.14 lb ai/A)  0.1 oz/1,000 sq ft 2.8 grams per 1,000 sq ft	Make application between June 1st and July 15th. Make application prior to egg hatch of listed white grub species.

1 level teaspoon contains 3 grams and one cup (8 fl oz) contains 5 oz of *Arena* 50 WDG Insecticide<sup>1</sup>.

**RESTRICTION**

- Regardless of the application method do not apply more than 0.4 lb active ingredient clothianidin per acre per year.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a dry place away from excessive heat. Do not store near food or feed. Store in original container only. To close package, replace and tighten cap to form an airtight seal. For help with any spill, leak, fire or exposure involving this material, call day or night (800) 892-0099.

**PESTICIDE DISPOSAL:** To avoid waste, use all material in this container by application according to label directions. If waste cannot be avoided, offer remaining product to a waste facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available; otherwise dispose of in a sanitary landfill or incineration.

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Manufactured for:

**Valent U.S.A. LLC**

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