GROUP

4A

INSECTICIDE



Arena 0.25G



FOR SYSTEMIC INSECT CONTROL IN TURFGRASS, SOD FARMS, LANDSCAPE ORNAMENTALS, INTERIOR PLANTSCAPES AND NON-BEARING FRUITS AND NUTS (IN LANDSCAPES)

INGREDIENTS

Active Ingredient	By Wt.
*Clothianidin	0.25%
Other Ingredients	<u>99.75%</u>
Total	100.00%

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

EPA Reg. No. 66330-70-59639 EPA Est. 39578-TX-01

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes.

Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.

Call a poison control center or

doctor for treatment advice.

If 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 do so 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.

(Continued)

FIRST AID (Continued)

If inhaled: 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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE: CALL 1-800-892-0099 FOR 24-HOUR CHEMICAL EMERGENCY (Spill, Leak, Fire or Accident) ASSISTANCE: CALL CHEMTREC 1-800-424-9300

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS CAUTION

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

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart. Applicators and other handlers must wear long-sleeved shirt and long pants, shoes plus socks, chemical-resistant gloves made of any waterproof material such as poly-ethylene or polyvinyl chloride.

Follow the manufacturer's instructions for cleaning/ maintaining PPE. If no instructions for washables are available, 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 breakdown.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates. 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 washwaters or rinsate.

This product is toxic to bees exposed to direct treatment or residues on blooming crops. Do not apply during bloom or when bees are present.

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

Carefully read and understand the Directions for Use and restrictions before applying this product.

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.

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, socks, shoes, chemical-resistant gloves made of any waterproof material.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in the box apply to use 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 and commercial greenhouses.

Keep children and pets off treated area until the dust has settled.

GENERAL INFORMATION

Arena® 0.25 G Insecticide is a broad spectrum, long lasting systemic insect control product for a wide spectrum of insects infesting turfgrass, sod farms, landscape ornamentals, interior plantscapes and non-bearing fruits and nuts (in landscapes). Non-bearing fruits and nuts are plants that do not bear edible fruits and nuts for at least 12 months after application of pesticides. *Arena* 0.25 G can be used around residences, business complexes, industrial complexes, airports, playgrounds, school yards, parks and recreation areas, athletic fields, golf courses, cemeteries, arboretums, non-production greenhouses, and other non-production turf and ornamental sites. *Arena* 0.25 G can be used on commercial sod farms.

GENERAL RESTRICTIONS AND LIMITATIONS

- Regardless of formulation or type of application (soil or foliar), DO NOT apply more than a total of 0.4 lbs active ingredient (Clothianidin) per acre.
- If the maximum season limit of Clothianidin (0.4 lbs/acre) has been applied and pest populations require additional treatments, use another registered pesticide labeled for the target pest.

RESISTANCE MANAGEMENT

The active ingredient in *Arena* 0.25 G is Clothianidin which is 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* 0.25 G or other Group 4A insecticides. Other active ingredients in Group 4A include imidacloprid, thiamethoxam, acetamiprid and dinotefuran.

To delay insecticide resistance in insects that are at risk of developing resistance to insecticides consider:

- Avoiding the consecutive use of other Group 4A insecticides on the same insect species.
- Using tank mixtures with insecticides from a different target site of action group as long as both products are registered for the same use.
- Basing insecticide use on a comprehensive IPM program.
- Monitoring treated insect populations for loss of field efficacy.
- Contacting your State Agricultural Experiment Station, State Extension Specialists, or other turf and ornamental experts and/or Valent U.S.A. Corporation for insecticide resistance management and/or IPM recommendations for the specific site and resistant pest problems.
- For further information or to report suspected resistance, you may contact Valent U.S.A. Corporation at 1-800-682-5368.

PLANT TOLERANCE

Neither the manufacturer nor the seller has determined whether or not *Arena* 0.25 G can be used safely on all cultivars of plants listed on the label. *Arena* 0.25 G has been tested on many

cultivars with no phytotoxicity observed at label rates. Since all plant species and their cultivars have not been tested for tolerance, it is recommended that a small area or number of plants be treated 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* 0.25 G in a manner inconsistent with its labeling.

DIRECTIONS FOR USE

TURFGRASS

Arena 0.25 G can be used for broad spectrum insect control in turfgrass. Arena 0.25 G can be used on sod farms, around residences, business complexes, industrial complexes, airports, playgrounds, school yards, parks and recreation areas, athletic fields, golf courses, cemeteries and other similar areas. Arena 0.25 G can be used on commercial sod farms and applicators should follow WPS agricultural use directions.

Arena 0.25 G has sufficient residual activity to provide high levels of control. The need for an application can be based on historical monitoring of the presence of or anticipated occurrence of individual or multiple insect pest species, the site, previous records or experiences, current season adult trapping or other methods. Where multiple pests are present or anticipated, use the highest rates suggested to control the species that are present. Optimum control of white grubs will be achieved when applications are made just prior to egg laying or to early instar larvae of target pests, followed by sufficient irrigation or rainfall to move the active ingredient into the zone where the insect pests are active.

Arena 0.25 G can be applied to turf at 80-160 lbs per acre. The rate is dependent on the target pest(s), their stage of development and the desired level of control. Optimum results for grubs (larvae) will be achieved when applications are made just prior to or just after peak egg laying. Higher rates should be used when long residual control is desired or late season curative applications are made to turf already showing grub damage. Multiple applications can be made but do not exceed the maximum amount per year (160 lbs per acre). Consult your local State Agricultural Experiment Station, State Extension Turf Specialists or other turf experts for specific information concerning the timing of applications.

Apply Arena 0.25 G to provide uniform distribution in the treated area. The use of properly calibrated equipment normally used for the application of granular turfgrass insecticides is suggested. Check calibration periodically to ensure that equipment is delivering the desired amount of insecticide.

Avoid mowing turfgrass until after irrigation or rainfall has occurred so that uniformity of application will not be affected.

APPLICATION EQUIPMENT

Apply Arena 0.25 G uniformly over the area being treated with normally used granular application equipment. Use either drop-type and rotary-type spreaders to apply Arena 0.25 G. Avoid the use of spreaders which would apply the material in narrow,

concentrated bands. Calibrate application equipment prior to use according to the manufacturer's directions. Check frequently to be sure equipment is working properly and distributing granules uniformly and accurately.

APPLICATION RATES

TURFGRASS		
APPLICATION RATE	INSECT PEST	
1.84-3.67 lbs per 1,000 sq ft	Annual bluegrass weevil Army worms* Billbugs	
80-160 lbs per acre (0.2-0.4 lbs ai/A)	Blilbugs Black turfgrass ataenius Chinch bugs Cutworms* Mole Crickets (Suppression) Nuisance ants Phyllophaga spp. (May or June beetles) Sod webworms Spittle bug White grubs (Asiatic garden beetle, European chafer, Green June beetle, Japanese beetle, Northern masked chafer, Oriental beetle, Southern masked chafer)	

^{*} For control of these insects, a minimum rate of 130 lbs of *Arena* 0.25 G per acre is recommended.

INSTRUCTIONS AND RESTRICTIONS

- Consult your local State Agricultural Experiment Station or State Extension Turf Specialists or other turf experts for more specific information concerning timing of application.
- Do not apply more than a total of 160 lbs of *Arena* 0.25 G (0.4 lbs active ingredient Clothianidin) per acre per season.
- 3. Water in with enough irrigation or rainfall to move the active ingredient into the zone where the target insects are active. Arena 0.25 G applications will provide control of foliage feeding insects; however, control will not be achieved until the active ingredient is taken up by the plant roots and translocated to the area where insects are feeding.
- If the maximum season limit of Clothianidin as mentioned above has been applied and pest populations require additional treatments, use another registered pesticide labeled for control of the targeted insects.

ORNAMENTALS, INTERIOR PLANTSCAPES & NON-BEARING FRUITS AND NUTS (IN LANDSCAPES)

Arena 0.25 G is a broad spectrum, long lasting systemic insect control product for a wide spectrum of insects infesting landscape ornamentals, interior plantscapes and non-bearing fruits and nuts (in landscapes). Arena 0.25 G can be used around residences, business complexes, industrial complexes, airports, playgrounds, school yards,

parks and recreation areas, athletic fields, golf courses, cemeteries, arboretums and non-production greenhouses.

Apply Arena 0.25 G to provide uniform distribution in the treated area. The use of properly calibrated equipment normally used for the application of granular insecticides is suggested. Check calibration periodically to ensure that equipment is delivering the desired amount of insecticide.

Water in with enough irrigation or rainfall to move the active ingredient into the zone where the target insects are active. *Arena* 0.25 G applications will provide control of foliage feeding insects; however, optimum control will not be achieved until the active ingredient is taken up by the plant roots and translocated to the area where insects are feeding. When making applications for *Arena* 0.25 G for the systemic control of foliar insects, there will be a delay between the time the applications are made and control of existing insects is achieved. Therefore, it is best to apply *Arena* 0.25 G before insects are anticipated to provide protection.

APPLICATION RATES

ORNAMENTALS, INTERIOR PLANTSCAPES & NON-BEARING FRUITS AND NUTS (IN LANDSCAPES)		
APPLICATION	NOTOT DECT	
RATE	INSECT PEST	
133-160 lbs per	Aphids	
acre	Azalea lace bug	
	Caterpillars	
3.05-3.67 lbs of	Florida wax scale	
product per 1,000	Glassy-winged sharpshooter	
sq ft	Japanese beetle adults	
(0.00.0.4.11	Leafhoppers	
(0.33-0.4 lbs ai per	Leafminers	
acre)	Mealybugs	
	Root weevils	
	Scales	
	White grubs	
	Whiteflies	

INSTRUCTIONS AND RESTRICTIONS

- Non-bearing fruits and nuts in landscapes are only for ornamental use and are not intended for use in commercial production. FRUIT AND NUTS FROM THESE PLANTS ARE NOT TO BE USED AS FOOD AT ANY TIME.
- 2. Do not apply more than a total of 160 lbs of *Arena* 0.25 G (0.4 lbs active ingredient Clothianidin) per acre per season.

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.

PESTICIDE DISPOSAL

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL

Triple rinse (or equivalent), then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or (if allowed by State and local authorities) by burning. If burned, stay out of smoke.

CONDITIONS OF SALE

- Valent U.S.A. Corporation ("Valent") warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in accordance with the Directions for Use under normal conditions of use.
- This warranty does not extend to the use of this product contrary to label instructions, or under abnormal use conditions, or under conditions not reasonably foreseeable to Valent. VALENT DISCLAIMS ALL OTHER WARRANTIES, **EXPRESSED OR IMPLIED, INCLUDING ANY** WARRANTY OF FITNESS FOR A PARTICU-LAR PURPOSE OR MERCHANTABILTY. TO THE EXTENT PERMITTED BY LAW, SELLER SHALL NOT BE LIABLE FOR CONSEQUEN-TIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM OR IN CONNECTION WITH THE MANUFACTURE, SALE, DELIV-ERY, USE, HANDLING OR STORAGE OF THIS PRODUCT. TO THE EXTENT PERMIT-TED BY LAW, SELLER'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE. VALENT DOES NOT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTY, GUARANTEE OR REPRESENTATION CONCERNING THIS PRODUCT.
- 3. Critical and unforeseeable factors beyond the control of Valent prevent Valent from eliminating all risks in connection with the use of this product. Such risks include, but are not limited to, damage to plants and crops to which the product is applied, lack of complete control, and damage caused by drift to other plants or crops. Such risks occur even though the product is reasonably fit for the use stated on the label and even though label directions are followed.
- Except as stated in 1. above, to the extent permitted by law, by purchasing, accepting and using this product, the buyer and user acknowledge and assume all risks and liabilities resulting from handling, storage, and use of this product.

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Information contained in this booklet is accurate at the time of printing. Since product testing is a continuous process, please read and follow the directions on the product label for the most current directions and precautionary statements.

Always check with your state to verify state registration status.



For state registration and/or supplemental labels, please call or visit us online.

 $\textit{Products That Work, From People Who Care} \ | \ \textbf{www.valent.com} \ | \ 800-89-VALENT \ (898-2536)$

Read and follow the label instructions before using.

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