# GrubOut DG 0.2% INSECTICIDE



# **Dispersing Granule Technology**

For systemic insect control in turfgrass, residential lawns, golf courses, sod farms, commercial and residential landscape plantings, ornamental trees, shrubs, parks, recreational areas, athletic fields and ornamentals, ornamental fruit and nut trees and vegetable plants in greenhouses, nurseries and interior plantscapes.

- Controls early nymph stages of mole crickets
- Ideal for white grub control
- Ideal for control of listed subsurface pests
- Contains GrubOut® Insecticide, contains the active ingredient imidacloprid
- **Patented Dispersing Granule Formula**

Active Ingredients Imidacloprid ... Other Ingredients. EPA Reg. No. 9198-244
EPA Est. No. 9198-OH-1M. 9198-OH-2B. 9198-AL-001A
Underlined letter is first letter used in run code on bag

# KEEP OUT OF REACH OF CHILDREN CAUTION

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum, using tobacco or using the toilet.

FIRST AID				
If in eyes	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contacts, if present, after the first 5 minutes, then continue rinsing.			
	Call a poison control center or doctor for treatment advice.			
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-757-8951 for emergency medical treatment information.				

Note to Physician: No specific antidote is available. Treat patient symptomatically.

- Personal Protective Equipment (PPE):
  WPS Uses: The following Personal Protective Equipment requirements apply to uses covered under the
  Worker Protection Standard (40CFR Part 170), i.e. sod farm uses:
  Applications and other handlers must wear:
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- Non-WPS Uses: The following Personal Protective Equipment requirements apply to uses other than those covered by the WPS: Applicators and other handlers must wear:

   Long sleeved shirt and long pants
   Chemical resistant-gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrill erubber, neoprener ubber, natural rubber, polyethylene, polyvinylchloride (PVC) or vitor. If you want more options, follow the instructions for category A on an EPA chemical-resistance category salection-critic

Engineering controls statement:
When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements itseld 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

- sets 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
- 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.

This pesticide is highly toxic to aquatic invertebrates, 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 when disposing of equipment washwater.

This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

READ ALL DIRECTIONS PRIOR TO APPLICATION OF THE PRODUCT

**SGN 150** 

Net Wt. 40 Lbs. (18.14 kg)



## Dispersing Granule Technology

DIRECTIONS FOR USE

Nice a violation of Federal Law to use this product in a manner inconsistent with its labeling.

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

RESTRICTIONS FOR ALL USES
Do not graze treated areas or use clippings from treated areas for feed or forage

Do not apply to soils which are water-logged or saturated. This condition will not allow the penetration of water into the root zone of the clants.

Do not over-irrigate or allow excessive runoff to occur following an application of this product.

On plants with a production cycle of less than one year, application is not to exceed a frequency of more than once each 16 weeks for a particular plant. On stock plants and woody crops with a production cycle of greater than one year, application may not exceed once a year.

Rotational Plant Back Intervals
Treated rases may be replanted with any crop specified on an imidaciping label, or with any crop for which a tolerance exists for the active ingredient immediately except for crees it included business, milet, cats, re, triticale and rice) and safflower which have a 30-day plant back interval.

For crops not listed on an imidadoprid label, or for crops for which no tolerance for the active ingredient has been established, a 12 month plant-back internal must be observed.

AGRICULTURAL USE RECURREMENTS
Use this procedure with mis labeling and with the Workers Protection Standard 40 CFR part 170, This standard contains requirements for be producted or grant and entering or farms, foreign, managers, and grant-bounds and handless of agricultural positiodies. It commans requirements for label discovery or contained to the product of the

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

PPE required for early entry to heated areas that is permitted under the worker Protection Standard and that involves contact with anything that has been recovered to the protection of the pro

NON-AGRICULTURAL USE REQUIREMENTS
The recultements in this box agely to use in this product that are not within the scope of the Worker Protection Standard for agricultural poeticids part 170. The Worker Protection Standard applies when this product is used to produce agricultural glants on farms, foreign, rurantee, or grey Don or disprove applies when a capting application to one destine transpersation. One of either recenter areas until dust have not present or present and acting application. On one either transpersation stress with dust have not present or present and acting application. On one either transpersation stress with dust have not present the present and acting application to not either transpersation.

Product Use Information .

The product control (see Information .

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Application Timing
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Irrigate if there has not been rainfall within 24 hours after application with enough water to thoroughly wet the underlying soil, this washes the active ingredient down below the full and thatch, and it enourages the subsurince peats to move upward in the soil profile where they will come in contact with the active ingredient. For bee peat control and not full-size, minimize that houldup to no more than 0.5 in., using mechanical remoral emelosis as needed.

Pest	Amount of Product
White Ordu Larven, such as Armal Bullery as weed! (Appendix spp.) Amail Bullery as weed! (Appendix spp.) Assist operation beefs. (Massiere casternee) Billysis (Semponizor spp.) Billysis (Semponizor spp.) European Challer, (Procorogou majesti) Billysis (Appendix spp.) Billysis (Appendix spp.) Billysis of Auto Bodder, (Prophogrags spp.) Birthom Southern masked childen, (Cyboolpala Borealis, Oriental Bodder, Automatic contesting)	125 – 200 barleare 3.0 – 4.5 bar1,000 sq. ft.
Crane Fly, such as European species, (Tipula spp.)	125 – 200 los/acre or 3.0 – 4.5 los/1,000 sq. ft.
Mole crickets, (Scapteriscus spp.)	200 lbs/acre or 4.5 lbs/1,000 sq. ft.

- satrictions

  On or agely more than 200 lbs, of product per acre (0.4 lb, acrive ingredient per acre) per year.

  On or agely to vegitable guidens.

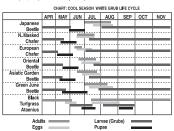
  On or agely to saturated dolls or water dogged areas. The product cannot pervious in the rect zone of the gital misse conditions.

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White grubs: Ideal liming for preventative applications are made is the time of peak adult flight activity as determined by local site monitoring, or as recommended by local cooperative extension agents. This is also the primary egg laying period, which will yield the best results.

Cool Season Turf Regions
The white goal bit cycle druft or the cool season buf regions below (Bustnites application iming that will control many of the grub spaces when they are most witnessed. Curry find preprior, designate god control can be obtained at 3.0 poundage or 1,000 sq. 1, in all but the most enterine situations (theory thatch, heavy intent pressure) where the 4.5 bits per 1,000 sq. 1, time is necessary for adequate control.



(chart reprinted with permission of Dr. David Shetlar, Entomologist, Ohio State University)

Irrigate if there has not been minful within 24 hours after application with enough water to thoughly see the undeline good, Use higher lated application rates in areas of how, precause and where that the present in excess of 0.5 in, thickness, Reduce thatch by mechanical means for best hard quality and other control of grobs popiess.

Medicinates

Addition Use 8th product in organization with a mendedal praedicate to central salet is large symph may content.

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Optimal control is actived at this time because young symphs are more accoptable for one layer and pregular more frequent applications to market in sections in most concentration. Control of larger, more designing symphs later in the year may require more frequent applications to market market in minimal participations, was more application to large the market control above to the cell oration where cell oration wher

Belowing insect posts:

Adalgois (including hemics woulty adalgoi)

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Apply 1.5 lbs of product per 1.2 inches of cumulative trunk dameter (1084) 

Usted borers – Application to omamental trees that are already heavily infested may not save the tree, due to existing damage and stress. Diameter at Breast Height (IDBH) is measured at 4.5 Apply listed amount of product everyly to the soil surface, under the canopy of the tree. Rainfall (IDBH) is measured at 4.5 or irrigation will water product to tree root zone where product will be absorbed into the plant. Apply 1.5 (bs. of product per 1.2 feet of comulative shrub.

Before application, remove any weed barrier material that does not allow water permeability. Shrubs Apply listed amount of product evenly within 1.2 feet of the base of the shrub. Brush or wash or any granules from plant foliage to prevent plant injury. Apply 4.5 lbs. of product per 1,000 sp, 8.

Can be applied before planting or to established plants. Apply product evenly over area to be treated and irrigate with 1,14 inch of water. Brush or wash off any granutes from plant foliage to prevent plant fluid; Flowers and Groundcovers

APPLICATION TO NURSERY AND GREEHHOUSE
This product controls lesion seather bending and resolve pasts on ornamental fault and nut trees and commercial vegetable plants in greenhouses, nurseries and intensing plantscapes. In these systems along and will elimon upward within the plant. Each dry applied grants and disperse into flourance of particles with imrigation or ramiful. Excitizing incorporation of the product to the notes of the plant, allowing the plant to absorb the active ingredient. After application, apply 14 inch of waster to treated uses. Do not allow bendinger not not continuents sort lail seal in registration or 10 days, whichever is forger.

		DOSAGE				
	İ	Container	Bulk Application		Topical application	
PEST	USE PATTERN	Size (inches)	Pots/cu.Yd. of mix	Bulk rate Ibs/cu.Yd.	Topical rate level teaspoon	Grams/pol
detaids schids schid schids schid s	Herbaceous Species including vegetable plants* (1 or 2 plants(pot)	2.0 to 3.0 3.5 to 5.0 5.5 to 7.0 8.0 to 10.0 11.0 to 12.0	4500 to 3200 1600 to 1300 900 to 400 200 to 160 80 to 60	35.0 to 17.50 19.5 to 15.0 9.0 to 6.0 5.0 to 4.0 4.0 to 2.5	2/3 to 1-1/3 1-1/3 to 2.0 2.0 to 2-3/4 2-3/4 to 3-3/4 3-3/4 to 5-2/3	2.5 to 5.0 5.0 to 7.0 7.0 to 10.0 10.0 to 13. 13.5 to 20.
	Herbaceous Species including vegetable plants* (3 or more plants/pot)	2.0 to 3.0 3.5 to 5.0 5.5 to 7.0	4500 to 3200 1600 to 1300 900 to 400	45 to 35 30 to 20 12.5 to 10.0	1-1/3 to 1-/3/4 1-3/4 to 2-3/4 2-3/4 to 3-3/4	5.0 to 6.5 6.5 to 10.0 10.0 to 13.5
Japanese beetles (adults) Lacebucs		8.0 to 10.0	200 to 160	7.5 to 5.0	3-3/4 to 5-2/3	13.5 to 20.5
cell bedfers (including Elm and Wuhramm latel Deep (including Elm and Wuhramm latel Deep (including sless)—selfinopers (includ	Woody Perennial Species (including orna- mental truit and nut trees)	11.0 to 12.0	90 to 60	5.0 to 4.0	5-2/3 to 8-1/4	20.5 to 30.5
	transplanting.  Topical Application: May be applied at transplanting, reporting or on established containerized plants, Imigate after application to disperse granules Do not allow significant hearting and runous for 3 imigations or 10 days, whichever is larges.					
	Containerized greenhouse and nursery ornamentals, vegetables and interiorscapes plants	1 Gallon 2 Gallon 3 Gallon 5 Gallon	260 to 230 125 to 100 70 to 60 50 to 30	25.0 to 12.5 22 to 11 16.5 to 8.5 10 to 5	6-3/4 to 13-3/4 13-3/4 to 27-1/2 20-2/3 to 41-1/3 24-3/4 to 51.0	25 to 50 50 to 100 75 to 150 90 to 185
	Remarks For optimal control, make applications prior to egg hatch of the target pest. Irrigate moderately after application to dispense the granules and move the active ingredient to the root zone.					
	Ornamental plants and vegetable plants?	Containerized plants grown in flats, on benches or in beds	Apply 4.5 lbs. per 1,000 sq. ft.			
	Remarks Apply as a broadcast treatment to established plants, trigate after application to disperse granules. Do not allow significant leaching and runout for 3 imigations or 10 days, whichever is longer.					

- Fungus gnat larvae in the soil will be controlled by incorporation. No adult Fungus Gnat control. Other foliar insect control is achieved by the uptake of this product from a healthy root system translocating the active ingredient up into the plant.

  Root Meahylag control will require a through incorporation of containerized media. Coverage is essential for control white minimizing the amount of

- Beachaire. Use but signification dissipps, "Class Beachaire Use to be stagged and continued to the control of t

Restrictions  - To not harvest or consume fruit or nut from ornamental trees that have been treated within 1 year (365 days).  - Do not apply to expetite garders.  - Do not apply to expetite garders.  - Do not apply to expetite garders.  - For cutdoor plants grown in the ground, application cannot exceed a total of 200 lbs. of product (0.4 lb, active impredient) per acre per year.							
	For use on nursery ornamentals						
	PEST	USE PATTERN	DOSAGE	REMARKS			
	White Grub Larvas (Such as: Japanese Beetle, Masked Chaffers, European Chafer, Oriental Beetle, Asiatic Garden Beetle)	Field and Forest Nurseries	Apply as a uniform band on either side of row using a band's at (6) inches wider than the actual root bell diameter to be dug. Do not allow bands in adjacent rows to overlap. Use 4.5 bis, per 1,000 sq. ft.  For grub control in areas of burt, apply as a topic object of the control of the con	Wegetation in the area to be treated should be moved to a height of 3 inches or less prior to application. Moving to the lowest possible height will insure greater considering of control. Apply May Principle July, Treatment must be followed by rainfall or intigation.			

Resistance: Some insects are known to develop resistance to traceticides after repeated use. Use this product in conformity with resistance managems strategies established for the use area. Consult your local Cooperative Extension Service for resistance management strategies and recommended pest management practices for the treatment area.

For resistance management purposes do not apply a foliar application of any chloronicotinyl insecticide following an application of this product

Woody Perennials: Protection of woody perennials will begin later than herbaceous species. Expect protection to be delayed 2 or more weeks. Larger plants will experience larger delays. Applications should be timed to be made in advance of the expected insect activity.

Bark Media: Media containing 30% or more bark content may have a shorter period of protection.

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This ground replace used to contribute our service in ground parts on roadways areas of nurseries, such as under or around field or centainer grown plants, on roadways or other grassy seess in or around nurseries. When used as deneted it will contribute such as Northern Southern masked challes, Cyclopopia bowsis. C. or memorialize, and or Lover, Architeg greater beach suffected as a will contribute part and plants. The contribute is a contribute of the co

That plan to unduring the agglinging which are below the agglination. Applications made price to the post inheadable followed by adequate implicit or the best control. Determine the evode and the properties the post of the description of the properties and the properties of the pro

restrictions.

Do not apply to saturated soits or waterlogged areas. The product cannot penetrate into the root zone of the plant in these conditions.

For outdoor plants grown in the ground, application cannot exceed a total of 200 lbs of product (0.4 lb. active ingredient) per acre per year.

Spreader Settlings These spreader settlings are not intended to regulate calization.  Calization por spreader settlings explaint process.  40 lbs. Irenia 15,000 ps. 18, to the 150 bs. productions - 1,000 ps. 18, to the						
			SPREADER SETTINGS			
SPREADER	GROUND SPEED	WIDTH OF COVERAGE	LIGHT 0.25 lbs. ai/A	LOW 0.30 lbs. ai/A	MEDIUM 0.35 lbs. aVA	
Andersons Model 2000 / AccuPro 2000 (cone 6); Andersons 2000 SR / SR-2000 (cone 6)	3 mph	11 feet	K 1/2	L 1/2	м	
Scotts R-8A (cone 6)	3 mph	11 feet	J 1/2	К	K 1/2	
Lesco 020093 (pattern 0.25)	3 mph	8 feet	D 1/2	E	E 1/2	
Lesco 705698 (pattern 0.25)	3 mph	8 feet	11	12	13	
Lely Models WTR, WFR, HR. 1250 (PTO at 450 rpm) Pattern III-C	4.5 mph	34 feet	5	5 1/4	5 3/4	
Vicon (03 Series)	4.5 mph	22 feet	22	24	26	

These spreader settings were established using standard equipment available from the spreader manufacturer at swath widths and speeds typically used within the industry. Calibrate all spreader equipment at the time of application to achieve the desired application rate.

MACRIANT, FEAS BEFORE USE.

The best for entire Thinking to Use and the Westerly Disclaimer and Limitation of Liability before using this product. It terms are not acceptable, return the unopered product container at once. By using this product, user of Buyer accepts the following Warranty Disclaimer and Limitation of Liability.

LEGAL RIGHTS:
THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS; YOU MAY HAVE OTHER RIGHTS THAT VARY FROM STATEJURISDICTION TO STATEJURISDICTION TO STATEJURISDICTION TO

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