

Biological Insecticide Granule Controls Annual White Grubs in Turf and Ornamentals All Season Long from Spring through Fall

Control de larvas durante toda la temporada desde la primavera a través de otoño.

ACTIVE INGREDIENT: Bacillus thuringiensis subsp. galleriae, Strain SDS-502 fermentation solids, spores and insecticidal toxins*9.0% w/w

OTHER INGREDIENTS:91.0% w/w

TOTAL:100.0% w/w

*Contains a minimum of 1 x 10⁹ CFU per gram.

KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA Reg. No.: 88347-2

Net Weight: 10 lbs ____ 20 lbs ____

EPA Est. No.: 9198-OH-1, 9198-OH-2, 9198-AL-1, 538-OH-1, 538-OH-2, 75527-PA-12,

82757-OH-1, 82757-MA-2, 82757-FL-1

Batch Number: C042318BA06061118

FIRST AID	
If on skin or clothing:	<ul style="list-style-type: none"> 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.
If inhaled:	<ul style="list-style-type: none"> 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.
If swallowed:	<ul style="list-style-type: none"> 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.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or when going for treatment. For non-emergency information concerning this product, call the National Pesticide Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8:00 am to 12:00 pm Pacific Time (NPIC Web site: www.npic.orst.edu). For emergencies, call your poison control center at 1-800-222-1222.	

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION
Harmful if absorbed through the skin, inhaled, or swallowed. Avoid contact with skin, eyes, or clothing and breathing dust. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE) FOR MANUFACTURING PERSONNEL ONLY
<p>Manufacturers must wear: • Long-sleeved shirt and long pants • Waterproof gloves • Shoes plus socks</p> <p>• A NIOSH-approved particulate respirator with any R or P filter with NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C. (Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.)</p> <p>• If no such instructions are available for washables, use detergent and hot water. Keep and wash PPE separately from laundry.</p>

SAFETY RECOMMENDATIONS
<p>For Manufacturing Personnel Only</p> <p>Manufacturers should:</p> <ul style="list-style-type: none"> 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.

grubGONE!® G is for all-season control of annual white grubs in landscape and recreational turf grasses and ornamental plants and to prevent their damage. Use sites include golf courses, residential lawns, commercial grounds (e.g., office and shopping complexes and airports), parks, schools, playgrounds, athletic fields, day care facilities, pet care facilities, cemeteries, sod farms, interior plantscapes, greenhouses, nurseries, fields, and other turf grass-covered or landscape ornamental-planted areas.

ENVIRONMENTAL HAZARDS
For terrestrial uses: Do not apply directly to water, 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 washwaters or rinsate. No manual application can be made within 300 feet of any threatened or endangered Lepidoptera or Coleoptera.
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 (WPS) 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 out of treated areas until dusts have settled.

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 requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation. Read the entire label before use.

PRODUCT USE INFORMATION

grubGONE!® G is a broad-spectrum biological insecticide. When applied at label rates, it is active against annual white grubs of the Annual bluegrass weevil (*Listronotus maculicollis*), Asiatic garden beetle (*Maladera castanea*), European chafer (*Rhizotrogus majalis*), green June beetle (*Cotinis nitida*), Japanese beetle (*Popillia japonica*), May or June beetle (*Phyllophaga* sp.), northern masked chafer (*Cyclocephala borealis*), oriental beetle (*Anomala orientalis*), southern masked chafer (*Cyclocephala lurida*) and black turfgrass ataenius (*Ataenius spretulus*). Rainfall or irrigation causes the active ingredient of **grubGONE!® G**, *Bacillus thuringiensis* (Bt) subspecies *galleriae* strain SDS-502, to be released from the granule. Once released, Bt subspecies *galleriae* strain SDS-502 is carried into the soil and root zone of turf and ornamentals. In the soil, **grubGONE!® G** will control annual white grubs upon ingestion of Bt subspecies *galleriae* strain SDS-502. Insect mortality varies with larval size (instar), grub species, and dose of active ingredient consumed.

RESISTANCE MANAGEMENT

grubGONE!® G is a biological insecticide (Group 11 Insecticide) that is not known to be cross-resistant to any other class of insecticide. However, insect pests are known to develop resistance to pesticide products used repeatedly. Because resistance development cannot be predicted, the use of **grubGONE!® G** should conform to sound resistance management strategies established for the crop and use area. Strategies should include rotation of treatments with different modes of action, limitation of the number of successive generations of the target insect pest being treated with the same compound, and adherence to label directions for use. Consult your local pest control advisor or extension office for additional methods for preventing resistance development. Phyllom BioProducts Corp. encourages responsible product stewardship to ensure effective long-term control of the insect pests on this label.

APPLICATION TO TURF GRASS

Sites of Application: **grubGONE!® G** can be used for applications to landscape and recreational turf grasses found in, on and/or adjacent to golf courses (e.g., greens, tees, collars, roughs, and fairways), residential lawns, commercial grounds (e.g., office and shopping complexes and airports), parks, schools, playgrounds, athletic fields, day care facilities, pet care facilities, cemeteries, sod farms, and other turf grass-covered areas.

grubGONE!® G is not phytotoxic and can be used on all turf grass species.

Restriction: Do not apply more than 6 lb 14 oz of **grubGONE!® G** per 1,000 sq ft of turf grass per year (equivalent to 300 pounds of **grubGONE!® G** per acre of turf grass per year).

Application Methods: Apply **grubGONE!® G** as a broadcast application to turf grass for control of targeted insect pests and to prevent their damage to turf grasses. With calibrated granular equipment, uniformly broadcast **grubGONE!® G** over the area being treated. Maintain adequate soil moisture before and after application for optimum control of insect pests and healthy turf grass growth. Excessively wet or dry conditions may impact the performance of **grubGONE!® G** against annual white grubs. **grubGONE!® G** must move to the site of insect pest infestation, such as in the root zone of the host plant. Sprinkler irrigation of about 0.5 in or moderate rainfall shortly after application improves performance for all applications by moving **grubGONE!® G** into the root zone where annual white grubs feed. Do not mow the turf until the treated area has been irrigated or moderate rainfall has occurred so that granules are not removed from the treated area.

Spreader Settings for grubGONE!® G: Spreader settings are influenced by factors such as speed, equipment wear, and condition of spreader, but mainly by the type or brand of spreader. Use the adjustment chart provided with the kind of spreader used as a guide in establishing accurate calibration of your spreader and to properly apply **grubGONE!® G** at label rates. Spreaders may also be calibrated by collecting deposited granules on a plastic sheet and comparing the amount of **grubGONE!® G** applied on a given area with spreader adjustment settings.

Application Timing: **grubGONE!® G** is effective when applied at label rates (see table directly below) to control annual white grubs and prevent their damage to turf. To control annual white grubs, apply **grubGONE!® G** when target insects are present. For optimum annual white grub control, apply **grubGONE!® G** from peak adult flight through peak egg hatch of the primary insect species being targeted. For specific information about developmental stages of the target insect pest, associated damage, and action thresholds to properly time applications, consult with your State Cooperative Extension Service.

Insect Pests	Application Timing of grubGONE!® G to Turf Grass or Landscape Ornamental Plants Grown in Outdoor Landscapes, Nurseries, Fields, Greenhouses, or Interior Plantscapes.	Application Rate of grubGONE!® G to Turf Grass and Ornamental Plants
<p>Larvae (annual white grubs) of:</p> <p>Annual bluegrass weevil (<i>Listronotus maculicollis</i>)</p> <p>Asiatic garden beetle (<i>Maladera castanea</i>)</p> <p>European chafer (<i>Rhizotrogus majalis</i>)</p> <p>Green June beetle (<i>Cotinis nitida</i>)</p> <p>Japanese beetle (<i>Popillia japonica</i>)</p> <p>May or June beetle (<i>Phyllophaga</i> sp.)</p> <p>Northern masked chafer (<i>Cyclocephala borealis</i>)</p> <p>Oriental beetle (<i>Anomala orientalis</i>)</p> <p>Southern masked chafer (<i>Cyclocephala lurida</i>)</p> <p>Black Turfgrass Ataenius (<i>Ataenius spretulus</i>)</p>	<p>Apply when insects of the insect species being targeted are present.</p> <p>For optimum control, apply from peak adult flight to peak egg hatch of the primary insect species being targeted.</p> <p>Additional applications may be made no earlier than 7 days after the preceding application as long as the annual maximum restriction on grubGONE!® G used (i.e., 6 lb 14 oz per 1,000 sq ft (equivalent to 300 pounds per acre)) is not exceeded.</p>	<p>Apply 2 lb 5 oz to 3 lb 7 oz of grubGONE!® G per 1,000 sq ft of turf grass (equivalent to 100 to 150 pounds of grubGONE!® G per acre of turf grass).</p> <p>Apply 2 lb 5 oz to 3 lb 7 oz of grubGONE!® G per 1,000 sq ft of ornamental plants (equivalent to 100 to 150 pounds of grubGONE!® G per acre of ornamental plants).</p> <p>For individual plant containers, measure the soil surface area, apply grubGONE!® G at a proportional rate equivalent to that listed above, and water in to disperse the product into the soil substrate.</p>

Note: For turf grass with heavy thatch (more than 0.75 in), use the higher rates within the specified rate range.

APPLICATION TO ORNAMENTAL PLANTS

Sites of Application: **grubGONE!® G** can be used for applications to landscape ornamental plants found in, on and/or adjacent to residential plantings, commercial grounds (e.g., office and shopping complexes and airports), parks, schools, playgrounds, athletic fields, day care facilities, pet care facilities, cemeteries, and other landscape ornamental-planted areas. **grubGONE!® G** can also be effectively used as directed for applications to ornamentals in nursery, field, greenhouse, or interior plantscapes.

Application Methods: See Application Directions under Application to Turf Grass

If the plants are in large numbers of closely grouped pots or in the field, it may be possible to use a granular applicator followed by watering in with about 0.5 in water applied with overhead sprinklers. If there are individual pots, use 0.42 to 0.55 oz of **grubGONE!® G** per 10 sq ft of combined surface area of the closely arranged containers. For individual planting pots or plant containers, the area of a pot surface is $\pi (pi) r^2$, where π is 3.142 and r is the radius or half the diameter. For example, a 12 in diameter pot surface is 113 sq in, which is about 0.8 sq ft. At the higher rate of **grubGONE!® G** application, the application rate is then 0.04 oz. **grubGONE!® G** must then be watered in as described earlier in this paragraph; do not drench, as excessive watering may reduce the effectiveness of **grubGONE!® G**.

STORAGE AND DISPOSAL	
Do not contaminate water, food or feed by storage or disposal.	
PESTICIDE STORAGE	Store in a cool, dry place inaccessible to children.
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, dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

WARRANTY AND LIMITATION OF DAMAGES
Phyllom BioProducts Corp. warrants that the material contained in this package conforms to the description on this label and is reasonably fit for the purposes referred to in the directions for use. Timing and method of application, weather, watering practices, nature of soil, the insect problem, condition of the crop, incompatibility with other chemicals not specifically recommended, and other influencing factors in use of this product are beyond the control of the seller. To the extent consistent with applicable law, buyer assumes all risks of use, storage, or handling of this material not in accordance with the directions on this label. To the extent consistent with applicable law, Phyllom BioProducts Corp. makes no other express or implied warranty of the fitness or merchantability of this product.

Target the pest!