



Howard Johnson's

Mallet® 0.5G INSECTICIDE

GROUP **4A** INSECTICIDE
SYSTEMIC INSECTICIDE FOR USE ON
TURFGRASS AND LANDSCAPE ORNAMENTALS

ACTIVE INGREDIENT:
Imidacloprid 0.5%
OTHER INGREDIENTS: 99.5%
TOTAL: 100.0%

EPA REG. NO. 228-501-32802
EPA EST. NO. 59144-GA-1 (A), 32802-MO-1 (B)
37351-CO-1 (C)

Net Weight 30 lbs (13.60 kg)

RESTRICTION: Not for Sale, Use or Distribution in or into Nassau, Suffolk, Kings, Or Queens Counties in New York State.

For Chemical Spill, Leak, Fire, or Exposure,
Call CHEMTREC (800) 424-9300
For Medical Emergencies Only, Call (877) 325-1840
Manufactured for: Howard Johnson's Enterprises, Inc.
9675 S 60th Street, Franklin, WI 53132

KEEP OUT OF REACH OF CHILDREN CAUTION

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- * Long-sleeved shirt and long pants.
- * Chemical-resistant gloves made of waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton.
- * Shoes plus socks.
- * Protective eyewear.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS	
Users Should:	
* Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.	
* Remove clothing immediately if pesticide gets inside. Then wash thoroughly and ut 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.	

FIRST AID

IF ON SKIN OR CLOTHING	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water of water for 15 to 20 minutes.• Call a poison control center or doctor for treatment advice.
IF IN EYES	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15 to 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 1-877-325-1840 for emergency medical treatment information.

NOTE TO PHYSICIAN

No specific antidote is available. Treat the patient symptomatically.

ENVIRONMENTAL HAZARDS

This product 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 disposing of equipment washwaters. 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.

DIRECTIONS FOR USE

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

RESTRICTIONS FOR ALL USES:

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 the pesticide regulation. **DO NOT** apply this product, by any application method, to linden, basswood or other *Tilia* species. **DO NOT** apply when treatment area is water saturated. The treated area must be in such a condition that rainfall or irrigation will penetrate vertically into the soil profile. **DO NOT** apply more than a total of 80 lb (0.4 lb of active ingredient) per acre per year.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) 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 worker entry into treated areas during the **restricted-entry interval (REI) of 12 hours**. Exception: If this product is applied by drenching, the Worker Protection Standard, under certain circumstances allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to 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
- * Chemical-resistant gloves made of waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton
- * Shoes plus socks
- * Protective eyewear

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.

OBSERVE THE FOLLOWING PRECAUTIONS WHEN MIXING AND APPLYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, RIVERS, PERMANENT STREAMS, MARSHES OR NATURAL PONDS, ESTUARIES AND COMMERCIAL FISH PONDS.

RUNOFF MANAGEMENT

DO NOT cultivate within 10 feet of the aquatic areas to allow growth of vegetative filter strip. When used on erodible soils, best management practices for minimizing runoff should be employed. Consult your local Natural Resources Conservation Service for recommendations in your use area.

ENDANGERED SPECIES NOTICE

Under the Endangered Species Act, it is a Federal Offense to use any pesticide in a manner that results in the death of a member of an endangered species. Consult your local county bulletin, County Extension Agent, or Pesticide State Lead Agency for information concerning endangered species in your area.

RESISTANCE MANAGEMENT

Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, the use of this product should conform to resistance management strategies established for the use area. This product contains a Group 4A insecticide called imidacloprid. Insect biotypes with acquired or inherent tolerance to group 4A products may eventually dominate the insect population if Group 4A products are used repeatedly as the predominant method of control for targeted species. This may eventually result in partial or total loss of control of these species by this product and to other Group 4A products.

The active ingredient in this product is a member of the neonicotinoid chemical group. Avoid using a block of more than three consecutive applications of this product and/or other Group 4A products having the same or similar mode of action. Following a neonicotinoid block of treatments, Nufarm strongly encourages the rotation to a block of applications with effective products of a different mode before using additional applications of neonicotinoid products. Using a block rotation or windowed approach, along with other IPM practices, is considered an effective use strategy for preventing or delaying an insect pest's ability to develop resistance to this class of chemistry.

Applications of this product or other Group 4A products from the neonicotinoid chemical class should not be used on crops previously treated with long-residual, soil-applied products from the neonicotinoid chemical class. Other Group 4A, neonicotinoid products used as foliar treatments include: Actara® Assail®, Calypso®, Centric®, Intruder™, Leverage® and Trimax.™ Other 4A Group, neonicotinoid products used as soil treatment include: Admire® and Platinum®.

Contact your local extension specialist, certified crop advisor and/or product manufacturer for additional insect resistance management recommendations. Also, for more information on Insect Resistance Management (IRM), visit the Insecticide Resistance Action Committee (IRAC) on the web at <http://irac-online.org/>

PRODUCT INFORMATION

This product is a systemic insecticide and will be translocated upward within the plant. The active ingredient in this product has sufficient residual activity so that applications can be made preceding the egg laying activity of the target pests. To assure optimum effectiveness, the product must be placed where the roots of the plant can absorb the active ingredient. Irrigate modestly, but thoroughly after application, allowing no leaching and runoff from treatment area. High levels of control can be achieved when applications are made preceding or during the egg laying period. The need for an application can be based on historical monitoring of the site, previous records or experience, current season adult trapping or other methods.

Resistance: Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, the use of this product should conform to resistance management strategies established for the use area. Consult your Cooperative Extension Service for resistance management strategies and recommended pest management practices for your area.

Incorporation: Incorporation of this product can be achieved by cultivation, irrigation, rainfall, mechanical placement or by using mechanical soil or media mixing equipment.

Wood Perennials: Onset of protection is slower than in herbaceous species. A delay of 2 or more weeks should be expected. Longer delays may be expected with larger plants. Application should therefore be made in advance of expected insect activity

Bark Media: Media with 30% or more bark content when treated with this product may confer a shorter period of protection.

APPLICATION TO TURFGRASSES AND LANDSCAPE ORNAMENTALS

Use this product for the control of listed soil inhabiting pests of turfgrass and landscaped ornamentals as directed on the use sites listed below. Use this product as a broadcast application to the soil around plants intended for aesthetic purposes or climactic modification and being grown in interior plantscapes, ornamental gardens or parks, or on golf courses or lawns and grounds in and around the perimeter of industrial and commercial buildings and on residential areas. Make application prior to anticipated pest infestation to maximize control. Rainfall, irrigation and mechanical incorporation after application will aid in maximizing control.

APPLICATION EQUIPMENT

Apply this product uniformly over the area being treated with granular application equipment. Both drop-type and rotary type spreaders may be used to apply this product. **DO NOT** use spreaders that apply the material in narrow, concentrated bands. Calibrate all application equipment at the time of application to achieve the specified application rate.

Use the "SPREADER SETTINGS FOR THIS PRODUCT" table below as a guide in establishing an accurate rate of this product. Application rates will vary depending upon speed, equipment wear, and condition of spreader.

TURFGRASSES (Lawns)	
PESTS	DOSAGE
For control of: Annual bluegrass weevil Asiatic garden beetles (<i>Maladera spp</i>) Billbugs Black turfgrass atanius European chafer European Crane Fly Green June beetle Japanese beetle May or June beetles Northern masked chafer Oriental beetle (<i>Phylophaga spp.</i>) Southern Masked chafer	60 to 80 lb per acre or 1.4 to 1.8 lb per 1000 sq. ft.
For control of: Mole crickets For suppression of: Chinchbugs Cutworms	80 lb per acre or 1.8 lb per 1000 sq. ft.

Remarks

For control of grubs, billbugs, European crane fly and annual bluegrass weevil, make application prior to egg hatch of the target pest.

For control of mole crickets make application prior to or during the peak egg hatch period. When adults or large nymphs are present and actively tunneling, accompany this product with a remedial insecticide.

For suppression of chinchbugs, make application prior to the hatching of the first instar nymphs.

Consult your local State Agricultural Experiment Station, or Sate Extension Turf Specialists for more specific information regarding timing of application. Irrigation or rainfall is required within 24 hours after application to move the active ingredient through the thatch.

On golf courses, irrigate treated areas following application.

Restrictions

DO NOT apply more than 80 lb (0.4 lb of active ingredient) per acre per year. **DO NOT** mow turf or lawn area until after irrigation or rainfall has occurred so that uniformity of application will not be affected.

DO NOT allow runoff or puddling of irrigation water following application.

DO NOT apply this product to water-logged or saturated areas. Application of this product to water-logged or saturated area will not allow penetration into the root zone of the plant.

DO NOT graze treated areas or use clippings from treated areas for feed or forage.

DO NOT allow people or pets onto area until pesticide is incorporated with water and the treatment area has dried.

ORNAMENTALS: Landscape Plantings (including tres, shrubs, evergreens, flowers, foliage & bedding plants, and ground covers.

PEST	DOSAGE
For control of: White grub larvae (including Japanese beetle larvae Chafers, Phyllophaga spp., Asiatic garden beetle, Oriental beetle)	1.4 to 1.8 lb per 1000 sq ft

Remarks

Apply as a broadcast treatment. Prior to application, remove black plastic or other weed barrier materials that inhibit water permeability. Mechanical incorporation, irrigation or rainfall is required within 24 hours after application to move the active ingredient into soil.

Restrictions

DO NOT apply more than 80 lb (0.4 lb of active ingredient) per acre per year. **DO NOT** allow runoff or puddling of irrigation water following application. **DO NOT** apply this product to water-logged or saturated areas. A plication of this product to water-logged or saturated areas will not allow penetration into the root zone of the plant.

DO NOT allow people or pets onto area until pesticide is incorporated with water and the treatment area has dried.

SPREADER	SPEED	SETTING	
	(mph)	60 lb/A	80 lb/A
Cyclon CB4000	3	3 1/4	3 1/2
Earthway Drop	3	9	10
Earthway Rotary	3	11	12
Levy	4.5	3.5	--
Lesco 6000	3	B 1/2	C
Prizelawn CBR-II	3	3 1/4	3 1/2
Scotts Proturf R-8A	3	H	I
Scotts Proturf SR-1	3	H	I
Scotts PF 1,2,3,4 Drop	3	4	4 1/2
Scotts SS-1 Drop	3	4	4 1/2
Spyker	3	3.1	3.2
Vicon PS 203	4.5	13	16

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticide, fertilizers, food, or feed. Store in original containers and out of the reach of children, preferably in a locked storage area.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide is a violation of Federal law.

CONTAINER HANDLING: [Nonrefillable bags] Nonrefillable Container. DO NOT reuse or refill this container. Completely empty bag into application equipment, then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration. **DO NOT** burn unless allowed by state and local ordinance. If burned stay out of smoke.

SPILLS: If the container is leaking or material is spilled for any reason or cause, carefully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material

DO NOT walk through spilled material. Dispose of as directed for pesticides above, or apply uncontaminated product according to Directions For Use. Keep unauthorized people away. For chemical spill, leak, fire, or exposure, you may contact CHEMTREC at 800-424-9300.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

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