

228-486

6-27-2006

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U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505C)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

228-486

Date of Issuance:

JUN 27 2006

NOTICE OF PESTICIDE:

Registration
 Reregistration

(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

Mallet 2F GN Insecticide

Name and Address of Registrant (include ZIP Code):

Nufarm Americas, Inc.
1333 Burr Ridge Parkway Suite 125A
Burr Ridge, IL 60527

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product when the Agency requires all registrants of similar products to submit such data.
2. Make the following label changes before you release the product for shipment:
 - a. Revise the EPA Registration Number to read, "EPA Reg. No. 228-486".
 - b. Replace the statement "Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Keep children or pets off treated area until spray is dry." found within the **PRECAUTIONARY STATEMENTS** section of the label and replace with "Harmful if absorbed through skin. Harmful if inhaled. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wear long-sleeved shirt and long pants, socks, shoes, and

Signature of Approving Official:

Date:

John Hebert, Product Manager (07)
Insecticide-Rodenticide Branch, Registration Division (7505P)

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chemical-resistant gloves (such as Natural Rubber, Selection Category A)."

- c. Within the **APPLICATION TO GRASSY AREAS IN NURSERIES** section of the label, include the statement "*Cannot be used on commercial sod farms.*".

3. The data requirements for storage stability (830-6317) and corrosion characteristics (830-6320) have not been satisfied, and must be submitted within eighteen months of the date of this letter.

4. Submit one copy of the revised final printed label for the record before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

John Hebert
Product Manager (07)
Insecticide-Rodenticide Branch
Registration Division (7505P)

Enclosure

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Mallet™ 2F GN INSECTICIDE

FOR FOLIAR AND SYSTEMIC INSECT CONTROL ON ORNAMENTALS,
FRUIT AND NUT TREES, AND VEGETABLE PLANTS IN GREENHOUSES,
NURSERIES, AND INTERIOR PLANTSCAPES.

ACTIVE INGREDIENT:		
Imidacloprid	21.4%	
OTHER INGREDIENTS:	78.6%	
TOTAL:	100.0%	

Contains 2 pounds of imidacloprid per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300
For Medical Emergencies Only, Call (877) 325-1840

ACCEPTED
with **COMMENTS**
In EPA Letter Dated:
JUN 27 2006
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
228-486

EPA REG. NO. 228-
EPA EST. NO.

MANUFACTURED BY
NUFARM AMERICAS INC.
BURR RIDGE, IL 60527-0866



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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 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 (REI) of 12 hours following application. Earlier entry by exception.

Exception: If the product is drenched, soil-injected or soil-incorporated, workers may enter the treated area at any time 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 any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton
- Shoes plus socks

APPLICATION TO ORNAMENTALS AND VEGETABLE PLANTS

This product is for insect control on ornamental and vegetable plants in nurseries and greenhouses and interior plantscapes. This product is a systemic product and will be translocated upward into the plant system. To assure optimum effectiveness, the product must be placed where the growing portion of the target plant can absorb the active ingredient. The addition of a nitrogen containing fertilizer, where applicable, into the solution may enhance the uptake of the active ingredient. Application can be made by foliar application or soil applications; including soil injection, drenches, and broadcast sprays.

When making soil applications to plants with woody stems, systemic activity will be delayed until the active ingredient is translocated throughout the plant. For this reason, applications should be made prior to anticipated pest infestation to achieve optimum levels of control.

For outdoor ornamentals, broadcast applications cannot exceed a total of 1.6 pints (0.4 lb of active ingredient) per acre per year.

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

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. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your local or state pest management authorities for details.

APPLICATION EQUIPMENT FOR ORNAMENTALS AND VEGETABLE PLANTS

Mix product with the required amount of water and apply as desired dependent upon the selected use pattern.

When making foliar applications on hard-to-wet foliage such as holly, pine, or ivy, the addition of a spreader/sticker is recommended. If concentrate or mist type spray equipment is used, an equivalent amount of product should be used on the area sprayed, as would be used in a dilute application.

This product has been found to be compatible with commonly used fungicides, miticides, liquid fertilizers, and other commonly used insecticides. The physical compatibility of this product may vary with different sources of pesticide products and local cultural practices. Any tank mixture which has not been previously tested should be prepared on a small scale (pint or quart jar), using the proper proportions of pesticides and water to ensure the physical compatibility of the mixture.

APPLICATION THROUGH IRRIGATION SYSTEMS

This product may be applied at rates recommended on the label either alone or in tank mixtures with other pesticides and chemicals registered for application through irrigation systems. The normal dilution ratio is 1:100 to 1:200, depending on the system. Always meter the product into the irrigation water during the first part of the irrigation cycle. The product may be mixed separately prior to injection. Agitation may be necessary if the mixture is allowed to stand more than 24 hours.

Remove scale, pesticide residue and other foreign matter from the tank and entire irrigation system.

Only use this product through micro irrigation (individual spaghetti tubes), drip irrigation, overhead irrigation, ebb and flood, or hand-held or motorized calibrated irrigation equipment.

Do not apply this product through any other type of irrigation system. Crop injury or lack of effectiveness can result from non uniform

sufficient irrigation or rainfall is needed to allow the movement of the active ingredient through the thatch.

Applications should not be made when grassy areas are waterlogged or the soil is saturated with water. Adequate distribution of the active ingredient cannot be achieved when these conditions exist. The treated grassy area must be in such a condition that the rainfall or irrigation will penetrate vertically in the soil profile. Application cannot exceed a total of 1.6 pints (0.4 lb of active ingredient) per acre per year.

Application Equipment for Use on Grassy Areas in Nurseries

Apply this product in sufficient water to provide adequate distribution in the treated area. The use of accurately calibrated equipment normally used for the application of soil insecticides is required. Use equipment which 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.

RECOMMENDED APPLICATIONS		
CROP	PEST	DOSAGE
Grassy areas of Field & Forest Nurseries	Larvae of: Annual bluegrass weevil Asiatic garden beetle Billbugs Black turfgrass ataeinus Cutworms (suppression) European chafer Green June beetle Japanese beetle Northern masked chafer Oriental beetle <i>Phyllophaga</i> spp. Southern masked chafer	19.2 to 25.6 oz. per acre or 0.45 to 0.6 fl oz (13 to 17 mL) per 1,000 sq ft
	Chinchbugs (suppression) Mole crickets	25.6 oz. per acre or (17 mL) per 1,000 sq ft
For optimum control of grubs, billbugs and annual bluegrass-weevil, make application prior to egg hatch of the target pest. Be sure to read "APPLICATION EQUIPMENT" section of this label. For suppression of chinchbugs, make application prior to or during the hatching of the first instar nymphs. 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, an application should be accompanied by a curative insecticide. Follow label instructions for other insecticides when tank-mixing.		
Consult your local turf, state Agricultural Experiment Station, or State Extension Service Specialists for more specific information regarding timing of application. NOTE: For optimum control, irrigation or rainfall should occur within 24 hours after application to move the active ingredient through the thatch. Do not apply more than 1.6 pt (0.4 lb of active ingredient) per acre per year. Avoid mowing turf or lawn area until after sufficient irrigation or rainfall has occurred so that uniformity of application will not be affected.		

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RECOMMENDED APPLICATIONS FOR NURSERY, GREENHOUSE AND INTERIORESCAPE PLANTS			
CROP	PEST	DOSAGE	REMARKS
Trees	Adelgids Aphids Armored scales (suppression) Black vine weevil larvae Eucalyptus longhorned borer Flatheaded borers (including bronze birch and alder borer) Japanese beetles (adults) Lace bugs Leaf beetles (including elm and viburnum leaf beetles) Leafhoppers (including glassy-winged sharpshooter) Leafminers Mealybugs Pine tip moth larvae Psyllids Royal palm bugs Sawfly larvae Soft scales Thrips (suppression) White grub larvae Whiteflies	0.1 to 0.2 fl oz (3 to 6 mL) per inch of trunk diameter (D.B.H.)	<p>Soil Injection: GRID SYSTEM: Holes should be spaced on 2.5 foot centers, in a grid pattern, extending to the drip line of the tree. CIRCLE SYSTEM: Apply in holes evenly spaced in circles, (use more than one circle dependent upon the size of the tree) beneath the drip line of the tree extending in from that line. BASAL SYSTEM: Space injection holes evenly around the base of the tree trunk no more than 6 to 12 inches out from the base.</p> <p>Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone. For optimum control, keep the treated area moist for 7 to 10 days. Do not use less than 4 holes per tree.</p> <p>No Soil Injection Applications Allowed in Nassau or Suffolk Counties of New York.</p> <p>Soil Drench: Uniformly apply the dosage in no less than 10 gallons of water per 1,000 square feet as a drench around the base of the tree, directed to the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.</p> <p>For Control of Specified Borers: Application to trees already heavily infested may not prevent the eventual loss of the trees due to existing pest damage and tree stress.</p>
Shrubs		0.1 to 0.2 fl oz (3 to 6 mL) per foot of shrub height	<p>Soil Injection: Apply to individual plants using dosage indicated. Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone. Keep the treated area moist for 7 to 10 days. Do not use less than 4 holes per shrub.</p> <p>No Soil Injection Applications Allowed in Nassau or Suffolk Counties of New York.</p> <p>Soil Drench: Uniformly apply the dosage in no less than 10 gallons of water per 1,000 square feet as a drench around the base of the tree, directed to the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.</p>
Flowers and Groundcovers		0.45 to 0.6 fl oz (13 to 17 mL) per 1,000 sq ft	<p>Apply as a broadcast treatment and incorporate into the soil before planting or apply after plants are established. To optimize control immediate irrigation is recommended when application is made to established plants.</p>

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RECOMMENDED DRENCH AND IRRIGATION APPLICATIONS

For use only on greenhouse and, nursery ornamentals, vegetable plants, and interiorscape plants using soil drenches, micro-irrigation, drip irrigation, overhead irrigation, ebb and flood irrigation, or hand-held or motorized calibrated irrigation equipment.

PEST	USE PATTERN		DOSAGE		REMARKS
Adelgids	Plants in Containers	Herbaceous Species - including vegetable plants ¹ (one or two plants per pot)	Container size (inches)	No. pots treated with 1.7 fl oz (50 mL)	Use sufficient volume to wet most of the potting medium without loss of liquid from the bottom of the container. Apply according to label directions. Follow application with moderate irrigation. Irrigate carefully during the next 10 days in order to avoid loss of active ingredient due to leaching.
Aphids			2	3000	
Fungus Gnats ¹ (larvae only)			3	2000	
Japanese Beetles (adults)			4	1500	
Lacebugs			5	1200	
Leaf beetles (including elm and viburnum leaf beetles)			6	1000	
Leafhoppers (including glassy-winged sharpshooter)			7	850	
Leafminers			8	750	
Mealybugs			9	675	
Psyllids			10	600	
Root mealybugs ²			11	550	
Root Weevil Complex (such as Apopka Weevil, Black vine Weevil, Citrus Root Weevil ³)			12	500	
Soft Scale	Woody Perennials	2	2000		
Thrips (suppression) ⁴		3	1350		
Whiteflies		4	1000		
White Grub larvae (such as Japanese Beetle, Masked Chafers, European Chafer, Oriental Beetle, Asiatic Garden Beetle)		5	8000		
			6	650	
			7	550	
			8	500	
			9	450	
			10	400	
			11	350	
			12	300	
	Herbaceous Species including vegetable plants ¹ (three or more plants per pot)	Use the above woody perennial rates			
	Ornamental and vegetable plants ¹ grown in flats, benches, or beds	1.7 fl. oz. (50 mL) per 3,000 square feet			Mix required amount in sufficient water to uniformly cover the area being treated. Do not use less than 2 gallons of mixture per 1,000 square feet. Apply as a broadcast treatment and incorporate into the medium before planting or apply after plants are established. To optimize control lightly water the treated areas if application is made to established plants. Allow no leaching or runoff for 10 days after application.

- 1 **Fungus gnat larvae** in the soil will be controlled by drench or 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.
- 2 **Root Mealybug** control will require a thorough drenching of containerized media. Coverage is essential for control while minimizing the amount of leachate. Rate: 1.7 fluid ounces (50 mL) in 150 gallons of water.
- 3 **Citrus Root Weevil:** For use on non-bearing citrus nursery stock.
- 4 **Thrips** suppression on foliage only. Thrips in buds and flowers will not be suppressed.
- 5 **Note:** For use on vegetable plants intended for resale only including: Broccoli, Chinese Broccoli, Broccoli Raab, Brussels Sprouts, Cabbage, Chinese Cabbage, Cauliflower, Collards, Eggplant, Ground Cherry, Kale, Kohlrabi, Lettuce, Mustard Greens, Pepinos, Peppers, Potatoes, Rape Greens, Sorghum, Sugarbeets, Tomatillo, and Tomato.

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RESTRICTIONS

Do not graze treated areas or use clippings from treated areas for feed or forage. Avoid runoff or puddling of irrigation water following application. Do not apply this product to soils which are water logged or saturated, which will not allow penetration into the root zone of the plants. Do not allow leachate run out for the first 10 days after application, in order to retain the product and facilitate full plant uptake of the active ingredient.

For outdoor ornamentals grown in beds or turf, applications of this product cannot exceed a total of 1.6 pt (0.4 lb of active ingredient) per acre per year.

Food crops: Treated areas may be replanted with any crop specified on an imidacloprid label, or with any crop for which a tolerance exists for the active ingredient.

For crops not listed on an imidacloprid label, or for crops for which no tolerances for the active ingredient have been established, a 12-month plant-back interval should be observed.

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 pesticides, fertilizers, food and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away.

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 by incineration, or, if allowed by state and local authorities by burning. If burned, stay out of smoke.

Conditions of Sale and Limitation of Warranty and Liability:

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Desirable plant injury, ineffectiveness, or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions beyond the control of Nufarm or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Nufarm and Seller harmless for any claims relating to such factors.

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the Directions for Use when used in accordance with the directions under normal conditions of use. NUFARM MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, NOR ANY OTHER EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE SELECTION, PURCHASE OR USE OF THIS PRODUCT. Any warranties, express or implied, having been made are inapplicable if this product has been used contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to (or beyond the control of) seller or Nufarm, and buyer assumes the risk of any such use.

To the extent allowed by law, Nufarm or seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF NUFARM AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH 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 THE PRODUCT OR AT THE ELECTION OF NUFARM OR SELLER, THE REPLACEMENT OF PRODUCT.

This Conditions of Sale and Limitation of Warranty and Liability may not be amended by any oral or written agreement.

(NEW)

Mallet is a trademark of Nufarm Americas Inc.