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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

1/16/2008

JAN 1 6 2008

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Mr. Timothy M. Formella Product Registration United Phosphorus, Inc. 630 Freedom Business Center, Suite 402 King of Prussia, PA 19406

SUBJECT: Application for Pesticide Notification (PRN 98-10) Request Primary Brand Name "ImiGold 70 DF Greenhouse Insecticide" EPA Reg. No.70506-157 Application Dated November 2, 2007

Dear Mr. Formella:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated 11/02/2007 for the above product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action(s) requested fall within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions, please call me directly at 703-305-6249 or Owen F. Beeder of my staff at 703-308-8899.

Sincerely, Linda Arrington

Notifications & Minor Formulations Team Leader Registration Division (7505P) Office of Pesticide Programs

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Please read instructions on reverse before	ore compleang form.		Form Approved, UMB No. 2	070-0060, Approval expires 05-31-98	
	United State	s	Registration	OPP Identifier Number	
EPA Env	vironmental Protec	tion Agency	☐ Amendment		
	Washington, DC	20460	M Other: NotiFicati	~ l	
	Applica	ation for Pes	ticide - Section I		
1. Company/Product Number		2. EPA Pr Dani Danie	oduct Manager	3. Proposed Classification	
70506-157 4. Company/Product (Name)		PM#		None Restricted	
ImiGold 70 DF Greenhouse Insect 5. Name and Address of Applicant (I		6 Exper	hited Peview In accordance	e with FIFRA Section 3(c)(3)	
United Phosphorus, Inc.				al in composition and labeling	
630 Freedom Business Center	, Suite 402	to:			
King of Prussia, PA 19406		EPA Reg.	No		
		Product Na	ame		
Check if this is a new a		 Section			
		Sectior			
Amendment – Explain below.			Final printed labels in respons	se to Agency letter dated	
Resubmission in response to A	igency letter dated	<u> </u>	"Me Too" Application     Other - Explain below		
<ul> <li>Explanation: Use additional</li> </ul>	page(s) if necessar	y. (For Section			
Notification of change in Primary E	Brand Name. This not	ification is consis	stent with the provisions of PR		
at 40 CFR 152.46, and no other cl understand that it is a violation of					
notification is not consistent with the	ne terms of PR Notice	98-10 and 40 CI	FR 152.46, this product may be		
be subject to enforcement action a	and penalties under se	ections 12 and 14	t of FIFRA.		
	· · · · · · · · · · · · · · · · · · ·				
		Section	) - []]		
1. Material This Product Will Be Pa					
Child-Resistant Packaging	Unit Packaging		Water Soluble Packaging	2. Type of Container	
	If "Yes"	No. per	If "Yes" No. per	Glass	
*Certification must	Unit Packaging wgt.	container	Package wgt. container	Paper	
be submitted				Other (laminated bag)	
3. Location of Net Contents Informa	Includin	<ul> <li>Retail Container</li> <li>but not limited to</li> </ul>		on of Label Directions	
Label Con	tainer	,		abeling accompanying product	
6. Manner in Which Label is Affixed	to Product Lith	ograph	Other		
Paper glued  Stenciled					
Section - IV					
1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application)					
Name		Title		CTelephone No. (Include Area	
Timothy M. Formella		Senior Regis	stration Manager	Code) <sup>က</sup> ုိင်ုိ	
Certification 610-491-2813					
I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. 100 CCC Received acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both (Statinped)					
under applicable law.	1	3. Title			
unithy M. form	ella		or Registration Manager		
4. Typed Name.) Timothy M. Form	ella	5. Date	x. 2, 2007		
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EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete

White- EPA File Copy (original) Yellow- Applicant Copy



## **United Phosphorus, Inc.**

**630 Freedom Business Center, Suite 402 King of Prussia, PA 19406** (610) 491-2813 (phone) (610) 491-2810 (fax)

September 14, 2007

VIA: UNITED PARCEL SERVICE

Dani Daniel Registration Division (7505P) Office of Pesticide Programs U.S. Environmental Protection Agency Room S-4900, One Potomac Yard 2777 South Crystal Drive Arlington, VA 22202-4501

RE: Imidacloprid 0.5G Insecticide (EPA Reg. No. 70506-142)
 Imidacloprid 70 DF Agricultural Insecticide (EPA Reg. No. 70506-153)
 Imidacloprid 1.6 F Insecticide (EPA Reg. No. 70506-154)
 Imidacloprid 70 DF Turf and Ornamental Insecticide (EPA Reg. No. 70506-156)
 Imidacloprid 70 DF Greenhouse Insecticide (EPA Reg. No. 70506-157)
 Submission of Final Printed Labels

Dear Ms. Daniel:

In response to the Agency's conditional registration approvals, enclosed please find final printed labels for the following United Phosphorus, Inc. end-use products:

- Imidacloprid 0.5G Insecticide (EPA Reg. No. 70506-142) Agency letter dated May 30, 2007
- Imidacloprid 70 DF Agricultural Insecticide (EPA Reg. No. 70506-153) Agency letter dated June 25, 2007
- Imidacloprid 1.6 F Insecticide (EPA Reg. No. 70506-154) Agency letter dated July 3, 2007
- Imidacloprid 70 DF Turf and Ornamental Insecticide (EPA Reg. No. 70506-156) Agency letter dated July 16, 2007
- Imidacloprid 70 DF Greenhouse Insecticide (EPA Reg. No. 70506-157) Agency letter dated July 16, 2007

Included with this submission are completed EPA Forms 8570-1 for submission of the final printed labels as well as two (2) copies of the final label for each product.

If you have any questions concerning the information provided, please contact me by phone at 610-491-2813 or by email at <u>tim.formella@uniphos.com</u>.

Sincerely, mithe

Timothy M. Formella Senior Registration Manager

## IMIGOLD 70 DF

## **Greenhouse Insecticide**

### For control of insects on vegetable and ornamental plants in greenhouses. Also for use in nurseries and interior plantscapes.

ACTIVE INGREDIENT			
IMIDACLOPRID - 1-[(6-Chloro-3-pyridiny	l)methyl]-N-nitro-2-	-	
imidazolidinimine			70.0%
OTHER INGREDIENTS			<u>30.0%</u>
	Total	•	100.0%

### KEEP OUT OF REACH OF CHILDREN CAUTION

	FIRST AID
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
	or label with you when calling a poison control center or doctor, or going for ky Mountain Poison Center at 1-866-767-5089 for emergency medical

NOTE TO PHYSICIAN: No specific antidote is available. Treat symptomatically.

# FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC at 1-800-424-9300

United Phosphorus, Inc. 630 Freedom Business Center, Suite 402 King of Prussia, PA 19406 1-800-438-6071 • <u>www.upi-usa.com</u> Net Contents: EPA Reg. No. 70506-157 EPA Est. No.

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Caution. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Causes eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing dust or vapor.

#### **Personal Protective Equipment (PPE):**

Applicators and other handlers must wear:

- Long-sleeved shirts and long pants
- 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.

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

#### **Engineering Controls Statements:**

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

- 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.
- Remove PPE immediately after handling. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### ENVIRONMENTAL HAZARDS

This product is highly toxic to aquatic invertebrates. Do not apply directly to water, 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 product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. This product is toxic to wildlife and highly toxic to aquatic invertebrates.

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

#### 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 treatment areas during the restricted entry interval (REI) of 12 hours.

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

#### 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.

**To Confine Spills**: Handle and open container in a manner as to prevent spillage. If the container is leaking or material is spilled for any reason or cause, carefully sweep material into a pile and dispose of as directed for pesticides below. Refer to Precautionary Statements on label for hazards associated with the handling of this material. In spill or leak incidents, keep unauthorized people away.

**Pesticide Disposal:** Pesticides wastes are toxic. Improper disposal of excess pesticide, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA regional Office for guidance.

**Container Disposal:** Do not use container in connection with food, feed, or drinking water. Completely empty container into the processing equipment. Then dispose of empty container in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

#### **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 agency responsible for pesticide regulation.

#### **CHEMIGATION**

Refer to DIRECTIONS FOR USE section before proceeding with chemigation application.

ImiGold 70 DF Greenhouse Insecticide may be applied at rates recommended on this label either alone or in tank mixture with other pesticides and chemicals registered for application through irrigation systems. The normal dilution ratio is 1:10 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.

Apply ImiGold 70 DF Greenhouse Insecticide only through microirrigation (individual spaghetti tube), 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 nonuniform distribution of treated water.

If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or a person who is under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

# SAFETY DEVICES FOR IRRIGATION SYSTEMS CONNECTED TO PUBLIC WATER SUPPLIES:

If the source of water for your irrigation system is a public water supply, follow the instructions below.

- 1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2. Chemigation systems connected to public water systems must contain a functional, reducedpressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.

# SAFETY DEVICES FOR IRRIGATION SYSTEMS NOT CONNECTED TO A PUBLIC WATER SUPPLY:

- 1. The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

- 3. The pesticide injection pipeline must also contain a functional normally closed solenoidoperated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where the pesticide distribution is adversely affected.
- 6. Systems must use a metering pump such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.

#### **DIRECTIONS FOR USE IN GREENHOUSES AND NURSERIES**

### **General Information**

IMIGOLD 70 DF Greenhouse Insecticide is a systemic product which provides insect control on ornamental and vegetable plants in nurseries, greenhouses and interior plantscapes. IMIGOLD 70 DF Greenhouse Insecticide will be translocated upward within the plant. Apply this product as a soil treatment only. To assure optimum effectiveness, the product must be reach the roots of the plant so that they can absorb the active ingredient.

Irrigate moderately but thoroughly after application. Do not allow leaching or runout from containers for at least three irrigations or 10 days, whichever is longer.

**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.

To aid in resistance management, foliar application of any chloronicotinyl insecticide following an IMIGOLD 70 DF Greenhouse Insecticide soil application in the same crop is <u>not</u> recommended.

Incorporate IMIGOLD 70 DF Greenhouse Insecticide by means of cultivation, irrigation, rainfall, mechanical placement, soil injection, drenching, and broadcast sprays.

**Woody Perennials:** Protection occurs more slowly than in herbaceous species, and a delay of 2 or more weeks should be expected. Longer delays may be expected with larger plants. Therefore it is best to apply well before expected insect activity.

**Bark Media:** Media with 30 to 50% or more bark content may confer a shorter period of protection when treated with IMIGOLD 70 DF Greenhouse Insecticide.

**Tank Mixes:** IMIGOLD 70 DF Greenhouse Insecticide has been found to be compatible with commonly used liquid fertilizers, fungicides and insecticides. United Phosphorus recommends that physical compatibility be confirmed using the correct proportion of products in a small jar test if local experience is unavailable.

#### APPLICATION TO GRASSY AREAS IN NURSERIES

Use IMIGOLD 70 DF Greenhouse Insecticide as directed on nursery grass in sites such as under or around field or container grown plants, on roadways or other grassy areas in or around nurseries. Do not use IMIGOLD 70 DF Greenhouse Insecticide on commercial sod farms.

**Insects controlled**: soil inhabiting pests of grassy areas of nurseries such as Northern and Southern masked chafers, *Cyclocephala borealis*, *C. immaculata*, and/or *C. lurida* Asiatic garden beetle, *Maladera castanea* European chafer *Rhizotroqus majalis*  Green June beetle, Cotinis nitida May or June beetle, Phyllophaga spp Japanese beetle, Popillia japonica Oriental beetle, Anomala orientalis Billbugs, Spherophorus spp. Annual bluegrass weevil, Hyperodes spp. Black turfgrass ataenius, Ataenius spretulus and Aphodius spp. Mole crickets, Scapteriscus spp.

Insects suppressed: cutworms and hairy chinchbugs.

For best control, apply IMIGOLD 70 DF Greenhouse Insecticide before or during the egg laying period and follow with sufficient irrigation or rainfall which will move the active ingredient through the thatch. The active ingredient in IMIGOLD 70 DF Greenhouse Insecticide has sufficient residual activity so that applications can be made preceding the egg laying activity of the target pests. Use historical monitoring data of the site, previous records or experiences, current season adult trapping or other methods to determine the need for application.

When grassy areas are waterlogged or the soil is saturated with water, adequate distribution of the active ingredient cannot be achieved. Rainfall or irrigation must be able to vertically penetrate in the soil profile. Do not apply more than a total of 9.1 oz (0.4 lb of active ingredient) per acre per year.

Application Equipment for Use on Grassy Areas in Nurseries: Apply IMIGOLD 70 DF Greenhouse Insecticide in enough water to provide adequate coverage of the treated area. Use accurately calibrated equipment normally used for soil application. Use equipment which will produce a uniform, coarse droplet spray, with a low pressure setting to eliminate off-target drift. Check calibration regularly to confirm that equipment is working properly.

#### **RECOMMENDED DRENCH AND IRRIGATION APPLICATIONS**

For use only on ornamental and vegetable plants in greenhouses, nurseries and interior plantscapes using soil drenches, micro-irrigation, drip irrigation, overhead irrigation, ebb and flood irrigation, or hand-held or motorized calibrated irrigation equipment.

Pest	Use Pattern		Rate IMIGOLD 70 DF Greenhouse		Remarks	
Adelgids Aphids Armored scale (suppression) Fungus gnats (larvae only) <sup>1</sup> Japanese Beetle (adults) Lacebugs Leaf beetles (including elm and viburnum leaf	Plants in containers	Herbaceous Species – including Vegetable plants <sup>5</sup> (one or two plants per pot)	Container Size (inches) 2 3 4 5 6 7 8 9 10 11 11 12	No. pots treated with 0.6 ounce 3000 2000 1500 1200 1000 850 750 675 600 550 500	Distribute 0.6 ounce of IMIGOLD 70 DF Greenhouse Insecticide evenly in the specified number of pots, using sufficient water volume to wet potting medium without loss of liquid through leaching. Apply according to label directions. Use moderate irrigation after each application. Irrigate carefully during the next 10 days in order to avoid loss of active ingredient due to leaching.	

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Pest	Use P	attern	R: IMIGOLD 70	ate DF Greenhouse	Remarks
beetles) Leafhoppers (including glassy-winged sharpshooter) Leafminers Mealybugs Psyllids Root mealybugs <sup>2</sup> Root Weevil Complex (Such as Black Vine Weevil, ApopkaWeevil, Citrus Root Weevil <sup>3</sup> ) Soft Scale Thrips (suppression) <sup>4</sup>		Woody Perennial Species Herbaceous Species – including Vegetable plants <sup>5</sup> (three or more plants per pot)	2 3 4 5 6 7 8 9 10 11 12 Use the above W Species rates	2000 1350 1000 800 650 550 500 450 400 350 300	
White Grub larvae (such as Japanese Beetle, Masked Chafers, European Chafer, Oriental Beetle, Asiatic Garden Beetle) Whiteflies	Ornamental and plants grown in beds	vegetable <sup>5</sup> flats, benches, or	0.6 ounce per 30	)00 sq ft	Mix required amount in enough water to uniformly and accurately cover the area being treated. Do not use less than 2 gallons of mixture per 1000 sq. ft. Apply as a broadcast treatment and incorporate into the medium before planting or apply after plants are established. If application is made to established plants, optimum control will be attained if areas are lightly irrigated after application. Allow no leaching or runout for 10 days after application.
	Containerized P	lants	Container Size 1 gallon 2 gallon 3 gallon 5 gallon	No. Pots Treated with One Ounce 240 to 120 120 to 60 90 to 40 65 to 30	Apply in enough water to wet the potting medium. For best control, apply before egg hatch of the target pest. Irrigate moderately after application to move the active ingredient into the root zone.
White Grub larvae (such as Japanese Beetle, Masked Chafers, European Chafer, Oriental Beetle, Asiatic Garden Beetle)	Field and Forest	Nurseries	Apply as a unifo either side of rov six (6) inches wi actual root ball c dug. Do not allo adjacent rows to one ounce per 10 3000 sq. ft. For grub control make a broadcas using one ounce	w using a band der than the liameter to be w bands in overlap. Use 000 ft. of row or in turf areas, t application	Mow vegetation in the area to be treated to a height of 3 inches or less before application. Mowing to the lowest possible height will provide more control. Apply May through July. For best control, treatment should be followed by rainfall or irrigation. Do not use less than 2 gallons of spray volume per 1000 square feet.

<sup>1</sup> 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 IMIGOLD 70 DF Greenhouse Insecticide from a healthy root system translocating the active ingredient up into the plant.

- <sup>2</sup> Root Mealybug control will require a thorough drenching of containerized media. Coverage is essential for control while minimizing the amount of leachate. Rate: one ounce in 250 gallons of water.
- <sup>3</sup> Citrus Root Weevil: For use on non-bearing citrus nursery stock.

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- <sup>4</sup> Thrips suppression on foliage only. Thrips in buds and flowers will not be suppressed.
- <sup>5</sup> 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.

#### RESTRICTIONS

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, which will not allow the penetration of the insecticide into the root zone of the plants.

Do not allow leachate runout 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 IMIGOLD 70 DF Greenhouse Insecticide cannot exceed a total of 9.1 oz (0.4 lb of active ingredient) per acre per year.

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.

**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.

PESTS	USES AND INSTRUCTIONS
Adelgids	TREES
Aphids	0.60 oz. per 8 to 16 inches of cumulative trunk diameter
Armored scales	Soil Injection: GRID SYSTEM: Using a grid pattern, space holes on 2.5
(suppression)	foot centers, extending to the drip line of the tree. CIRCLE SYSTEM:
Black vine weevil	Apply in holes evenly spaced in circles, (use more than one circle
larvae	depending on the size of the tree) beneath the drip line of the tree
Eucalyptus longhorned borers	extending in from that line. BASAL SYSTEM: Space injection holes
Flatheaded borers (including	evenly around the base of the tree trunk no more than 6 to 12 inches out from the base.
bronze birch, emerald ash, and alder borers)	
Japanese beetles (adults)	Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Use low pressure and sufficient solution for
Lacebugs Leaf beetles (including elm	distribution of the liquid into the treatment zone. For best control, keep the treated area moist for 7 to 10 days. Use a minimum of 4 holes per tree.
and viburnum leaf beetles) Leafhoppers (including glassy-winged sharpshooter)	No Soil Injection Application Allowed in Nassau or Suffolk Counties of New York.
Leafminers	Soil Drench: Uniformly apply the dosage in at least 10 gallons of water
Mealybugs	per 1000 square feet as a drench around the base of the tree. Direct to the
Pine tip moth larvae	root zone. Remove plastic or any other barrier that will stop solution from
Psyllids	reaching the root zone.
Royal palm bugs	For Control of Specified Borers: Application to trees already heavily
Sawfly larvae Soft scales	infested may not prevent the eventual loss of the trees due to existing pest damage and tree stress.
Thrips (suppression)	
White grub larvae Whiteflies	SHRUBS
whitemes	0.60 0z. per 8 to 16 feet of cumulative shrub height
	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.
	No Soil Injection Application Allowed in Nassau or Suffolk Counties of New York.
	Soil Drench: Uniformly apply the dosage in at least 10 gallons of water
	per 1000 square feet as a drench around the base of the tree, directed to the

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	root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.	
	FLOWERS AND GROUND COVERS	
	0.6 oz. per 5000 sq. ft.	
	Apply as a broadcast treatment and incorporate into the soil before	
	planting or apply after plants are established. If application is made to established plants, optimum control will be attained if area is irrigated	
1	thoroughly after application.	

#### IMIGOLD 70 DF Greenhouse Insecticide Ebb & Flood Application

**IMIGOLD 70 DF Greenhouse Insecticide** may be applied through Ebb and Flood applications. To assure accurate uptake it is recommended that prior to treatment, a minimum of 10 plants be brought up to a known field capacity and allowed to dry out for one or two days. Re-wet the same plants to determine how much water on average each plant will absorb to bring it back at field capacity. Use the volume absorbed per plant (keeping pot sizes uniform) multiplied by the number of pots being treated. Add to this volume a required minimum to flood your smallest treatment area. This should minimize the return back to the storage tank. Re-use the returned volume with subsequent irrigation or nutrients on the same plants.

	IMIGOLD 70 DF Greenhouse Insectici EBB & FLOOD APPLICATIONS	de		
Adelgids	Leafhoppers	Soft Scales		
Aphids	(including glassy-winged	Thrips		
Armored scales	sharpshooter)	(suppression) <sup>4</sup>		
(suppression)	Leafminers	Whiteflies		
Fungus Gnats	Mealybugs	White Grub larvae		
(larvae only) <sup>1</sup>	Psyllids	(such as Japanese Beetle, Masked		
Japanese Beetles	Root mealybugs <sup>2</sup>	Chafers, European Chafer, Orienta		
(adults)	Root Weevil Complex:	Beetle, Asiatic Garden Beetle)		
Lacebugs	(such as Apopka Weevil, Black			
Leaf beetles	Vine Weevil, Citrus Root Weevil <sup>3</sup> )			
(including elm and viburnum leaf beetles)				
	Number of pots treated with 0.6 ounces			
		Woody perennials,		
	Herbaceous species	Herbaceous species		
	including vegetable plants <sup>5</sup>	including vegetable plants <sup>5</sup>		
Pot sizes (inches)	(one or two plants per pot)	(3 or more per pot)		
2	5000	3300		
3	3000	2250		
4	2500	1650		
5	2000	1325		
6	1600	1080		
7	1400	900		
8	1250	830		
9	1120	750		
10	1000	665		
11	900	580		
	830	500		

Fungus gnat larvae in the soil will be controlled by drench or incorporation. No adult Fungus Gnat control. Othe foliar insect control is achieved by the uptake of IMIGOLD 70 DF Greenhouse Insecticide from a healthy root system translocating the active ingredient up into the plant.

<sup>2</sup> 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 fl oz (50 mL) in 150 gallons of water.

<sup>3</sup> Citrus Root Weevil: For use on non-bearing citrus nursery stock.

<sup>4</sup> Thrips suppression on foliage only. Thrips in buds and flowers will not be suppressed.

<sup>5</sup> 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, Sugar Beets, Tomatillo, and Tomato.

#### IMPORTANT INFORMATION READ BEFORE USING PRODUCT

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