5/7/2009



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

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

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

MAY - 7 2009

Dear Mr. Formella:

Subject:

Labeling Amendment; Addition of Poultry Facilities IMIBLOC 70 DF Turf, Ornamental, and Greenhouse Insecticide EPA Registration No. 70506-157 Submission Date: March 29, 2009

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable with the following provisions:

- 1. On page 1 of the label, delete the underline that stretches from the company website to the Batch/Lot number.
- 2. On page 7 of the label, revise "*Notes for Trees: Use enough water so that an equal amount of solution may be injected in each hole," to read "*For Trees: Use enough water so that an equal amount of solution my be injected in each hole."
- 3. On page 7 of the label, revise "**Notes for Shrubs: Use enough water so that an equal amount of solution may be injected in each hole." to read "*For Shrubs: Use enough water so that an equal amount of solution my be injected in each hole."

A stamped copy is enclosed for your records. Please submit one (1) final printed copy for the referenced label, incorporating the above changes, before releasing the product for shipment. If you have any questions regarding this letter, please contact me at (703) 306-0415.

Sincerely,

Kable Bo Davis Entomologist Insecticide-Rodenticide Branch Registration Division (7505P)

Enclosure- Stamped Labeling

IMIGOLD 70 DF

Turf, Ornamental, and Greenhouse Insecticide

For insect control (both foliar and systemic) in turfgrass (including sod farms), landscape ornamentals, fruit and nut trees, and interior plantscapes.

ALSO

For control of insects on vegetable and ornamental plants in greenhouses and use in nurseries.

ALSO

For control of hide beetles and darkling beetles in poultry facilities and within 25 feet of the perimeter of the poultry structure.

ACTIVE INGREDIENT

IMIDACLOPRID – 1-[(6-Chloro-3-p	yridinyl)methyl]-N-nitro-2-	
wide contents	· · · · · · · · · · · · · · · · · · ·	70.0%
QELER INGREDIENTS		
MAY - 7 2009	Total	100.0%
Under the Federal Insecticide, Fungicide		

and Rodenticide Act, As amended, for the

pesticide Registered under EPA Reguinder OUT OF REACH OF CHILDREN

10506-157

CAUTION

	FIRST AID
If swallowed	 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 do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
If in eyes	 Hold eye open and rinse slowly and gently with water for 15-20 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.
If on skin or clothing	 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.
	or label with you when calling a poison control center or doctor, or going for xy 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

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United Phosphorus, Inc.		Net Contents:
630 Freedom Business Center, Suite 402	4	EPA Reg. No. 70506-157
King of Prussia, PA 19406	i i	EPA Est. No.
1-800-438-6071 • <u>www.upi-usa.com</u>	े भ	Batch/Lot #

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Caution. Harmful if swallowed or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing dust or vapor. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Keep children and pets off treated area until spray is dry.

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.

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.

When used for poultry facilities, once the product is diluted as directed on the label, shirt, pants, shoes and socks may be worn. All pesticide handlers must wear protective eyewear when working in a non-ventilated space.

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/PPE 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

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.

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 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 may be hazardous. Improper disposal of excess pesticide, spray mixture 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 Handling:**

Nonrefillable container. Do not reuse or refill this container.

Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available 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.

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.

Apply only when wind speed is 10 mph or less at the application site.

TURFGRASS APPLICATIONS

Restriction: Do not apply more than a total of 9 oz (0.4 lb ai) per acre per year.

Apply ImiGold 70 DF Insecticide to the following sites, to control/suppress the pests listed in the chart below.

Home lawns	Cemeteries
Business and office complexes	Parks
Shopping complexes	Playgrounds
Multi-family residential complexes	Athletic fields
Golf courses	Sod farms
Airports	

PESTS CONTROLLED	SCIENTIFIC NAME
Northern and Southern masked chafers	Cyclocephala borealis, C. immaculata, and/or D.
	lurida
Asiatic garden beetle	Maladera castanea
European chafer	Rhizotroquis majalis
Green June beetle	Coținis nilida
May or June beetle	Phyllophaga spp.
Japanese beetle	Popilla japonica
Oriental beetle	Anomala orientalis
Billbugs	Spherophorus spp.
Annual bluegrass weevil	Hyperodes spp.
Annual bluegrass ataenius	Ataenius spretulus and Aphodius spp.
European crane fly	Tibula paludosa
Mole crickets	Scapteriscus spp.
PESTS SUPPRESSED	
Cutworms	
Chinchbugs	

Due to the residual activity of the active ingredient, applications of ImiGold 70 DF Insecticide may be made before target pests lay their eggs. For best control, apply before the eggs hatch. All applications must be followed by rainfall or irrigation to move the active ingredient through the thatch.

When infested turfgrass areas are waterlogged, or soil beneath turf is saturated with water, avoid making applications because it is difficult to obtain thorough and consistent distribution of the product. Ensure that rainfall or irrigation after application will vertically penetrate the soil, allowing the active ingredient to be carried into the zone where the pests are found.

Application

Apply ImiGold 70 DF Insecticide in sufficient water to provide adequate distribution in the treated area. Use a low pressure setting, and apply a uniform coarse droplet spray, which will eliminate off-target drift. Check equipment calibration periodically to ensure that the product is being distributed properly.

PESTS	RATE	INSTRUCTIONS
	IMIGOLD 70 DF	
Larvae of:	6 to 9 oz/A	For best control, apply before egg hatch.
Annual bluegrass weevil	or	Chinch bugs (suppression) apply the
Asiatic garden beetle	3 to 4 tsp	maximum rate before the first instar
Billbug	per 1000 square ft	nymphs hatch.
Black turfgrass ataenius		
Chinch bug (suppression)		For mole crickets, apply before or during
Cutworms (suppression)		the peak egg hatch period. For adults or
European crane fly		large nymphs that are actively tunneling,
European chafer	1 12 4	combine ImiGold 70 DF Insecticide with
Green June beetle		an insecticide with a different mode of
Japanese beetle		action. Follow label instructions for
Mole crickets		other insecticides when tank-mixing.
Northern masked chafer	1 4 1	
Oriental beetle		To ensure that the active ingredient
Phyllophaga spp		moves into the turf, irrigation or rainfall
Southern masked chafer		must occur within 24 hours of
		application. Do not mow until after
		sufficient irrigation or rainfall has
		occurred.
· · ·		
		Do not apply more than 9 oz (0.4 lb ai)
· · · · · · · · · · · · · · · · · · ·		per acre per year.

ORNAMENTAL APPLICATIONS

For use on ornamental plants in commercial and residential landscapes and interior plantscapes.

Restriction: For outdoor ornamentals, do not apply more than a total of 9 oz (0.4 lb ai) per acre per year.

Because ImiGold 70 DF Insecticide is a systemic insecticide that is transported within the plant system from the roots to the upper foliage, it must be applied into a growing area of the plant so that the active ingredient can be absorbed. To promote the uptake of active ingredient, soluble nitrogen type fertilizers can be added to the spray solution.

Applications can be made by foliar or soil applications, including soil injection, drenches, and broadcast sprays. Foliar applications provide locally systemic activity against insect pests.

When the product is applied to woody plants using soil application, the systemic translocation of the active ingredient will be slower, and can take as much as 60 days and sometimes longer, depending on the species and size of the plant.

Use for Ant Management

Use ImiGold 70 DF Insecticide to control ants by removing honeydew as their food source. ImiGold 70 DF Insecticide will control the aphids, scale insects, mealybugs and other sucking pests on ornamentals. For greater ant control, supplement foliar application with residual sprays, baits, or other ant control tactics.

Application

ImiGold 70 DF Insecticide may be used in many types of application equipment. It mixes well with water. For better coverage on hard to wet foliage on plants such as holly, ivy, or pine, add a commercial spreader/sticker.

ImiGold 70 DF Insecticide is compatible with many fungicides, miticides, liquid fertilizers, and insecticides. If the applicator does not have experience with a particular tank mix, use a clear jar to test compatibility using the proportions of the proposed tank mixture.

Restriction: Do not apply through any irrigation system.

Only for this foliar use in industrial and cor	nmercial buildings and their outdoor areas.
Also for this foliar use in residential areas	

ORNAMENTAL	PESTS	RATE		INSTRUCTIONS
PLANT				•
Trees	Adelgids	ImiGold 70 DF		Use the dilution
Shrubs	Aphids	(level measure)	Water	information to determine
Evergreens	Japanese beetles	1⁄4 tsp	2.5 gal	the rate for the amount of
Flowers	Lace bugs	¹ / ₂ tsp	5 gal	water needed to
Foliage plants	Leaf beetles (in-	1 tsp	10 gal	uniformly cover the area
Groundcovers	cluding elm &	3 tsp	25 gal	to be treated. Do not use
Interior	viburnum leaf	5 tsp	50 gal	less than 2 gallons of
Plantscapes	beetles)	3 tbsp + 1 tsp	100 gal	water per 1000 sq ft.
	Leafhoppers (in-			
	cluding glassy-	. 54		Irrigate thoroughly to
	winged		}	incorporate ImiGold 70
	sharpshooter)			DF Insecticide into the
	Mealybugs			upper soil zone.
	Psyllids			
	Sawfly larvae			Before pest populations
· .	Thrips (suppr.)	1		become established,
	Whiteflies			make foliar applications.
	White grub larvae			Apply as needed.
	(Japanese beetle,			To control white grub
	chafers,			larvae, apply 3-4 level
	Phyllaphaga spp,	1		tsp per 1000 sq ft.
	Asiatic garden	1		
	beetle, Oriental			
	beetle)	, , , , , , , , , , , , , , , , , , ,	<u> </u>	

Only for this use in industrial and commercial buildings and their outdoor areas. Also for use in residential areas, and state, national, and private wooded and forested areas

ORNAMENTAL	PESTS	RATE	INSTRUCTIONS
PLANT		· 244 -	
Trees	Adelgids	TREES*	TREES, SOIL INJECTION: for a
Shrubs	Aphids	1 to 1 ¹ / ₂ level tsp per	grid system, apply in a grid pattern
Flowers	Armored scales	inch trunk diameter	on 2.5 centers within the tree's
Groundcovers	(suppression)	(D.B.H.)	drip line. For a circle system,
	Black vine weevil	or	apply in evenly spaced holes
	Elm and	1 to 2 oz per 30	approximately 1-3 ft apart in a
	viburnum)	cumulative inches	circle within the tree's drip line.
	Eucalyptus	trunk diameter	More circles may be needed for
	longhorned borer	(D.B.H.)	larger trees. For a basal system,
	Flatheaded borers		apply in evenly spaced holes no
	(incl. bronze birch	SHRUBS**	more than 6 to 12 inches out from

Page 6

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and alder borer)	1 to 1 ¹ / ₂ level tsp per	the tree's base.
Japanese beetles	foot of shrub height	TREES, SOIL DRENCH: Apply
Lace bugs	or	in at least 10 gallons water per
Leafminers	1 to 2 oz per 30	1000 sq ft as a drench around the
Leaf beetles (incl.	cumulative feet of	base of the tree, directed to the
Pine tip moth	shrub height	root zone. Remove any barrier
larvae)	FLOWERS &	that may prevent the solution from
Leafhoppers (incl	. GROUNDCOVERS	reaching the root zone.
glassywinged	3 to 4 level tsp per	SHRUBS, SOIL INJECTION:
sharpshooter)	1000 sợ ft	Apply as a uniform drench around
Mealybugs		the base of the shrub, in at least 10
Psyllids		gallons water per 1000 sq ft.
Royal palm bugs		Remove any barrier that may
Sawfly larvae		prevent the solution from reaching
Soft scales		the root zone.
Thrips	4 1	FLOWERS AND
(suppression)	1	GROUNDCOVERS: Apply as a
larvae		broadcast treatment, incorporating
White grub larvae		into the soil before planting.
Whiteflies	1 6 T	Application can also be made after
		the plants are established; in this
	;	case best control is achieved if
	4 5	plants are irrigated after
		application.
* Notes for TREES: Use enough water so that an equal amount of solution may be injected in each		

* Notes for TREES: Use enough water so that an equal amount of solution may be injected in each hole. Use low pressure and enough solution to ensure thorough distribution. Keep soil moist for 7-10 days. Use at least 4 holes per tree. If trees are already heavily infested with borers, application may not save the tree.

** Notes for SHRUBS: Use enough water so that an equal amount of solution may be injected in each hole. Use low pressure and enough solution to ensure thorough distribution. Use at least 4 holes per shrub.

RESTRICTIONS: No soil injection applications are allowed in Nassau or Suffolk Counties of New York.

FOR USE ON POME FRUITS IN AND ON RESIDENTIAL AREAS ONLY

(Apple, Crabapple, Loquat, Mayhaw, Pear, Pear (oriental), Quince)

PESTS	RATE	INSTRUCTIONS
	IMIGOLD 70 DF	
Aphids (except	0.5 oz (3 tbsp + 1 tsp) per	Apply at the specified rate as needed once
Wooly apple aphid)	100 gallons	petal fall is complete.
Leafoppers (incl.	or	Do not apply more than 2 ounces per acre in
glassy-winged	2 oz/Acre	one single application. Do not make more
sharpshooter)	Note: the amount of product	than 5 applications.
Leafminer	per acre will vary according	Do not apply more often than every 10 days.
Mealybugs (not for	to tree size and volume of	Preharvest interval: 7 days.
use on this pest on	foliage. The per acre rate is	Rosy apple aphid: apply before the pest
pears in California)	based on a standard 400	begins leafrolling.
San Jose Scale (not for	gallons dilute solution per	First generation leafminers: apply as soon as
use on this pest on	acre for large trees.	petal fall is complete. For best control, apply
pears in California)	1	as early as possible.
	ч. 4	Second and later generation leafminers: apply
		early in the adult flight to control eggs and
		early instar larvae. If necessary under
		conditions of severe pressure or overlapping
		generations, make a second application 10

	days later. Applying only once may result only in suppression. This product will not control late stage larvae.San Jose Scale: make application at the crawler stage. Treat each generation.Leafhoppers, late season control: apply when most leafhoppers are nymphs.Mealybug: for best control, good coverage of trunk, scaffolding limbs, or other resting sites is essential.
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FOR USE ON PECANS IN AND ON RESIDENTIAL AREAS ONLY

Note: use on pecans r	s not allowed in California unless specific supplemental labeling exists		
PESTS	RATE	INSTRUCTIONS	
	IMIGOLD 70 DF		
Yellow pecan aphid	0.5 oz (3 tbsp + 1 tsp) per	Make foliar applications before pest	
Black margined	100 gallons	population becomes severe. For pest	
aphid	or	control, 2 applications at 10- to 14-day	
Pecan leaf phyloxera	2 oz/Acre	intervals may be needed. Scout and retreat	
Pecan spittlebug	Note: the amount of	if necessary.	
Pecan stem	product per acre will vary	Treat foliage to ensure thorough, uniform	
phylloxera	according to tree size and	coverage. An organosilicone-based spray	
	volume of foliage. The per	adjuvant may be added at a rate not	
•	acre rate is based on a	exceeding the manufacturer's	
	standard 400 gallons dilute	recommendation, to improve coverage.	
	solution per acre for large	Do not apply more than 6 oz ImiGold 70	
	trees.	DF Insecticide per acre per year. Do not	
·		apply more than 3 times. Do not apply	
·		more often than every 10 days.	

FOR USE ON GRAPES IN AN AROUND INDUSTRIAL AND COMMERCIAL BUILDINGS AND RESIDENTIAL AREAS

PESTS	RATE IMIGOLD 70 DF	INSTRUCTIONS
Leafhoppers, incl. glassy-winged sharpshooter Mealybugs	0.5 oz (3 tbsp + 1 tsp) per 100 gallons or 1 oz/Acre	Apply as a foliar spray using 200 gallons water per acre. Do not apply more than 2 oz ImiGold 70 DF Insecticide per acre per year. Do not apply more often than every 14 days. ImiGold 70 DF Insecticide may be applied up to and including the day of harvest.

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.

Keep children and pets off treated area until dry.

Do not apply ImiGold 70 DF Insecticide to areas that are waterlogged or saturated, as this will not allow penetration into the root zone of the plant.

Do not apply more than 9 oz (0.4 lb ai) per acre per year.

CHEMIGATION

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

Apply ImiGold 70 DF Insecticide at labeled rates 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 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.

GREENHOUSE AND NURSERY APPLICATIONS

Use Information

IMIGOLD 70 DF Insecticide is a systemic product which provides insect control on ornamental and vegetable plants in nurseries and greenhouses. IMIGOLD 70 DF 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 Insecticide soil application in the same crop is <u>not</u> recommended.

Incorporate IMIGOLD 70 DF 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 Insecticide.

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

APPLICATION TO GRASSY AREAS IN NURSERIES

Use IMIGOLD 70 DF 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 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, 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 Insecticide before or during the egg laying period. To ensure that the active ingredient moves through the thatch, irrigation or rainfall must occur within 24 hours of application. The active ingredient in IMIGOLD 70 DF 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.

Restriction: Do not apply more than a total of 9 oz (0.4 lb of active ingredient) per acre per year.

Application Equipment for Use on Grassy Areas in Nurseries: Apply IMIGOLD 70 DF Insecticide in sufficient water to provide adequate coverage of the treated area. Use equipment which will produce a uniform, coarse droplet spray, with a low pressure setting. Check calibration periodically to confirm that equipment is working properly.

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		attern Rate IMIGOLD 70 DF		Directions
Adelgids Aphids Armored scale (suppression) Fungus gnats (larvae only) ¹ Japanese Beetle (adults) Lacebugs Leaf beetles (including elm	Plants in containers	Herbaceous Species – including Vegetable plants ⁵ (one or two plants per pot)	Container Size (inches) 2 3 4 5 6 7 8 9 10	No. pots treated with 0.5 ounce 3000 2000 1500 1200 1000 850 750 675 600 550	Distribute 0.5 ounce of IMIGOLD 70 DF 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.

Pest	Use P	attern	Ra IMIGOL	nte "D 70 DF	Directions
beetles) Leafhoppers (including glassy-winged sharpshooter)		Woody Perennial Species	Container Size (inches) 2 3 4	No. pots treated with 0.5 ounce 2000 1350 1000	
Leafminers Mealybugs Psyllids Root mealybugs ² Root Weevil Complex (Such as Black Vine Weevil,			5 6 7 8 9 10 11 12	800 650 550 450 400 350 300	
ApopkaWeevil, Citrus Root Weevil ³) Soft Scale Thrips (suppression) ⁴ White Grub larvae (such as Japanese Beetle, Masked Chafers,		Herbaceous Species – including Vegetable plants ⁵ (three or more plants per pot)	Use the above W Species rates		
Masted Chalers, European Chafer, Oriental Beetle, Asiatic Garden Beetle) Whiteflies	Ornamental and plants grown in beds	vegetable ⁵ flats, benches, or	0.5 ounce per 30	100 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. Lightly irrigate following application to established plants. Allow no leaching or runout for 10 days after application.
	Containerized Pl	ants	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 o 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, at 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. Rainfall or irrigation must occur following treatment. Do not use less than 2 gallons of spray volume per 1000 square feet.

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 IMIGOLD 70 DF Insecticide 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: one ounce in 250 gallons of water.

13

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.

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 Insecticide cannot exceed a total of 9 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 must be observed.

IMIGOLD 70 DF Insecticide Ebb & Flood Application

IMIGOLD 70 DF 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 Insecticide EBB & FLOOD APPLICATIONS	
Adelgids	Leafhoppers	Soft Scales
Aphids	(including glassy-winged	Thrips
Armored scales	sharpshooter)	(suppression) ⁴
(suppression)	Leafminers	Whiteflies
Fungus Gnats	Mealybugs	White Grub larvae
(larvae only) ¹	Psyllids	(such as Japanese Beetle, Masked
Japanese Beetles	Root mealybugs ²	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 ³)	•
Leaf beetles (including elm and viburnum	Vine Weevil, Citrus Root Weevil ³)	
	Vine Weevil, Citrus Root Weevil ³)	
(including elm and viburnum		eated with 0.5 ounces
(including elm and viburnum		eated with 0.5 ounces Woody perennials,
(including elm and viburnum		
(including elm and viburnum	Number of pots tre	Woody perennials,
(including elm and viburnum	Number of pots tre Herbaceous species	Woody perennials, Herbaceous species
(including elm and viburnum leaf beetles)	Number of pots tre Herbaceous species including vegetable plants ⁵	Woody perennials, Herbaceous species including vegetable plants ⁵
(including elm and vibumum leaf beetles)	Number of pots tre Herbaceous species including vegetable plants ⁵ (one or two plants per pot)	Woody perennials, Herbaceous species including vegetable plants ⁵ (3 or more per pot)
(including elm and vibumum leaf beetles)	Number of pots tre Herbaceous species including vegetable plants ⁵ (one or two plants per pot) 3000	Woody perennials, Herbaceous species including vegetable plants ⁵ (3 or more per pot) 2000
(including elm and viburnum leaf beetles)	Number of pots tre Herbaceous species including vegetable plants ⁵ (one or two plants per pot) <u>3000</u> 2000	Woody perennials, Herbaceous species including vegetable plants ⁵ (3 or more per pot) 2000 1350

. 7	850	550
8	750	500
9	1675	450
10	600	400
11	550	350
12	500	300

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 IMIGOLD 70 DF Insecticide 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.
- 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, Peppinos, Peppers, Potatoes, Rape Greens, Sorghum, Sugar Beets, Tomatillo, and Tomato.

POULTRY FACILITIES APPLICATIONS

For control of hide beetles and darkling beetles in poultry facilities and within 25 feet of the perimeter of the poultry structure.

- Broadcast or banded treatment
- One application kills darkling beetles and hide beetles
- Stops the damage that darkling beetles cause
- Rotate with pyrethroid products labeled for this use to manage resistance

Application

Use ImiGold 70 DF Turf, Ornamental, and Greenhouse Insecticide as a general surface, spot, or crack and crevice treatment to walls, floors, and support beams of poultry facilities.

Do not apply when birds are present. Apply between flocks, following de-caking/sanitation procedures. Remove or cover exposed feed and water in the area to be treated. Allow treated surfaces to dry before restocking/reintroducing birds into the facility.

Mixing and Application

Determine the area (number of square feet) to be treated. Refer to the Mixing Table below for amount of ImiGold 70 DF Turf, Ornamental, and Greenhouse Insecticide to use. Mix the required amount of product with the appropriate amount of water and apply as a spray. Fill the sprayer tank with ½ of the required amount of water for the treatment. Begin agitation and add the required amount of ImiGold 70 DF Turf, Ornamental, and Greenhouse Insecticide to the spray tank. Continue mixing and add the remaining amount of water. Maintain sufficient agitation during product application to ensure a uniform spray. Prepare fresh spray mixture before each treatment.

Pests		MIXING TABLE Rate Per 1,000 ft ²	Gallons of Water Per 1,000 ft ²
Darkling Beetles		4 tablespoons	¹ / ₂ - 2 gallons
Hide Beetles		(¼ cup)	
	•	(2 ounces)	· ·

How to Apply

Band Application: When darkling beetles are concentrated in certain areas, such as under feed or water lines or along the perimeter walls, it may not be necessary to treat the entire poultry house. For these situations, certain portions of the house, or "bands," may be treated. For

example: Apply diluted ImiGold 70 DF Turf, Ornamental, and Greenhouse Insecticide to a 3foot wide band of litter under all of the feed and/or water lines in the house; a 3-foot wide band of litter adjacent to the side and end walls and the lower section of the walls, including 1 foot up onto the wood surfaces above the foundation. Be sure to measure the actual area (square feet) to be treated in order to determine the amount of ImiGold 70 DF Turf, Ornamental, and Greenhouse Insecticide needed for the application.

Whole House Application: When darkling beetle infestation is severe, the entire house may need to be treated. Apply diluted ImiGold 70 DF Turf, Ornamental, and Greenhouse Insecticide as a broadcast spray to the litter covering the entire floor area, especially to litter under feed and water lines, as well as to the lower sections of walls, including 1 foot up onto wood surfaces above the foundation.

In houses with support beams, treat the litter surface around each support post and 1 foot up each post. Also apply diluted spray to cracks and crevices around wall insulation, where beetles have been seen or can find shelter.

Resistance Management

Darkling beetles, like all insects, have the ability to develop resistance to insecticides. When a single chemical class is used continuously, this increases the chances that resistance to that chemical class will develop. ImiGold 70 DF Turf, Ornamental, and Greenhouse Insecticide contains the active ingredient imidacloprid, which belongs to the class of chloronicotinyl insecticides. ImiGold 70 DF Turf, Ornamental, and Greenhouse Insecticide should be used in an insecticide rotation program with other classes of insecticides including pyrethroids, organophosphates, and spinosyns, in order to prevent resistance and preserve the product's effectiveness for darkling beetle control.

- Read and follow ALL label directions when using this product or any other insecticide.
- Do not use this product or any other insecticide product at lower than the recommended label rates. Using products at less than the labeled rates exposes the pests to a sub-lethal dose and increases the likelihood of resistance.
- Use Integrated Pest Management (IPM) strategies in addition to insecticide treatments to manage darkling beetle populations.

Contact your local UPI representative or your local Cooperative Extension Service for advice concerning the use of ImiGold 70 DF Turf, Ornamental, and Greenhouse Insecticide and appropriate resistance management strategies.

NOTE: When exclusion of pests at possible entry points is desired, supplement ImiGold 70 DF Turf, Ornamental, and Greenhouse Insecticide treatments with targeted applications of pyrethroid insecticides to the building perimeter, foundation, doors and windows, utility entry points, and other places where pests may enter the structure. Read and follow all label directions for use of these other products.

IMPORTANT INFORMATION READ BEFORE USING PRODUCT

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 reflect the opinion of experts based on field use and tests, and must be followed carefully. It is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of

Page 15

use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of United Phosphorus, Inc. or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of United Phosphorus, Inc. and Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold United Phosphorus, Inc. and Seller harmless for any claims relating to such factors.

To the extent consistent with applicable law, United Phosphorus, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or United Phosphorus, Inc., and Buyer and User assume the risk of any such use. To the extent consistent with applicable law, UNITED PHOSPHORUS, INC. MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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