1/10/2011

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

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

#### JAN 10 2011

Anne Turnbough, Ph.D. Control Solutions, Inc. 5903 Genoa-Red Bluff Pasadena, TX 77507-1041

Subject: Notification for Additional Marketing Statement and Optional Directions for Use with Low Pressure Shower Applicator

Dear Dr. Turnbough:

The Agency is in receipt of your Application(s) for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated December 14, 2010 for:

EPA Registration 53883-205

**IMI 1.47% Concentrate** 

The Registration Division (RD) has conducted a review of this request for applicability under PRN 98-10 finds that the label change(s) requested falls within the scope of PRN-98-10. The label has been date-stamped "Notification" and will be placed in our records.

If you have any questions, at 703 305-5409 or electronically at daniel.dani@epa.gov

Sincerely,

Dani Daniel

Registration Division (7504P)

Insecticide/Rodenticide Branch

 Please read instructions on re	everse before comple	) tina for <b>hi</b> l (\) T	"I   "	Form Approve	ed. Gwil No. 20	70-0066	20€ 1
_	Environmenta	nited States	MAGANAYA	N	Registrati Amendm Other	on	OPP Identifier Number
		Applicatio	n for Pestic	ide - Section	ı l		
1. Company/Product Number 53883 - 205				Product Menager s Eagle		3. Pro	posed Classification
4. Company/Product (Name) IMI 1.47% Concentrate			PM#	13			
5. Name and Address of App Control Solutions, Inc. 5903 Genoa-Red Bluf Pasadena, TX 77507	f	de)	(b)(i), i to: EPA		milar or identic		FIFRA Section 3(c)(3) mposition and labeling
	<del></del>		Section -	11			
Amendment - Explain  Resubmission in responsion  Notification - Explain I  Explanation: Use addition	onse to Agency letter		I and Section II.)	Agency letter de "Me Too" Appli  Other - Explain	cation.	0	
Notification for the addition of highlighted in attached label. An additional method of application method resulting the new application method the product is not registered.	CSI believes this is a rication permitted under its in exposure no greates in exposure in change in the contract of the contr	otification based section 2(ee)(3 ter than exposudosage, conce	d upon the followin  i) of FIFRA that mere  re from the current  ntration, or frequer	g : eets the following c ly registered metho	riteria, may be ad od(s);		-
			Section -	111			
Material This Product Will Child-Resistant Packaging Yes No	Be Packaged In: Unit Packaging Yes No		Water Soluble Yes No	Packaging		ontainer Metal Plastic Glass	
* Certification must be submitted	If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt	No. per container		Paper Other (S	Specify)
3. Location of Net Contents I	nformation ontainer	4. Size(s) Reta	ail Container	5. L	ocation of Label	Directio	ons
6. Manner in Which Label is A	Affixed to Product	Lithogr Paper of Stencil	aph glued ed	Other _			33333
			Section -	IV			2 2 ) 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
1. Contact Point (Complete i	items directly below i	or identification	n of individual to l	be contacted, if ne	ecessary, to proc	653 His	applicatior,)
Name Anne Turnbough		i	Title Manager, Regul	atory Affairs	1 4	elephon 87-892-	e No. (Include,Area Code) 2532
I certify that the staten I acknowledge that any both under applicable I	knowlinglly false or		all attachments th		curate and comp		6. Date Application Received
2. Signature	e TS	2	<b>3. Title</b> Manager, Regulat	tory Affairs			3010   3000

5. Date

12-14-10

4. Typed Name

Anne Turnbough



Dec 14, 2010

Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504P)
U.S. Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202-4501

Re: Notification to add Optional Marketing Statements, per (PR) Notice 98-10 EPA Reg. No. 53883-205, IMI 1.47% Concentrate

#### Dear Sir or Madam:

Please find enclosed a request for notification for the addition of optional marketing statements AND optional directions for use with low-pressure shower applicator. All changes have been highlighted in attached label. CSI believes this is a notification based upon the following:

An additional method of application permitted under section 2(ee)(3) of FIFRA that meets the following criteria, may be added to the label by notification:

- the application method results in exposure no greater than exposure from the currently registered method(s);
- the new application method results in no change in dosage, concentration, or frequency of application of the product;
   and
- the product is not registered for public health related uses or as a termiticides.

Please see highlighted areas for all additions.

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 USC Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Enclosed please find:		) ((((((((((((((((((((((((((((((((((((
Application for Pesticide Registration (EPA Form 8570-1)		ر ژو ر ر ژ
2. 2 copies of label with highlighted changes and clean copy	3 3 3 3 3 3	ى 3 ، رورود
If you have any questions or need additional information, please do not hesitate to contact me.	13	ر دود ر دود
Sincered	, , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , ,
Anne Turnbough Ph.D. Manager, Regulatory Affairs		, , , , , , , , , , , , , , , , , , ,

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# NOTIFICATION JAN 1 0 2010

# **IMI 1.47% Concentrate**[Alt. brand name: Dominion Tree & Shrub]

[ROOM FOR OPTIONAL MARKETING STATEMENTS]

For Outdoor Residential Use Only.

**ACTIVE INGREDIENT:** 

NOT FOR SALE, USE OR DISTRIBUTION IN or INTO Nassau, Suffolk, Kings or Queens Counties, New York

Imidacloprid OTHER INGREDIENTS: TOTAL:		1.47% <u>98.53%</u> 100.00%	0 0 0 0 1 4 0 0 0 0 1 4 0 0 0 1 4 0 0 0 1 4	
	KEEP OUT OF REACH OF CHILDREN	999999 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	3 33333 3333 3333	
	CAUTION	) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) )	3 33333 3	
going for treatme	FIRST AID  It container or label with you when calling a poison control  ent. You may also contact SafetyCall® International (866  ical treatment information.		r, or	
If in eyes:	<ul> <li>Hold eye open and rinse slowly and gently with</li> <li>Remove contact lenses, if present, after the firs continue rinsing eye.</li> <li>Call a poison control center or doctor for treatm</li> </ul>	t 5 minutes, then		
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>			
Note to Physici				

See Back Panel Booklet for Additional Ingredients and Precautionary Statements

EPA Reg. No. 53883-205

EPA Est. No. 53883-TX-02

Net Contents: [fl. oz., qts., gallons]

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## PRECAUTIONARY STATEMENTS HAZARD TO HUMANS AND DOMESTIC ANIMALS

#### **CAUTION**

Causes eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to aquatic invertebrates. Do not apply directly to lakes, streams or ponds. Do not dump rinse water into sewers or other bodies of water. This pesticide is highly toxic to bees. Do not apply **IMI 1.47% Concentrate** when bees are active. Apply this product only as specified on this label.

#### **DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. For best results, be sure to read and follow all label directions. Shake well before using.

#### RESTRICTIONS:

- · Read and follow directions when using.
- Do not spray the product into fish pools, ponds, streams, or lakes.
- · Remove animal feeding dishes prior to application.

#### **LAWNS**

#### Information

IMI 1.47% Concentrate kills White Grubs, Mole Crickets, European Crane Fly Larvae and other pests listed in the table below. IMI 1.47% Concentrate forms a protective barrier in the soil which provides control of listed pests all season long. When applied early, IMI 1.47% Concentrate kills grubs, mole crickets and European crane fly before they hatch and damage; lawns. Contact your County Extension Agent for the best dates to apply in your area. IMI 1.47% Concentrate may be sprayed over soil or mulch. Remove weed barrier before applying.

Use on lawns and yards including the following grasses:

Cool season or Northern lawns	Warm season or Southern lawns		
Kentucky bluegrass,	Bermudagrass, Common and hybrid		
Perennial ryegrass,	Centipedegrass		
Tall fescue, fescues (red or fine leaf)	St. Augustinegrass		
·	Zoysiagrass		
	Buffalograss		
	Bahiagrass		

#### **Pests Controlled**

Pest	Indication of Damage to Lawns		
Adelgids	European crane fly larvae often cause damage by		
Annual bluegrass Weevil	feeding on grass roots and disrupting the soil		
Aphids	surface.		
Billbugs			
Bluegrass Weevils	Mole crickets often cause extensive damage by		
Chinch bug (suppression)	tunneling through lawns. Some species also feed		
Cutworms (suppression)	on roots. Tunneling uproots the grass so it easily		
Elm leaf beetle	dries out. Lawns turn yellow, become thin, weedy		
European crane fly larvae	and can eventually die.		
Lacebugs			
Leafhoppers	White grubs cause extensive damage to lawns by		

Leafminers	feeding on grass roots. Grass turns yellow, then
Mealybugs	brown and dies. Grubs chew off roots so that the
Mole crickets	grass is easily pulled up in pieces in your hands.
Sawfly larvae	You can roll it back like a carpet to reveal the
Sod webworm	grubs. If patches of dead grass appeared in your
Thrips	lawn late last summer, check for grubs.
Whiteflies	1
White Grubs (including larvae of Asiatic	
Garden Beetle, Black Turfgrass Ataenuis,	
Chafers, Japanese Beetle, May or June	
Beetle, and Oriental Beetle)	

#### **Application Instructions**

Treat for grubs from the beginning of May to the end of October, or when first noticed.

Contact your State Agricultural Extension Service agents for additional recommendations for your area.

**RESTRICTIONS:** Do not exceed one application of **IMI 1.47% Concentrate** per season for lawns.

#### IMI 1.47% Concentrate Ready-To-Spray Instructions- Lawns

**IMI 1.47% Concentrate** is a ready-to-spray formulation. Attach the bottle to your garden hose according to the directions below. Water will mix with the **IMI 1.47% Concentrate** as you spray.

- 1. Measure area to be sprayed. Calculate "square feet" by multiplying length times width. This [32 fl. oz.] container will cover up to 5,333 sq. ft.
- 2. Make sure sprayer knob control lever is in "OFF" position, then connect sprayer to garden hose.
- 3. When spraying turf and other low foliage, twist sprayer hood to the "Fan" position for more uniform coverage.
- 4. Turn water on at faucet. To begin spraying, turn [rotate] knob control lever to "ON" position. The product mixes automatically with the water as you spray.
- 5. To stop spraying, turn [rotate] knob control lever to the "OFF" position. Turn off water at the faucet. To relieve pressure, turn [rotate] knob control lever to the "ON" position and point the sprayer away from any desirable plants before disconnecting the spray nozzle from the garden hose.

Spray evenly over the measured area. [32 fl. oz. covers approximately 5,333 sq. ft]. For heavier infestations, use 32 fl. oz. to treat 3,560 sq. ft.

#### RESTRICTIONS:

- Children and pets may re-enter the treated area after the spray has dried.
- Do not water lawn within one hour after applying.
- Do not apply IMI 1.47% Concentrate to waterlogged areas
- For grub (larvae) control, ½ inch of rainfall or irrigations should occur within 24 hours after application. Thoroughly wet the lawn a few hours after application.
- For armyworm and cutworm control, do not irrigate treated areas within 24 hours after application of this product.
- Do not mow treated lawn until after adequate rainfall or irrigation has occurred.

#### **Hand-Operated Sprayers**

Including backpack, compression, knapsack or tank type sprayers and low pressure boom sprayers.

For lawns, mix 2 to 3 fl. oz. of **IMI 1.47% Concentrate** per one (1.0) gallon of water for treating approximately 333 sq. ft. of lawn. Use the higher rate for heavier infestations of insect pests.

Gallons of Water	Fluid ounces (fl. oz.) of IMI 1.47% Concentrate	Tablespoons (tbs.) of product	Area to be treated (sq. ft.)
1 gallon	2.0 – 3.0 fl. oz.	4 - 6 tbs.	333 sq. ft.
2 gallons	4.0 – 6.0 fl. oz.	8 – 12 tbs.	666 sq. ft.
3 gallons	6.0 – 9.0 fl. oz.	12 – 18 tbs.	1,000 sq. ft.

<sup>1.0</sup> fl. oz. = 2 tablespoons

#### For one (1) gallon retail containers:

For lawn using low pressure boom sprayers, mix 6.0 fl. oz. of **IMI 1.47% Concentrate** per 1,000 sq. ft. of lawn. Use a spray volume of 2.5 gallons per 1,000 sq. ft. of lawn. Additional spray preparation instructions are presented in the following table. NOTE: Amounts can be varied as indicated above as long as resulting spray amount is between 6 to 9 fl. oz. product per 1,000 sq. ft

Gallons of water	Fluid ounces (fl. oz.) of IMI 1.47% Concentrate	Area to be treated (sq. ft.)
2.5 gallons	6.0 fl. oz.	1,000 sq. ft.
5 gallons	12 fl. oz.	2,000 sq. ft.
10 gallons	24 fl. oz.	4,000 sq. ft.
12.5 gallons	30 fl. oz.	5,000 sq. ft.
25 gallons	60 fl. oz.	10,000 sq. ft. or 0.23 acre
53 gallons	128 fl. oz. (1 gallon)	21,333 sq. ft. or 0.5 acre

<sup>1</sup> gallon = 128 fl. oz. = 4 quarts = 16 cups

#### **ESTABLISHED ORNAMENTALS IN RESIDENTIAL AREAS**

#### Information

**IMI 1.47% Concentrate** is for use on outdoor trees, shrubs and groundcovers in landscape plantings as listed in the table below:

Landscape Plantings	Types of Plants	
Roses, flowers, bedding plants and flowering shrubs	Azalea, begonia, camellia, cherry laurel, geranium, gardenia, hydrangea, impatiens, ligustrum, peonies, primrose, tea roses, salvia, zinnias and similar herbaceous plants	
Evergreen and leafy shrubs and woody ornamentals	Arborvitae, boxwood, cotoneaster, euonymus, holly, juniper, laurel, privet, spruce yews and similar plants	
Groundcovers	English ivy, Dichondra, ivy, pachysandra, vinca and other similar plants	

**IMI 1.47% Concentrate** is for use to kill the pests listed in the table below on outdoor trees and shrubs.

Pests Controlled				
Adelgids	Leafhoppers (incl. Glassy-winged			
Aphids	Sharpshooters)			
Black Vine Weevil Larvae	Leafminers (incl. Birch Leafminers)			
Roundheaded Borers (incl. Eucalyptus	Mealybugs			
Longhorned Borers)	Pine Tip Moth Larvae			
Flatheaded Borers (incl. Bronze Birch, Alder	Psyllids			
Borers)	Royal Palm Bugs			

<sup>1</sup> quart = 32 fl. oz. = 4 cups

Japanese Beetles (Adult)	Sawfly Larvae
Lacebugs	Scales (incl. Armored Scale [suppression]
Leaf Beetles (incl. Elm Leaf Beetles and	and Soft Scale)
Viburnum Leaf Beetles)	Thrips (suppression)
	Whiteflies

**Foliar Applications** 

Use **IMI 1.47% Concentrate** as a foliar spray to provide contact control of larvae, nymphs or adults of the following insect pests: adelgids, aphids, Japanese beetles, lace bugs, leaf beetles (including elm leaf beetles and viburnum leaf beetles), leafhoppers (including glassy-winged sharpshooter), mealybugs, psyllids, sawfly larvae, thrips (suppression) and whiteflies.

#### **Application Instructions**

Apply when insects first appear and before high pest populations are established. Retreat when re-infestation occurs, when high pest pressure is observed or repeat applications on an asneeded basis with 10-14 day intervals between applications.

#### **How to Apply**

Foliar applications with water should be made as a thorough cover spray to provide uniform distribution. Spray to wet all foliage (leaves, stems and branches). Target the undersides of the leaves and try to penetrate dense foliage with the spray droplets.

#### IMI 1.47% Concentrate Ready-To-Spray Instructions

- 1. Make sure knob control lever is in "OFF" position, then connect sprayer to garden hose.
- 2. When spraying low growing groundcovers and small shrubs, twist the sprayer hood to the "FAN" position. When spraying taller trees, shrubs and ornamentals, twist the sprayer hood to the "STREAM" position for extended reach and more uniform coverage.
- 3. Turn water on at faucet. To begin spraying, turn [rotate] knob control lever to "ON" position. The product mixes automatically with the water as you spray.
- 4. To stop spraying, turn [rotate] knob control lever to the "OFF" position. Turn off water at the faucet. To relieve pressure, turn [rotate] knob control lever to the "ON" position and point the sprayer away from any desirable plants before disconnecting the spray nozzle from the garden hose.

#### **Hand-Operated Sprayers**

Including backpack, compression, knapsack or tank type sprayers.

For foliar applications mix 1.5 (1 ½) teaspoons (tsp) of **IMI 1.47% Concentrate** per one (1) gallon of water.

Spray Volume Gallons of Water	Teaspoons (tsp.) of product	Tablespoons (tbs.) of product
1 gallon	1 ½ tsp.	1/2 tbs.
2 gallons	3 tsp.	1 tbs.
3 gallons	4 ½ tsp.	1 ½ tbs.

1.0 fl. oz. = 2 tablespoons = 6 teaspoons (tsp.)

#### Hose-End Sprayer Instructions [For Gilmour Dial-A-Mix Sprayer or Air-O-Matic]

- 1. Set the dial to 1 ½ teaspoons (tsp.). Keep the dial set to this setting while spraying.
- 2. Add an adequate amount of product to the spray bottle to treat the total area. Do not add water to jar.
- 3. Spray to wet all foliage and direct the spray droplets for an even distribution on the target plants. Any unused product can be poured back into its original container.

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#### **Soil Applications**

Soil application of **IMI 1.47% Concentrate** provides systemic activity and longer residual control as compared to foliar applications. **IMI 1.47% Concentrate** may be used on bedding plants, flowers, trees, shrubs, groundcovers and woody ornamentals in landscape plantings as a soil surface spray. Individual trees and shrubs may be treated with a soil drench.

Pests Controlled		
Adelgids Leafhoppers		
Aphids	Leafminers	
Armored scales (suppression)	Mealybugs	
Black Vine Weevil Larvae	Pine Tip Moth Larvae	
Eucalyptus Longhorned Borers	Psyllids	
Flatheaded Borers	Royal Palm Bugs	
Japanese Beetles (adult)	Sawfly Larvae	
Lacebugs	Soft Scale (suppression)	
Elm Leaf Beetles	Thrips (suppression)	
Viburnum Leaf Beetles	White grub larvae	
	Whiteflies	

#### **Application Instructions**

**Seedbed or planting beds:** Apply as a broadcast treatment to the soil and incorporate into the soil by cultivation or irrigation before seeding, planting and transplanting.

**Established plantings:** Apply **IMI 1.47% Concentrate** to the root zone of the established plants and irrigate the treated areas before the insect activity is expected.

Irrigate the treated area (0.5 inch) thoroughly after the application of IMI 1.47% Concentrate.

#### **Hand-Operated Sprayers**

Including backpack, compression, knapsack or tank type sprayers.

For soil applications to landscape plantings, mix 3.0 fl. oz. of **IMI 1.47% Concentrate** per one (1) gallon of water for treating approximately 333 sq. ft. Additional spray preparation rates are given in the table below.

Spray Volume Gallons of Water	Fluid Ounces (fl. oz.) of IMI 1.47% Concentrate	Tablespoons (tbs.) of product	Area to be treated sq. ft.
1 gallon	3.0 fl. oz.	6 tbs.	333 sq. ft.
2 gallons	6.0 fl. oz.	12 tbs.	666 sq. ft.
3 gallons	9.0 fl. oz.	18 tbs.	1,000 sq. ft.

1.0 fl. oz. = 2 tablespoons

#### **Hose-End Sprayer Instructions**

- 1. Measure the total area to be sprayed
- 2. Set the dial to 3 oz.
- 3. Add an adequate amount of product to the spray bottle to treat the total area, or add 9 fl. oz. of product for every 1,000 sq. ft. For example, pour 18 fl. oz. of product into sprayer jar to treat an area of 2,000 sq. ft. Do not add water to jar.
- 4. Spray evenly over the measured area. Any unused product can be poured back into its original container.

#### Soil Drench to Individual Trees and Shrubs

**IMI 1.47% Concentrate** quickly dissolves in water allowing the insecticide to move through the soil into the root zone. Once in the roots, the insecticide moves up through the tree or shrub

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providing year-long insect control. **IMI 1.47% Concentrate** will also provide control to new growth. Drench applications to individual trees will control pests listed below:

Pests Controlled		
Adelgids	Leafhoppers	
<u>Aphids</u>	<u>Leafminers</u>	
Armored scales (suppression)	<u>Mealybugs</u>	
Black Vine Weevil Larvae	Pine Tip Moth Larvae	
Eucalyptus Longhorned Borers	<u>Psyllids</u>	
Flatheaded Borers	Royal Palm Bugs	
Japanese Beetles (adult)	Sawfly Larvae	
Lacebugs	Soft Scale (suppression)	
Elm Leaf Beetles	Thrips (suppression)	
Viburnum Leaf Beetles	White grub larvae	
	Whiteflies	

For best results, use this product as part of a preventative treatment program before insect damage occurs. Use one soil drench treatment per year during early spring to early fall.

IMI 1.47% Concentrate can be applied anytime except when the ground is saturated or frozen. These conditions will make movement of the product down into the root zone difficult. When applying this product during dry periods, generously water the tree or shrub the night before treatment.

**NOTE:** For insect control, the insecticide must move throughout the tree or shrub. The time it takes to do this will depend on the size of the plant that is treated (one week to three months for very large trees). For this reason, soil drenches should occur 2-3 months before the expected pest infestation. Trees that are already heavily infested may not survive due to the existing pest damage and the resulting stress.

#### **RESTRICTIONS:**

Do not apply to soil that is frozen or waterlogged. Keep children and pets off treated area until it has dried.

#### **Application Instructions**

Soil Drench: Refer to the directions in the "TREES" section below.

Soil Injection: Apply the rates indicated in the table in the "TREES" section. Divide the appropriate volume by the number of holes required. Place holes at approximately evenly spaced intervals around the entire circumference of the tree at about 2/3 the distance from the truck to the dripline. Inject at a depth of 8-12 inches.

#### **TREES**

#### Determining Amount of IMI 1.47% Concentrate to Use

Measure the circumference (distance around the tree trunk) in inches at chest height or at 4.5 feet from the soil using a flexible tape. Or, measure the diameter of the tree trunk in inches at chest height or at 4.5 feet from the soil.

Mix 1 oz. of **IMI 1.47% Concentrate** per inch of circumference of the tree trunk to one (1) gallon of water. Refer to the mixing chart below for the amounts of IMI 1.47% Concentrate needed.

#### **How to Apply**

Apply the solution to the root zone as a band around the base of the tree. Apply one (1) gallon of solution in a circular band from the base of the tree outward for two (2) feet. For trees with trunk

diameters more than 16 inches at chest height, apply two (2) gallons of solution in a circular band from the base of the tree outward for three to four (3-4) feet.

Do not irrigate immediately after a soil drench application. Depending on the size and vigor of the tree, the uptake period may vary from one week to three months for larger trees. Insect control will be achieved when the uptake and translocation from the roots to all plant parts (leaves) has occurred.

Tree Trunk Circumference (inches)	Tree Diameter (inches)	Amount of IMI 1.47% Concentrate (fl. oz.)	Volume of Water (gallons)	Band Width of Circular Area Around Base of Tree (outward feet)
8	2	8	1	2'
10	3	10	1	2'
15	5	15	1	2'
20	6	20	1	2'
25	8	25	1	2'
30	10	30	1	2'
35	11	35	1	3-4'
40	12	40	1	3-4'
45	14	45	1	3-4'
50	16	50	2	3-4'
55	18	55	2	3-4'

**NOTE:** The Directions for Use, or this chart for 1 quart containers may not describe the spray preparation beyond 32 fl. oz. per the *EPA Label Review Manual* Chapter 11.

#### **SHRUBS**

#### Determining Amount of IMI 1.47% Concentrate to Use

Measure the height of the shrub to the nearest foot. Round any inches down to the nearest foot if less than 6" and up to the nearest foot if greater than 6".

Mix 3 oz. of **IMI 1.47% Concentrate** per foot of shrub height to one (1) gallon of water. Refer to table below for additional mixing instructions.

#### How to Apply

Apply the solution to the root zone as a band around the base of the shrub. Apply one (1) gallon of solution in a circular band from the base of the shrub outward for one (1) feet. For shrubs taller than 3 feet, apply one (1) gallon of solution in a circular band from the base of the shrub outward for two (2) feet.

Do not irrigate immediately after a soil drench application.

Shrub Height (feet)	Amount of IMI 1.47% Concentrate (fl. oz.)	Volume of Water (gallons)	Band Width of Circular Area Around Base of Shrub (outward feet)
2	6	1	1'
3	9	1	1'
4	12	1	2'
5	15	1	2'
6	18	1	2'
7	21	1	2'
8	24	1	2'

#### APPLE, PEAR, PEACH, PLUM, CHERRY AND PECAN TREES

For plants established in residential areas as ornamental plantings or as fruit/nuts for consumption.

Plants	Insect Pests Controlled	
Apple and Crabapple	Aphids (except woolly apple aphid), Japanese beetles,	
Pear, Common and Oriental	leafhoppers (including glassy-winged sharpshooter),	
	leafminers, mealybugs, and San Jose scale	
Peach, Plum and Cherry	Aphids, cherry fruit fly maggot, Japanese beetles,	
•	leafhoppers, plant bugs, San Jose scale and stink bugs	
Pecan	Yellow pecan aphid, black margined aphid, pecan leaf	
	phylloxera, pecan spittlebug, pecan stem phylloxera	

#### **Application Instructions**

Timing of applications should coincide with vulnerable stages of the pests. The calendar schedules below are to be used as a guide to application timing but should not be considered a forecast or predictor for treating these insect pests. Consult your State Agricultural Extension Service agent for specific schedules and guidance for your local area. In addition, observe these guidelines for treating the following pests:

- Aphids: Make application when aphids first appear and before the leaves are rolled as a result of these pests.
- Leafhoppers: Make applications when leafhoppers first appear, during the nymph stage.
- Leafminers: Make two applications with intervals of 10 of more days. Make the first application soon after the petal fall is complete. A second application at the same dosage 10 days later should be applied to the early instar larvae.
- Mealybugs: Thorough and uniform coverage is necessary.
- San Jose Scale: Make application when crawlers are present. Ensure complete spray coverage of the branches, stems and leaves.
- Spittlebug: Apply when spittle masses are present and as new generations develop.

**For Apples and Pears:** Apply full cover sprays after the petal fall is complete. Continue application until the target insects are controlled. Apply up to five (5) foliar applications per season and allow 10 or more days between insecticide applications. Allow seven (7) days between the final application and the apple or pear harvest.

Stage of Trees	Approximate Dates	Apple	Pear	
Petal fall	May 22	•		
1 <sup>st</sup> cover spray, 5-10 days after petal fall	June 1	Х	Х	
2 <sup>nd</sup> cover spray, 10-14 days later	June 15	X	Х	
3 <sup>rd</sup> cover spray, 10-14 days later	June 29	Х	X	
4 <sup>th</sup> cover spray, 10-14 days later	July 13	Х	Х	
5 <sup>th</sup> cover spray, 10-14 days later	July 27	X	Х	
Waiting period before harvest	-	7 days	7 days	

**For Peaches:** Apply full cover sprays after the petal fall is complete. Continue application until the listed insects are controlled sufficiently. Use up to three (3) foliar applications per season. Allow at least 7 days between applications.

Stage of Trees	Approximate Dates	Peach	
Petal fall	May 25 – June 1		
1 <sup>st</sup> cover spray, 5-10 days after petal fall	June 1	Х	
2 <sup>nd</sup> cover spray, 7-14 days later	June 8 – 14	Х	
3 <sup>rd</sup> cover spray, 7-14 days later	June 15 – 21	X	
Waiting period before harvest	-	0 days	

For Cherries and Plums: Apply full cover sprays after the petal fall is complete. Continue application until the target insects are controlled sufficiently. Apply up to five (5) foliar applications per season and allow 10 or more days between insecticide applications. Allow seven (7) days between the final application and the cherry or plum harvest.

Stage of Trees	Approximate Dates	Cherry	Plum
Petal fall	May 22		
1 <sup>st</sup> cover spray, 5-10 days after petal fall	June 1	Х	Х
2 <sup>nd</sup> cover spray, 10-14 days later	June 15	Х	Х
3 <sup>rd</sup> cover spray, 10-14 days later	June 29	Х	Х
4 <sup>th</sup> cover spray, 10-14 days later	July 13	Х	Х
5 <sup>th</sup> cover spray, 10-14 days later	July 27	Х	Х
Waiting period before harvest	-	7 days	7 days

**For Pecans:** Apply full cover sprays after the petal fall is complete. Continue application until the listed insects are controlled sufficiently. Use up to three (3) foliar applications per season. Allow at least 7 days between applications.

Stage of Trees	Approximate Dates	Pecan
Petal fall	Late April	
1 <sup>st</sup> cover spray, 5-10 days after petal fall	May 1	Х
2 <sup>nd</sup> cover spray, 10-14 days later	May 15	X
3 <sup>rd</sup> cover spray, 10-14 days later	May 30	Х

#### How to Apply

Foliar applications with water should be made as a thorough cover spray to provide uniform distribution. Spray to wet all foliage (leaves, stems and branches). Target the undersides of the leaves and try to penetrate dense foliage with the spray droplets.

#### IMI 1.47% Concentrate Ready-To-Spray Instructions

- 1. Make sure knob control lever is in "OFF" position, then connect sprayer to garden hose.
- 2. When spraying low growing groundcovers and small shrubs, twist the sprayer hood to the "FAN" position. When spraying taller Trees, Shrubs and Ornamentals, twist the sprayer hood to the "STREAM" position for extended reach and more uniform coverage.
- 3. Turn water on at faucet. To begin spraying, turn [rotate] knob control lever to "ON" position. The product mixes automatically with the water as you spray.
- 4. To stop spraying, turn [rotate] knob control lever to the "OFF" position. Turn off water at the faucet. To relieve pressure, turn [rotate] knob control lever to the "ON" position and point the sprayer away from any desirable plants before disconnecting the spray nozzle from the garden hose.

#### **Hose-End Sprayer Instructions**

- 1. Set the dial to 1 ½ teaspoons (tsp.). Keep the dial set to this setting while spraying.
- 2. Add an adequate amount of product to the spray bottle to treat the infested trees. Do not add water to iar.
- 3. Spray to wet all foliage and direct the spray droplets for an even distribution on the target plants. Any unused product can be poured back into its original container.

Spray volume will vary with the size of the trees and thorough coverage is important. Small trees (less then 15 feet in height) will require approximately 2 gallons of diluted spray per tree. Larger trees (25 feet in height) will require approximately 8 gallons of diluted spray per tree.

**Dilutions and Time Chart** – The estimated amount of diluted spray and the time required to spray one tree with the dial setting of 1 1/2 teaspoons (tsp.)

Tree Height (feet)	Spray Volume per Infested Tree (gallons)	Estimated Time to Spray One Tree (minutes)
15	2	1
20	5	2 ½
25	8	4
30	15	7 1/2
35	20	10

#### Soil Drench to Apple, Pear, Peach, Plum, Cherry and Pecan Trees

**IMI 1.47% Concentrate** quickly dissolves in water allowing the insecticide to move through the soil into the root zone. Once in the roots, the insecticide moves up through the tree or shrub providing year-long insect protection. **IMI 1.47% Concentrate** will also provide protection to new growth. Drench applications to individual trees will control aphids, borers, leafhoppers, lace bugs, mealybugs, scale insects, and other larvae as listed above.

For insect control, the insecticide must move throughout the tree or shrub. The time it takes to do this will depend on the size of the plant that is treated (one week to three months for very large trees). For this reason, apply soil drenches 2-3 months before the expected pest infestation.

For best results, use this product as part of a preventative treatment program before insect damage occurs. Use one soil drench treatment per year during early spring to early fall.

IMI 1.47% Concentrate can be applied anytime except when the ground is saturated or frozen. These conditions will make movement of the product down into the root zone difficult. When applying this product during dry periods, generously water the tree or shrub the night before treatment.

Do not apply to soil that is frozen or waterlogged.

Trees that are already heavily infested may not survive due to the existing pest damage and the resulting stress.

#### **Determining Amount of IMI 1.47% Concentrate to Use**

Measure the circumference (distance around the tree trunk) in inches at chest height or at 4.5 feet from the soil using a flexible tape. Or, measure the diameter of the tree trunk in inches at chest height or at 4.5 feet from the soil.

Mix 1 oz. of **IMI 1.47% Concentrate** per inch of circumference of the tree trunk to one (1) gallon of water. Refer to the mixing chart below for the amounts of IMI 1.47% Concentrate needed.

#### How to Apply

Apply the solution to the root zone as a band around the base of the tree. Apply one (1) gallon of solution in a circular band from the base of the tree outward for two (2) feet. For trees with trunk diameters more than 16 inches at chest height, apply two (2) gallons of solution in a circular band from the base of the tree outward for three to four (3-4) feet.

Do not irrigate immediately after a soil drench application. Depending on the size and vigor of the tree, the uptake period may vary from one week to three months for larger trees.

Tree Trunk Circumference (inches)	Tree Diameter (inches)	Amount of IMI 1.47% Concentrate (fl. oz.)	Volume of Water (gallons)	Band Width of Circular Area Around Base of Tree (outward feet)
8	2	8	1	2'
10	3	10	1	2'
15	5	15	1	2'

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20	6	20	1	2'
25	8	25	1	2'
30	10	30	1	2'
35	11	35	1	3-4'
40	12	40	1	3-4'
45	14	45	1	3-4'
50	16	50	2	3-4'
55	18	55	2	3-4'

**NOTE:** The Directions for Use, or this chart for 1 quart containers may not describe the spray preparation beyond 32 fl. oz. per the *EPA Label Review Manual* Chapter 11.

[Optional Directions for Use with Low-Pressure Shower Applicator:]

#### [DRENCH DIRECTIONS FOR HOSE-END APPLICATOR

#### Determining Amount of IMI 1.47% Concentrate to Use

#### Trees with 1 Trunk:

Measure the circumference (distance around the tree trunk) in inches at chest height or at 4.5 feet from the soil using a flexible tape. Or, measure the diameter of the tree trunk in inches at chest height or at 4.5 feet from the soil. This is the number of ounces of this product to apply. Then determine Total Spray Time as in the Example below:

#### Trees with 2 or more Trunks:

Measure the circumference (distance around each the tree trunk) in inches at chest height or at 4.5 feet from the soil using a flexible tape. Add measurements of each trunk together. Or, measure the diameter of the tree trunk in inches at chest height or at 4.5 feet from the soil. Multiply this total by 0.75 to get the required number of ounces of this product to apply. Then determine Total Spray Time as in the Example below:

#### Shrubs:

Measure the height of each shrub to the nearest foot. Multiply the number of feet by 3. This is the number of ounces of product to apply. Then determine Total Spray Time as in the Example below:

The low-pressure shower applicator applies approximately 1 ounce of product every 5 seconds.

Number of Ounces x 5 seconds = Total Spray Time

Example: After measuring the tree or shrub as determined above, you determine that the amount the amount of product needed is 12 ounces.

12 Ounces X 5 seconds = 60 Total Seconds of Spray Time

Shake the bottle well, Then connect sprayer to hose and turn on water. To begin spraying, point nozzle at the base of the plant you are treating. Bend small plastic tab down, and turn knob to ON position.

Apply evenly around the plant base as close to the trunk as possible for the time determined in the calculation above. To stop spraying, turn knob to OFF position. Turn off water. Relieve water

pressure by bending the plastic tab down and turn the knob back to the ON position until water slows to a drip. Then turn the knob back to OFF. Finally, disconnect sprayer from the hose.

#### STORAGE AND DISPOSAL

**Pesticide Storage:** Store in original container in a cool, dry place, out of the reach of children, preferably a locked storage cabinet. Protect from freezing.

**Pesticide Disposal: If empty:** Nonrefillable container. Do not reuse or refill this container. Rinse the empty product container thoroughly and disperse the rinse water on lawn as part of the application. Offer for recycling if available. If recycling in not available: then dispose of container in sanitary landfill or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**If partly filled:** It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please call your local solid waste agency. Never place unused product down any indoor or outdoor drain.

#### [IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of liability before using this product.

If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following conditions, disclaimer of warranties and limitations of liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, because of manner of use and other factors beyond Control Solutions, Inc.'s control it is impossible for Control Solutions, Inc. to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, CONTROL SOLUTIONS, INC. MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Control Solutions, Inc. is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. Control Solutions, Inc. disclaims any liability whatsoever for special, incidental or consequential damages, resulting from the use or handling of this product.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT CONTROL SOLUTIONS, INC.'S ELECTION, THE REPLACEMENT OF PRODUCT.] optional language

[NOTICE: To the extent consistent with applicable law, Buyer assumes all responsibility for safety and use not in accordance with directions.] optional language

<sup>('</sup>GUARANTEED RESULTS OR YOUR MONEY BACK

If you are not satisfied with this product for any reason, send your written request for a refund to the address below, together with the original dated store receipt showing the price you paid. Please allow 6-8 weeks for processing] optional language

Control Solutions, Inc. 5903 Genoa-Red Bluff

#### Pasadena, TX 77507

#### Optional marketing statements in brackets []

[For Use on Lawns]

[Kills White Grubs, Mole Crickets and European Crane Fly Larvae]

[One application kills white grubs, mole crickets and European Crane Fly Larvae all season long] [When applied early, IMI 1.47% Concentrate kills grubs, mole crickets and European crane fly

before they hatch and damage lawns]

[Ready-to-Spray. No Mixing, No Measuring]

[Treats more than 5,000 sq ft (32 oz size )]

[Treats up to 5,333 sq. ft.]

[Season Long Control of White Grubs]

[Kills Grubs all season]

[Early Application stops grubs before they start]

[For Use on Trees & Shrubs including listed Fruit and Nut Trees]

[For Use on Apple, Pear, Peach, Plum, Cherry and Pecan Trees]

[Kills Adelgids, Aphids, Bronze Birch Borers, Leafminers, Scale and other listed pests]

[Kills insects & prevents new infestations]

[Cannot be washed off by rain or water.]

[Just mix in water and pour around tree or shrub]

[Treats 32" around Trees and 5 – 2 ft. tall Shrubs (32 fl. oz.)])

[Mix & Pour apply at the tree base]

[Moves through the soil into the root zone]

[Can be applied as a foliar spray and/or soil drench]

[Systemic insect protection for the entire plant]

[No Mixing, No Measuring – just connect to the hose and begin spraying.](MAY BE USED ONLY ON THE HOSE-END SPRAYER PACKAGING)

[Use on Lawns, Flowers, Shrubs, Ornamentals, Shrubs and Trees (including listed Fruit & Nut Trees.]

[Orchard Spray & Drench controls insects on Apple, Pear, Peach, Plum, Cherry and Pecan Trees.]

[Apply up to day of harvest on Peaches and Pecans.]

[Apply up to 7 days before harvest on Apples, Pears, Cherries, and Plums.]

[For trees, shrubs, and lawns]

[Shoots 25' or gentle spray for shrubs](MAY BE USED ONLY ON THE HOSE-END SPRAYER PACKAGING)

[Kills Adelgids, Aphids, Listed Borers, Beetles & Bugs, Leafminers, Scale and Other Listed Pest] [For Roses, Flowers, Bedding Plants, Listed Fruit and Nuts, Shrubs, Ground Covers & Trees] [Use on Flowers, Ornamentals, Shrubs and Trees (including listed Fruit and Nut Trees)] [Lasts for weeks]

[Kills Borers & Miners]

[This concentrate dissolves in water allowing the insecticide to move through the root zone. Once in the roots, the insecticide moves up through the tree or shrub providing protection from insects. This product will also provide protection for new growth.]

[Soil [Drench] Application Provides Year-Long Insect Control for Trees & Shrubs]

[Year-Long Insect Control for Trees 7 Shrubs when Applied as Soil Drench]

[Low-Pressure Shower Applicator]

[For terms of guarantee, see back pane.l]

{Rainproof [Protection]]

[People [Children] & pets may re-enter treated areas after spray has dried]