

14-469

09-11-2008

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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Rebecca M Horton, Agent for
Bonide Products, Inc.
Registration by Design, Inc
118 1/2 East Main Street, Suite 1
Salem, VA 24153—3805

SEP 11 2008

SUBJECT: Application for Pesticide Notification (PRN 98-10)
Request Alternate Brand Name(s) "BONDIE Beetle Killer" and "Beetle Killer"
and Added Pest & Related Changes
EPA Reg. No. 4-469
Application Dated July 15, 2008

Dear Registrant: :

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated 07/15/08 for the above product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action(s) requested fall within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

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

Sincerely,

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

2/18



United States
Environmental Protection Agency
Washington, DC 20460

Registration
 Amendment
 Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number 4-469	2. EPA Product Manager LaRocca	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) BONIDE® Lambda 0.5% Concentrate	PM# 13	
5. Name and Address of Applicant (Include ZIP Code) Bonide Products, Inc. 6301 Sutliff Road Oriskany, NY 13424 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: NOTIFICATION EPA Reg. No. _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)
 Notification of: (1) additional brand names; (2) to add Asian lady beetle (a non-public health concern pest) to labeled use sites; (3) to add optional marketing statements, consistent with currently approved label use; and (4) to repeat directions for "PESTS OUTSIDE THE HOME" currently featured under Version A, concentrate packaging - under the optional Version B, ready-to-spray packaging.
 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. Bonide Products, Inc. understands that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA, and further understands 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 Bonide Products, Inc. may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Metal	<input checked="" type="checkbox"/> Plastic
				<input type="checkbox"/> Glass	<input type="checkbox"/> Paper
* Certification must be submitted	If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt	No. per container	Other (Specify) _____
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 16, 24, 32 fl oz		5. Location of Label Directions <input checked="" type="checkbox"/> on label/attached booklet	
6. Manner in Which Label is Affixed to Product <input checked="" type="checkbox"/> Lithograph <input checked="" type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled			<input type="checkbox"/> Other _____		

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Rebecca M. Horton	Title Consultant/Agent for Bonide Products, Inc..	Telephone No. (Include Area Code) 540-375-8826
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment, or both under applicable law.		6. Date Application Received (Stamped)
2. Signature <i>Rebecca M. Horton</i>	3. Title Consultant/Agent for Bonide Products, Inc.	
4. Typed Name Rebecca M. Horton	5. Date July 15, 2008	

Registrations by Design, Inc.sm

118 1/2 East Main Street
Suite 1
Salem, VA 24153-3805
phone 540.375.8826
fax 540.375.8827

CERTIFIED MAIL #7007 0710 0002 1183 1440
July 15, 2008

Document Processing Desk (NOTIF)
Office of Pesticide Programs / Registration Division (7505P)
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Ave., NW
Washington, DC 20460

Re: Notification of Minor Label Changes
EPA Reg. No. 4-469, BONIDE® Lambda 0.5% Concentrate

Attn: Linda Arrington, Team Leader
Minor Formulations & Notifications

On behalf of Bonide Products, Inc. of Oriskany, NY, enclosed is notification of the following label changes for the above pesticide registration:

- 1) additional brand names
- 2) addition of the non-public health concern insect pest, Asian lady beetle, for use on currently approved label sites
- 3) addition of optional marketing statements, consistent with currently approved label use patterns
- 4) repeat use directions for "PESTS OUTSIDE THE HOME" (currently featured on Page 3 of Version A—concentrate packaging label) on Page 11 of the optional Version B—ready-to-spray packaging label). This was inadvertently omitted on the original label submission/approval.

All areas of revision are highlighted on the enclosed label for your convenience in review.

Best regards,



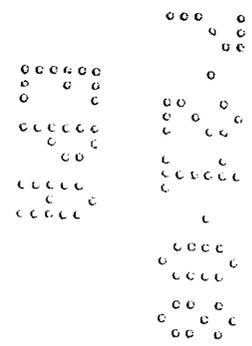
Rebecca M. Horton
Consultant/Agent for
BONIDE PRODUCTS, INC.

e-mail: hortonb@ntelos.net

/bmh

Enclosure

cc: MVickers/BPI



1/3

[VERSION A – CONCENTRATE PACKAGING]



LAMBDA 0.5% CONCENTRATE

[Additional Brand Names: Beetle Killer; BONIDE® Beetle Killer]

Optional Marketing Statements

- Protects [For] lawns, vegetables, roses, flowers, trees, shrubs, ornamentals
- Use outdoors on trees, shrubs, lawns and structures
- Kills [Controls] [For use on] Lawn & Garden insects, including ants, aphids, Asian lady beetle, chinch bugs, Colorado potato beetle, cutworms, deer ticks, elm leaf beetle, European crane flies, fire ants, flea beetles, fleas, grubs, Japanese beetles, mites, mosquitoes, sod webworms, whiteflies and many more [other] listed insects.
- Broad spectrum insect killer [insecticide][concentrate]
- Concentrated insect spray [killer]
- For soil and turf insect control
- For broadcast and barrier use
- Kills & repels insects
- Kills insects [pests] outside the home [on outdoor surfaces] for up to 8 weeks [2 months]
- Low odor, non-staining [formula]
- Fast acting [formula] [insect killer] [with up to 8 weeks residual]
- Works [kills] in 24 hours
- Kills 130+ [over 130] pests [insects] on contact
- Long-lasting insect protection
- Makes up to 128 gallons (for qt size container – volume will vary as appropriate to packaging size)
- Covers up to 16,000 sq. ft. [of lawn] (for qt size container – volume will vary as appropriate to packaging size)
- Kills Fire Ants in 24 hours
- Kills the Fire Ant Mound
- Kills the Queen and the Mound
- Controls Fire Ants for up to 4 Weeks [1 month]

ACTIVE INGREDIENT:

Lambda-cyhalothrin..... 0.5%

OTHER INGREDIENTS:..... 99.5%

TOTAL:..... 100.0%

Keep Out of Reach of Children

CAUTION

See back/side/other panel(s) or attached booklet for additional Precautionary Statements & First Aid.

Net Contents: 1QT (32 fl oz) (946 mL)

EPA Reg. No. 4-469
July 15, 2008 - notification

EPA Est. 4-NY-1
Page 1 of 15 Pages

READ THE ENTIRE LABEL BEFORE USE

This product kills grubs, ants, fleas, chinch bugs, mosquitoes, sod webworms, aphids, beetles, whiteflies, deer ticks, mites, Japanese beetles, European crane flies, fire ants and other listed insects.

DIRECTIONS FOR USE

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

Do not allow children or pets into the treated area until dry.

[In New York State, this product may not be applied to lawns within 100 ft. of a coastal marsh, or stream that drains directly into a coastal marsh.]

Mixing and Application

1. Using a clean sprayer, measure and mix the amounts of product and water as directed in the following table(s) [Use Rate Table(s)]
2. Do not use kitchen utensils such as measuring cups and spoons for food purposes after they have been used with pesticides.
3. Spray as directed – complete coverage is important.
4. Flush sprayer with clean water after use.
5. Treat when insects begin to appear and repeat treatments to maintain control as directed.
6. Carefully follow all label directions and any limitations of use, such as the amount of spray to apply or PHI (pre-harvest interval) for particular vegetable crops.

Measurement Conversions:

- 1 Tablespoon (Tbs) = 3 teaspoons (tsp)
- 1 fl oz = 2 Tbs = 6 tsp
- 6 fl oz = ¾ cup
- 1½ Tbs in 3 gallons of water = 1½ tsp in 1 gallon of water
- 2 Tbs in 3 gallons of water = 2 tsp in 1 gallon of water

Note: This product is non-staining to most home siding, depending on age and cleanliness. Prior to applying this product to areas that may contact home siding (including vinyl siding), test in a hidden area and recheck in a few hours. If any staining is observed, do not use this product.

LAWNS: Measure the area to be sprayed. See **Table 1-Underground and/or Thatch Infesting Insects** and **Table 2-Surface Insects** for use rates and instructions.

Table 1. Underground and/or Thatch Infesting Insects		
Pests	Use Rate	Instructions
Bluegrass billbug ¹ (adult), Black turfgrass Ataenius (adult), Chiggers, Chinch bugs, White grubs ^{2,3} (Japanese beetle, European chafer, Southern chafer), Dung beetle, Hyperodes weevils (adult), European crane flies, Mole crickets ³ (nymphs & young adults)	0.5 fl oz (1 Tbs) in 1 gallon of water to cover 125 sq. ft. - or - 4 fl oz (½ cup) in 8 gallons of water to cover 1,000 sq. ft.	Do not apply more than 7 times per year per location ¹ Treat billbugs in May (or when first noticed). ² Treat for grubs in early July to (or when first noticed) through October.

		³ Sub-surface (mole crickets & grubs): Water treated area with ¼ to ½ inch of water following application..
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Table 2. Surface Insects		
Pests	Use Rate	Instructions
Ants ¹ , Armyworms, Cockroaches, Crickets, Cutworms, Earwigs, Fleas, Lawn Moths (sod webworms), Millipedes, Mosquitoes, Palmetto bugs, Sowbugs, Mites, Spittlebugs, Deer ticks (which may transmit lime disease), Waterbugs ¹ Argentine, Southern, Field, Allegheny mound, Florida carpenter, Cornfield, Honey, Pavement, Nuisance.	For Light to <u>Moderate Infestations</u> 0.5 fl oz (1 Tbs) in 1 gallon of water to cover 250 sq. ft. - or - 2 fl oz (¼ cup) in 4 gallons of water to cover 1,000 sq. ft. <u>Heavy Infestations</u> 3 fl oz (6 Tbs) in 4 gallons of water to cover 1,000 sq. ft.	Do not apply more than 14 times per year per location. Do not water or mow for 24 hours following application.

PESTS OUTSIDE THE HOME: Use on ornamental plants next to building foundations and other outdoor surfaces where these pests are active, including porches, buildings, screens, overhangs, window frames, garages and patios. See **Table 3-Outdoor Surface Barrier Application** for use rates and instructions.

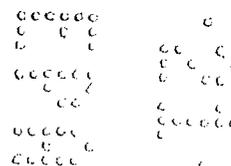
Table 3. Outdoor Surface Barrier Application		
Pests	Use Rate	Instructions
Ants ¹ , Asian lady beetles, Centipedes, Cockroaches, Crickets, Earwigs, Fleas, Millipedes, Mosquitoes, Palmetto bugs, Scorpions, Sowbugs, Pillbugs, Spiders, Deer ticks (which may transmit lime disease), Waterbugs ¹ Argentine, Southern, Field, Allegheny mound, Florida carpenter, Cornfield, Honey, Pavement, Nuisance.	0.5 fl oz (1 Tbs) in 1 gallon of water to cover 250 sq. ft. of surface area	For best results, remove any leaf litter or debris from area prior to treating. Cut back branches or vegetation that contact foundation. Rake back mulch and remove any other material that may serve as harborage sites for pests. Apply a continuous 3 ft. band as a coarse spray to thoroughly and uniformly wet the treated area around the foundation of buildings, windows, vents, overhangs, doors and other areas to reduce access by crawling insects. Repeat treatment every 8 weeks [2 months], as needed.

FIRE ANT MOUNDS: Mix 1 fl oz (2 Tbs) in 1 gallon of water. Do not disrupt mound before treatment. Thoroughly wet each mound and surrounding 4 ft. area. For best results, treat in cool weather (65°-80°F) or in the early morning or late evening hours. Apply to new mounds as they appear.

MOSQUITO CONTROL: Use on lawns, ornamental plants next to building foundations and other outdoor surfaces where these pests are active, including porches, buildings, screens, overhangs, window frames, garages and patios. See **Table 4-Outdoor Mosquito Control** for use rates and instructions.

Table 4. Outdoor Mosquito Control		
Use Site	Use Rate	Instructions
Lawns	<p><u>For Light to Moderate Infestations</u> 0.5 fl oz (1 Tbs) in 1 gallon of water to cover 250 sq. ft. - or - 2 fl oz (¼ cup) in 4 gallons of water to cover 1,000 sq. ft.</p> <p><u>Heavy Infestations</u> 3 fl oz (6 Tbs) in 4 gallons of water to cover 1,000 sq. ft.</p>	<p>Completely wet grass a few hours prior to application. After application, do not water or mow for 24 hours.</p> <p>Do not apply more than 14 times per year per location.</p>
Outdoor Surfaces including ornamental plants next to building foundations, porches, buildings, screens, overhangs, window frames, garages, patios and other areas where mosquitoes are active	<p>0.5 fl oz (1 Tbs) in 1 gallon of water to cover 250 sq. ft. - or - 2 fl oz (¼ cup) in 4 gallons of water to cover 1,000 sq. ft.</p>	<p>Apply a continuous 3 ft. band around the building and 3 ft. upwards along the foundation and around windows, doors, roof overhangs and other areas where mosquitoes may be active. Apply as a coarse spray to thoroughly and uniformly wet the treated area.</p> <p>Repeat treatment every 8 weeks [2 months], as needed.</p>

ORNAMENTAL TREES, SHRUBS & FLOWERS: Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. For best results, apply early – prior to high insect infestations. See **Table 5-Ornamental Trees, Shrubs & Flowers Pest Control** for use rates and insects controlled.



6. Vegetable Garden Insect Control		
Use Rate: 0.5 fl oz (1 Tbs) in 1 gallon of water to cover 300 sq. ft.		Instructions: Do not exceed pre-harvest interval* (number of days to wait between last application and harvest) for treated vegetables. Do not apply more than 5 times per growing season for corn. For all other crops, do not apply more than 9 times per growing season.
Crop	PHI*	Insects Controlled
Broccoli, Brussels sprouts, Cabbage, Cavalo broccoli, Cauliflower, Chinese broccoli, Chinese cabbage, Chinese mustard, Kohlrabi	1 day	Alfalfa looper, Aphid, Armyworm, Beet armyworm, Cabbage looper, Cabbage webworm, Corn earworm, Cutworm, Diamondback moth, Fall armyworm, Flea beetle, Grasshopper, Imported cabbageworm, Japanese beetle ¹ , Leafhopper, Lygus bug, Meadow spittlebug, Plant bug, Southern cabbageworm, Spider mite, Stink bug, Thrips, Yellow-striped armyworm, Whitefly ¹ adult stages
Corn (sweet & pop)	21 days	Armyworm, Bean leaf beetle, Beet armyworm, Cereal leaf beetle, Chinch bug, Corn earworm, Corn leaf aphid, Cutworm, English grain aphid, European corn borer, Grasshopper, Green bug, Green cloverworm, Hop vine borer, Japanese beetle ¹ , Meadow spittlebug, Mexican corn rootworm beetle ¹ , Northern corn rootworm beetle ¹ , Sap beetle ¹ , Southern corn rootworm beetle ¹ , Southwestern corn borer, Stalk borer, Stink bug, Tobacco budworm, Western bean cutworm, Western corn rootworm beetle ¹ ¹ adult stages
Corn (sweet only)	21 days	Aphid, Aster leafhopper, Corn silkfly ¹ , Southern armyworm, Spider mite, Tarnished plant bug, Western bean cutworm ¹ adult stages
Lettuce (head & leaf)	1 day	Alfalfa looper, Aphid, Armyworm, Beet armyworm, Cabbage looper, Corn earworm, Cutworm, Diamondback moth, European corn borer, Fall armyworm, Flea beetle, Grasshopper, Green cloverworm, Imported cabbageworm, Japanese beetle ¹ , Leafhopper, Meadow spittlebug, Plant bug, Saltmarsh caterpillar, Southern armyworm, Spider mite, Stink bug, Tobacco budworm, Vegetable weevil ¹ , Whitefly ¹ adult stages
Onion (bulb) & Garlic	14 days	Aphid, Armyworm, Cutworm, Flower thrips, Leafminer ¹ , Onion maggot ¹ , Onion thrips, Plant Bug, Seedcorn maggot ¹ , Stink bug, Tobacco thrips, Western flower thrips ¹ adult stages

Tomato & Tomatillo	5 days	Aphid, Beet armyworm, Cabbage looper, Colorado potato beetle, Cutworm spp., European corn borer, Fall armyworm, Flea beetle, Grasshopper, Hornworm, Leafhopper, Leafminer, Meadow spittlebug, Plant bug, Southern armyworm, Stink bug, Tobacco budworm, Tomato fruitworm, Tomato pinworm, Yellow-striped armyworm, Whitefly
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STORAGE & DISPOSAL

Pesticide Storage: Store and transport in upright position. Store only in original container, in a cool dry place inaccessible to children or pets.

Pesticide Disposal: *If partly filled* – Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

Container Disposal: *If empty* -- Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available.

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals

CAUTION: Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.

FIRST AID	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Pesticide Information Center at 1-800-585-7378 for emergency medical treatment information.	
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 a 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.

Environmental Hazards: This product is extremely toxic to fish. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

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.

[VERSION B – READY-TO-SPRAY APPLICATOR PACKAGING]



LAMBDA 0.5% CONCENTRATE

[Additional Brand Name(s): BONIDE® LAMBDA READY-TO-SPRAY. Beetle Killer; BONIDE® Beetle Killer]

Optional Marketing Statements

- Protects [For] lawns, vegetables, roses, flowers, trees, shrubs, ornamentals
- Kills [Controls] [For use on] Lawn & Garden insects, including ants, aphids, Asian lady beetle, chinch bugs, Colorado potato beetle, cutworms, deer ticks, elm leaf beetle, European crane flies, fire ants, flea beetles, fleas, grubs, Japanese beetles, mites, mosquitoes, sod webworms, whiteflies and many more [other] listed insects.
- Broad spectrum insect killer [insecticide][concentrate]
- Concentrated insect spray [killer]
- For soil and turf insect control
- For broadcast and barrier use
- Kills & repels insects
- Kills insects [pests] outside the home [on outdoor surfaces] for up to 8 weeks [2 months]
- Low odor, non-staining [formula]
- Fast acting [formula] [insect killer] [with up to 8 weeks residual]
- Works [kills] in 24 hours
- Kills 130+ [over 130] pests [insects] on contact
- Long-lasting insect protection
- Makes up to 128 gallons (for qt size container – volume will vary as appropriate to packaging size)
- Covers up to 16,000 sq. ft. [of lawn] (for qt size container – volume will vary as appropriate to packaging size)
- Kills Fire Ants in 24 hours
- Kills the Fire Ant Mound
- Kills the Queen and the Mound
- Controls Fire Ants for up to 4 Weeks [1 month]
- Shoots 25' [ft.] (for ready-to-spray applicator packaging)

ACTIVE INGREDIENT:

Lambda-cyhalothrin 0.5%

OTHER INGREDIENTS:..... 99.5%

TOTAL:..... 100.0%

Keep Out of Reach of Children

CAUTION

See back/side/other panel(s) or attached booklet for additional Precautionary Statements & First Aid.

Net Contents: 1QT (32 fl oz) (946 mL)

EPA Reg. No. 4-469
July 15, 2008 - notification

EPA Est. 4-NY-1
Page 9 of 15 Pages

READ THE ENTIRE LABEL BEFORE USE

This product kills grubs, ants, fleas, chinch bugs, mosquitoes, sod webworms, aphids, beetles, whiteflies, deer ticks, mites, Japanese beetles, European crane flies, fire ants and other listed insects.

DIRECTIONS FOR USE

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

Do not allow children or pets into the treated area until dry.

[In New York State, this product may not be applied to lawns within 100 ft. of a coastal marsh, or stream that drains directly into a coastal marsh.]

Note: This product is non-staining to most home siding, depending on age and cleanliness. Prior to applying this product to areas that may contact home siding (including vinyl siding), test in a hidden area and recheck in a few hours. If any staining is observed, do not use this product.

Application: Spray as directed – complete coverage is important. Treat when insects begin to appear and repeat treatments to maintain control as directed. Carefully follow all label directions and any limitations of use, such as the amount of spray to apply or PHI (pre-harvest interval) for particular vegetable crops.

Ready-to-Spray Nozzle Instructions:

1. Make sure knob control lever is in "OFF" position, then connect sprayer to garden hose.
2. When spraying low growing groundcovers, lawns 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 uniform coverage.
3. Turn water on at the faucet. To begin spraying, turn [rotate] knob control lever to the "ON" position. The product mixes automatically with the water as you spray.
4. To stop spraying, turn knob control lever to the "OFF" position. Turn off water at the faucet. To relieve pressure, turn 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.

LAWNS: Measure the area to be sprayed. See **Table 1-Underground and/or Thatch Infesting Insects** and **Table 2-Surface Insects** for use rates and instructions.

Table 1. Underground and/or Thatch Infesting Insects		
Pests	Use Rate	Instructions
Bluegrass billbug ¹ (adult), Black turfgrass Ataenius (adult), Chiggers, Chinch bugs, White grubs ^{2,3} (Japanese beetle, European chafer, Southern chafer), Dung beetle, Hyperodes weevils (adult), European crane flies, Mole crickets ³ (nymphs & young adults)	1 QT (32 fl oz) treats 8,000 sq. ft.	Do not apply more than 7 times per year per location ¹ Treat billbugs in May (or when first noticed). ² Treat for grubs in early July to (or when first noticed) through October. ³ Sub-surface (mole crickets &

14
18

		grubs): Water treated area with ¼ to ½ inch of water following application.
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Table 2. Surface Insects		
Pests	Use Rate	Instructions
<p>Ants¹, Armyworms, Cockroaches, Crickets, Cutworms, Earwigs, Fleas, Lawn Moths (sod webworms), Millipedes, Mosquitoes, Palmetto bugs, Sowbugs, Mites, Spittlebugs, Deer ticks (which may transmit lime disease), Waterbugs</p> <p>¹Argentine, Southern, Field, Allegheny mound, Florida carpenter, Cornfield, Honey, Pavement, Nuisance.</p>	<p>1 QT (32 fl oz) treats 16,000 sq. ft.</p>	<p>Do not apply more than 14 times per year per location.</p> <p>Do not water or mow for 24 hours following application.</p>

PESTS OUTSIDE THE HOME: Use on ornamental plants next to building foundations and other outdoor surfaces where these pests are active, including porches, buildings, screens, overhangs, window frames, garages and patios. See **Table 3-Outdoor Surface Barrier Application** for use rates and instructions.

Table 3. Outdoor Surface Barrier Application		
Pests	Use Rate	Instructions
<p>Ants¹, Asian lady beetles, Centipedes, Cockroaches, Crickets, Earwigs, Fleas, Millipedes, Mosquitoes, Palmetto bugs, Scorpions, Sowbugs, Pillbugs, Spiders, Deer ticks (which may transmit lime disease), Waterbugs</p> <p>¹Argentine, Southern, Field, Allegheny mound, Florida carpenter, Cornfield, Honey, Pavement, Nuisance.</p>	<p>1 QT (32 fl oz) treats 16,000 sq. ft.</p>	<p>For best results, remove any leaf litter or debris from area prior to treating. Cut back branches or vegetation that contact foundation. Rake back mulch and remove any other material that may serve as harborage sites for pests.</p> <p>Apply a continuous 3 ft. band spray to thoroughly and uniformly wet the treated area around the foundation of buildings, windows, vents, overhangs, doors and other areas to reduce access by crawling insects.</p> <p>Repeat treatment every 8 weeks [2 months], as needed.</p>

MOSQUITO CONTROL: Use on lawns, ornamental plants next to building foundations and other outdoor surfaces where these pests are active, including porches, buildings, screens, overhangs, window frames, garages and patios. See **Table 4-Outdoor Mosquito Control** for use rates and instructions.

Use Site	Use Rate	Instructions
Lawns	1 QT (32 fl oz) treats 16,000 sq. ft.	Completely wet grass a few hours prior to application. After application, do not water or mow for 24 hours. Do not apply more than 14 times per year per location.
Outdoor Surfaces including ornamental plants next to building foundations, porches, buildings, screens, overhangs, window frames, garages, patios and other areas where mosquitoes are active		Apply a continuous 3 ft. band around the building and 3 ft. upwards along the foundation and around windows, doors, roof overhangs and other areas where mosquitoes may be active. Apply as a coarse spray to thoroughly and uniformly wet the treated area. Repeat treatment every 8 weeks [2 months], as needed.

ORNAMENTAL TREES, SHRUBS & FLOWERS: Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. For best results, apply early – prior to high insect infestations. See **Table 5-Ornamental Trees, Shrubs & Flowers Pest Control** for use rates and insects controlled.

Use Site	Insects Controlled
Ornamental Trees, Shrubs & Flowers including (but not limited to): Ageratum, Ash, Aster, Arborvitae, Arizona Cypress, Azaleas, Begonia, Birch, Boxwood, Box Elder, Camellias, Cherry (ornamental), Non-bearing Citrus, Chrysanthemum, Carnation, Coleus, Common Ninebark, Conifers, Douglas Fir, Elm, English Ivy, Euonymus, Exacum, Weeping Fig, Fir, Gladioli, Gold Bells, Hawthorn, Holly, Honeysuckle, Hypoestes, Ivy, Juniper, Lilac, Locust, Maple, Marigold, Mimosa, Mock Orange,	Ants ¹ , Armyworms, Aphids, Asian lady beetles, Azalea caterpillar, Bagworms ² , Black vine weevil (adult), Boxelder bugs, Broadmites, Brown soft scale ² , Budworms, California red scale ² (crawler), Cankercworms, Clover mites, Cockroaches, Crickets, Cutworms, Eastern tent caterpillar, Elm leaf beetles, European sawfly, Fall webworm, Flea beetles, Forest tent caterpillar, Gypsy moth larvae, Japanese beetle (adults), June beetles (adults), Lace bugs, Leaf feeding caterpillars, Leafhoppers, Leafminers (adult), Leaf rollers, Leaf skeletonizers, Mealybugs, Midges, Oleander moth larvae, Pillbugs, Pine sawfly, Pine shoot beetles, Pineneedle scale ² (crawler), Pinetip moths, Plant bugs, Root weevil, Sawfly, Scale insects ² (crawlers), Spiders, Spider mites, Spittlebugs, Striped beetles, Striped oakworm, Thrips, Tip moth, Tussock moth larvae, Whiteflies

<p>Nannyberry, Oak, Orchid, Palm, Pansy, Pea Shrub, Petunia, Philodendron, Pine, Ornamental Plum, Poinsettia, Poplar, Tulip Poplar, Rhododendron, Roses, Snapdragon, Snowberry, Spruce, Taxus, Willow, Zinnia.</p>	<p>¹Argentine, Allegheny mound, Black carpenter, Cornfield, Field, Florida carpenter, Harvester, Honey, Pavement, Southern, Sugar, Nuisance.</p> <p>²For bagworm control, apply when bagworm larvae start to hatch.</p> <p>³For scale control, treat the whole plant, including the stem, trunks and twigs.</p>
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VEGETABLES: Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. For best results, apply when insects first appear or damage occurs. Do not exceed pre-harvest interval* (number of days to wait between last application and harvest) for treated vegetables. Do not apply more than 5 times per growing season for corn. For all other crops, do not apply more than 9 times per growing season. See **Table 6-Vegetable Garden Insect Control** for crops, pre-harvest interval (PHI) and insects controlled.

6. Vegetable Garden Insect Control		
Crop	PHI*	Insects Controlled
<p>Broccoli, Brussels sprouts, Cabbage, Cavalo broccoli, Cauliflower, Chinese broccoli, Chinese cabbage, Chinese mustard, Kohlrabi</p>	<p>1 day</p>	<p>Alfalfa looper, Aphid, Armyworm, Beet armyworm, Cabbage looper, Cabbage webworm, Corn earworm, Cutworm, Diamondback moth, Fall armyworm, Flea beetle, Grasshopper, Imported cabbageworm, Japanese beetle¹, Leafhopper, Lygus bug, Meadow spittlebug, Plant bug, Southern cabbageworm, Spider mite, Stink bug, Thrips, Yellow-striped armyworm, Whitefly</p> <p>¹adult stages</p>
<p>Corn (sweet & pop)</p>	<p>21 days</p>	<p>Armyworm, Bean leaf beetle, Beet armyworm, Cereal leaf beetle, Chinch bug, Corn earworm, Corn leaf aphid, Cutworm, English grain aphid, European corn borer, Grasshopper, Green bug, Green cloverworm, Hop vine borer, Japanese beetle¹, Meadow spittlebug, Mexican corn rootworm beetle¹, Northern corn rootworm beetle¹, Sap beetle¹, Southern corn rootworm beetle¹, Southwestern corn borer, Stalk borer, Stink bug, Tobacco budworm, Western bean cutworm, Western corn rootworm beetle¹</p> <p>¹adult stages</p>
<p>Corn (sweet only)</p>	<p>21 days</p>	<p>Aphid, Aster leafhopper, Corn silkfly¹, Southern armyworm, Spider mite, Tarnished plant bug, Western bean cutworm</p> <p>¹adult stages</p>
<p>Lettuce (head & leaf)</p>	<p>1 day</p>	<p>Alfalfa looper, Aphid, Armyworm, Beet armyworm, Cabbage looper, Corn earworm, Cutworm, Diamondback moth, European corn borer, Fall armyworm, Flea beetle, Grasshopper, Green cloverworm, Imported cabbageworm,</p>

		Japanese beetle ¹ , Leafhopper, Meadow spittlebug, Plant bug, Saltmarsh caterpillar, Southern armyworm, Spider mite, Stink bug, Tobacco budworm, Vegetable weevil ¹ , Whitefly ¹ adult stages
Onion (bulb) & Garlic	14 days	Aphid, Armyworm, Cutworm, Flower thrips, Leafminer ¹ , Onion maggot ¹ , Onion thrips, Plant Bug, Seedcorn maggot ¹ , Stink bug, Tobacco thrips, Western flower thrips ¹ adult stages
Tomato & Tomatillo	5 days	Aphid, Beet armyworm, Cabbage looper, Colorado potato beetle, Cutworm spp., European corn borer, Fall armyworm, Flea beetle, Grasshopper, Hornworm, Leafhopper, Leafminer, Meadow spittlebug, Plant bug, Southern armyworm, Stink bug, Tobacco budworm, Tomato fruitworm, Tomato pinworm, Yellow-striped armyworm, Whitefly

STORAGE & DISPOSAL

Pesticide Storage: Store and transport in upright position. Store only in original container, in a cool dry place inaccessible to children or pets.

Pesticide Disposal: *If partly filled* – Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

Container Disposal: *If empty* -- Non-refillable container. Do not reuse or refill this container unless directions for use allow a different (concentrated) product to be diluted in the container. Offer for recycling, if available.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.

FIRST AID

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Pesticide Information Center at 1-800-585-7378 for emergency medical treatment information.

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 a 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.

