

4-469

02/06/2009

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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

FEB 6 2009

Ms. Nicole Russell
Pesticide Compliance Specialist
Bonide Products, Inc.
6301 Sutliff Road
Oriskany, NY 13424

Re: Notification of Addition of Optional Marketing Statement and Additional Brand Name:
Caterpillar Killer, Bonide® Caterpillar Killer
EPA Registration No.: 4-469
Date of Submission: October 13, 2008

Dear Ms. Russell:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated October 13, 2008, for the product Bonide Lambda 0.5% Concentrate. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the actions 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 Joyce Edwards of my staff at 703-308-5479.

Sincerely,

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



LAMBDA 0.5% CONCENTRATE

[Additional Brand Names: Beetle Killer; BONIDE® Beetle Killer, Caterpillar Killer, Bonide® Caterpillar 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]
- Kills on Contact ✓
- For trees, shrubs, ornamentals, vegetables, lawns and structures
- Kills and repels for up to 8 weeks ✓
- Kills and repels insects, including Japanese Beetles ✓ and over 130 other insect pests
- Covers up to 16,000 sq. ft. Lasts up to 8 weeks.
- Protects trees, shrubs, ornamentals, lawns, structures and listed vegetables from insect damage
- Kills bagworms, tent caterpillars, gypsy moths and over 100 other insect pests
- Kills and repels insects on trees, shrubs, vegetables and ornamentals

NOTIFICATION

FEB 6 2009

ACTIVE INGREDIENT:

Lambda-cyhalothrin0.5%

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)

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.

[This product kills Lawn & Garden insects, including, Asian lady beetle, Colorado potato beetle, elm leaf beetle, flea beetles, Japanese beetles, and many other listed insects.]

[This product kills Azalea caterpillar, Eastern tent caterpillar, Leaf feeding caterpillars 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, [Eastern tent caterpillar,] Fleas, [Forest tent caterpillar, Gypsy moth larvae,] 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.

Use Site	Use Rate	Instructions
Lawns	<p>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.</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.

Use Site	Use Rate	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, Nannyberry, Oak, Orchid, Palm,	0.25 fl oz (½ Tbs) in 1 gallon of water to cover 250 sq. ft.	Ants ¹ , Armyworms, Aphids, Asian lady beetles, Azalea caterpillar, Bagworms, Black vine weevil (adult), Boxelder bugs, Budworms, Cankerworms, 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, Midges, Oleander moth larvae, Pillbugs, Pine sawfly, Pine shoot beetles, Pinetip moths, Plant bugs, Root weevil, Sawfly, Scale

Pansy, Pea Shrub, Petunia, Philodendron, Pine, Ornamental Plum, Poinsettia, Poplar, Tulip Poplar, Rhododendron, Roses, Snapdragon, Snowberry, Spruce, Taxus, Willow, Zinnia.		insects (crawlers), Spiders, Spittlebugs, Striped beetles, Striped oakworm, Thrips, Tip moth, Tussock moth larvae ¹ Argentine, Allegheny mound, Black carpenter, Cornfield, Field, Florida carpenter, Harvester, Honey, Pavement, Southern, Sugar, Nuisance.
	0.5 fl oz (1 Tbs) in 1 gallon of water	Broadmites, Brown soft scale, California red scale (crawler), Clover mites, Mealybugs, Pineneedle scale (crawler), Spider mites, Whiteflies

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. See **Table 6-Vegetable Garden Insect Control** for use rates, crops, pre-harvest interval (PHI) 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

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.



LAMBDA 0.5% CONCENTRATE

[Additional Brand Name(s): BONIDE® LAMBDA READY-TO-SPRAY. Beetle Killer; BONIDE® Beetle Killer, Caterpillar Killer, Bonide® Caterpillar 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)
- Kills on Contact
- For trees, shrubs, ornamentals, vegetables, lawns and structures
- Kills and repels for up to 8 weeks
- Shoots 25' or gentle spray for shrubs
- Kills and repels insects, including Japanese Beetles and over 130 other insect pests
- Covers up to 16,000 sq. ft.
- Lasts up to 8 weeks
- Protects trees, shrubs, ornamentals, lawns, structures and listed vegetables from insect damage
- Just connect to garden hose and spray Twist & Shoot™ feature delivers a straight “Stream” for taller trees and a “Fan” pattern for low lying plants and gardens
- Twist and Shoot™ sprayer reaches over 25 feet for taller trees, or a fan pattern for lower lying plants and gardens
- Kills bagworms, tent caterpillars, gypsy moths and over 100 other insect pests
- Connect and Spray
- Kills and repels insects on trees, shrubs, vegetables and ornamentals

ACTIVE INGREDIENT:

Lambda-cyhalothrin 0.5%

OTHER INGREDIENTS: 99.5%

TOTAL: 100.0%

12/25

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)

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.

[This product kills Lawn & Garden insects, including, Asian lady beetle, Colorado potato beetle, elm leaf beetle, flea beetles, Japanese beetles, and many other listed insects.]

[This product kills Azalea caterpillar, Eastern tent caterpillar, Leaf feeding caterpillars 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.

TWIST & SHOOT™ 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 & grubs): Water treated area with ¼ to ½ inch of water following application.

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.	1 QT (32 fl oz) treats 16,000 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, [Eastern tent caterpillar,] Fleas, [Forest tent caterpillar, Gypsy moth larvae,] 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.	1 QT (32 fl oz) treats 16,000 sq. ft.	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 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.

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	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.

<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>		<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>
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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.

Table 5. Ornamental Trees, Shrubs & Flowers Pest Control	
Use Site	Insects Controlled
<p>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, 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>Ants¹, Armyworms, Aphids, Asian lady beetles, Azalea caterpillar, Bagworms², Black vine weevil (adult), Boxelder bugs, Broadmites, Brown soft scale², Budworms, California red scale² (crawler), Cankerworms, 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 scale² (crawler), Pinetip moths, Plant bugs, Root weevil, Sawfly, Scale insects² (crawlers), Spiders, Spider mites, Spittlebugs, Striped beetles, Striped oakworm, Thrips, Tip moth, Tussock moth larvae, Whiteflies</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>

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</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,</p>

broccoli, Chinese cabbage, Chinese mustard, Kohlrabi		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

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.

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.

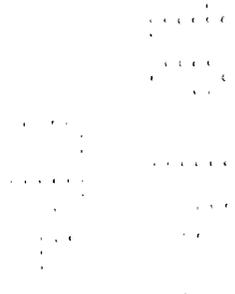
WARRANTY

Seller warrants that this product complies with the specifications expressed in this label. To the extent consistent with applicable law, Seller makes no other warranties, and disclaims all other warranties, express or implied, including but not limited to warranties of merchantability and fitness for the intended purpose. To the extent consistent with applicable law, Seller's liability or default, breach or failure under this label shall be limited to the amount of the purchase price. To the extent consistent with applicable law, Seller shall have no liability for consequential damages.

For information on pesticide products (including health concerns, medical emergencies, or pesticide incidents) call National Pesticide Information Center at 1-800-858-7378.

Bonide Products, Inc.
6301 Sutliff Road
Oriskany, NY 13424

[batch code inserted at production]



TRUSTED SINCE 1926
BONWIDE®

Kills on contact

Beetle Killer

For trees, shrubs, ornamentals, vegetables, lawns and structures

STROKS
a gentle spray for sensitive plants

Japanese Beetle
Colorado Potato Beetle
Asian Lady Beetle
Firmly Resistant Beetle

ACTIVE INGREDIENT	0.5%
Inert Ingredients	99.5%
OTHER INGREDIENTS	0.005%
TOTAL	100.00%

EPA Reg. No. 4449-1
EPA Reg. No. 4-469

Keep Out Of Reach Of Children
CAUTION See Back Panel For Precautions
Net Contents 32 FL. OZ. (946 ML)

188

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BEETLE KILLER

- **KILLS AND REPELS INSECTS, INCLUDING JAPANESE BEETLES AND OVER 130 OTHER INSECT PESTS**
- **COVERS UP TO 16,000 SQ. FT. LASTS UP TO 8 WEEKS**
- **PROTECTS TREES, SHRUBS, ORNAMENTALS, LAWNS, STRUCTURES AND LISTED VEGETABLES FROM INSECT DAMAGE**
- **JUST CONNECT TO GARDEN HOSE AND SPRAY TWIST & SHOOT™ FEATURE DELIVERS A STRAIGHT "STREAM" FOR TALLER TREES AND A "FAN" PATTERN FOR LOW LYING PLANTS AND GARDENS**

Store and transport in an upright position.
 EPA Est. No. 4-NY-1 EPA Reg. No. 4-469
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 Oriskany, NY 13424
 Quart



READ THE ENTIRE LABEL BEFORE USE

This product kills Lawn & Garden insects, including, Asian lady beetle, Colorado potato beetle, elm leaf beetle, flea beetles, Japanese beetles, and many 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.

TWIST & SHOOT™ READY TO SPRAY NOZZLE INSTRUCTIONS

1. Make sure knob control lever is in "OFF" position, then connect sprayer to garden hose.

TWIST & SHOOT™ READY TO SPRAY NOZZLE INSTRUCTIONS Cont.

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 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.

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 1-Ornamental Trees, Shrubs & Flowers Pest Control** for use rates and insects controlled.

Table 1. Ornamental Trees, Shrubs & Flowers Pest Control	
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,	Ants ¹ , Armyworms, Aphids, Asian lady beetles, Azalea caterpillar, Bagworms ² , Black vine weevil (adult), Boxelder bugs, Broadmites, Brown soft scale ³ , Budworms, California red scale ³ (crawler), Cankerworms, Clover mites, Cockroaches, Crickets,

Table 1. Ornamental Trees, Shrubs & Flowers Pest Control Cont.

Use Site	Insects Controlled
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, Pineneedle scale ³ (crawler), Pinetip moths, Juniper, Lilac, Locust, Maple, Marigold, Mimosa, Mock Orange, Nannyberry, Oak, Orchid, Palm, Pansy, Pea Shrub, Petunia, Philodendron, Pine, Ornamental Plum, Poinsettia, Poplar, Tulip Poplar, Rhododendron, Roses, Snapdragon, Snowberry, Spruce, Taxus, Willow, Zinnia.	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, Plant bugs, Root weevil, Sawfly, Scale insects ³ (crawlers), Spiders, Spider mites, Spittlebugs, Striped beetles, Striped oakworm, Thrips, Tip moth, Tussock moth larvae, Whiteflies ¹ Argentine, Allegheny mound, Black carpenter, Cornfield, Field, Florida carpenter, Harvest, Honey, Pavement, Southern Sugar, Nuisance. ² For bagworm control, apply when bagworm larvae start to hatch. ³ For scale control, treat the whole plant, including the stem, trunks and twigs.

LAWNS

Measure the area to be sprayed. See Table 2-Underground and/or Thatch Infesting Insects and Table 3-Surface Insects for use rates and instructions.

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 (or when first noticed) through October. ³ Sub-surface (mole crickets & grubs): Water treated area with ¼ to ½ inch of water following application.

Table 3. 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 QT. (32 fl oz) treats 16,000 sq. ft.	Do not apply more than 14 times per year per location. Do not water or mow for 24 hours following application.
¹ Argentine, Southern, Field, Allegheny mound, Florida carpenter, Cornfield, Honey, Pavement, Nuisance.		

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 4-Outdoor Surface Barrier Application for use rates and instructions.

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 QT. (32 fl oz) treats 16,000 sq. ft.	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, as needed.
¹ Argentine, Southern, Field, Allegheny mound, Florida carpenter, Cornfield, Honey, Pavement, Nuisance.		

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. See Table 5-Vegetable Garden Insect Control for use rates, crops, pre-harvest interval (PHI) and insects controlled.

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, Japanese beetle, Grasshopper, Imported cabbageworm, Leafhopper, Lygus bug, Meadow spittlebug, Plant bug, Southern cabbageworm, Spider mite, Stink bug, Trips, Yellow-striped armyworm, Whitefly (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, Meadow spittlebug, Mexican corn rootworm beetle, Northern corn rootworm beetle, Sap beetle, Southern corn rootworm beetle, Southwestern corn borer, Stalk borer,

Crop	PHI*	Insects Controlled
Corn (sweet & pop) cont.	21 days	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

Crop	PHI*	Insects Controlled
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. Place in trash or offer for recycling if available.

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: 1-800-858-7378 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.

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.

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 creeks, ditches 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.

WARRANTY
 Seller warrants that this product complies with the specifications expressed in this label. To the extent consistent with applicable law, Seller makes no other warranties, and disclaims all other warranties, express or implied, including but not limited to warranties of merchantability and fitness for the intended purpose. To the extent consistent with applicable law, Seller's liability or default, breach or failure under this label shall be limited to the amount of the purchase price. To the extent consistent with applicable law, Seller shall have no liability for consequential damages.

For information on pesticide products (including health concerns, medical emergencies, or pesticide incidents) call the National Pesticide Information Center at 1-800-858-7378.

CATERPILLAR KILLER

- **TWIST AND SHOOT™ SPRAYER REACHES OVER 25 FEET FOR TALLER TREES, OR A FAN PATTERN FOR LOWER LYING PLANTS AND GARDENS**
- **KILLS BAGWORMS, TENT CATERpillARS, GYPSY MOTHS AND OVER 100 OTHER INSECT PESTS**
- **CONNECT AND SPRAY**
- **KILLS AND REPELS INSECTS ON TREES, SHRUBS, VEGETABLES AND ORNAMENTALS**

Store and transport in an upright position.
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 Buyers Guarantee Limited to Label Claims.
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 Quart



READ THE ENTIRE LABEL BEFORE USE

This product kills Azalea caterpillar, Eastern tent caterpillar, Leaf feeding caterpillars 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.

TWIST & SHOOT™ READY TO SPRAY NOZZLE INSTRUCTIONS

1. Make sure knob control lever is in "OFF" position, then connect sprayer to garden hose.

TWIST & SHOOT™ READY TO SPRAY NOZZLE INSTRUCTIONS Cont.

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 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.

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 1-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),	Ants ¹ , Armyworms, Aphids, Asian lady beetles, Azalea caterpillar, Bagworms ² , Black vine weevil (adult), Boxelder bugs, Broadmites, Brown soft scale ³ , Budworms, California red scale ³ (crawler), Cankerworms, Clover mites, Cockroaches, Crickets, Cutworms, Eastern tent caterpillar,

Table 1. Ornamental Trees, Shrubs & Flowers Pest Control Cont.

Use Site	Insects Controlled
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, Pineneedle scale ³ (crawler), Pinetip moths, Juniper, Lilac, Locust, Maple, Marigold, Mimosa, Mock Orange, Nannyberry, Oak, Orchid, Palm, Pansy, Pea Shrub, Petunia, Philodendron, Pine, Ornamental Plum, Poinsettia, Poplar, Tulip Poplar, Rhododendron, Roses, Snapdragon, Snowberry, Spruce, Taxus, Willow, Zinnia.	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 (adults), Lace rollers, Leaf skeletonizers, Mealybugs, Midges, Oleander moth larvae, Pillbugs, Pine sawfly, Pine shoot beetles, Plant bugs, Root weevil, Sawfly, Scale insects ³ (crawlers), Spiders, Spider mites, Spittlebugs, Strip d beetles, Striped oakworm , Thrips; Tip moth, Tree cricket , moth larvae , Whiteflies ¹ Argentine, Allegheny mound, Black carpenter, Cornfield, Field, Florida carpenter, Harvester, Honey, Pavement, Southern, Curcul, Nuisance. ² For bagworm control, apply when bagworm larvae start to hatch. ³ For scale control, treat the whole plant, including the stem, trunks and twigs.

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. See Table 2-Vegetable Garden Insect Control for use rates, crops, pre-harvest interval (PHI) and insects controlled.

Crop	PHI ¹	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

Table 2. Vegetable Garden Insect Control Cont.

Crop	PHI ¹	Insects Controlled
Corn (sweet only)	21 days	Aphid, Aster leafhopper, Corn silkfly ¹ , Southern armyworm, Spider mite, Tamished 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

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.

Pests	Use Rate	Instructions
Ants ¹ , Asian lady beetles, Centipedes, Cockroaches, Crickets, Earwigs, Eastern tent caterpillar, Fleas, Forest tent caterpillar, Gypsy moth larvae, Millipedes, Mosquitoes, Palmetto bugs, Scorpions, Sowbugs, Pillbugs, Spiders, Deer ticks (which may transmit lime disease), Waterbugs	1 QT. (32 fl oz) treats 16,000 sq. ft.	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, as needed.

LAWNS

Measure the area to be sprayed. See Table 4-Underground and/or Thatch Infesting Insects and Table 5-Surface Insects for use rates and instructions.

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/June when first noticed. ² Treat for grubs in early July (or when first noticed) through October. ³ Sub-surface (mole crickets & grubs): Water treated area with 1/4 to 1/2 inch of water following application.

Table 5. 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 QT. (32 fl oz) treats 16,000 sq. ft.	Do not apply more than 14 times per year per location. Do not water or mow for 24 hours following application.
¹ Argentine, Southern, Field, Allegheny mound, Florida carpenter, Cornfield, Honey, Pavement, Nuisance.		

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. Place in trash or offer for recycling if available.

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 1-800-858-7378 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.

NOTIFICATION

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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.

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.

WARRANTY
 Seller warrants that this product complies with the specifications expressed in this label. To the extent consistent with applicable law, Seller makes no other warranties, and disclaims all other warranties, express or implied, including but not limited to warranties of merchantability and fitness for the intended purpose. To the extent consistent with applicable law, Seller's liability or default, breach or failure under this label shall be limited to the amount of the purchase price. To the extent consistent with applicable law, Seller shall have no liability for consequential damages.

For information on pesticide products (including health concerns, medical emergencies, or pesticide incidents) call the National Pesticide Information Center at 1-800-858-7378.