34704-1009

12/20/2013

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



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

December 20, 2013

Dr. Premjit Halarnkar Loveland Products, Inc. P.O. Box 1286 Greeley, CO 80632-1286

Subject: Label notification to add restrictions for the state of Oregon, per PRN 98-10

Dear Dr. Halarnkar:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10, dated December 3, 2013, for "Malice 75 WSP," EPA Registration Number 34704-1009.

The Registration Division (RD) has conducted a review of this request for applicability under PRN 98-10 and finds that the label changes requested do fall within the scope of PRN 98-10. The label submitted with your application has been date-stamped "Notification" and will be placed in our files.

If you have any questions, please contact me directly at 703-308-8735 or email me at chao.julie@epa.gov.

Sincerely,

Julie A. Chao Insecticide-Rodenticide Branch Registration Division (7505P) Office of Pesticide Programs

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Loveland Produ P.O. Box 1286	ucts Inc.			EPA Reg	imilar or identi No	cal in composit	tion and i	abeling to:
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Name Prem	niit Halarnka	r, Ph.D., MPA	Title	Manager of R	egistrations	Τe	elephone N	No. (Include Area Code) (970) 685-3579
	•	@cpsagu.com		•	-0			(970) 085-3579
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EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete.



December 3, 2013

Venus Eagle (PM 1) Insecticide-Rodenticide Branch/Registration Division Document Processing Desk Office of Pesticide Programs (7504C) U.S. Environmental Protection Agency Room S4900, One Potomac Yard 2777 S Crystal Drive Arlington, VA 22202

NOTIFICATION

DEC 2 0 2013

Subject: Malice 75 WSP (EPA Reg. No. 34704-1009) Submission of Revised Label – Oregon Statement

Dear Ms. Eagle:

Loveland Products is submitting this notification for Malice 75 WSP (EPA Reg. No. 34704-1009). The Restriction Statement for the state of Oregon was added on the label.

Attached, please find the following documents in support of this application.

- 1. Form 8570-1 Application
- 2. A copy of the label

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

If you have any questions, please contact me at (970) 685-3579 or by email: premiit.halarnkar@cpsagu.com

Sincerely

Premjit Halarnkar, Ph.D., MPA Registration Manager

PO Box 1286, Greeley, CO 80632-1286 • Phone: (970) 685-3300 • Fax: (970) 685-3911







Systemic and foliar insect control in turfgrass (including sod farms), and on fruit and nut trees, landscape ornamentals, and interior plantscapes and for control of listed insects infesting various crops.

ACTIVE INGREDIENT:	
Imidacloprid: 1-[(6-Chloro-3-pyridinyl) methyl]- <i>N</i> -nitro-2-imidazolidinimine	75.0%
OTHER INGREDIENTS:	
TOTAL	100.0%

Malice® 75 WSP contains imidacloprid, the active ingredient used in Merit® and Provado®.

KEEP OUT OF REACH OF CHILDREN CAUTION

	FIRST AID
If swallowed:	 Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow.
	 Do not induce vomiting unless told to do so by a poison control center or doctor. Do not do anything by mouth to an unconscious person.
If in eyes:	 Hold eye open and rinse slowly and gently with water for 15 to 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.
lf on skin or clothing:	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.
FOR A MEDIC	HOT LINE NUMBER act container or label with you when calling a poison control center or doctor, or going for treatment. AL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565. SICIAN: No specific antidote is available. Treat the patient symptomatically.

EPA REG. NO. 34704-1009

EPA EST. NO. 34704-MT-001

NET CONTENTS 4 x 1.6 OZ WSP

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NOTIFICATION

DEC 2 0 2013

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

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

PERSONAL PROTECTIVE EQUIPMENT (PPE):

WPS USES: Applicators and other handlers who handle this product for any use covered by the Worker Protection Standard (40 CRF Part 170) – in general, agricultural plant uses e.g., crops, sod farms, must wear:

- · Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as, barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton.
- Protective eyewear
- Shoes plus socks

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

NON-WPS USES: Applicators and other handlers who handle this product for any use NOT covered by the Worker Protection Standard (40 CFR part 170) – in general, only agricultural plant uses are covered by the WPS, must wear:

- Shirt and pants
- Gloves
- Protective eyewear
- Shoes plus socks

ENGINEERING CONTROLS STATEMENTS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Users should:

USER SAFETY RECOMMENDATIONS

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

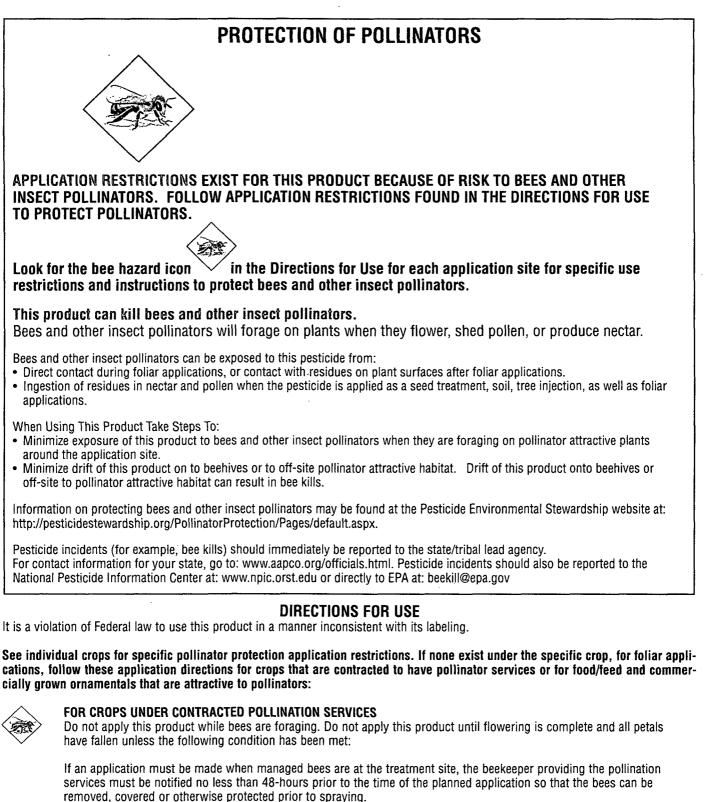
 Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is highly toxic to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops/plants or weeds if bees are foraging. This product is toxic to wildlife and highly toxic to aquatic invertebrates.

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





FOR FOOD/FEED CROPS AND COMMERCIALLY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless one of the following conditions is met:

- The application is made to the target site after sunset
- . The application is made to the target site when temperatures are below 55 °F
- . The application is made in accordance with a government-initiated public health response
- The application is made in accordance with an active state-administered apiary registry program where beekeepers are
 notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or
 otherwise protected prior to spraying
- The application is made due to an imminent threat of significant crop loss, and a documented determination consistent with an IPM plan or predetermined economic threshold is met. Every effort should be made to notify beekeepers no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.



FOR NON-AGRICULTURAL USE SITES

Do not apply Malice® 75 WSP while bees are foraging. Do not apply Malice 75 WSP to plants that are flowering. Only apply after all flower petals have fallen off.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticide. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to the uses of this product that are covered by the Worker Protection Standard. **Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.**

Exception: If the product is applied by drenching, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Coveralls

• Chemical-resistant gloves made of any waterproof material such as, barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton

- Protective evewear
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries and greenhouses.

Keep children and pets off treated areas until dry.

RUNOFF MANAGEMENT

Do not cultivate within 10 feet of the aquatic areas to allow growth of vegetative filter strip. When used on erodible soils, best management practices for minimizing runoff should be employed. Consult your local Natural Resources Conservation Service for recommendations in your use area.

ENDANGERED SPECIES NOTICE

Under the Endangered Species Act, it is a Federal Offense to use any pesticide in a manner that results in the death of a member of an endangered species. Consult your local county bulletin, County Extension Agent, or Pesticide State Lead Agency for information concerning endangered species in your area.

RESISTANCE MANAGEMENT

Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, the use of this product should conform to resistance management strategies established for the use area.

This product contains a Group 4A insecticide called imidacloprid. Insect biotypes with acquired or inherent tolerance to Group 4A products may eventually dominate the insect population if Group 4A products are used repeatedly as the predominant method of control for targeted species. This may eventually result in partial or total loss of control of those species by this product and to other Group 4A products.

The active ingredient in this product is a member of the neonicotinoid chemical group. Avoid using a block of more than three consecutive applications of this product and/or other Group 4A products having the same or similar mode of action. Following a neonicotinoid block of treatments, Loveland Products, Inc. strongly encourages the rotation to a block of applications with effective products of a different mode before using additional applications of neonicotinoid products. Using a block rotation or windowed approach, along with other IPM practices, is considered an effective use strategy for preventing or delaying an insect pest's ability to develop resistance to this class of chemistry.

Foliar applications of this product or other Group 4A products from the neonicotinoid chemical class should not be used on crops previously treated with a long-residual, soil-applied products from the neonicotinoid chemical class.

Other Group 4A, neonicotinoid products used as foliar treatments include: Actara®, Assail®, Calypso®, Centric®, Intruder®, Leverage®, Provado®, and Trimax™. Other 4A Group, neonicotinoid products used as soil treatment include: Admire® and Platinum®.

Contact your local extension specialist, certified crop advisor and/or product manufacturer for additional insect resistance management recommendations. Also, for more information on Insect Resistance Management (IRM), visit the Insecticide Resistance Action Committee (IRAC) on the web at http://irac-online.org/.

CROP USE LABEL PRODUCT PACKAGED IN WSP

OBSERVE THE FOLLOWING PRECAUTIONS WHEN MIXING AND APPLYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, PERMANENT STREAMS, MARSHES OR NATURAL PONDS, ESTUARIES AND COMMERCIAL FISH FARM PONDS.

SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions. <u>Avoiding spray drift is the responsibility of the applicator</u>.

Mixing and Loading Requirements

To avoid potential contamination of groundwater, the use of a properly designed and maintained containment pad for mixing and loading of any pesticide into application equipment is recommended. If containment pad is not used, maintain a minimum distance of 25 feet between mixing and loading areas and potential surface to groundwater conduits such as field sumps, uncased well heads, sinkholes, or field drains.

For Aerial Applications

Mount spray boom on the aircraft so as to minimize the drift caused by wing tip vortices. The minimum practical boom length should be used, and must not exceed 75% of the wing span or rotor diameter.

Importance of Droplet Size

An important factor influencing drift is droplet size. Small droplets (<150 to 200 microns) drift to a greater extent than large droplets. Within typical equipment specifications, applications should be made to deliver the largest droplet spectrum that provides sufficient control and coverage. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray boom pressure.

Release spray at the lowest possible height consistent with good pest control and flight safety. Do not apply more than 10 feet above the crop canopy.

Wind Speed Restrictions

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy and equipment specifications determine drift potential at any given wind speed. Do not apply when winds are greater than 15 mph and avoid gusty and windless conditions. Risk of exposure to sensitive aquatic areas can be reduced by avoid-ing applications when wind direction is toward the aquatic area.

Restrictions During Temperature Inversions

Because the potential for spray drift is high during temperature inversions, do NOT make aerial or ground applications during temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however if fog is not present, inversions can also be identified by the movement of smoke from a ground source. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical mixing.

MALICE® 75 WSP EPA REG. NO. 34704-1009

Airblast (Air Assist) Specific Instructions for Tree Crops and Vineyards

Airblast sprayers carry droplets into the canopy of trees/vines via a radially, or laterally directed air stream. The following specific drift management practices should be followed:

- · Adjust deflectors and aiming devices so that spray is only directed into the canopy;
- Block off upward pointed nozzles when there is no overhanging canopy;
- Use only enough air volume to penetrate the canopy and provide good coverage;
- Do not allow the spray to go beyond the edge of the cultivated area (i.e. turn off sprayer when turning at end rows);
- Only spray inward, toward the orchard or vineyard, for applications to the outside rows.

No-Spray Zone Requirements for Foliar Applications

Do not apply by ground within 25 feet, or by air within 150 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish farm ponds.

RESTRICTIONS

• DO NOT apply this product through any type of irrigation system.

- · Keep children and pets off treated areas until dry.
- DO NOT apply by air except for uses permitting aerial application in the "TREE, BRUSH AND VINE CROPS" section.
- DO NOT graze treated areas or use clippings from treated areas for feed or forage.
- DO NOT apply this product to soils that are waterlogged or saturated and avoid runoff or puddling of irrigation water following application.
- DO NOT allow leechate to run out for the first 10 days after application or reduced efficacy may result.
- Regardless of formulation or method of application, apply no more than 0.5 pounds active ingredient imidacloprid per acre per year, including seed treatment, soil, and foliar uses, unless specified within a crop-specific application section for a given crop.

APPLICATION INSTRUCTIONS

Apply as a directed or broadcast foliar spray using adequate spray volumes, properly calibrated application equipment and spray adjuvant (if necessary) to obtain thorough coverage. Thorough coverage of the foliage (without runoff) is necessary. Loss of insect control or delay in onset of activity may result if there is not adequate coverage and retention of this product on leaves and fruit. Except where otherwise specified, this product may be applied using properly calibrated ground and/or aerial application equipment using a minimum spray volume of 10.0 gallons per acre by ground application and 5.0 gallons per acre through aerial equipment.

Unless allowed under state-specific 24(c) labeling, do not use this product on crops grown for production of true seed intended for private or commercial planting. Your Cooperative Extension Service, PCAs, consultants or local Loveland Products, Inc. representatives can provide additional information on this product's uses with these crops.

Mixing Instructions

- Add a portion of the required amount of water to the spray tank and begin agitation.
- Add the specified amount of this product.
- Fill the tank with the remaining water needed, being sure to maintain sufficient agitation during both mixing and application.
- If tank mixing this product with other pesticides and/or fertilizer solutions, please refer to the Compatibility Testing Instructions below.
 When tank mixing this product with other pesticides, prepare the tank mixture as specified above and follow the Mixing Order below.

Mixing Order

Add this product first and allow the PVA packets to dissolve. Add any other wettable powders or wettable granules, flowables (suspension concentrates) second, and emulsifiable concentrates last. Maintain agitation as each component is added and do not add an additional component until the previous one is thoroughly mixed. A fertilizer pesticide compatibility agent may be needed if a fertilizer solution is added to the mix. To ensure uniformity of the spray mixture, be sure to maintain constant agitation during both mixing and application.

Compatibility Testing Instructions

Do not use PVA packets in a tank-mix with products that contain boron or release free chlorine. The resultant reaction of PVA and boron or free chlorine is a plastic that is not soluble in water or solvents. For further information, contact your local Loveland Products, Inc. representative.

Conduct the following test for compatibility of the intended tank mixture before adding this product to the spray or mix tank:

- 1. In a pint or quart jar, add proportionate amounts of each ingredient in the appropriate order.
- 2. Cap and shake for 5 minutes.
- 3. Let set for 5 minutes.
- 4. Observe the jar for signs indicating an incompatible mixture that should not be used such as poor mixing or the formation of precipitates that do not readily re-disperse.

Rotational Crops

As soon as practical following the last application, treated areas may be replanted with any crop specified on an imidacloprid label, or any crop for which a tolerance exists for the active ingredient. For crops not listed on an imidacloprid label, or for crops for which no tolerances for the active ingredient have been established, a 12-month plant-back interval must be observed.

Cover crops for soil building or erosion control may be planted at any time, but do not graze or harvest for food or feed.

Immediate Plant-back:

All crops on this label plus the following crops not on this label: barley, canola, corn (field, sweet and pop), rapeseed, sorghum, sugar beet and wheat.

30-Day Plant-back:

Cereals (including buckwheat, millet, oats, rice, rye and triticale), soybeans and safflower

10-Month Plant-back:

Onion and bulb vegetables

12-Month Plant-back:

All other crops

FIELD CROPS

Application Instructions

Apply as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage using the rates below is necessary to achieve optimum control. To improve coverage, a spray adjuvant may be used. This product may not knock-down heavy or established insect infestations; scout fields and make two applications if necessary to achieve control. For knockdown of pests or for improved control of other pests, this product may be tank mixed with other insecticides as listed below.

COTTON

Restrictions

- DO NOT graze treated fields after any application of this product
- Pre-Harvest Interval (PHI): 14 days
- . Minimum interval between applications: 7 days
- Maximum of this product allowed per year: 6.5 ounces per acre (0.31 pound active ingredient per acre)

Pests Controlled	Application Rate (Oz/A)
Banded-winged whitefly	0.7 to 1.3
Bollworm/Budworm (ovicidal effect)	
Cotton aphid	· · · · ·
Cotton fleahopper	
Green stink bug	
Plant bugs (excludes Lygus hesparus)	
Southern green stink bug	
Lygus bug (Lygus Hesperus) [†]	1.0 to 1.3
Whiteflies (other than Banded winged whitefly) †	
† Suppression only.	

Tank Mix Instructions

For early season control of Thrips:

• Mix 0.7 to 1.0 ounce per acre of this product with 1.6 to 3.2 ounces per acre of Bidrin® 8.

For mid- to late-season control of Cotton leafperforator, Grasshoppers, Plant bugs, Saltmarsh catepillar and Stink bugs (including Brown stink bug):

• Mix 0.7 to 1.0 ounce of this product with 4.0 to 8.0 ounces of Bidrin® 8 per acre.

Be sure to refer to the Bidrin® 8 label for specific use instructions and to observe the most conservative use directions and restrictions from both labels.

POTATO

Restrictions

Pre-Harvest Interval (PHI): 7 days

Minimum interval between applications: 7 days

• Maximum of this product allowed per crop year: 4.0 ounces per acre (0.19 pound active ingredient per acre)

Pests Controlled	Application Rate (Oz/A)	
Aphids	1.0	
Colorado potato beetle		
Flea beetles		
Leafhoppers		
Psyllids		
	7	

TOBACCO Restrictions

Restrictions

• Pre-Harvest Interval (PHI): 14 days

Minimum interval between applications: 7 days

• Maximum of this product allowed per crop year: 6.0 ounces per acre (0.28 pound active ingredient per acre)

Pests Controlled	Application Rate (Oz/A)	
Aphids	0.5 to 1.1	
Flea beetles	1.1	
Japanese beetle		

VEGETABLE and SMALL FRUIT CROPS

Application Instructions

Apply as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage using the rates below is necessary to achieve insect control. To improve coverage, a spray adjuvant may be used. This product may not knockdown heavy or established insect infestations; scout fields and make two applications if necessary to achieve control. For knockdown of pests or for improved control of other pests, this product may be tank mixed with other insecticides as recommended below.

FRUITING VEGETABLES

Crop Group 8 plus Okra including: Eggplant, Ground cherry, Okra, Pepper (including bell, chili, cooking, pimento and sweet), Tomato, Pepinos, Tomatillo

Restrictions

• NOT for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

• Pre-Harvest Interval (PHI): 0 days

Minimum interval between applications: 5 days

• Maximum of this product allowed per crop season: 5.0 ounces per acre (0.23 pound active ingredient per acre)

Pests Controlled	Application Rate (Oz/A)	Application Instructions
Aphids Leafhoppers Whiteflies	1.0	For insect control, good coverage of foliage Colorado potato beetle and fruit is necessary. Incorporate applications of this product into a full-season program that uses effective products from multiple classes of chemistry and different modes of action in a blocked or windowed approach. For additional information, please contact your Loveland Products, Inc. representative, extension specialist or crop advisor.
Pepper weevil (Pepper only)	1.6	Apply the rate of this product using ground equipment only. Time applications prior to a damaging population becoming established.

GLOBE ARTICHOKE

Restrictions

Pre-Harvest Interval (PHI): 7 days

Minimum interval between applications: 14 days

• Maximum of this product allowed per crop year: 10.7 ounces per acre (0.5 pound active ingredient per acre)

Pests Controlled	Application Rate (Oz/A)	,
Aphids	1.1 to 2.7	
Leafhoppers		

HEAD and STEM BRASSICA VEGETABLES

Crop Group 5 including: Broccoli, Broccoli raab (rapini), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccoli, Chinese (gai lon) broccoli, Chinese (bok choy) cabbage, Chinese (napa) cabbage, Chinese mustard (gai choy) cabbage, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rage greens, Turnip (tops or leaves)

LEAFY VEGETABLES

Crop Group 4 including: Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (roquette), Chervil, Chrysanthemum (edible leaved and garland), Cilantro, Corn salad, Cress (garden), Cress (upland, yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Radicchio (red chickory), Spinach (including New Zealand and vine (Malabar spinach, Indian spinach)), Watercress (commercial production only – Applications must not be made to native cress growing in streams or other bodies of water), Watercress (upland)

Restrictions

- NOT for use in California unless otherwise directed by state-specific 24(c) labeling.
- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 5 days
- Maximum of this product allowed per crop season: 5.0 ounces per acre (0.23 pound active ingredient per acre)
- NOT for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

Pests Controlled	Application Rate (Oz/ A)	Application Instructions
Aphids Flea beetles	1.0	For applications made to watercress: Apply to fully leafed-up canopies only. Production fields must be drained of water at least 24 hours prior to
Leafhoppers Whiteflies		application and water must not be reapplied to the field for a minimum of 24 hr following the application.

LEGUME VEGETABLES

Crops of Crop Group 6 (except soybean, dry) including:

Edible Podded and Succulent Shelled pea and Bean and Dried shelled pea and Bean

Bean (Lupinis spp. includes grain lupin, sweet lupin, white lupin, and white sweet lupin)

Bean (*Phaseolus* spp. includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean) **Bean** (*Vigna* spp. includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, yardlong bean)

Pea (*Pisum* spp. includes dwarf pea, edible pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea) **Other Beans and Peas:** Broad bean (fava), chickpea (garbanzo bean), Guar, Jackbean, Lablab bean, hyacinth bean, lentil, pigeon pea, soybean (immature seed), sword bean

Restrictions

• NOT for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

• Pre-Harvest Interval (PHI): 7 days

Minimum interval between applications: 7 days

Maximum of this product allowed per crop season: 2.8 ounces per acre (0.13 pound active ingredient per acre)

Pests Controlled	Application Rate (Oz/A)	
Aphids	0.9	,
Leafhoppers		
Whiteflies		

ROOT, TUBEROUS and CORM VEGETABLES

Crop Group 1 (except sugarbeet) including: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Beet (garden)[†], Burdock (edible)[†], Canna (edible, Queensland arrowroot), Carrot[†], Cassava (bitter and sweet)[†], Celeriac[†], Chayote (root), Chervil (turnip-rooted)[†], Chickory[†], Chufa, Dasheen (taro)[†], Ginger, Ginseng, Horseradish, Leren, Parsley (turnip-rooted), Parsnip[†], Radish[†], Oriental radish (diakon)[†], Rutabaga[†], Salsify (black)[†], Salsify (oyster plant), Salsify (Spanish), Skirret, Sweet potato[†], Tanier (cocoyam)[†], Tumeric, Turnip[†], Yam bean (jicama, manioc pea), Yam (true)[†]

[†] Tops or green from these crops may be utilized for food of feed.

For applications on Potato, refer to the Field Crops section.

Restrictions

- NOT for use on crops grown for seed unless allowed by state-specific 24(c) labeling.
- Pre-Harvest Interval (PHI): 7 days
- · Minimum interval between applications: 5 days
- Maximum of this product allowed per crop season: Radish: 0.9 ounce per acre (0.044 pound active ingredient per acre) All other crops: 2.8 ounces per acre (0.13 pound active ingredient per acre)
- Maximum number of applications of this product per crop season: Radish: 1; All other crops: 3

Pests Controlled	Application Rate (Oz/A)	
Aphids	0.9	
Flea beetles		
Leafhoppers		
Whiteflies		

STRAWBERRY

Restrictions

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 5 days
- Maximum of this product allowed per crop season: 3.0 ounces per acre (0.14 pound active ingredient per acre)
- DO NOT apply during bloom or within 10 days prior to bloom or when bees are foraging.

Pests Controlled	Application Rate (Oz/A)	
Aphids	1.0	
Spittlebugs		
Whiteflies		

TREE, BUSH and VINE CROPS

Application Instructions

Apply as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage using the rates below is necessary to achieve optimum control. To improve coverage, a spray adjuvant may be used. This product may not knock-down heavy or established insect infestations; scout fields and make two applications if necessary to achieve control. For knockdown of pests or for improved control of other pests, this product may be tank mixed with other insecticides as listed below.

Applying this product aerially may result in slower activity and reduced control relative to results from ground application.

For tree and vine crops, application rates are based on full-size, mature trees or vines.

BUSH BERRY

Crop Subgroup 13 including: Blueberry, Currant, Elderberry, Gooseberry, Huckleberry, Juneberry, Lingonberry, Salal **Restrictions**

- Pre-Harvest Interval (PHI): 3 days
- Minimum interval between applications: 7 days
- Maximum of this product allowed per year: 10.7 ounces per acre (0.5 pound active ingredient per acre)
- Maximum number of applications of this product per year: 5
- Maximum application volume (water): 20.0 GPA ground; 5.0 GPA aerial
- DO NOT apply during bloom or within 10 days prior to bloom or when bees are foraging.

Pests Controlled	Application Rate (Oz/A)	
Aphids	0.8 to 1.1	
Leafhoppers/Sharpshooters		
Blueberry maggot	1.6 to 2.1	
Japanese beetles (adults)		
Thrips		

CITRUS

Crop Group 10 including: Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Tangelo, Satsuma mandarin, and other cultivars and/or hybrids of these crops

Restrictions

- Pre-Harvest Interval (PHI): 0 days
- Minimum interval between applications: 10 days
- Maximum of this product allowed per year: 10.7 ounces per acre (0.5 pound active ingredient per acre)
- DO NOT apply during bloom or within 10 days prior to bloom or when bees are foraging.

Pests Controlled	Application Rate (Oz/ A)	Application Instructions
Aphids Asian citrus psyllid Black fly Leafhoppers / Sharpshooters Leafminers Mealybugs Scales Whiteflies	2.7 to 5.3 (depending on tree size, target pest and infestation pressure)	Scales: Time applications to the crawler stage and treat each generation.
Thrips [†]	2.7 to 5.3	
[†] Suppression only.		

GRAPE

Including American bunch grape, Muscadine grape and Vinifera grape

Restrictions

• Pre-Harvest Interval (PHI): 0 days

Minimum interval between applications: 14 days

• Maximum of this product allowed per year: 2.0 ounces per acre (0.1 pound active ingredient per acre)

Pests Controlled	Application Rate (Oz/ A)	Application Instructions
Leafhoppers / Sharpshooters Mealybugs	0.8 to 1.0	
Grapeleaf skeletonizer	1.0	Ground applications that provide thorough coverage of foliage should control Grapeleaf skeletonizer. Aerial applications may provide suppression.

HOP

Restrictions

• Pre-Harvest Interval (PHI): 28 days

Minimum interval between applications: 21 days

• Maximum of this product allowed per year: 6.4 ounces per acre (0.3 pound active ingredient per acre)

Pests Controlled	Application Rate (Oz/A)
Aphids	2.1

PECAN

Restrictions

• NOT for use in California unless otherwise directed by state-specific 24(c) labeling.

• DO NOT apply after shuck split.

Minimum interval between applications: 10 days

• Maximum of this product allowed per year: 7.5 ounces per acre (0.35 pound active ingredient per acre)

Pests Controlled	Application Rate (Oz/A)	
Aphids (use higher listed rate for Black pecan aphid) <i>Phylloxera</i>	0.9 to 1.9	
Spittlebugs		

POME FRUIT

Crop Group 11 including: Apple, Crabapple, Loquat, Mayhaw, Pear (including Oriental pear), Quince **Restrictions**

• Pre-Harvest Interval (PHI): 7 days

· Minimum interval between applications: 10 days

• Maximum of this product allowed per year: 10.7 ounces per acre (0.5 pound active ingredient per acre)

• DO NOT apply during bloom or within 10 days prior to bloom or when bees are foraging.

Pests Controlled	Application Rate (Oz/A)	Application Instructions
Leafhoppers	1.2 to 2.1	Apply low listed rate for low to moderate populations of White apple leafhoppers and high listed rate for high populations or for other leafhopper species. Apply this product while most Leafhoppers are in the nymphal stage.
Aphids (except Woolly2.1Leafminer – To complete and bee complete and bee from the earliest LeafminersSan Jose scaleLeafminer, optima flight against egg 10 days later if se A single application late instar larvae. Rosy apple aphid		Leafminer – To control first generation Leafminer, apply as soon as pollination is complete and bees are removed from the orchard. Greatest control will result from the earliest possible application. For second and succeeding generations of Leafminer, optimal control is obtained from applications made early in the adult flight against egg and early instar larvae. A second application may be required 10 days later if severe pressure continues or if generations are overlapping. A single application may result in suppression only. This product will not control
PEAR ONLY: Mealybugs Pear psylla	5.3	Mealybugs – apply maximum gallonage for tree with ground equipment. Ensure good spray coverage of the trunk and scaffolding limbs or other resting sites of Mealybugs.

STONE FRUIT

Crop Group 12 including: Apricot, Cherry (including sweet and tart), Nectarine, Peach, Plum (including Chickasaw, Damson and Japanese), Plumcot, Prune (fresh and dried)

Restrictions

• DO NOT apply during bloom or within 10 days prior to bloom or when bees are foraging.

Apricot, Nectarine, Peach: Restrictions

· Pre-Harvest Interval (PHI): 0 days

- Minimum interval between applications: 7 days
- Maximum of this product allowed per year: 6.4 ounces per acre (0.3 pound active ingredient per acre)
- Minimum application volume (water): 50 GPA ground application; 25 GPA aerial application

Cherries, Plums, Plumcot, Prunes: Restrictions

• Pre-Harvest Interval (PHI): 7 days

· Minimum interval between applications: 10 days

• Maximum of this product allowed per year: 10.7 ounces per acre (0.5 pound active ingredient per acre)

• Minimum application volume (water): 50 GPA - ground application; 25 GPA - aerial application

Application Rate (Oz/A)	
1.1 to 2.1	
1.6 to 2.1	
2.1	
-	1.1 to 2.1 1.6 to 2.1

T Suppression only.

TROPICAL FRUIT

Including: Acerola, Avocado, Black sapote, Canistel, Feijoa, Jaboticaba, Guava, Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Pulasan, Rambutan, Sapodilla, Spanish lime, Star apple, Starfruit, Wax jambu Restrictions

Restrictions

• Pre-Harvest Interval (PHI): 7 days

· Minimum interval between applications: 10 days

• Maximum of this product allowed per year: 10.7 ounces per acre (0.5 pound active ingredient per acre)

• DO NOT apply during bloom or within 10 days prior to bloom or when bees are foraging.

Pests Controlled	Application Rate (Oz/A)	
Aphids	2.1	
Leafhoppers/Sharpshooters		
Thrips		
Whiteflies		
Scales [†]	2.1	
† Suppression only.		

OTHER SITES

Application Instructions

Apply as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage using the rates below is necessary to achieve optimum control. To improve coverage, a spray adjuvant may be used. This product may not knock-down heavy or established insect infestations; scout fields and make two applications if necessary to achieve control. For knockdown of pests or for improved control of other pests, this product may be tank mixed with other insecticides as listed below.

POPLAR/COTTONWOOD

Includes members of the genus Populus grown for pulp or timber

Restrictions

• NOT for use in California unless otherwise directed by state-specific 24(c) labeling.

• Minimum interval between applications: 10 days

• Maximum of this product allowed per year: 10.7 ounces per acre (0.5 pound active ingredient per acre)

• DO NOT apply during bloom or within 10 days prior to bloom or when bees are foraging.

Pests Controlled	Application Rate (Oz/A)	
Aphids	1.1 to 2.1	
Leaf beetles		

CHRISTMAS TREE

Restrictions

Minimum interval between applications: 7 days

• Maximum of this product allowed per year: 10.7 ounces per acre (0.5 pound active ingredient per acre)

Pests Controlled	Application Rate (Oz/A)	Application Instructions
Aphids Adelgids Sawflies	1.1 to 2.1	Gall-forming adelgids – time applications to coincide with full bud-swell or first bud-break of earliest bud-breaking trees. Once Galls form, spraying will be ineffective.

TURF AND ORNAMENTALS FOR PRODUCT PACKAGED IN WSP

MIXING AND APPLICATION INSTRUCTIONS

Inside each foil pouch is a clear, water-soluble inner packet containing this product. To prepare a solution, remove the outer foil pouch and drop the required number of unopened clear water-soluble packets into the spray tank while filling with water to the desired level. Be sure to agitate while mixing and depending on the amount of agitation and the water temperature, the packets should completely dissolve within a few minutes of being added to the water. Note that cooler water temperatures increase the time needed for the inner packet to completely dissolve.

Mixing Restrictions:

- DO NOT allow packets to become wet prior to adding to the tank.
- DO NOT handle the clean inner packets with wet hands or wet gloves.
- DO NOT use this product in a tank-mix with products that contain boron or release free chlorine. Combining these products will result in a plastic that is not soluble in water or solvents (such as diesel oils, kerosene, gasoline or alcohol). Chlorinated water may be used.

- Because the water-soluble packets are not soluble in petroleum-based liquids, DO NOT attempt to use this product's water-soluble
 packets directly in diesel oils or summer spray type oils such as those used in ULV or LV applications.
- DO NOT allow this product to contact plants in bloom if bees are foraging in the treatment area.

Rough handling of the packets may cause breakage. Reseal outer carton to protect remaining packets.

Tank Mixes: This product has been found to be compatible with commonly used liquid fertilizers, fungicides and insecticides. If this product is not known to be compatible with your particular tank mix partners, check compatibility using the correct proportion of products in the following small jar test:

1) Add proportionate amount of each ingredient in the appropriate order to a pint or a quart jar;

2) Cap and shake for 5 minutes;

3) Let set for 5 minutes.

Do not use if poor mixing or formation of precipitates that do not readily re-disperse indicates an incompatible mixture. For further information, contact your local Loveland Products, Inc. representative.

Mixing Instructions: The enclosed packets containing this product are water-soluble and will completely dissolve in water. The proper mixing procedure for this product alone or in tank mix combinations with other pesticides is:

- 1. Fill the spray tank 1/4 to 1/3 full with clean water.
- 2. While recirculating and with the agitator running, add the required number of unopened packets of this product.
- 3. The packets should completely dissolve in 5 to 10 minutes; allow sufficient time for thorough mixing.
- 4. Continue to fill spray tank with water until 1/2 full.
- 5. If applicable, add remaining tank mix components in the following order: wettable powders, flowables, and emulsifiable concentrates. Ensure good agitation as each component is added. Do not add a tank mix component until the previous component is thoroughly mixed.
- 6. Fill spray tank to desired level and maintain constant agitation to ensure uniformity of spray mixture.

TURFGRASS

This product will control listed soil-inhabiting pests in grassy areas on home lawns, business and office complexes, shopping complexes, multi-family residential complexes, golf courses, airports, cemeteries, parks, playgrounds, athletic fields and sod farms. The need for an application can be based on historical monitoring of the site, previous records or experiences, current season adult trapping or other methods. Applications may be made preceding the egg laying activity of the target pests and high levels of control may be achieved when applications are made proceeding or during the egg laying period. For insect control, make applications prior to egg hatch of the target pests, followed by sufficient irrigation or rainfall to move the active ingredient through the thatch.

Use Restrictions:

• DO NOT exceed a total of 8.6 ounces (0.4 pound of active ingredient) per acre per year.

- DO NOT make applications when grassy areas are waterlogged or the soil is saturated with water because adequate distribution of the active ingredient cannot be achieved when these conditions exist.
- The treated grassy area must be in such a condition that the rainfall or irrigation will penetrate vertically in the soil profile.

• DO NOT mow treated areas until after sufficient rainfall or irrigation has occurred in order to maintain the uniformity of the application.

- DO NOT apply this product in a way that will contact people or pets.
- DO NOT allow children or pets to enter treated areas until sprays have dried.

Application Instructions:

Apply this product in sufficient water to provide adequate distribution in the treated area. Use of accurately calibrated equipment normally used for soil application of insecticides is required. Use equipment that will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off-target drift. Check calibration periodically to ensure that equipment is working properly.

Pest	Application Rate	Specific Instructions
Larvae of: Annual bluegrass weevil Asiatic garden beetle Billbugs Black turfgrass ataenius Cutworms ^T European chafer European crane fly Green June beetle Japanese beetle Northern masked chafer Oriental beetle <i>Phyllophaga</i> spp. Southern masked chafer	1.6 oz (1 packet)/ 8250 to 11,000 sq ft	 Grubs, European crane fly, billbugs and annual bluegrass weevil: For best results make applications prior to egg hatch of the target pest. Chinchbugs: Make applications prior to the hatching of the first instar nymphs. Mole crickets: Make applications prior to or during the peak egg hatching period. When adults or large nymphs are present and actively tunneling, accompany this product with a remedial insecticide. For insect control, the active ingredient must be moved through the thatch by irrigation or rainfall occurring within 24 hours after application.
Chinchbugs [†] Mole crickets	1.6 oz (1 packet)/ 8250 sg ft	

ORNAMENTALS, GROUNDCOVERS AND INTERIOR PLANTSCAPES

This product is a systemic insecticide that may be applied to ornamentals, groundcovers and interior plantscapes in and around industrial and commercial buildings and residential areas. The insecticide is translocated upward into the plant system and for best results must be placed where the growing portions of the target plant can absorb the active ingredient. When applicable, adding a fertilizer containing nitrogen into the spray solution may enhance plant uptake of this product.

Use Restriction

Applications must not exceed a total of 8.6 ounces (0.4 pound of active ingredient) per acre per year.

• DO NOT apply this product by any application method, to linden, basswood or other *Tillia* species in the State of Oregon.

Ant Management Programs:

This product may be used to limit the honeydew available as a food source for ant populations when controlling aphids, scale insects, mealy bugs and other sucking pests on ornamentals. Applications of this product may be supplemented with bait traps, residual sprays and other methods to further reduce the unwanted ant population.

Insect Resistance:

Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, the use of this product should conform to resistance management strategies established for the use area. Consult your Cooperative Extension Service for resistance management strategies and recommended pest management practices for your area.

Woody Perennials:

Protection in woody perennials is slower than in herbaceous species and a delay of 2 or more weeks should be expected, with longer delays for larger plants. Because of this, make applications to woody perennials well in advance of expected insect activity.

Bark Media:

Treatments of this product to media with 30 to 50% or more bark content may confer a shorter period of protection.

Foliar and Broadcast Applications

This product may be applied as a broadcast or foliar application to trees (including non-bearing fruit and nut trees), shrubs, evergreens, flowers, foliage plants, ground covers, interior plantscapes and vegetable plants intended for resale.

Application Instructions:

Apply this product in sufficient water to provide adequate distribution in the treated area. Use of accurately calibrated equipment normally used for soil application of insecticides is required. Use equipment which will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off-target drift. Check calibration periodically to ensure that equipment is working properly.

When making foliar applications to plants with hard-to-wet foliage such as holly, pine or ivy, the use of a spreader/sticker may increase effectiveness.

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Pest	Application Method	Application Rate	Specific Instructions
Adelgids Aphids Japanese beetle (adult) Lacebugs Leaf beetles (including Elm and Viburnum leaf beetles) Leafhoppers (including Glassy- winged sharpshooter) Leafminers Mealybugs Sawfly larvae Thrips [†] Whiteflies	Foliar	1.6 oz (1 packet)/ 300 gal of water	Make applications prior to establishment of large pest populations and retreat as necessary. Applying this product foliarly after a soil application in the same crop may reduce resistance management.
White grub larvae (such as Japanese beetle larvae, Chafers, <i>Phyllophaga</i> spp., Asiatic garden beetle <u>and Oriental beetle</u>) [†] Suppression only.	Broadcast	1.6 oz (1 packet)/ 8250 to 11,000 sq ft	Mix the specified amount of this product in sufficient water to uniformly cover the area being treated using at least 2.0 gal of water per 1000 sq ft. For insect control, incorporate this product into the upper soil profile by irrigating after the application is made.

Soil Injection and Drench Applications

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Application Site	Application Rate	Application Instructions	Pests Controlled
Trees	1.6 oz (1 packet)/	 SOIL INJECTION – Restriction: No soil 	Adelgids
(Application to trees	24 to 48" of	injection application allowed in Nassau	Aphids
already heavily infested	cumulative trunk	or Suffolk counties of New York.	Armored scale [†]
nay not prevent the	diameter (DBH)	GRID SYSTEM: Holes must be spaced on	Black vine weevil larvae
eventual loss of the	1	2.5 ft centers, in a grid pattern, extending	Emerald ash borer
rees due to existing pest		to the drip line of the tree.	Eucalyptus longhorned borers
damage and tree stress.)		CIRCLE SYSTEM: Apply in holes evenly	Flatheaded borers (including
		spaced in circles, (use more than 1 circle	Bronze birch and Alder borers)
		dependent upon the size of the tree)	Japanese beetles (adults)
		beneath the drip line of the tree extending	Lacebugs
		in from that line.	Leaf beetles (including Elm and
		BASAL SYSTEM: Space injection holes	Viburnum leaf beetles)
		evenly around the base of the tree trunk no	Leafhoppers (including
		more than 6 to 12" out from the base.	Glassy-winged sharpshooter)
		Mix required dosage in sufficient water to	Leafminers
		inject an equal amount of solution in each	Mealybugs
		hole. Maintain a low pressure and use	Pine tip moth larvae
		sufficient solution for distribution of the	Psyllids
		liquid into the treatment zone. For insect	Royal palm bugs
		control, keep the treated area moist for 7	Sawfly larvae
		to 10 days. Do not use less than 4 holes	Soft scales
		/tree.	Thrips [†]
		SOIL DRENCH: Remove plastic or any	White grub larvae
		other barrier that will stop solution from	Whiteflies
		reaching the root zone. Uniformly apply	
		around the base of the tree, direct to the	
		root zone as a drench in no less than 10	
		gal of water/1000 sq ft.	
Shrubs	1.6 oz (1 packet)/	SOIL INJECTION - Restriction: No soil	
	24 to 48 ft of cumulative	injection application allowed in Nassau or	
	shrub ht	Suffolk counties of New York.	
		Mix required dosage in sufficient water to	
		inject an equal amount of solution in each	
		hole. Using a minimum of 4 holes/shrub,	
		apply to individual plants maintaining	
		16	

a low pressure and use sufficient solution for distribution of the liquid into the treatment zone.

Keep the treated area moist for 7 to 10 days. **SOIL DRENCH:** Remove plastic or any other barrier that will stop solution from reaching the root zone. Uniformly apply around the base of the tree, direct to the root zone as a drench in no less than 10.0 gal of water/1000 sq ft. Apply as a broadcast treatment and incorporate into the soil before planting, or apply prior to bloom or after petal fall is

Flowers and Ground Cover

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1.6 oz (1 packet)/

8250 to 11,000 sq ft

[†] Suppression only of these species

POME FRUIT IN AND ON RESIDENTIAL AREAS

complete for established plants. If application is made to established plants, irrigate thoroughly after application.

Apple, Crabapple, Loquat, Mayhaw, Pear (including Oriental pear) Quince **Restrictions**

• Pre-Harvest Interval (PHI): 7 days

Reapplication Interval: At least 10 days

Maximum applications per year: 5

Not permitted for control on pears in California.

Pest	Ounces per 300 Gals.of Water	Ounces per Acre‡	Specific Instructions
Aphids (except Woolly apple aphid) Leafhoppers (including Glassy-winged sharpshooter) Leafminer Mealybugs San Jose scale	1.6 (1 packet) 2.1		Apply as a foliar spray as needed after petal-fall is complete. Rosy apple aphid : Apply prior to leaf rolling caused by the pest. Leafhopper: For late season (preharvest) control, apply while most Leafhoppers are in the nymphal stage. Leafminer: Make first application as soon as petal-fall is complete for control of first generation, with best results occurring when the application is made at the earliest possible time.
			time. For succeeding generations, best results occur when applications are made early in the adult flight against egg and early instar larvae. If generations are overlapping or severe pressure continues, a second application may be necessary after 10 days. A single application may result in suppression only. This product will not control late stage larvae. Mealybug: For insect control, be sure to have good spray coverage of the trunk and scaffolding limbs or other nesting sites.
		<u>``</u>	San Jose scale: Time applications to the crawler stage and treat each generation.

‡ The amount of this product required per acre depends on tree size and volume of foliage. The listed rate per acre is based on a standard of 400 gallons of dilute spray per acre for large trees.

PECANS IN AND ON RESIDENTIAL AREAS

Restrictions

• NOT PERMITTED IN CALIFORNIA unless otherwise directed by state-specific 24(c) labeling

Reapplication Interval: At least 10 days

Maximum applications per year: 3

Maximum of this product allowed per year: 6.3 ounces per acre.

Pest	Ounces/300 Gal of Water	Ounces /Acre‡	Specific Instructions
Yellow pecan aphid Black margined aphid Pecan leaf phylloxera Pecan spittlebug Pecan stem phylloxera	1.6 (1 packet)	2.1	Apply as a foliar spray as pest pressure builds but before infestation is extremely heavy. Two applications at a 10- to 14-day interval may be required to achieve control. For insect control, thorough and uniform coverage is necessary. Coverage may be improved through the use of an organosilicone-based spray adjuvant

‡ The amount of this product required per acre depends on tree size and volume of foliage. The listed rate per acre is based on a standard of 400 gallons of dilute spray per acre for large trees.

GRAPES ORNAMENTAL USE

Restrictions

Reapplication Interval: At least 14 days

· Maximum of this product allowed per year: 2.0 ounces per acare

Ornamental Grapes In Industrial and Commercial Buildings and On Residential Areas				
Pest	Ounces/300	Ounces		
	Gal of Water	/Acre‡	Specific Instructions	
Leafhoppers (including Glassy-winged sharpshooter)	1.6 (1 packet)	1.0	Apply as a foliar spray using 200 gal of water/A.	
Mealybugs				

TURF AND ORNAMENTALS FOR PRODUCT PACKAGED IN NON-WSP

TURFGRASS

This product will control listed soil-inhabiting pests in grassy areas such as home lawns, business and office complexes, shopping complexes, multi-family residential complexes, golf courses, airports, cemeteries, parks, playgrounds, and athletic fields and sod farms. The need for an application can be based on historical monitoring of the site, previous records or experiences, current season adult trapping or other methods. Applications may be made preceding the egg laying activity of the target pests and high levels of control may be achieved when applications are made proceeding or during the egg laying period. For insect control, make applications prior to egg hatch of the target pests, followed by sufficient irrigation or rainfall to move the active ingredient through the thatch. **Restrictions**

- DO NOT exceed a total of 8.6 ounces (0.4 pound of active ingredient) per acre per year.
- DO NOT make applications when grassy areas are waterlogged or the soil is saturated with water because adequate distribution of the active ingredient cannot be achieved when these conditions exist.
- The treated grassy area must be in such a condition that the rainfall or irrigation will penetrate vertically in the soil profile.
- DO NOT mow treated areas until after sufficient rainfall or irrigation has occurred in order to maintain the uniformity of the application.
- DO NOT apply this product in a way that will contact people or pets.
- DO NOT allow children or pets to enter treated areas until sprays have dried.

Application Instructions:

Apply this product in sufficient water to provide adequate distribution in the treated area. Use of accurately calibrated equipment normally used for soil application of insecticides is required. Use equipment which will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off-target drift. Check calibration periodically to ensure that equipment is working properly.

Pest	Level Tsp/ 1000 Sq Ft	Ounces /Acre	Specific Instructions
Larvae of: Annual bluegrass weevil Asiatic garden beetle Billbugs Black turfgrass ataenius Cutworms† European chafer Green June beetle Japanese beetle Northern masked chafer Oriental beetle <i>Phyllophaga</i> spp. Southern masked chafer	2.5 to 4.0	5.4 to 8.6	 Grubs, European crane fly, Billbugs and Annual bluegrass weevil: For best results make applications prior to egg hatch of the target pest. Chinchbugs: Make applications prior to the hatching of the first instar nymphs. Mole crickets: Make applications prior to or during the peak egg hatching period. When adults or large nymphs are present and actively tunneling, accompany this product with a remedial insecticide. For insect control, the active ingredient must be moved through the thatch by irrigation or rainfall occurring within 24 hr after application.
Chinchbugs [†] Mole crickets	4.0	8.6	

† Suppression only.

1.0 level teaspoon = 1.4 grams of this product

3.0 level teaspoons = 1.0 level tablespoon

ORNAMENTALS, GROUNDCOVERS AND INTERIOR PLANTSCAPES

This product is a systemic insecticide that may be applied to ornamentals, groundcovers and interior plantscapes in and around industrial and commercial buildings and residential areas. The insecticide is translocated upward into the plant system and for best results must be placed where the growing portions of the target plant can absorb the active ingredient. When applicable, adding a fertilizer containing nitrogen into the spray solution may enhance plant uptake of this product.

Restriction:

• DO NOT apply this product by any application method, to linden, basswood or other *Tillia* species in the State of Oregon.

Ant Management Programs:

This product may be used to limit the honeydew available as a food source for ant populations when controlling aphids, scale insects, mealy bugs and other sucking pests on ornamentals. Applications of this product may be supplemented with bait traps, residual sprays and other methods to further reduce the unwanted ant population.

Insect Resistance:

Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, the use of this product should conform to resistance management strategies established for the use area. Consult your Cooperative Extension Service for resistance management strategies and best pest management practices for your area.

Woody Perennials:

Protection in woody perennials is slower than in herbaceous species and a delay of 2 or more weeks should be expected, with longer delays for larger plants. Because of this, make applications to woody perennials well in advance of expected insect activity.

Bark Media:

Treatments of this product to media with 30 to 50% or more bark content may confer a shorter period of protection.

Foliar and Broadcast Applications

This product may be applied as a broadcast or foliar application to trees (including non-bearing fruit and nut trees), shrubs, evergreens, flowers, foliage plants, ground covers, interior plantscapes and vegetable plants intended for resale.

Application Instructions:

Apply this product in sufficient water to provide adequate distribution in the treated area. Use of accurately calibrated equipment normally used for soil application of insecticides is required. Use equipment which will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off-target drift. Check calibration periodically to ensure that equipment is working properly.

When making foliar applications to plants with hard-to-wet foliage such as holly, pine or ivy, use of a spreader/sticker may increase effectiveness.

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Pest	Application	Application Rate		Specific Instructions	
·	Method	Malice 75 WSP	Water	· · ·	
Adelgids	Foliar	0.25 tsp	2.5 gal	Make applications prior to establishment of	
Aphids		0.50 tsp	5.0 gal	large pest populations and retreat as	
Japanese beetle (adult)		1.0 tsp	10.0 gal	necessary.	
Lacebugs		2.5 tsp	25.0 gal	Do not apply this product foliarly after a soi	
Leaf beetles		5.0 tsp	50.0 gal	application in the same crop for resistance	
(including Elm and Viburnum leaf beetles)		·	Ū	management purposes.	
Leafhoppers		3.0 tbsp +	100 gal		
(including Glassy-winged sharpshooter)	ſ	1.0 tsp	Ū		
Leafminers					
Mealybugs					
Sawfly larvae					
Thrips [†]					
Whiteflies					
White grub larvae	Broadcast	3.0 to 4.0 level		Mix the specified amount of this product in	
(such as Japanese		tsp/1000 sq ft		sufficient water to uniformly cover the area	
beetle larvae,				being treated using at least 2.0 gal of water	
Chafers,				per 1000 sq ft.	
<i>Phyllophaga</i> spp.,				For insect control, incorporate this product	
Asiatic garden beetle				into the upper soil profile by irrigating after	
and Oriental beetle)		<u> </u>		the application is made.	
[†] Suppression only.					

[†] Suppression only.
1.0 level teaspoon = 1.4 grams of this product
3.0 level teaspoons = 1.0 level tablespoon

Soil Injection and Drench Applications

Application Site	Application Rate	Application Instructions	Pests Controlled
Trees	0.7 to 1.4 level	 SOIL INJECTION – Restriction: No soil 	Adelgids
(Application to trees	tsp per inch	injection application allowed	Aphids
already heavily infested	of trunk diameter	in Nassau or Suffolk counties of New York.	Armored scale [†]
may not prevent the	(DBH)	GRID SYSTEM: Holes must be spaced on	Black vine weevil larvae
eventual loss of the	or	2.5 ft centers, in a grid pattern, extending	Eucalyptus longhorned borers
trees due to existing	1.0 to 2.0 oz/	to the drip line of the tree.	Flatheaded borers (including
pest damage and tree	30 cumulative	CIRCLE SYSTEM: Apply in holes evenly	Bronze birch and Alder borers)
stress.)	inches of trunk	spaced in circles, (use more than one	Japanese beetles (adults)
	diameter (DBH)	circle dependent upon the size of the tree)	Lacebugs
	()	beneath the drip line of the tree extending	Leaf beetles (including Elm and
		in from that line.	Viburnum leaf beetles)
		BASAL SYSTEM: Space injection holes	Leafhoppers (including
		evenly around the base of the tree trunk	Glassy-winged sharpshooter)
		no more than 6 to 12 inches out from the	Leafminers
		base. Mix required dosage in sufficient	Mealybugs
		water to inject an equal amount of solution	Pine tip moth larvae
		in each hole. Maintain a low pressure and	Psyllids
		use sufficient solution for distribution of	Royal palm bugs
N		the liquid into the treatment zone. For	Sawfly larvae
		insect control, keep the treated area moist	Soft scales
		for 7 to 10 days. Do not use less than 4	Thripst
		holes per tree.	White grub larvae
		SOIL DRENCH: Remove plastic or any	Whiteflies
		other barrier that will stop solution from	
		reaching the root zone. Uniformly apply	
		around the base of the tree, direct to the	
•		root zone as a drench in no less than 10.0	
		gal of water 1000 sq ft.	

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Shrubs	0.7 to 1.4 level tsp/ft of shrub ht or 1.0 to 2.0 oz/30 cumulative ft of shrub ht	 SOIL INJECTION – Restriction: No soil injection application allowed in Nassau or Suffolk counties of New York. Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Using a minimum of 4 holes/shrub, apply to individual plants maintaining a low pressure and use sufficient solution for distribution of the liquid into the treatment zone. Keep the treated area moist for 7 to 10 days. SOIL DRENCH: Remove plastic or any other barrier that will stop solution from reaching the root zone. Uniformly apply around the base of the tree, direct to the root zone as a drench in no less than 10.0 gal of water/1000 sq ft.
Flowers and Ground Cover	3.0 to 4.0 level tsp/1000 sq ft	Apply as a broadcast treatment and incorporate into the soil before planting, or apply prior to bloom or after petal fall is complete for established plants. If application is made to established plants, irrigate thoroughly after application.

[†] Suppression only of these species.

1.0 level teaspoon = 1.4 grams of this product

3.0 level teaspoons = 1.0 level tablespoon

POME FRUIT IN AND ON RESIDENTIAL AREAS

Apple, Crabapple, Loquat, Mayhaw, Pear (including Oriental pear) Quince Restrictions

Pre-Harvest Interval (PHI): 7 days
Reapplication Interval: At least 10 days

• Maximum single application rate (per acre): 2.0 ounces

Maximum applications per year: 5

Pest	Ounces/100 Gal of Water	Ounces /Acre‡	Specific Instructions
Aphids (except Wooly apple aphid) Leafhoppers (including Glassy-winged sharpshooter) Leafminer Mealybugs† San Jose Scale†	0.5 oz. (3.0 tbsp + 1.0 tsp)	2.0	 Apply as a foliar spray as needed after petal-fall is complete. Rosy apple aphid: Apply prior to leaf rolling caused by the pest. Leafhopper: For late season (preharvest) control, apply while most Leafhoppers are in the nymphal stage. Leafminer: Make first application as soon as petal-fall is complete for control of first generation with best results occurring when the application is made at the earliest possible time. For succeeding generations, best results occur when applications are made early in the adult flight against egg and early instar larvae. If generation may be necessary after 10 days. A single application may result in suppression only. This product will not control late stage larvae. Mealybug: For best results be sure to have good spray coverage of the trunk and scaffolding limbs or other nesting sites. San Jose scale: Time applications to the crawler stage and treat each generation.

Not permitted for control on pears in California.

⁺ The amount of this product required per acre depends on tree size and volume of foliage. The listed rate per acre is based on a standard of 400 gallons of dilute spray per acre for large trees.

1.0 level teaspoon = 1.4 grams of this product

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3.0 level teaspoons = 1.0 level tablespoon

PECANS IN AND ON RESIDENTIAL AREAS

Restrictions

• NOT PERMITTED IN CALIFORNIA unless otherwise directed by state-specific 24(c) labeling

· Reapplication Interval: At least 10 days

Maximum applications per year: 3

Maximum of this product allowed per year: 6.3 ounce sper acre

• DO NOT apply more than 6.3 ounces of product per acre per year.

Pest	Ounces/100 Gal of Water	Ounces /Acre‡	Specific Instructions
Yellow pecan aphid Black margined aphid Pecan leaf phylloxera Pecan spittlebug Pecan stem phylloxera	0.5 oz (3.0 tbsp + 1.0 tsp)	2.0	Apply as a foliar spray as pest pressure builds but before infestation is extremely heavy. Two applications at a 10- to 14-day interval may be required to achieve control. For insect control, thorough and uniform coverage is necessary. Coverage may be improved through the use of an organosilicone-based spray adjuvant. An addition of organosilicone-based spray adjuvant may not exceed the adjuvant manufacturer's labeled use rate.

[‡] The amount of this product required per acre depends on tree size and volume of foliage. The listed rate per acre is based on a standard of 400 gallons of dilute spray per acre for large trees.

1.0 level teaspoon = 1.4 grams of this product

3.0 level teaspoons = 1.0 level tablespoon

GRAPES ORNAMENTAL USE

Restrictions

· Reapplication Interval: At least 14 days

• Maximum of this product allowed per year: 2.0 ounces per acre

• DO NOT apply more than 2.0 ounces of product per acre per year.

Ornamental Grapes in Industrial and Commercial Buildings and on Residential Areas

Pest	Ounces/100	Ounces	
	Gal of Water	/Acre‡	Specific Instructions
Leafhoppers (including	0.5 oz (3.0 tbsp +	1.0	Apply as a foliar spray using 200 gallons of water/A.
Glassy-winged	1.0 tsp)		Applications may be applied up to and including the day of
sharpshooter)			harvest.
Mealybugs	·		

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE [For product packaged in plastic containers]: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

PESTICIDE STORAGE [For product packaged in Water-soluble Packaging]: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Exposure to moisture or excessive handling of water-soluble packets may cause breakage. **PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal

facility.

Container Disposal: Do not reuse or refill this container.

Outer Packaging: Outer Packaging for this product is secondary packaging to contain either non water soluble plastic bags or water soluble plastic bags: Thoroughly rinse any soluble powder residue from pail or box into application equipment; then offer for recycling if available or dispose of in a sanitary landfill.

Non water-soluble plastic bags: Completely empty plastic bags into application equipment, ensure that all product is removed from the bag and then offer for recycling if available or dispose of in a sanitary landfill.

Water-soluble plastic bags: After adding water-soluble plastic bags to the spray tank, allow sufficient time for bags to dissolve before spraying. There is no container disposal once the bag has been dissolved in the spray tank.

For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC - 1-800-424-9300

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