82940-1

7/12/2006

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

> OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Actagro LLC c/o Pyxis Regulatory Consulting, Inc. 4110 136<sup>th</sup> St. N.W. Gig Harbor, WA 98332

JUL 1 2 2006

Subject: Product Name: Resist 57 EPA Reg. No: 82940-1 Application for label Notification dated June 22, 2006 to add an alternant brand name and minor label revisions per PR Notice 98-10.

Dear Mr. Kellogg:

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The Biopesticides and Pollution Prevention Division is in receipt of your application for Notification under 98-10 dated above. A preliminary screen of this request has been conducted for its applicability under PRN 98-10 and it has been determined that the action(s) requested falls within the scope of PRN 98-10. Our records have been duly noted, and the label submitted with this application has been stamped "Notification, received, but not reviewed" and will be placed accordingly in our records.

Questions concerning this action should be directed to Mr. Raderrio Wilkins at (703) 308-1259 or email at wilkins.raderrio@epa.gov.

Sincerely,

Sheryl K. Reilly

Sheryl K. Reilly, Ph.D. Chief Biochemical Pesticides Branch Biopesticides and Pollution Prevention Division

	Environmenta	United States		<u> </u>		Registr Amend Other	atio	n			<u>pires 2-28-s</u> r Number
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5. Name and Address of Actagro LLC c/o Pyxis Regulatory 4110 136th St. NW Gig Harbor, WA 9833	Consulting, Inc.	5 de)	(b)(i) to: EPA	xpedited Re , my product A Reg. No.	t is sim	nilar or ider	nticał	in con	npositio	en and	
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Amendment - Exp Resubmission in re Notification - Expl Explanation: Use addit Notification of an alternate with the provisions of PR statement of formula of th that if this notificat on is no enforcement action and p	asponse to Agency letter ain below. ional page(s) if necessar b brand name and minor la Notice 98-10 and EPA reg is product. 1 understand to bt consistent with the term	<ul> <li>Y. (For section bel revisions pulations at 40 ( that it is a violation so f PR Notice</li> </ul>	er PR Noti <u>ce 98-1</u> CFR 152.46, and r on of 18 U.S.C. S 98-10 and 40 CFF	Agency le "Me Too" Other - Ex .) 0. The alterna to other change ec. 1001 to will	tter dat Applice plain be te branc es have fully ma	ation. slow. 1 name is "R been made ike any faise	esist 5 to the staten	labelin nent to	g or the EPA. If	confide further	ential understand
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lame Michael Kellogg			Title Agent				-		No. 1100 7369	ude A	rea Code)
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. Signature	LOUR		3. Title Agent								
4. Typod Name Michael Kellogg	1		5. Dete 6/22/4	26							

EPA Form 8570-1 (Rev. 3-94) Previous editions are obsolete.



October 27, 2005

To Whom It May Concern:

RE: Letter of Authorization

Dear Sir or Madam:

Please let this letter serve to confirm that Pyxis Regulatory Consulting, Inc. is authorized to act as agent for Actagro LLC (EPA Company Number pending), before the U.S. Environmental Protection Agency and state governmental agencies in all matters regarding our pesticide registrations pursuant to the Federal Insecticide, Fungicide and Rodenticide Act ("FIFRA"), 7 U.S.C. § 136 et seq. and state law.

If you have any questions, please do not hesitate to contact me.

Sincerely,

and cheland

Carl Ueland President

cc: Pyxis Regulatory Consulting, Inc.



 $\bigstar$  personally known to me  $\odot$  proved to me on the basis of satisfactory evidence

to be the person(c) whose name(c) is and subscribed to the within instrument and acknowledgod to me that he/ehe/they executed the same in his/her/their authorized capacity(res), and that by his/her/their signature(c) on the instrument the person(c) acted, executed the instrument

WITNESS my hand and official seal.

P.O. Box 309 + Biola. CA 93606 + Office. (559) 843 2700 + Fax: (559) 843-2845

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### Resist 57

For commercial use only: A fungicide for the control of phytophthora, downy mildew, pythium, and various other diseases on agricultural and greenhouse crops, indoor and outdoor ornamentals, bedding plants, turf and commercial forestry and domestic trees including conifers, pines, oaks

#### **ACTIVE INGREDIENT:**

Mono- and di-potassium phosphite*	57.0%
OTHER INGREDIENTS:	<u>43.0%</u>
TOTAL:	100.0%

\*Resist 57 contains 6.78 lbs./gallon of the active ingredients, mono- and di-potassium phosphite, equivalent to 4.16 pounds phosphorous acid per gallon (35% by weight).

### KEEP OUT OF REACH OF CHILDREN CAUTION

	FIRST AID
If in eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
	HOT LINE NUMBER
treatment. Yo	duct container or label with you when calling a poison control center or doctor, or going for ou may also contact the National Pesticide Information Center (NPIC) at 1-800-858-7378 for edical treatment information.

#### PRECAUTIONARY STATEMENTS HAZARD TO HUMANS AND DOMESTIC ANIMALS

CAUTION

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

#### ENVIRONMENTAL HAZARDS

For terrestrial uses. Do not apply directly to water, 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 or rinsate.

EPA Reg. No. 82940-1

Manufactured by: Actagro LLC P.O. Box 309 Biola, CA 93606



EPA Est. No.

Net Contents: 2.5 gallons (9.463 liters)

#### PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Protective eyewear

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

#### ENGINEERING CONTROLS STATEMENT

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) (4-5)], the handler PPE requirements may be reduced or modified as specified in the WPS.

#### USER SAFETY RECOMMENDATIONS

#### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read the entire label before using this product. 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 State or Tribal 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 pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

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 over long-sleeved shirt and long pants
- Chemical-resistant gloves
- Shoes plus socks
- Protective eyewear

#### NON-AGRICULTURAL USE REQUIREMENTS

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

Do not enter treated areas without protective clothing until sprays have dried.

#### **GENERAL APPLICATION INSTRUCTIONS**

Resist 57 may be applied as a foliar spray, trunk injection, soil drench, soil incorporation, or bare root dip. For foliar sprays, apply Resist 57 with sufficient water for adequate coverage of foliage, according to crop and growth stage. To ensure good coverage, spray until wet but not to the point of runoff.

#### LOW VOLUME AND ULTRA-LOW VOLUME APPLICATIONS

Label rates are written for conventional application equipment. For LV/ULV equipment, use the per acre rate of Resist 57 and adjust amount of water to equipment needs.

NOTE: Always conduct a phytotoxicity test on a small area before applying to a large area in order to assess any potential risk to plants.

#### MIXING INSTRUCTIONS

- 1. Fill the spray tank with ½ cup of the required volume of water.
- 2. Begin agitation (either hydraulic or mechanical) and add Resist 57 slowly to the tank.
- 3. Continue agitation and fill the tank to the desired volume with water.
- 4. Maintain agitation while applying.

#### COMPATIBILITY

Crop injury may result from mixing Resist 57 with certain surfactants, foliar fertilizers or other pesticides. Because Resist 57 is a slightly acidic buffer solution users should avoid mixing Resist 57 with strongly acidic or alkaline materials. Do not tank mix without first testing the mixture's compatibility nor apply it without assessing its safety to the crop (phytotoxicity).

Because it is not possible to test all material combinations and environmental tank mix combinations, always conduct a test with the intended tank mix on a small area prior to any large scale applications. To determine if a combination is phytotoxic to a specific crop, spray a small area of foliage and fruit, and then evaluate 3-7 days later for visual symptoms.

Always test the compatibility of spray adjuvants (i.e. stickers, spreaders, wetting agents) with Resist 57 before use. Do not use acidifying type compatibility agents.

To determine the compatibility of Resist 57 with other products, use the following jar compatibility test:

- 1. Add the correct proportions of each product and the appropriate quantity of water to clean container
- 2. Thoroughly mix
- 3. Let stand for 3-5 minutes

If the mixture remains in solution or can be remixed readily, the products are considered compatible.

#### CHEMIGATION

#### APPLICATIONS THROUGH SPRINKLER AND DRIP IRRIGATION SYSTEMS

Apply this product through microjet, drip (surface and subsurface), solid set, and center pivot sprinkler irrigation systems. Do not apply this product through any other type of irrigation system.

**Preparation of Injection Equipment:** Remove scale, pesticide residues and other foreign matter from the chemical tank and entire injector system. Flush with clean water.

Application Instructions: Fill tank with ½ to ¾ of desired amount of water. Start mechanical or hydraulic agitation. Add the required amount of Resist 57, then the remaining volume of water. Set sprinkler to deliver 0.1 to 0.3 inch of water per acre. Start sprinkler and uniformly inject the solution of Resist 57 into the irrigation water line so as to deliver the desired rate per acre. Inject the Resist 57 solution with a positive displacement pump into the main line ahead of a right angle turn to ensure adequate mixing. For other questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.

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**Note:** For Microjet and Drip Irrigation Systems: Avoid further irrigation of the treated area for 24 to 48 hours after treatment has been completed. For Solid Set and Center Pivot Irrigation Systems: Avoid further irrigation of the Resist 57 treated area until after the foliage has completely dried. This will help to prevent washing the chemical off the crop.

#### GENERAL PRECAUTIONS FOR APPLICATIONS THROUGH SPRINKLER AND DRIP IRRIGATION SYSTEMS

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. Do not apply when wind sped favors drift beyond the area intended for treatment.

Maintain continuous agitation in mix tank during mixing and application to assure uniformity solution: Do not apply when wind speed favors drift, when system connections or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product must be dismantled or drained. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop may result from non-uniform distribution of chemigation water.

Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. A person knowledgeable of the chemigation system and responsible for its operation shall shut down and adjust the system as needed.

Do not connect an irrigation system (including greenhouse system) used for pesticide application to a public water system unless the label-prescribed safety devices for public water supplies are in place.

#### FOOD CROPS

Resist 57 fungicide will control Downy Mildew, *Erwinia amylovora*, Pythium, Fusarium, Rhizoctonia and Phytophthora disease (such as purple blotch, late blight, blue mold, soft rot, root rot, brown rot, foot rot, crown/collar rot, canker, fruit/foliar rot, fire blight, heart rot, pink rot, pythium leak, red stele, leather rot, etc.) on agronomic crops. Refer to the specific crop groupings below for additional diseases treated and instructions.

**BERRY CROPS:** Blackberry (including bingberry, black satin berry, boysenberry, Cherokee blackberry, Chesterberry, Cheyenne blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, Grapes (all types), Himalayaberry, hullberry, Lavacaberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, nectarberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberrry, Shawnee blackberry, youngberry, and varieties and/or hybrids of these), Blueberry, Cane Berries, Cranberry, Currant, Elderberry, Gooseberry, Huckleberry, Loganberry, Raspberry (black and red) and Strawberry.

#### **Use Precautions:**

- Do not exceed the highest rate per application.
- Do not apply at less than 3 day intervals.
- Do not apply to plants that are dormant or heat or moisture stressed.

 To avoid undesirable copper phytotoxicity, do not apply Resist 57 foliarly to plants treated with copper based compounds at less than 20 day intervals unless instructed to do so by your consultant.

**Application Instructions:** Make applications prior to disease development in conjunction with good cultural management practices. Allow foliage to completely dry after application. Do not apply when conditions favor wet tissue for prolonged periods (>4 hours).

Use rates and frequency are designed to prevent plant injury; use the higher rate when disease pressure is severe. If more frequent applications are necessary for disease control, consult a crop expert and follow their recommendations.

Disease	Application Method	Rate	Application Program
	Foliar	1 to 3 quarts in a minimum of 20 gallons of water/acre. (5 to 7 liters in minimum of 100 liters of water/hectare)	<b>Disease Prevention Program</b> <sup>†</sup> : Apply lower rate at 2-4 week intervals after plants become established. <b>Disease Control Program:</b> Apply
Phytophthora	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	higher rate at 2-3 week intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity.
Pythium Fusarium Rhizoctonia	Root Dip	2 quarts/100 gallons of water, 2/3 fl. oz./gallon of water. (5 liters/1000 liters of water)	Apply as pre-plant dip to the roots for 15-30 minutes. Plant within 24 hours after dipping.
	Irrigation	Overhead: 2 to 4 quarts in at least 100 gals. of water. (7 to 9 L in at least 1,000 L of water) Drip: 2 to 3 qts. in at least 100 gals. of water. (5 to 7 L in at least 1,000 L of water)	Apply with normal irrigation schedule. Follow Disease Prevention Program or Disease Control Program as stated above.
Downy Mildew	. Foliar	1 to 3 quarts in a minimum of 20 gallons of water/acre.(5 to 7 liters in minimum of 100 liters of water/hectare)	Apply at 2-3 week intervals. Follow <b>Disease Prevention</b>
	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre.(5 to 7 liters in minimum of 75 liters of water/hectare)	Program or Disease Control Program as stated above.

<sup>†</sup> If you are unsure these conditions exist consult your local Extension Agent.

**BRASSICA CROPS:** Broccoli (all types), Brussels sprouts, Cabbage (all types), Cauliflower, Cavalo broccoli, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach and Rape greens.

#### **Use Precautions:**

• Do not exceed the highest rate per application.

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- Do not apply at less than 3 day intervals.
- Do not apply to plants that are dormant or heat or moisture stressed.
- Do not apply when conditions favor wet tissue for prolonged periods (>4 hours).
- To avoid undesirable copper phytotoxicity, do not apply Resist 57 foliarly to plants treated with copper based compounds at less than 20-day intervals unless instructed to do so by your consultant.

**Application Instructions:** Make applications prior to disease development in conjunction with good cultural management practices. Allow foliage to completely dry after application.

Use rates and frequency are designed to prevent plant injury; use the higher rate when disease pressure is severe. If more frequent applications are necessary for disease control, consult a crop expert and follow their recommendations.

Disease	Application Method	Rate	Application Program
	Foliar	1 to 3 guarts in a minimum of 20 gallons of water/acre. (5 to 7 liters in minimum of 100 liters of water/hectare)	Disease Prevention Program <sup>†</sup> : Apply lower rate at 2-4 week intervals after plants become established. Disease Control Program: Apply
Phytophthora	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	higher rate at 2-3 week intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity.
Pythium Fusarium Rhizoctonia		1 qt./100 gal. of water, 1/3 fl. oz./gal of water (2.5 L/1000 L of water)	Apply as pre-plant dip immediately prior to planting. (100 gallons is intended to treat the number of slips required to plant on acre.)
	Irrigation	Overhead: 2 to 4 qts. in at least 100 gal. of water. (7 to 9 L in at least 1,000 L of water) Drip: 2 to 3 qts. In at least 100 gal. of water. (5 to 7 L in at least 1,000 L of water)	Apply with normal irrigation schedule. Follow <b>Disease Prevention</b> <b>Program</b> or <b>Disease Control</b> <b>Program</b> as stated above.
Downy Mildew	Foliar	1 to 3 quarts in a minimum of 20 gallons of water/acre. (5 to 7 liters in minimum of 100 liters of water/hectare)	Apply at 2-3 week intervals. Follow <b>Disease Prevention</b>
	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	Program or Disease Control Program as stated above.

<sup>†</sup> If you are unsure these conditions exist consult your local Extension Agent.

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**CEREAL GRAINS, FORAGE AND FIBER CROPS:** Alfalfa, Barley, Buckwheat, Canola, Clover (all types), Corn (all types), Cotton, Hay, Kudzu, Lespedeza, Lupin, Millet, Oats, Popcorn, Rice, Rye, Safflower, Sainfoin, Sorghum, Sunflower, Teosinte, Trefoil, Triticale, Vetch, Wheat and Wild rice.

#### **Use Precautions:**

- Do not exceed the highest rate per application.
- Do not apply at less than 3 day intervals.
- Do not apply to plants that are dormant or heat or moisture stressed.
- Do not apply when conditions favor wet tissue for prolonged periods (>4 hours).
- To avoid undesirable copper phytotoxicity, do not apply Resist 57 foliarly to plants treated with copper based compounds at less than 20-day intervals unless instructed to do so by your consultant.

**Application Instructions:** Make applications prior to disease development in conjunction with good cultural management practices. Allow foliage to completely dry after application.

Use rates and frequency are designed to prevent plant injury; use the higher rate when disease pressure is severe. If more frequent application are necessary for disease control, consult a crop expert and follow their recommendation.

Disease	Application Method	Rate	Application Program
	Foliar	1 to 3 quarts in a minimum of 20 gallons of water/acre. (5 to 7 liters in minimum of 100 liters of water/hectare)	Disease Prevention Program <sup>†</sup> : Apply lower rate at 2-4 week intervals after plants become established. Disease Control Program:
Phytophthora Pythium Fusarium	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	Apply higher rate at 2-3 week intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity.
Rhizoctonia	Irrigation	Overhead: 2 to 4 qts. in at least 100 gals. of water. (7 to 9 L in at least 1000 L of water) Drip: 2 to 3 qts. in at least 100 gals. of water. (5 to 7 L in at least 1,000 L of water)	Apply with normal irrigation schedule. Follow <b>Disease Prevention</b> <b>Program</b> or <b>Disease Control</b> <b>Program</b> as stated above.
Downy Mildew	Foliar	1 to 3 quarts in a minimum of 20 gallons of water/acre. (5 to 7 liters in minimum of 100 liters of water/hectare)	Apply at 2-3 week intervals. Follow <b>Disease Prevention</b>
	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	Program or Disease Control Program as stated above.

<sup>†</sup> If you are unsure these conditions exist consult your local Extension Agent.

**CITRUS CROPS (Bearing and Non-Bearing) INCLUDING AVOCADO:** Avocado, Calamondin, Citrus hybrids, Grapefruit, Kumquat, Lemon, Lime, Mandarin, Orange (all types), Pummelo, and Satsuma mandarin.

#### Use Precautions:

- Do not exceed the highest rate per application.
- Do not apply at less than 3 day intervals.
- Do not apply to plants that are dormant or heat or moisture stressed.
- Do not apply with conditions favor wet tissure for prolonged periods (>4 hours).
- To avoid undesirable copper phytotoxicity, do not apply Resist 57 foliarly to plants treated with copper based compounds at less than 20-day intervals unless instructed to do so by your consultant.

**Application Instructions:** Make applications prior to disease development in conjunction with good cultural practices. Allow foliage to completely dry after application.

Use rates and frequency are designed to prevent plant injury; use the higher rate when disease pressure is severe. If more frequent applications are necessary for disease control, consult a crop expert and follow their recommendations.

Disease	Application Method	Rate	Application Program
	Foliar	1 to 3 quarts in a minimum of 100 gallons of water/acre. (5 to 7 liters in minimum of 1000 liters of water/hectare)	<b>Disease Prevention Program</b> <sup>†</sup> : Apply lower rate at 2-4 week intervals after plants become established.
	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	Disease Control Program: Apply higher rate at 2-3 week intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity
Phytophthora Pythium	Root Dip	2 qts./100 gal. of water, 2/3 fl. oz./gal. of water (5 L/1,000 L of water)	Apply as pre-plant dip to the roots for 15-30 minutes. Plant within 24 hours after dipping.
Fusarium Rhizoctonia		Overhead: 2 to 4 qts. in at least 100 gal. of water. (7 to 9 L in at least 1,000 L of water) Drip: 2 to 3 qts. In at least 100 gal. of water. (5 to 7 L in at least 1,000 L of water)	Apply with normal irrigation schedule. Follow Disease Prevention Program or Disease Control Program as stated above.
	Trunk Injection	3 teaspoons/linear yard of canopy width or 2 in. of trunk diameter at breast height (DBH) (15 ml/linear meter of canopy width or 5 cm DBH). Inject directly into tree.	Apply according to injection equipment instructions. Adjust rate based on injection equipment suggestions for specific applications. Repeat 2- 4 times a year until control is reached.

Disease	Application Method	Rate	Application Program		
Downy Mildew	Foliar	1 to 3 quarts in a minimum of 100 gallons of water/acre. (5 to 7 liters in minimum of 1000 liters of water/hectare)	Apply at 2-3 week intervals. Follow <b>Disease Prevention</b>		
	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	Program or Disease Control Program as stated above.		

**CUCURBIT CROPS:** Chayote, Chinese waxgourd, Citron melon, Cucumber (all types), Gherkin, Gourd, Muskmelon, Pumpkin, Squash (summer and winter) and Watermelon.

#### Use Precautions:

- Do not exceed the highest rate per application.
- Do not apply at less than 3 day intervals.
- Do not apply to plants that are dormant or heat or moisture stressed.
- Do not apply when conditions favor wet tissue for prolonged periods (>4 hours).
- To avoid undesirable copper phytotoxicity, do not apply Resist 57 foliarly to plants treated with copper based compounds at less than 20-day intervals unless instructed to do so by your consultant.

**Application Instructions:** Make applications prior to disease development in conjunction with good cultural management practices. Allow foliage to completely dry after application.

Use rates and frequency are designed to prevent plant injury; use the higher rate when disease pressure is severe. If more frequent applications are necessary for disease control, consult a crop expert and follow their recommendations.

Disease	Application Method	Rate	Application Program
Phytophthora Pythium Fusarium Rhizoctonia	Foliar	1 to 3 quarts in a minimum of 20 gallons of water/acre. (5 to 7 liters in minimum of 100 liters of water/hectare)	Disease Prevention Program <sup>†</sup> : Apply lower rate at 2-4 week intervals after plants become established.
	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	Disease Control Program: Apply higher rate at 2-3 week intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity.
	Irrigation	Overhead: 2 to 4 qts. in at least 100 gal. of water. (7 to 9 L in at least 1,000 L of water) Drip: 2 to 3 qts. In at least 100 gal. of water. (5 to 7 L in at least 1,000 L of water)	Apply with normal irrigation schedule. Follow <b>Disease Prevention</b> <b>Program</b> or <b>Disease Control</b> <b>Program</b> as stated above.

Dísease	Application Method	Rate	Application Program
	Foliar	1 to 3 quarts in a minimum of 20 gallons of water/acre. (5 to 7 liters in minimum of 100 liters of water/hectare)	Apply at 2-3 week intervals. Follow <b>Disease Prevention</b>
Downy Mildew	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	Program or Disease Control Program as stated above.

**HERB AND SPICE CROPS**: Allspice, Angelica, Anise, Annatto, Balm, Basil, Borage, Bumet, Camomile, Caper buds, Caraway, Cardamom, Cassia bark and buds, Catnip, Celery seed, Chervil, Chive, Cinnamon, Clary, Clove, Cocoa, Coriander, Costmary, Cilantro, Cumin, Curry, Dill, Fennel, Fenugreek, Grain of paradise, Hops, Horehound, Hyssop, Juniper berry, Lavender, Lemongrass, Lovage, Mace, Marigold, Marjoram, Mint, Mustard, Nasturtium, Nutmeg, Parsley, Pennyroyal, Pepper, Poppy seed, Rosemary, Rue, Saffron, Sage, Savory, Sweet bay, Tansy, Tarragon, Thyme, Vanilla, Wintergreen, Woodruff, and Wormwood.

#### Use Precautions:

- Do not exceed the highest rate per application.
- Do not apply at less than 3 day intervals.
- Do not apply to plants that are dormant or heat or moisture stressed.
- Do not apply when conditions favor wet tissue for prolonged periods (>4 hours).
- To avoid undesirable copper phytotoxicity, do not apply Resist 57 foliarly to plants treated with copper based compounds at less than 20-day intervals unless instructed to do so by your consultant.

**Application Instructions:** Make applications prior to disease development in conjunction with good cultural management practices. Allow foliage to completely dry after application.

Use rates and frequency are designed to prevent plant injury; use the higher rate when disease pressure is severe. If more frequent applications are necessary for disease control, consult a crop expert and follow their recommendations.

Disease	Application Method	Rate	Application Program	
Phytophthora Pythium Fusarium Rhizoctonia	Foliar	1 to 3 quarts in a minimum of 20 gallons of water/acre. (5 to 7 liters in minimum of 100 liters of water/hectare)	Disease Prevention Program Apply lower rate at 2-4 week intervals after plants become established. Disease Control Program:	
	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	Apply higher rate at 2-3 week intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity.	

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Disease	Application Method	Rate	Application Program
	Irrigation	Overhead: 2 to 4 qts. in at least 100 gal. of water. (7 to 9 L in at least 1000 L of water) Drip: 2 to 3 qts. In at least 100 gal. of water. (5 to 7 L in at least 1000 L of water)	Apply with normal irrigation schedule. Follow <b>Disease Prevention</b> <b>Program</b> or <b>Disease Control</b> <b>Program</b> as stated above.
Downy Mildew	Foliar	1 to 3 quarts in a minimum of 20 gallons of water/acre. (5 to 7 liters in minimum of 100 liters of water/hectare)	Apply at 2-3 week intervals. Follow <b>Disease Prevention</b>
Downy Mildew	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	Program or Disease Control Program as stated above.

LEGUME CROPS: Bean (all types), broad been (fava bean), Chick pea (garbanzo bean), Guar, Jackbean, Lablab bean, Lentil, Pea (all types), Peanut, Pigeon pea, Soybean and Sword bean.

#### **Use Precautions:**

- Do not exceed the highest rate per application.
- Do not apply at less than 3 day intervals.
- Do not apply to plants that are dormant or heat or moisture stressed.
- Do not apply when conditions favor wet tissue for prolonged periods (>4 hours).
- To avoid undesirable copper phytotoxicity, do not apply Resist 57 foliarly to plants treated with copper based compounds at less than 20-day intervals unless instructed to do so by your consultant.

**Application Instructions:** Make applications prior to disease development in conjunction with good cultural management practices. Allow foliage to completely dry after application.

Use rates and frequency are designed to prevent plant injury; use the higher rate when disease pressure is severe. If more frequent applications are necessary for disease control, consult a crop expert and follow their recommendations.

Disease	Application Method	Rate	Application Program
Phytophthora Pythium Fusarium Rhizoctonia Early and Late	Foliar	1 to 3 quarts in a minimum of 20 gallons of water/acre. (5 to 7 liters in minimum of 100 liters of water/hectare)	Disease Prevention Program <sup>†</sup> : Apply lower rate at 2-4 week intervals after plants become established. Disease Control Program: Apply higher rate at 2-3 week

Disease	Application Method	Rate	Application Program	
Leaf Spot on Peanut (Cercospora arachidicola and Cercosporidium personatum)	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity.	
	Irrigation	Overhead: 2 to 4 qts. in at least 100 gal. of water. (7 to 9 L in at least 1000 L of water) Drip: 2 to 3 qts. In at least 100 gal. of water. (5 to 7 L in at least 1000 L of water)	Apply with normal irrigation schedule. Follow <b>Disease Prevention</b> <b>Program</b> or <b>Disease Control</b> <b>Program</b> as stated above.	
Downy Mildew	Foliar	1 to 3 quarts in a minimum of 20 gallons of water/acre. (5 to 7 liters in minimum of 100 liters of water/hectare)	Apply at 2-3 week intervals. Follow <b>Disease Prevention</b>	
	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	Program or Disease Control Program as stated above.	

POME FRUIT CROPS (Bearing and Non-Bearing) INCLUDING PAPAYA: Apple, Crabapple, Loquat, Mayhaw, Papaya, Pear, and Quince.

#### Use Precautions:

- Do not exceed the highest rate per application.
- Do not apply at less than 3 day intervals.
- Do not apply to plants that are dormant or heat or moisture stressed.
- Do not apply when conditions favor wet tissue for prolonged periods (>4 hours).
- To avoid undesirable copper phytotoxicity, do not apply Resist 57 foliarly to plants treated with copper based compounds at less than 20-day intervals unless instructed to do so by your consultant.

**Application Instructions:** Make applications prior to disease development in conjunction with good cultural management practices. Allow foliage to completely dry after application.

Use rates and frequency are designed to prevent plant injury; use the higher rate when disease pressure is severe. If more frequent applications are necessary for disease control, consult a crop expert and follow their recommendations.

Disease	Application Method	Rate	Application Program
	Foliar	1 to 3 quarts in a minimum of 100 gallons of water/acre. (5 to 7 liters in minimum of 1000 liters of water/hectare)	<b>Disease Prevention Program</b> <sup>†</sup> : Apply lower rate at 2-4 week intervals after plants become established.
	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	Disease Control Program: Apply higher rate at 2-3 week intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity.
Phytophthora Pythium Fusarium Rhizoctonia	Root Dip	2 qts./100 gal. of water, 2/3 fl. oz./gal. of water (5 L/1000 L of water)	Apply as pre-plant dip to the roots for 15-30 minutes. Plant within 24 hours after dipping.
Fire Blight ( <i>Erwinia</i> <i>amylovora</i> )	Irrigation	Overhead: 2 to 4 qts. in at least 100 gal. of water. (7 to 9 L in at least 1000 L of water) Drip: 2 to 3 qts. In at least 100 gal. of water. (5 to 7 L in at least 1000 L of water)	Apply with normal irrigation schedule. Follow <b>Disease Prevention</b> <b>Program</b> or <b>Disease Control</b> <b>Program</b> as stated above.
	Trunk Injection	3 teaspoons/linear yard of canopy width or 2 in. of trunk diameter at breast height (DBH) (15 ml/linear meter of canopy width or 5 cm DBH). Inject directly into tree.	Apply according to injection equipment instructions. Adjust rate based on injection equipment suggestions for specific applications. Repeat 2- 4 times a year until control is reached.
Downy Mildew	Foliar	1 to 3 quarts in a minimum of 100 gallons of water/acre. (5 to 7 liters in minimum of 1000 liters of water/hectare)	Apply at 2-3 week intervals. Follow <b>Disease Prevention</b>
	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	Program or Disease Control Program as stated above.

STONE FRUIT CROPS INCLUDING OLIVES: Apricot, Cherry, Nectarine, Olive, Peach, Plum, Plumcot, and Prune.

**Use Precautions:** 

- Do not exceed the highest rate per application.
- Do not apply at less than 3 day intervals.
- Do not apply to plants that are dormant or heat or moisture stressed.
- Do not apply when conditions favor wet tissue for prolonged periods (>4 hours).
- To avoid undesirable copper phytotoxicity, do not apply Resist 57 foliarly to plants treated with copper based compounds at less than 20-day intervals unless instructed to do so by your consultant.

**Application Instructions:** Make applications prior to disease development in conjunction with good cultural management practices. Allow foliage to completely dry after application.

Use rates and frequency are designed to prevent plant injury; use the higher rate when disease pressure is severe. If more frequent applications are necessary for disease control, consult a crop expert and follow their recommendations.

Disease	Application Method	Rate	Application Program
Phytophthora Pythium Fusarium Rhizoctonia	Foliar	1 to 3 quarts in a minimum of 100 gallons of water/acre. (5 to 7 liters in minimum of 1000 liters of water/hectare)	<b>Disease Prevention Program</b> <sup>†</sup> : Apply lower rate at 2–4 week intervals after plants become established.
	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	Disease Control Program: Apply higher rate at 2-3 week intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity.
	Root Dip	2 qts./100 gal. of water, 2/3 fl. oz./gal. of water (5 L/1000 L of water)	Apply as pre-plant dip to the roots for 15-30 minutes. Plant within 24 hours after dipping.
	Irrigation	Overhead: 2 to 4 qts. in at least 100 gal. of water. (7 to 9 L in at least 1,000 L of water) Drip: 2 to 3 qts. In at least 100 gal. of water. (5 to 7 L in at least 1,000 L of water)	Apply with normal irrigation schedule. Follow <b>Disease Prevention</b> <b>Program</b> or <b>Disease Control</b> <b>Program</b> as stated above.
	Trunk Injection	3 teaspoons/linear yard of canopy width or 2 in. of trunk diameter at breast height (DBH) (15 ml/linear meter of canopy width or 5 cm DBH). Inject directly into tree.	Apply according to injection equipment instructions. Adjust rate based on injection equipment suggestions for specific applications. Repeat 2-4 times a year until control is reached.

Disease	Application Method	Rate	Application Program	
Downy Mildew	Foliar	1 to 3 quarts in a minimum of 100 gallons of water/acre. (5 to 7 liters in minimum of 1000 liters of water/hectare)	Apply at 2-3 week intervals. Follow <b>Disease Prevention</b>	
Downy Mildew	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	Program or Disease Control Program as stated above.	

TREE NUT CROPS INCLUDING VINES: Almond, Beech nut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Grapes (all types), Hickory nut, Kiwi, Macadamia nut, Pecan, Pistachio and Walnut.

#### **Use Precautions:**

- Do not exceed the highest rate per application.
- Do not apply at less than 3 day intervals.
- Do not apply to plants that are dormant or heat or moisture stressed.
- Do not apply when conditions favor wet tissue for prolonged periods (>4 hours).
- To avoid undesirable copper phytotoxicity, do not apply Resist 57 foliarly to plants treated with copper based compounds at less than 20-day intervals unless instructed to do so by your consultant.

**Application Instructions:** Make applications prior to disease development in conjunction with good cultural management practices. Allow foliage to completely dry after application.

Use rates and frequency are designed to prevent plant injury; use the higher rate when disease pressure is severe. If more frequent applications are necessary for disease control, consult a crop expert and follow their recommendations.

Disease	Application Method	Rate	Application Program	
Phytophthora Pythium Fusarium Rhizoctonia	Foliar	1 to 3 quarts in a minimum of 100 gallons of water/acre. (5 to 7 liters in minimum of 1000 liters of water/hectare)	<b>Disease Prevention Program</b> <sup>†</sup> : Apply lower rate at 2-4 week intervals after plants become established. <b>Disease Control Program:</b>	
	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	Apply higher rate at 2-3 week intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity.	
	Root Dip	2 qts./100 gal. of water, 2/3 fl. oz./gal. of water (5 L/1000 L of water)	Apply as pre-plant dip to the roots for 15-30 minutes. Plant within 24 hours after dipping.	

Disease	Application Method	Rate	Application Program
	Irrigation	Overhead: 2 to 4 qts. in at least 100 gal. of water. (7 to 9 L in at least 1000 L of water) Drip: 2 to 3 qts. In at least 100 gal. of water. (5 to 7 L in at least 1,000 L of water)	Apply with normal irrigation schedule. Follow Disease Prevention Program or Disease Control Program as stated above.
	Trunk Injection	3 teaspoons/linear yard of canopy width or 2 in. of trunk diameter at breast height (DBH) (15 ml/linear meter of canopy width or 5 cm DBH). Inject directly into tree.	Apply according to injection equipment instructions. Adjust rate based on injection equipment suggestions for specific applications. Repeat 2-4 times a year until control is reached.
Downy Mildew	Foliar	1 to 3 quarts in a minimum of 100 gallons of water/acre. (5 to 7 liters in minimum of 1000 liters of water/hectare)	Apply at 2-3 week intervals. Follow <b>Disease Prevention</b>
	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	Program or Disease Control Program as stated above.

VEGETABLES INCLUDING MINOR FOOD CROPS: (Leafy, Root and Tuber) Amaranth (Chinese spinach, tampala, etc.), Arracacha, Arugula, Arrowroot, Artichoke (all types), Asparagus, Beet (all types), Burdock, Canna, Cardoon, Carrot, Cassava, Celeriac, Celery, Chayote, Chervil (turnip-rooted), Chicory, Chiles, Chrysanthemum (edible), Chufa, Cinchoca, Coconut, Coffee, Corn (all types), Cress (all types), Dandelion, Dasheen, Dock, Eggplant, Endive, Fennel, Garlic, Ginger, Ginseng, Horseradish, Leren, Lettuce (all types), Okra, Onion, Orach, Parsley, Parsnip, Peppers (all types), Pineapple, Purslane, Potato (all types), Radicchio, Radish (all types), Rhubarb, Rutabaga, Salisify (all types), Skirret, Spinach (all types), Sugarcane, Sweet Potato, Swiss Chard, Tanier, Tobacco, Tomato, Turmeric, Turnip, Yam (all types).

#### Use Precautions:

- Do not exceed the highest rate per application.
- Do not apply at less than 3 day intervals.
- Do not apply to plants that are dormant or heat or moisture stressed.
- Do not apply when conditions favor wet tissue for prolonged periods (>4 hours).
- To avoid undesirable copper phytotoxicity, do not apply Resist 57 foliarly to plants treated with copper based compounds at less than 20-day intervals unless instructed to do so by your consultant.

**Application Instructions:** Make applications prior to disease development in conjunction with good cultural management practices. Allow foliage to completely dry after application.

Use rates and frequency are designed to prevent plant injury; use the higher rate when disease pressure is severe. If more frequent applications are necessary for disease control, consult a crop expert and follow their recommendations.

Disease	Application Method	Rate	Application Program	
	Foliar	1 to 3 quarts in a minimum of 20 gallons of water/acre. (5 to 7 liters in minimum of 100 liters of water/hectare)	Disease Prevention Program*: Apply lower rate at 2-4 week intervals after plants become established. Disease Control Program:	
Phytophthora	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	Apply higher rate at 2-3 week intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity.	
Pythium Fusarium Rhizoctonia	Root Dip	2 qts./100 gal. of water, 2/3 fl. oz./gal. of water (5 L/1000 L of water)	Apply as pre-plant dip immediately prior to planting. (100 gallons is intended to treat the number of slips required to plant one acre.	
	Irrigation	Overhead: 2 to 4 qts. in at least 100 gal. of water. (7 to 9 L in at least 1000 L of water) Drip: 2 to 3 qts. In at least 100 gal. of water. (5 to 7 L in at least 1000 L of water)	Apply with normal irrigation schedule. Follow <b>Disease Prevention</b> <b>Program</b> or <b>Disease Control</b> <b>Program</b> as stated above.	
Downy Mildew	Foliar	1 to 3 quarts in a minimum of 20 gallons of water/acre. (5 to 7 liters in minimum of 100 liters of water/hectare)	Apply at 2-3 week intervals. Follow <b>Disease Prevention</b>	
·	Aerial Application	1 to 3 quarts in a minimum of 10 gallons of water/acre. (5 to 7 liters in minimum of 75 liters of water/hectare)	Program or Disease Control Program as stated above.	
Pink Rot (Phytophthora erythroseptica) Late Blight (Phytophthora infestans)	Foliar or Aerial Application	3 to 5 quarts in a minimum of 20 gallons of water/acre. (5 to 7 liters in minimum of 100 liters of water/hectare)	Apply at 2-3 week intervals.	
	Post Harvest Application	Apply 0.1 gallons Resist 57 per ton of tubers in 0.5 gallons of water as a spray. Ensure complete and even coverage.	Follow Disease Prevention Program or Disease Control Program as stated above.	

<sup>†</sup> If you are unsure these conditions exist consult your local Extension Agent.

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#### ORNAMENTALS

Resist 57 fungicide will control Pythium, Downy Mildew, Phytophthora, and various other diseases on ORNAMENTALS grown in commercial nurseries and greenhouses, golf courses, parks and commercial landscapes.

Resist 57 may be applied to all ornamental and landscape plants including (but not limited to):

Aglaonema	Aphelandra	Arbovitae	Ash
Azaleas	Bougainvilles	Boxwood	Bushes
Cattleya sinneri	Cedars	Ceanothus	Cotoneaster
Cissus	Diffenbachia	Dogwood	Ferns
Ficus	Flowering Trees	Hibiscus	Hard Wood Trees
Holly	Home Lawns	Juniper	Magnolia Trees
Maple	Pines	Oaks	Palms
Peperomia	Photinia	Pittosporum	Philodendron
Pieris	Pothos	Red woods	Rhododendron
Roses	Scheffiera	Sedum	Sempervivum
Shrubs	Spathiphyllum	Sycamore	Taxus media
Zygocactus			

#### **Use Precautions:**

- Do not exceed the highest rate per application.
- Do not apply at less than 3 day intervals.
- Do not apply to plants that are dormant or heat or moisture stressed.
- To avoid undesirable copper phytotoxicity, do not apply Resist 57 foliarly to plants treated with copper based compounds at less than 20-day intervals unless instructed to do so by your consultant.

#### **Application Instructions:**

Apply Resist 57 prior to disease development in conjunction with good cultural management practices. Allow foliage to completely dry after application. Do not apply when conditions favor wet tissue for prolonged periods (>4 hours).

Use rates and frequency are designed to prevent plant injury; use the higher rate when disease pressure is severe. If more frequent applications are necessary for disease control, consult a crop expert and follow their recommendations.

Disease	Application Method	Rate	Application Program
Phytophthora Pythium Fusarium Rhizoctonia Fire Blight ( <i>Erwinia</i> <i>amylovora</i> ) Bacterial Blight (Xanthomonas campestris)	Foliar Spray	1 to 2 qt./100 gal of water (2.5 to 5 L/1000 L of water) or 1/3 fl. oz. to 2/3 fl. oz per gal. of water	Disease Prevention Program <sup>†</sup> : Apply lower rate at 2-4 week intervals after plants become established. Disease Control Program: Apply higher rate at 2-3 week intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity.
Green Wild <i>(Raistonia</i> spp.)	Soil Drench	12-24 fl. oz./100 gals. of water or 1/8 to ¼ fl. oz. per gallon of water (1 to 2 liters/1000 liters of water)	Apply 1-2 pts. of diluted solution per sq. foot. Adjust volume as needed to thoroughly wet media. Apply at 2-3 week intervals and repeat as needed.

Disease	Application Method	Rate	Application Program	
	Soil Incorporation	1-2 pts./cubic yard of soil mix (300-600 ml/ cubic meter	Mix 1-2 pints of Resist 57 with enough water to wet one cubic yard of soil; mix immediately before potting. If conditions are favorable for disease development, it is recommended to make additional applications as a foliar spray or soil drench.	
	Irrigation	Overhead: 1 to 2 qts./100 gallons of water (2.5 to 5 L/1000 L of water) Drip: 1 to 2 qts./100 gallons of water (2.5 to 5 L/1000 L of water)	Apply with normal irrigation schedule. Follow <b>Disease Prevention</b> <b>Program</b> or <b>Disease Control</b> <b>Program</b> as stated above.	
	Trunk Injection	3 teaspoons/linear yard of canopy width or 2 in. of trunk diameter at breast height (DBH) (15 ml/linear meter of canopy width or 5 cm DBH). Inject directly into tree.	Apply according to injection equipment instructions. Adjust rate based on injection equipment suggestions for specific applications. Repeat 2-4 times a year until control is reached.	
	Root Dip	2 qts/ 100 gal. of water or 2/3 fl. oz./gal. of water (5 L/1000 L of water)	Dip transplants into diluted solution of Resist 57. Thoroughly wet plant root mass immediately before transplanting. Keep roots submerged for 1-2 minutes.	
Downy Mildew	Foliar Spray	1-2 qts./ 100 gal. of water or 1/3 fl. oz. to 2/3 fl. oz./gallon of water (2.5 – 5 titers/1000 liters of water)	Apply diluted solution to thoroughly wet foliage. Apply at 2-3 week intervals and repeat as needed. Follow <b>Disease Prevention</b> <b>Program</b> or <b>Disease Control</b> <b>Program</b> as stated above.	

<sup>†</sup> If you are unsure these conditions exist consult your local Extension Agent.

#### BEDDING PLANTS

Resist 57 fungicide will control Downy Mildew, Pythium, Phytophthora and various other diseases on bedding plants grown in commercial nurseries and greenhouses, golf courses, parks and commercial landscapes.

Resist 57 may be applied to all bedding plants including (but not limited to) the following:

Ageratum	Algerian ivy	Alyssum	Anthurium
Artemisia	Aster	Baby's Breath	Begonia
Caladium	Carnation	Chrysanthemum	Coleus
Columbine	Daisy	Delphinium	Easter Lily
English Ivy	Foxglove	Gaillardia	Geranium

Gloxinia	Impatiens	Marigold	Pansy
Petunia	Phlox	Pinks	Poinsettia
Primrose	Prostrate	Rosemary	Salvia
Snapdragon	Verbena	Vinca	Zinnia

#### **Use Precautions:**

- Do not exceed the highest rate per application.
- Do not apply at less than 3 day intervals.
- Do not apply to plants that are dormant or heat or moisture stressed.
- To avoid undesirable copper phytotoxicity, do not apply Resist 57 foliarly to plants treated with copper based compounds at less than 20-day intervals unless instructed to do so by your consultant.

#### **Application Instructions:**

Apply Resist 57 at 2-3 week intervals prior to disease development in conjunction with good cultural management practices. Apply diluted solution to thoroughly wet foliage and allow foliage to completely dry after application. Do not apply when conditions favor wet tissue for prolonged periods (>4 hours).

Use rates and frequency are designed to prevent plant injury; use the higher rate when disease pressure is severe. If more frequent applications are necessary for disease control, consult a crop expert and follow their recommendations.

Disease	Application Method	Rate	Application Program
Phytophthora Pythium Fusarium Rhizoctonia Fire Blight ( <i>Erwinia</i> <i>amylovora</i> )	Foliar Spray	1-2 qt./100 gal of water or 1/3 fl. oz. to 2/3 fl. oz per gal. of water (2.5-5 L/1000 L of water)	Disease Prevention Program <sup>†</sup> : Apply lower rate at 2-4 week intervals after plants become established. Disease Control Program: Apply higher rate at 2-3 week intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity
	Root Dip	2 qts./100 gals. of water or 2/3 fl. oz./gallon of water. (5 liters/1000 liters of water)	Dip transplants into diluted solutions of Resist 57. Thoroughly wet plant root mass immediately before transplanting. Keep roots submerged for 1 to 2 minutes.
	Soil Drench	12-24 fl. oz./100 gals. of water or 1/8 to ¼ fl. oz. per gallon of water (1 to 2 liters/1000 liters of water)	Apply 1-2 pts. of diluted solution per sq. foot. Adjust volume as needed to thoroughly wet media. Apply at 2-3 week intervals and repeat as needed.

Disease	Application Method	Rate	Application Program
	Irrigation	Overhead: 1 to 2 qts. in at least 100 gal. of water. (2.5 to 5 liters/1000 liters of water) Drip: 1 to 2 qts. in at least 100 gal. of water. (2.5 to 5 liters/1000 liters of water)	Apply with normal irrigation schedule. Follow <b>Disease Prevention</b> <b>Program</b> or <b>Disease Control</b> <b>Program</b> as stated above.
Downy Mildew	Foliar Spray	1 to 2 qts./ 100 gal. of water (1/3 fl. oz. to 2/3 fl. oz./gallon of water) (2.5 to 5 liters/1000 liters of water)	Follow Disease Prevention Program or Disease Control Program as stated above.

#### CONIFERS AND TREES IN COMMERCIAL NURSERIES, PLANTATIONS AND FORESTS, LANDSCAPES AND PARKS (INCLUDING CHRISTMAS TREES, OAKS AND PINES) APPLICATIONS BY COMMERCIAL APPLICATORS

Resist 57 applied in conjunction with good cultural management practices will control Phytophthora root rot in conifers including (but not limited to) Douglas fir, spruce and pines as well as other Phytophthora disease of Oaks (Sudden Oak Death) and forest trees.

#### **Use Precautions:**

- Do not apply to trees that are under heat or moisture stress.
- Do not graze livestock in treated conifer nurseries and/or plantations.
- Do not feed forage to livestock from treated nurseries and/or plantations.

#### **Application Instructions:**

Use the higher rates when disease pressure is severe.

Disease	Application Method	Rate	Application Program
Phytophthora	Foliar Spray	1-2 qt./100 gal of water or (2.5-5 L/1000 L of water/hectare) or 1/3 fl. oz. to 2/3 fl. oz per gal. of water. Apply diluted solution to thoroughly wet foliage. Apply at 2-3 week intervals and repeat as needed.	Disease Prevention Program <sup>†</sup> : Apply lower rate at 2-4 week intervals after plants become established. Disease Control Program: Apply higher rate at 2-3 week intervals until control is reached.
	Soil Drench	12 to 24 fl. oz./100 gals. of water or 1/8 to ¼ fl. oz. per gallon of water (1 to 2 liters/1000 liters of water)	Apply 1 to 2 pts. of diluted solution per sq. foot. Adjust volume as needed to thoroughly wet media. Apply at 2 to 3 week intervals and repeat as needed.

Disease	Application Method	Rate	Application Program
	Trunk Injection	3 teaspoons/linear yard of canopy width or 2 in. of trunk diameter at breast height (DBH) (15 ml/linear meter of canopy width or 5 cm DBH). Inject directly into tree.	Apply according to injection equipment instructions. Adjust rate based on injection equipment suggestions for specific applications.
	Root Dip	2 qts/ 100 gal. of water or 2/3 fl. oz./gal. of water (5 L/1000 L of water)	Apply as a pre-plant dip to the roots for 15-30 minutes. Plant within 24 hours after dipping.

#### TURF (INCLUDES RESIDENTIAL AND COMMERCIAL LAWN APPLICATIONS BY COMMERCIAL APPLICATORS)

Resist 57 fungicide will control Pythium blight, Summer Complex (Bermuda and others), Dollar Spot, Grey Leaf Spot, Brown Patch, Anthracnose, and damping-off diseases in turf grasses on sod farms and lawns, commercial turf production, golf courses (including tees and greens), parks and commercial landscapes.

#### **Use Precautions:**

- Do not graze animals on treated turf.
- Do not feed clippings from treated turf to livestock and poultry.

#### **Application Instructions:**

Begin preventive applications when conditions first favor disease and repeat at recommended intervals. Use higher rates under severe disease conditions. Do not mow or irrigate treated areas until sprays have completely dried.

Disease	Application Method	Rate	Application Program
Pythium (Yellow Turf) Rhizoctonia Sclerotinia Helminthosporium Altemaria Anthracnose (Colletotrichum graminicola)	Foliar Spray	2 to 3 fl. oz./1000 sq. ft. (50 to 90 ml/100 sq. meters)	Apply amount in minimum of 2 gallons of water per 1000 sq. ft. Apply at 10 to 21 day intervals as needed.
		1 to 3 quarts/100 gallons of water/acre. (5 to 7 liters/1000 liters of water/hectare)	For sod farms and large areas: Apply diluted solution to thoroughly wet foliage. Apply at 2 to 3 weeks intervals and repeat as needed.
	Irrigation	Overhead: 2 to 3 qts./ acre (5 to 7 liters/hectare) in at least 100 gal. (1000 L) of water	Apply with normal irrigation schedule. Apply at 10 to 21 day intervals and repeat as needed.

#### STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool, dry place.

**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:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### WARRANTY

**NOTICE:** ACTAGRO WARRANTS THAT THIS PRODUCT CONFORMS TO THE CHEMICAL DESCRIPTION ON THE LABEL THEREOF AND IS REASONABLY FIT FOR THE PURPOSES STATED ON SUCH LABEL ONLY WHEN USED IN ACCORDANCE WITH THE DIRECTIONS UNDER NORMAL USE CONDITIONS. IT IS IMPOSSIBLE TO ELIMINATE ALL RISKS INHERENTLY ASSOCIATED WITH THE USE OF THIS PRODUCT. CROP INJURY, INEFFECTIVENESS, OR OTHER UNINTENDED CONSEQUENCES MAY RESULT BECAUSE OF SUCH FACTORS AS WEATHER CONDITIONS, PRESENCE OF OTHER MATERIALS, OR THE MANNER OF USE OR APPLICATION, ALL OF WHICH ARE BEYOND THE CONTROL OF ACTAGRO.

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