



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

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

May 3, 2023

Lauren A. Fierman  
Regulatory Specialist  
Luxembourg-Pamol, Inc.,  
c/o SciReg, Inc.  
12733 Director's Loop,  
Woodbridge, VA 22192

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment – Add bitter rot as a pest to apples and instructions and application rates for chemigation to strawberry.  
Product Name: ProPhyt  
EPA Registration Number: 42519-22  
EPA Receipt Date: 02/06/2023  
Action Case Number: 00430271

Dear Ms. Fierman:

The amended labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

This approval does not affect any terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the U.S. Environmental Protection Agency (EPA). If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains statements or claims substantially differing from statements or claims made in connection with obtaining

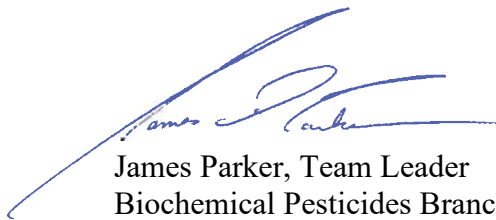
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a FIFRA section 3 registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Sydnie Hetzel by phone at (202) 566-1606 or via email at [hetzel.sydnie@epa.gov](mailto:hetzel.sydnie@epa.gov).

Sincerely,



James Parker, Team Leader  
Biochemical Pesticides Branch  
Biopesticides and Pollution  
Prevention Division (7511M)  
Office of Pesticide Programs

Enclosure

**ACCEPTED**

May 03, 2023

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 42519-22

Master Label

# ProPhyt®

**[A systemic biofungicide containing potassium phosphite]**

**[A systemic biofungicide for the control of several foliar and soil-borne diseases of field crops, grapes, herbs, orchards, [tree nuts], [pecans] and vegetables]**

**[A systemic biofungicide containing potassium phosphite for the control of several foliar and soil-borne diseases of field crops, grapes, herbs, orchards, [tree nuts], [pecans] and vegetables]**

**ACTIVE INGREDIENT:**

Potassium Phosphite\* .....54.50%

**OTHER INGREDIENTS:** .....45.50%

**TOTAL** .....100.00%

\*Phosphorous acid equivalent: 34.30% (4.2 lbs/gal)

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

| <b>FIRST AID</b>  |   |
|---|---|
| <b>If swallowed</b>   | <ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to by a poison control center or doctor.</li> <li>• Do not give anything to an unconscious person.</li> </ul> |
| <b>If in eyes</b>   | <ul style="list-style-type: none"> <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.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>   |
| <b>If on skin or clothing</b>   | <ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>   |
| <p><b>HOT LINE NUMBER 1-800-424-9300</b></p> <p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical information.</p> |   |

**[See inside booklet for additional Precautionary Statements, Directions For Use and First Aid]**

EPA Reg. No.: 42519-22

Net Contents:

EPA Est. No.: 42519-ISR-002

**Manufactured for:**

**LUXEMBOURG – PAMOL, INC.**

**3647 Willowbend Blvd., Suite 810**

**Houston, Texas 77054 U.S.A.**

**Customer Service (713) 661-8800**

Batch No. XXXX-XX



FOR CHEMICAL SPILL, LEAK,  
FIRE OR EXPOSURE CALL  
TOLL FREE: 1-800-424-9300

**AGRICULTURAL CHEMICAL**

DO NOT SHIP OR STORE WITH FOODS, FEEDS, DRUGS OR CLOTHING

**PRECAUTIONARY STATEMENTS**

**Hazards to Humans and Domestic Animals**

**CAUTION**

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

**Personal Protective Equipment (PPE):**

Applicators and other handlers must wear:

- long-sleeved shirt and long pants
- waterproof gloves
- shoes plus socks

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

**User Safety Recommendations:** Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. 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:** For terrestrial uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean highwater mark. Do not contaminate water when disposing of equipment washwater or rinsate.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the State or tribal agency responsible for pesticide regulation. 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.

**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), and restricted entry intervals (REI). 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 of 4 hours unless wearing appropriate PPE.

PPE requirement 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
- waterproof gloves
- shoes plus socks

## **CHEMIGATION**

### **General Chemigation Information**

1. Apply this product only through drip (trickle), microjet, center pivot, solid set, hand move, or moving wheel irrigation system that does not contain aluminum components. Do not apply this product through any other type of irrigation system.
2. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
3. If you have questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.
4. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
5. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
6. Equip the pesticide supply tank with a means for continuous agitation either recirculation or mechanical agitator. Fill the supply tank with the appropriate amount of water and add the ProPhyt® slowly followed by any other products that are compatible and labeled for chemigation. Observe all cautions and limitations on the label of all products used in the mixtures. For fixed position irrigation systems such as center pivot etc., apply the pesticide toward the end of the irrigation cycle. Exact timing will depend upon the desired ProPhyt® application rate and the calibration of the system. For moving systems, apply the ProPhyt® continuously. In all cases, maintain thorough coverage of the crop.

### **For Chemigation Systems Connected to Public Water Systems:**

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, discharge the water from the public water system into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection.

#### Master Label

4. The pesticide injection pipeline must 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.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. 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.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

#### **For Drip (Trickle) Chemigation and Sprinkler Chemigation Systems:**

1. 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.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. 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.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. 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.
6. 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.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

#### **GENERAL INFORMATION**

ProPhyt<sup>®</sup> is a systemic, biofungicide product, which contains phosphorous acid. Phosphorous acid is effective in prevention and control of downy mildew and *Phytophthora*, by activation of the plants' natural resistance mechanism, as well as by direct activity on the fungus. ProPhyt<sup>®</sup> is intended for use as part of an Integrated Pest Management (IPM) system. When used in conjunction with good cultural management practices and as part of a complete disease control program, ProPhyt<sup>®</sup> will control downy mildew, purple blotch, late blight, brown rot (of citrus) and root rot in field crops, vineyards and orchards. In order to achieve maximum results in controlling the disease, carry out spraying before the appearance of the disease or when disease is first observed. Initiate applications when environmental conditions are favorable for disease development. The preharvest interval is 0 days for this product.

**MIXING AND APPLICATION INSTRUCTIONS**

Apply in sufficient water to ensure thorough coverage. Fill spray tank halfway with clean water. Add the required amount of ProPhyt® to the tank as indicated in the table below. While agitating, add the remaining amount of water. Apply solution directly to foliage, unless directed otherwise in the application rate table. For optimum control, thorough coverage is required.

**COMPATIBILITY**

ProPhyt® is believed to be compatible with most commonly used pesticides. Consult specific product labels for additional information. Conduct a tank spray compatibility test when you plan to mix this product with other products. To determine the physical compatibility of this product with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to approximately one quart of water with agitation. Add dry formulations first, then flowables, and then emulsifiable concentrates last. After thorough mixing, allow this mixture to stand for 5 minutes. If the combination remains mixed or can be readily remixed, it is physically compatible. Once compatibility has been proven, use the same procedure for adding products to the spray tank.

Use tank-mix combinations on a small number of plants before treating large areas, as crop sensitivity to these mixtures may vary.

ProPhyt® has been evaluated for phytotoxicity on a large variety of crops under various normal field conditions. However, testing all crop varieties, in all mixtures and combinations is not feasible. Test a small portion of the area to be treated for phytotoxicity, before treating the entire area. Do not apply ProPhyt® to plants under stress.

**Important:**

Do not apply on plants when they are under water stress, or during severe weather conditions such as high or very low temperatures. Begin spraying when environmental conditions are favorable for the development of disease or as indicated below.

**APPLICATION INSTRUCTIONS**

Do not apply more than the following application rates. Unless specified, there is no limit to the number of applications. When applying ProPhyt®, be sure the spray solution has a **pH > 5.5** to limit the possibility of phytotoxicity to the crop. Apply by air or ground in sufficient water for complete coverage of the foliage. Use a minimum of 5 gallons of water per acre by air, unless specified (see cranberries, pecans, snap beans and stone fruit). Apply by ground in a minimum of 20 gallons per acre.

| <b>Crop</b>      | <b>Disease</b>   | <b>Rate</b>                 | <b>Remarks</b>   |
|------------------|--|-----------------------------|--|
| <b>Asparagus</b> | Spear slime & Crown rot<br>( <i>Phytophthora</i> spp.) | 2-4 <sup>1</sup> pints/acre | Apply ProPhyt® to fully expanded asparagus ferns using sufficient water for thorough coverage. Do not apply to ferns once they begin to senesce. |

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| <p><b>Avocado</b></p>   | <p>Root rot<br/>(<i>Phytophthora</i><br/>spp.)</p>  | <p>Foliar spray:<br/>4 pints/acre</p>   | <p>Make four preventive foliar applications with spray volumes of 125-300 gal/acre: twice (at a 10-14 day interval) in each of two root growth seasons (usually May and July). Avoid applying during period of foliar growth.</p>   |
|   |   | <p>Injection: Measure the area under the tree canopy. Apply 0.034 fl. oz. (1 mL) of ProPhyt® in 0.68 fl. oz. (20 mL) water for every 10 feet of area under the canopy. Divide the total amount needed per tree by the number of injections to be spaced 3-6 inches apart.</p> | <p>Inject trees at spring flush. Remove 2-4 inches of soil from the base of the tree to uncover the top of the root flare. Drill 3/16-inch holes at a slight downward angle 1-2 inches into root flare to allow insertion of the syringe or injection tee to form an airtight contact with the xylem and the delivery point of the injection. Disinfect the drill bit with 20% bleach between trees. Inject only ProPhyt® and water. Make a second application during the summer flush.</p> |
| <p><b>Blueberry</b></p>   | <p>Phytophthora &amp; Pythium root rot</p>  | <p>4 pints/acre</p>   | <p>Begin foliar applications at pink bud stage in the spring, and continue on a 14-21 day interval in a minimum of 50 gal/acre.</p>   |
|   | <p>Alternaria fruit rot (<i>Alternaria tenuissima</i>)<br/>Septoria leaf spot<br/>Anthracnose</p> | <p>4 pints/acre</p>   | <p>Use cover and post-harvest sprays on a 14 day interval for suppression. Use sufficient water to obtain thorough coverage.</p>  |
|   | <p>Bacterial Wilt*</p>  | <p>4 pints/acre</p>   | <p>For suppression of Bacterial Wilt, apply via drip irrigation using at least 200 gallons of water per acre. For potted plants, use in a drench of 100 gallons of water prior to planting in an infected field. Make follow up applications on 14-28 day intervals.</p>  |
| <p><b>Brassica vegetables</b>, such as broccoli, cabbage, cauliflower</p> | <p>Downy mildew</p>   | <p>2-4<sup>1</sup> pints/acre</p>   | <p>Make preventive foliar applications at a 4-10 day interval, as the disease situation dictates. Use sufficient water to obtain adequate coverage.</p>   |



Master Label

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| (See note 6 for full crop group)   |   |  |  |
| <b>Bulb vegetables,</b> such as garlic, onion, shallot<br><br>(See note 7 for full crop group) | Downy mildew ( <i>Peronospora destructor</i> )<br>Purple blotch ( <i>Alternaria porri</i> ) | 4 pints/acre   | Apply preventively in 20-50 gal/acre <sup>2,3</sup> . Continue applications on a 7-14 day interval. Do not exceed 7 applications per crop season.  |
| <b>Caneberries sub-group,</b> such as blackberry<br><br>(See note 8 for full crop group)       | Phytophthora root rot<br><br>Orange Cane Blotch ( <i>Cephaleuros virescens</i> )            | 4 pints/acre   | Apply as a foliar spray after bud break (1-3 inches of new growth) and repeat 3-4 weeks later. Two additional applications may be made after harvest. Use a minimum of 40-50 gal/acre. For orange cane blotch, apply up to 6 applications per year starting in spring.   |
| <b>Citrus,</b> such as grapefruit, kumquat, lemon, lime, orange                                | Phytophthora Brown rot  | 4 pints/acre   | Make preventive foliar applications during spring and fall. Spray to wetness (about 100-250 gal/acre).   |
|  | Root rot ( <i>Phytophthora</i> spp.)  | Foliar spray:<br>4 pints/acre  | Make preventive foliar applications when conditions favor disease development, usually three times annually (March-April, May-June, and Sept.-Oct.). Spray to wetness (about 100-250 gal/acre).  |
|  |   | Injection: Measure the area under the tree canopy. Apply 0.034 fl. oz. (1 mL) of ProPhyt® in 0.68 fl. oz. (20 mL) water for every 10 feet of area under the canopy. Divide the total amount needed per tree by the number of injections to be spaced 3-6 inches apart. | Inject trees at spring flush. Remove 2-4 inches of soil from the base of the tree to uncover the top of the root flare. Drill 3/16-inch holes at a slight downward angle 1-2 inches into root flare to allow insertion of the syringe or injection tee to form an airtight contact with the xylem and the delivery point of the injection. Disinfect the drill bit with 20% bleach between trees. Inject only ProPhyt® and water. Make a second application during the summer flush. |
|  |   | Sprinklers below canopy:<br>4-8 <sup>1</sup> pints/acre  | Make application in at least 100 gallons of water per acre after trees become established, in rotation with  |
| Drip irrigation:   |   |  |  |

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|                         |   | 4-6 <sup>1</sup> pints/acre                           | Ridomil or Ridomil Gold timed with the root flushes.   |
|                         | Brown spot<br>( <i>Alternaria alternata</i> ) | 2-4 <sup>1</sup> pints/acre                           | Begin foliar applications starting on the spring flush, at petal fall and then maintain spraying on a 2 week interval until the fruit are 3 months old, or until conditions are no longer conducive for the disease.   |
| <b>Citrus seedlings</b> | Phytophthora root rot                         | 2 gal per 100 gal (2%)                                | Make drench of ½ pint solution per seedling in a 2 gallon soil sleeve or pot, every two months during the season the seedlings are actively growing. Application can be made through drip irrigation system. Do not apply before or after drastic pruning. Do not combine with other products. |
| <b>Conifers</b>         | <i>Phytophthora</i><br><i>Pythium</i> spp.    | Preplant dip:<br>4 pints/100 gal                      | Plants such as Douglas Fir, spruce and pines. Thoroughly wet plant and root mass.  |
|                         |   | Foliar application:<br>2-4 <sup>1</sup> pints/100 gal | Spray to wetness using no more than 400 gal/acre. Begin applications in the spring before growth starts. Do not apply more than once every 30 days.  |
| <b>Corn</b>             | Downy mildew                                  | 3-4 <sup>1</sup> pints/acre                           | Use in conjunction with resistant cultivars. Make initial application within two weeks of emergence and a second application 10-14 days later.   |

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| <p><b>Cranberries</b></p>  | <p>Phytophthora root rot<br/>(<i>Phytophthora</i> spp.)</p>                  | <p>4 pints/acre</p>               | <p>Make three applications, by air or chemigation, on approximately a 3 week interval, starting at the rough neck stage, then at bloom and again during fruit development. Aerial applications may be made with 4 pints/acre in a spray volume of 10 gallons of water per acre. To avoid potential phytotoxicity effects, the pH of the spray solution must be above 5.5, or run irrigation for a minimum of 30 minutes to fully wet the foliage prior to application.</p> |
| <p><b>Cucurbits</b>, such as cucumber, melon, pumpkin, squash (in open field and under coverage)<br/><br/>(See note 9 for full crop group)</p> | <p>Downy mildew</p>  | <p>2-4<sup>1</sup> pints/acre</p> | <p>Make preventive foliar applications at one-week intervals with a spray volume of 40-100 gal/acre, depending on size of plants. Use sufficient water to obtain adequate coverage.</p>  |
|  | <p><i>Phytophthora capsici</i></p>   | <p>See remarks</p>                | <p>Drench application of 4 pints per 100 gallons water to transplants prior to transplanting or a 5 fl. oz./1000 feet of row in furrow drench at planting, followed by weekly foliar applications at 6 pints/acre, beginning 2 weeks after planting will suppress this disease.</p>  |
| <p><b>Fruiting vegetables</b>, such as tomato, tomatillo<br/><br/>(See note 10 for full crop group)</p>  | <p>Late blight<br/>(<i>Phytophthora infestans</i>)</p>                       | <p>4 pints/acre</p>               | <p>Make preventive foliar applications starting 6 weeks after seeding or immediately after transplanting. Apply at 5-10 day interval.<sup>3</sup> Thorough coverage is required. Best applied with Mancozeb or Chlorothalonil.</p>   |
| <p><b>Ginseng</b></p>  | <p>Phytophthora foliar &amp; root rot<br/>(<i>Phytophthora cactorum</i>)</p> | <p>4 pints/acre</p>               | <p>Make applications in 100 gal/acre beginning in the spring when conditions first become conducive to the disease. Repeat applications on a 7 day interval as long as conditions remain favorable for the disease.</p>  |

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|   |   |                             | Do not apply more than 9 sprays a season.  |
| <b>Grapes</b>   | Downy mildew<br>Black rot<br>Phomopsis<br>(suppression) | 2-4 <sup>1</sup> pints/acre | Prebloom, apply 50 gal/acre, postbloom apply 50-100 gal/acre. Spray preventively to control downy mildew <sup>3</sup> . Key to controlling Phomopsis is a season-long spray program on a 7-10 day interval starting at the 1-3 inch shoot stage. Do not exceed spray solution concentration of 0.5%. Do not apply to Venifera grapes by back pack sprayer. |
| <b>Herbs and Spices,</b><br>such as basil,<br>tarragon, thyme<br><br>(See note 11 for full<br>crop group)     | Downy mildew  | 3-4 <sup>1</sup> pints/acre | Best applied preventively on a 7 day interval in at least 30 gal of water per acre. Due to the number of herbs and spices, conduct a phytotoxicity trial first on a limited area of the crop.  |
| <b>Hops</b>   | Downy mildew<br>( <i>Pseudoperonospora humuli</i> )     | 2-4 <sup>1</sup> pints/acre | Make applications at the first evidence of foliar infection using the following schedule 1) when shoots are 6-12 inches high, 2) after training when vines are 5-6 feet tall, 3) approximately 3 weeks after the second application, and 4) during bloom. Use sufficient water to insure complete coverage of the foliage.                                 |
| <b>Leafy vegetables,</b><br>such as lettuce,<br>spinach<br><br>(See note 12 for full<br>crop group)           | Downy mildew  | 2-4 <sup>1</sup> pints/acre | Make preventive foliar applications at 4-10 day interval as the disease situation dictates. Use a spray volume of 10-30 gal/acre. <sup>3</sup> Begin spraying at 2-4 leaf stage of growth.   |
| Spinach   | White rust  | 3-4 <sup>1</sup> pints/acre | Best applied in alternation with Quadris <sup>®</sup> 2.08F.   |
| <b>Legume<br/>vegetables</b> such as<br>edible beans,<br>soybeans<br><br>(See note 13 for full<br>crop group) | Downy mildew  | 3-4 <sup>1</sup> pints/acre | Start applications at flowering. Repeat on a 7 day interval or as conditions dictate. On soybeans, ProPhyt <sup>®</sup> may be mixed with a triazole fungicide to improve control of soybean rust and yields.  |

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| Snap beans                      | Pythium and Rhizoctonia                       | 4 fl. oz./1000 feet of row +<br>0.42 fl. oz./1000 feet of row of Quadris® 2.08F. | Apply in furrow at planting. For best control of damping off, apply in combination with Quadris® 2.08F.  |
|                                 | Pythium cottony leak                          | 4-6 <sup>1</sup> pints/acre  | Apply at onset of disease and repeat every 7 days. Make aerial applications in a minimum of 10 gallons of water per acre.  |
| Peanuts                         | Pythium Pod rot                               | 4 pints/acre   | Apply at pod set and 4 weeks later.  |
|                                 | Pythium + Rhizoctonia Pod rot                 | 4 pints/acre<br>ProPhyt® + 18.5 fl. oz./acre Abound® Flowable Fungicide          |  |
| Pepper                          | <i>Phytophthora capsici</i>                   | 6 pints/acre   | Drench application of 4 pints per 100 gallons water to transplants prior to transplanting or a 5 fl. oz./1000 feet of row in-furrow drench at planting followed by weekly foliar applications at 6 pints/acre beginning 2 weeks after planting will suppress this disease. |
| Pineapple                       | Heart rot ( <i>Phytophthora parasitica</i> )  | Preplant dip: See remarks  | Use 2 pints per 100 gallons per acre of slips.   |
|                                 |   | Established plantings: 3 pints/acre  | Apply foliar sprays when conditions are conducive for disease development, or are forecast. Continue applications on a 3 month interval. Use sufficient water to insure complete coverage.   |
| Pome Fruit, such as apple, pear | Collar & foot rot ( <i>Phytophthora</i> spp.) | 2-4 <sup>1</sup> pints/acre  | Apply in 100 gal/acre (thorough spray coverage is required) when conditions favor disease development, and continue on a 30-60 day interval. Use the low rate on the shorter interval, and the high rate on the longer interval.   |

Master Label

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| Apple               | Summer diseases (including Alternaria blotch, sooty blotch, fly speck, black pox, bitter rot)   | 4-6 <sup>1</sup> pints/acre   | Use a combination of ProPhyt <sup>®</sup> at 4 pints/acre plus Captan 80 WDG at 3.75 lbs/acre. In the second and later cover sprays, use a 10-14 day interval. (Observe all restrictions on the Captan 80 WDG label.)   |
|                     | Scab  | 3-4 <sup>1</sup> pints/acre   | Apply in combination with Mancozeb at 3 lbs/acre beginning at ¼ - ½ inch green tip through first cover on a 7-10 day interval or according to forecasted infection events. Continue with ProPhyt <sup>®</sup> + Captan 80 WDG in the remaining cover sprays.  |
| Potato, pre-harvest | Late blight ( <i>Phytophthora infestans</i> )   | 4 pints/acre  | Make preventive foliar applications. Apply on a 5-10 day interval. <sup>3</sup> Thorough coverage is required. Best applied with other fungicides labeled for late blight including: Catamaran <sup>®</sup> , Mancozeb, or Chlorothalonil.  |
|                     | Tuber rot diseases: Pink rot ( <i>Phytophthora erythrocephala</i> ) Late blight tuber rot ( <i>Phytophthora infestans</i> ) and Pythium leak ( <i>Pythium</i> spp.) | At planting: 5-8 <sup>1</sup> pints/acre + 0.42 fl. oz./1000 feet of row Ridomil <sup>®</sup> Gold SL or 1.68 fl. oz./1000 feet of row MetaStar <sup>®</sup> 2E AG or In field/In season: 4-8 <sup>1</sup> pints/acre alone or in combination with 4 pints/acre Catamaran | Suppression of Pink rot, Late blight tuber rot and Pythium leak. Apply in a 6-8 inch band at planting in a minimum of 3 gallons of water per acre. Make applications directly over the seed pieces prior to row closure. In-season applications of ProPhyt <sup>®</sup> alone or in combination with a mefenoxam product may be necessary when disease conditions are severe, disease was present in a previous potato crop, or a susceptible or moderately susceptible variety is being grown. Initiate applications when tubers are at dime in size. Repeat 14 and 28 days later. |

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| <p><b>Potato,</b><br/>post-harvest</p> | <p>Late blight tuber rot<br/>(<i>Phytophthora infestans</i>)<br/>Pink rot<br/>(<i>Phytophthora erythrocephala</i>)<br/>Pythium leak<br/>(<i>Pythium</i> spp.)<br/>and Silver scurf rot<br/>(<i>Helminthosporium solani</i>)</p> | <p>13 fl. oz. in half a gallon of water sprayed on a ton of tubers</p> | <p>For suppression of Late blight tuber rot, Pink rot, Pythium leak, and Silver scurf.</p>                               |
| <p><b>Sorghum Grain</b></p>            | <p>Downy mildew<sup>4</sup></p>   | <p>36 fl. oz./100 lbs.</p>   | <p>Seed treatment: Overtreat Apron<sup>®</sup> or Apron<sup>®</sup> XL treated seed that has 90% or more germinated.</p> |
|  |   | <p>4-6<sup>1</sup> pints/acre<sup>5</sup></p>                          | <p>In-furrow spray: Spray in furrow at planting over Apron<sup>®</sup> or Apron<sup>®</sup> XL treated seed.</p>         |





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|  | Leather rot<br>( <i>Phytophthora cactorum</i> ) | 2-4 <sup>1</sup> pints/acre   | Begin applications at 10% bloom; continue spraying on a 7-14 day interval through fruit set while conditions are favorable for disease.<br><br>Chemigation: Apply 2-4 pints of ProPhyt. Follow CHEMIGATION application instructions in the General Information section of this label. |
| <b>Sod Farms</b>                         | Pythium   | 6 fl. oz. per 1000 sq. ft. at 14 day intervals                              | Begin preventive applications when conditions first favor disease. Repeat at recommended intervals. Do not water or mow treated areas until foliage is completely dry.  |
|  | Yellow tuft                                     | 12 fl. oz. per 1000 sq. ft. at 21 day intervals                             |   |
| <b>Sunflowers</b>                        | Downy mildew                                    | 4 pints/acre  | Best applied preventatively one week following emergence. If conditions remain conducive for disease development, apply on a 7 day schedule.  |
| <b>Tree Nuts:</b><br>Almonds, Walnuts    | Scab*<br>( <i>Cladosporium</i> spp.)            | 2-4 <sup>1</sup> pints/acre applied foliarly in 100 gallons water by ground | Begin applications on a 7-14 day interval (closer during rainfall) at petal fall. Continue until 5 weeks after petal fall.  |
|  | Anthracnose*<br>( <i>Colletotrichum</i> spp.)   |   | Apply sprays beginning at 5-10% bloom or pink bud, and repeat every 10-14 days if rains persist. Late spring rains may necessitate additional applications into May.  |
|  | <i>Alternaria alternata</i> *<br>(Suppression)  |   | If monitoring indicates the presence of <i>Alternaria</i> , begin late-spring treatments about mid-April. In orchards with a history of the disease, treat in mid- to late April and 2-3 weeks later.   |
| Almonds, Pistachios, Pecans, and Walnuts | Phytophthora root and collar rot                | 2-4 <sup>1</sup> pints/acre applied foliarly in 100 gallons water by ground | Apply in spring, mid-summer and fall prior to senescence.   |

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|              |   | Sprinklers below canopy: 4-8 <sup>1</sup> pints/acre   | Make application in at least 100 gallons of water per acre after trees become established, in rotation with Ridomil or Ridomil Gold timed with the root flushes.<br><br>Apply in spring, mid-summer, and fall prior to senescence.   |
|              |   | Drip irrigation: 4-8 <sup>1</sup> pints/acre   |  |
| Pecans       | Scab ( <i>Cladosporium caryigenum</i> )<br><br>Anthracnose* ( <i>Colletotrichum gleosporoides</i> ) | 2-5 <sup>1</sup> pints/acre in 100 gallons water by ground or<br>2-3 <sup>1</sup> pints/acre in 7-10 gallons water/acre by air | Apply on a preventative schedule beginning at bud break, and continue on a 10-14 day interval.<br><br>Applications to the nuts may be alternated or in conjunction with label rates of Elast® 400F or Super Tin® 80WP. The first three applications of ProPhyt® may be made by air to the young emerging foliage in 5 or more gallons of water per acre. Make later aerial applications in 7-10 gallons of water per acre. |
| Walnuts      | Stem canker ( <i>Phytophthora cinnamomi</i> ) (Suppression)   | 3 quarts in 100 gallons water/acre   | Make a single foliar application in the early fall, before leaves begin to senesce and the trees are still actively translocating to the roots. Make a single foliar application per season.   |
| <b>Wheat</b> | Downy mildew ( <i>Sclerophthora macrospore</i> ) (Suppression)                                      | 3-4 <sup>1</sup> pints/acre  | Make applications at the onset of disease. Repeat treatments on a 7-10 day interval, as needed. Use 4 pints/acre for heavy disease pressure situations.  |

\* Not for use in California.

- 1 Use higher rate when conditions favor disease development and/or with increased disease pressure.
- 2 Use a low spray volume, so that the material does not wash off or drip to the ground.
- 3 For prevention of downy mildew and/or late blight in bulb, fruiting and leafy vegetables, potato, and grapes, combine ProPhyt® treatment with additional protective products, specifically with dithiocarbamates, by tank-mix or by alternating treatments.
- 4 To improve disease control, use varieties that have tolerance to downy mildew.
- 5 When spraying in-furrow, apply ProPhyt® alone in 20 gallons of water per acre.
- 6 Brassica (cole) leafy vegetables: broccoli, broccoli raab (rapini), Brussels sprouts, cabbage, Chinese broccoli (gai lan), Chinese cabbage (bok choy and napa), Chinese

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mustard cabbage (gai choy), cauliflower, cavalo broccolo, collards, kale, kohlrabi, mizuna, mustard greens, mustard spinach, rape greens, turnip greens.

- 7 Bulb vegetables: chive, garlic, leek, green onion, dry bulb onion, Welsh onion, shallot.
- 8 Caneberry sub-group: blackberry, boysenberry, loganberry, red and black raspberry, cultivars and/or hybrids of these.
- 9 Cucurbit vegetables: cantaloupe, cucumber, Chinese waxgourd, citron melon, gherkin, gourd (edible), momordica spp.(balsam apple, balsam pear, bitter melon, Chinese cucumber) melon, muskmelon, varieties of *Cucumis melo*, pumpkin, summer and winter squash, watermelon.
- 10 Fruiting vegetables (except cucurbits): bell pepper, chili pepper, cooking pepper, eggplant, groundcherry, pepino, pimento, sweet pepper, tomatillo and tomato.
- 11 Herbs and spices: allspice, anise, basil balm, chamomile, caraway, catnip, celery seed, coriander leaf, cilantro, dill, fennel, lavender, lemongrass, marigold, marjoram, pepper (black and white), rosemary, saffron, sage, savory, sweet bay, tansy, tarragon, thyme, vanilla, wintergreen, woodruff and wormwood.
- 12 Leafy vegetables (except brassica vegetables): amaranth, arugula, cardoon, celery, Chinese celery, celtuce, chervil, chrysanthemum, corn salad, cress (garden upland), endive, escarole fennel (florence), lettuce (head and leaf), parsley, purslane radicchio (red chicory), rhubarb, spinach, New Zealand and vine spinach, Swiss chard.
- 13 Legume vegetables: Beans (succulent & dry) *Phaseolus*, Pea (succulent & dry) *Pisum*, and soybean. Commodities include: Bean (*Lupinus*) grain, sweet and white lupin, bean (*phaseolus*) field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean.  
Bean (*Vigna*) adzuki bean, asparagus bean, blackeyed pea, broad bean (dry), catjang, Chinese longbean, cowpea, crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, broad bean (fava), chickpea (garbanzo) guar, jackbean, lentil, Pea (*Pisum*) dwarf pea, edible pod pea, English pea, field pea, garden pea, green pea, snowpea, sugar snap pea, pigeon pea, soybean (immature seed).

## STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store in a dry, cool 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 Handling:** Nonrefillable Container: Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

**Container sizes of 5 gallons or less:** Triple rinse as follows: Empty the remaining contents into the application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container  $\frac{1}{4}$  full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times.

**Container sizes of greater than 5 gallons:** Triple rinse as follows: Empty the remaining contents into the application equipment or a mix tank. Fill the container  $\frac{1}{4}$  full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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## WARRANTY LIMITATIONS AND DISCLAIMER

To the extent consistent with applicable law, Luxembourg warrants that at the time of delivery, the product will conform to its chemical description on the label, that it will pass without objection in the trade under the contract description, that seller will convey good title thereto, and that such product will be delivered free from any lawful security interest, lien or encumbrance.

This is the only warranty made on this product. Luxembourg EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND, EXCEPT AS SET FORTH IN THE ABOVE PARAGRAPH, ANY OTHER EXPRESS OR IMPLIED WARRANTIES. To the extent consistent with applicable law, buyer assumes all risk of use of this material when such use is contrary to label instructions. Read and follow the label directions carefully.

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Super Tin<sup>®</sup> is a registered trademark of LG Life Sciences, Ltd.