

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

**OFFICE OF CHEMICAL SAFETY** AND POLLUTION PREVENTION

September 11, 2015

Lisa Nichols **Registration Specialist** Loveland Products Inc. P.O. Box 1286 Greeley, CO 80632-1286

Subject: Labeling Notification per Pesticide Registration Notice (PRN) 98-10 – To revise one sentence referral statement for precautionary statements, first aid, directions for use, storage and disposal, and other use information on first page of label booklet. Product Name: Rampart Fungicide EPA Registration Number: 34704-924 Application Date: August 11, 2015 **OPP Decision Number: 508033** 

Dear Ms. Nichols:

The U.S. Environmental Protection Agency (EPA) is in receipt of your application for notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Biopesticides and Pollution Prevention Division (BPPD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The labeling submitted with this application has been stamped "Notification" and will be placed in our records. You must submit one (1) copy of the final printed labeling with the modifications.

If you have any questions, please contact Colin G. Walsh of my team by phone at (703) 308-0298 or via email at walsh.colin@epa.gov.

Sincerely,

andrew C. Buycelow

Andrew C. Bryceland, Team Leader **Biochemical Pesticides Branch Biopesticides and Pollution** Prevention Division (7511P) Office of Pesticide Programs

Enclosure





NOTIFICATION 34704-924

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

09/11/2015

### A FUNGICIDE FOR THE CONTROL OF DOWNY MILDEW, PHYTOPHTHORA, PYTHIUM AND VARIOUS OTHER DISEASES ON AGRICULTURAL CROPS AND GREENHOUSE CROPS, INDOOR AND OUTDOOR ORNAMENTALS, BEDDING PLANTS, TURF, FORESTRY APPLICATIONS AND DOMESTIC TREES, INCLUDING CONIFERS, PINES, OAKS AND POST-HARVEST TREATMENT OF POTATOES FOR PINK ROT AND LATE BLIGHT AND POST-HARVEST CONTROL OF *PENICILLIUM DIGITATUM* (GREEN MOLD), *PENICILLIUM ITALICUM* (BLUE MOLD) AND *PHYTOPHTHORA* SPP. (BROWN ROT ON CITRUS FRUIT).

ACTIVE INGREDIENTS:		
Mono- and dipotassium salts of Phosphorous Acid*		 <b>53</b> %
OTHER INGREDIENTS:		 47%
	-	100%

\*Contains 6.22 pounds per gallon of active ingredients, mono- and dipotassium salts of phosphorous acid. Equivalent to 3.90 pounds phosphorous acid per gallon.

# KEEP OUT OF REACH OF CHILDREN CAUTION

For additional Precautionary Statements, complete First Aid, Directions for Use, Storage and Disposal and other use information see inside this label booklet.

### **FIRST AID STATEMENTS**

<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 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>
 • Gail a poison control center of doctor for treatment advice.

# HOT LINE NUMBER

Have the container or label with you when calling a poison control center or doctor, or going for treatment. **FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL 24 HOURS: 1-866-944-8565.** 

EPA REG. NO. 34704-924

EPA EST. NO. 34704-MS-001

NET CONTENTS 2.5 GAL (9.46 L)

092514 V3D 08015

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# PRECAUTIONARY STATEMENTS HAZARDS 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, using tobacco, or using the toilet.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants,
- Chemical resistant gloves,
- Shoes plus socks and
- Protective eyewear.

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

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

# **USER SAFETY INSTRUCTIONS**

#### Users should:

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.

## **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.

# PHYSICAL AND CHEMICAL HAZARDS

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

### **DIRECTIONS FOR USE**

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

When using Rampart fungicide with Pentra-Bark®, adhere to applicable label directions. Only use Pentra-Bark with basal bark or tree injection applications.

### 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 interval. The requirements in this box only apply to uses of this product that are covered by the Workers 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,

- Socks, shoes,
- Chemical resistant gloves,
- Protective eyewear.

# **NON-AGRICULTURAL USE REQUIREMENTS**

The requirements of 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**

Apply Rampart® Fungicide by various application methods, including foliar sprays, trunk injection\*, soil drench, soil incorporation, basal bark application, and bare root dip. For foliar sprays, apply Rampart Fungicide with sufficient water for adequate coverage of foliage, according to crop and growth stage. To insure good coverage, spray to wet. \*Not for use in New York

### GENERAL APPLICATION INSTRUCTIONS (TRUNK INJECTION ONLY\*)

Rampart Fungicide is a systemic fungicide for the prevention and treatment of Downy mildew, Sudden oak death (*Phytophthora ramo-rum*), root rots (*Phytophthora* spp.), *Pythium* and various other disease of agricultural trees, indoor and outdoor ornamentals, forestry applications including domestic trees, conifers, pines and oaks. This product may be applied up to the day of harvest. \*Not for use in New York

# **MIXING INSTRUCTIONS**

1. Fill the spray tank with 1/2 of the required volume of water.

2. Add Rampart Fungicide slowly to the tank and agitate by hydraulic or mechanical means.

3. Continue to fill the tank with water to the desired volume while agitating.

4. Continue agitation when applying.

For 1.0 gallon (3.785 liters) container sizes: this package can treat up to 34,848 square feet at the maximum treatment rate.

For 2.5 gallons (9.463 liters) container sizes: this package can treat up to 2 acres at the maximum treatment rate.

For 5.0 gallons (18.925 liters) container sizes: this package can treat up to 4 acres at the maximum treatment rate.

# LOW VOLUME AND ULTRA-LOW VOLUME APPLICATIONS

Label rates are written for conventional application equipment. For LV/ULV equipment, use per acre rate of Rampart Fungicide and adjust amount of water to equipment needs. Always conduct a phytotoxicity test on a small area before applying to a large area in order to asses any potential risk to plants.

### **COMPATIBILITY**

Mixing Rampart Fungicide with certain surfactants, foliar fertilizers or other pesticides may cause crop injury. Rampart Fungicide is a slightly acidic buffer solution. Avoid mixing Rampart Fungicide 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). 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 to 7 days later for visual symptoms.

Test the compatibility of spray adjuvants (i.e. stickers, spreaders, wetting agents) with Rampart Fungicide before use. Do not use acidifying type compatibility agents.

To determine the compatibility of Rampart Fungicide with other products, use a jar compatibility test. Add the correct proportions of each product and the appropriate quantity of water to clean container, thoroughly mix, then let stand for 3 to 5 minutes. If the mixture remains in solution or can be remixed readily, the products are considered compatible.

Compatability (Trunk Injection Only\*): Use only Rampart Fungicide alone when used as a trunk injection. To avoid undesirable phytotoxicity, do not apply Rampart Fungicide to trees treated with other pesticides or copper based compounds at intervals less than 20 days, unless instructed to do so by your consultant.

\*Not for use in New York

## CHEMIGATION APPLICATIONS THROUGH SPRINKLER AND DRIP IRRIGATION SYSTEMS

Apply this product through microjet, drip, 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 1/2 to 3/4 of desired amount of water. Start mechanical or hydraulic agitation. Add the required amount of Rampart Fungicide, 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 Rampart Fungicide into the irrigation water line so as to deliver the desired rate per acre. Inject the Rampart Fungicide solution with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing. For other questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.

**Note:** For microjet and drip irrigation systems: Avoid further irrigation of the treated area for 24 to 48 hours after treatment with Rampart Fungicide has been completed. For solid set and center pivot irrigation systems: Avoid further irrigation of the Rampart Fungicide 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 speed 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 connection 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.

### GENERAL INSTRUCTIONS FOR APPLICATIONS FOOD CROPS

Rampart Fungicide is used for control of Downy mildew, *Erwinia amylovora, Fusarium,* Powdery mildew, *Phytophthora, Pythium* and *Rhizoctonia* disease (such as Blue mold, Brown rot, Canker, Crown/Collar rot, Fire blight, Foot rot, Fruit/Foliar rot, Heart rot, Late blight, Leather rot, Pink rot, Pythium leak, Purple blotch, Red stele, Root rot, Soft rot, etc.) of agronomic crops. (See specific crop groupings for additional diseases.) This product may be applied up to the day of harvest.

#### Rampart Fungicide is applied to plants including:

**Berry Crop Grouping:** Blackberry (including Bingberry, Black satin berry, Boysenberry, Cherokee blackberry, Chesterberry, Cheyenne blackberry, Coryberry, Darrowberry, Dewberry, Dirksen thornless berry, Himalayaberry, Hullberry, Lavacaberry, Lowberry, Lucretiaberry, Mammoth blackberry, Marionberry, Nectarberry, Olallieberry, Oregon evergreen berry, Phenomenalberry, Rangeberry, Ravenberry, Rossberry, 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.

Disease	Application Method	Rate	Application Program
Anthracnose Fusarium	Foliar	1.0 to 3.0 qt in a minimum of 20.0 gal of	<b>Disease Prevention Program*:</b> Apply lower rate at 2- to 4-week intervals after plants become established. Do not apply
Phytophthora Pythium Rhizoctonia Xanthomonas camestris	or	water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	Rampart Fungicide at intervals less than 3 days. <b>Disease Control Program:</b> Apply higher rate at 2- to 3-week intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity. Do not apply
Xantiononas camostrio	Aerial Application	1.0 to 3.0 qt in a minimum of 10.0 gal of water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	Rampart Fungicide at intervals less than 3 days.
	Root Dip	2.0 qt/100 gal of water, 0.6 fl oz/gal of water (5.0 L/1000 L of water)	Apply as pre-plant dip to the roots for 15 to 30 minutes. Plant within 24 hours after dipping.

Disease	Application Method	Rate	Application Program
Anthracnose Fusarium Phytophthora Pythium Rhizoctonia Xanthomonas camestris cont'd.:	Irrigation	Overhead: 2.0 to 4.0 qt in a minimum of 100 gal of water (10.0 L in a minimum of 1000 L of water) Drip: 2.0 to 3.0 qt in minimum of 100 gal of water (5.0 to 7.0 L in a minimum of 1000 L of water)	Apply with normal irrigation schedule. Follow <b>Disease</b> <b>Prevention Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.
Downy mildew Powdery mildew	Foliar or Aerial Application	1.0 to 3.0 qt in 100 gal of water/A (3.0 to 8.0 L in 1000 L of water/ha) 1.0 to 3.0 qt in a minimum of 10.0 gal of water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	Apply at 2- to 3-week intervals. Follow <b>Disease Prevention</b> <b>Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.

\* Check with your local Extension Agent if you are unsure these conditions exist.

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

Disease	Application Method	Rate	Application Program
Anthracnose Fusarium Phytophthora Pythium Rhizoctonia	Foliar or	1.0 to 3.0 qt in a minimum of 20.0 gal of water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	<b>Disease Prevention Program</b> *: Apply lower rate at 2- to 4-week intervals after plants become established. Do not apply Rampart Fungicide at intervals less than 3 days. <b>Disease Control Program:</b> Apply higher rate at 2- to 3-week intervals until control is reached. Consult with Farm Advisor
Xanthomonas camestris	Aerial Application	1.0 to 3.0 qt in a minimum of 10.0 gal of water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	or crop expert to determine disease severity. Do not apply Rampart Fungicide at intervals less than 3 days.
F	Root Dip	1.0 qt/100 gal of water, 0.3 fl oz/gal of water (2.5 L/1000 L of water)	Apply as pre-plant dip immediately prior to planting. (100 gal is intended to treat the number of slips required to plant 1 A.)
	Irrigation	Overhead: 2.0 to 4.0 qt in a minimum of 20.0 gal of water (5.0 to 10.0 L in a minimum of 100 L of water) Drip: 2.0 to 3.0 qt in a minimum of 100 gal of water (5.0 to 7.0 L in a minimum of 1000 L of water)	Apply with normal irrigation schedule. Follow <b>Disease</b> <b>Prevention Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.

<b>Disease Prevention</b> Is stated above. Do not s than 3 days.

\* Check with your local Extension Agent if you are unsure these conditions exist.

**Cereal Grains, Forage and Fiber Crop Grouping:** 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.

Make applications prior to disease development in conjunction with good cultural management practices. Use the higher rate when disease pressure is severe. Use rates and frequency are designed to prevent plant injury. If more frequent applications are necessary for disease control, consult a crop expert and follow their instructions. 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 Rampart Fungicide foliarly to plants treated with copper based compounds at less than 20-day intervals unless instructed to do so by your consultant. Allow foliage to completely dry after application. Do not apply when conditions favor wet tissue for prolonged periods (>4 hours).

Disease	Application Method	Rate	Application Program
Anthracnose Fusarium	Foliar	1.0 to 3.0 qt in a minimum of 20.0 gal of	<b>Disease Prevention Program*:</b> Apply lower rate at 2- to 4-week intervals after plants become established. Do not apply
Phytophthora or Pythium Rhizoctonia Xanthomonas camestris Aerial Application	or	water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	Rampart Fungicide at intervals less than 3 days. <b>Disease Control Program:</b> Apply higher rate at 2- to 3-week intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity. Do not apply
	Application	1.0 to 3.0 qt in a minimum of 10.0 gal of water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	Rampart Fungicide at intervals less than 3 days.
	Irrigation	Overhead: 2.0 to 4.0 qt in a minimum of 100 gal of water (5.0 to 10.0 L in a minimum of 1000 L of water) Drip: 2.0 to 3.0 qt in a minimum of 100 gal of water (5.0 to 7.0 L in a minimum of 1000 L of water)	Apply with normal irrigation schedule. Follow <b>Disease</b> <b>Prevention Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.
Downy mildew	Foliar or	1.0 to 3.0 qt in a minimum of 20.0 gal of water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	Apply at 2- to 3-week intervals. Follow <b>Disease Prevention</b> <b>Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.
* Chaok with your local E	Aerial Application	1.0 to 3.0 qt in a minimum of 10.0 gal of water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha) you are unsure these conditi	one evict

\* Check with your local Extension Agent if you are unsure these conditions exist.

**Citrus Crop Grouping (Bearing and Non-Bearing) including Avocado:** Avocado, Calamondin, Citrus hybrids, Grapefruit, Kumquat, Lemon, Lime, Mandarin, Orange (all types), Pummelo and Satsuma madarin.

Make applications prior to disease development in conjunction with good cultural management practices. Use the higher rate when disease pressure is severe. Use rates and frequency are designed to prevent plant injury. If more frequent applications are necessary for disease control, consult a crop expert and follow their instructions. 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 Rampart Fungicide foliarly to plants treated with copper based compounds at less than 20-day intervals unless instructed to do so by your consultant. Allow foliage to completely dry after application. Do not apply when conditions favor wet tissue for prolonged periods (>4 hours).

Disease	Application Method	Rate	Application Program
Fusarium Phytophthora Pythium Rhizoctonia	Foliar or	1.0 to 3.0 qt in 100 gal of water/A (3.0 to 8.0 L in 1000 L of water/ha)	<b>Disease Prevention Program*:</b> Apply lower rate at 2- to 4-week intervals after plants become established. Do not apply Rampart Fungicide at intervals less than 3 days. <b>Disease Control Program:</b> Apply higher rate at 2- to 3-week
Xanthomonas camestris	Aerial Application	1.0 to 3.0 qt in a minimum of 10.0 gal of water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity. Do not apply Rampart Fungicide at intervals less than 3 days.
	Root Dip	2.0 qt/100 gal of water, 0.6 fl oz/gal of water (5.0 L/1000 L of water)	Apply as pre-plant dip to the roots for 15 to 30 minutes. Plant within 24 hours after dipping.
Tri	Irrigation	Overhead: 2.0 to 4.0 qt in a minimum of 100 gal of water (5.0 to 10.0 L in a minimum of 1000 L of water) Drip: 2.0 to 3.0 qt in a minimum of 100 gal of water (5.0 to 7.0 L in a minimum of 1000 L of water)	Apply with normal irrigation schedule. Follow <b>Disease</b> <b>Prevention Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.
	Trunk Injection*	3.0 tsp/lin yd of canopy width or 2 inches of trunk diameter at breast ht (DBH) (15.0 mL/lin 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 to 4 times a year until control is reached. *Not for use in New York
Downy mildew	Foliar or	1.0 to 3.0 qt in a minimum of 100 gal of water/A (5.0 to 7.0 L in a minimum of 1000 L of water/ha)	Apply at 2- to 3-week intervals. Follow <b>Disease Prevention</b> <b>Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.
	Aerial Application	1.0 to 3.0 qt in a minimum of 10.0 gal of water/A (5.0 to 7.0 L in a minimum of 100 L of water/ha)	

\* Check with your local Extension Agent if you are unsure these conditions exist.

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

Disease	Application Method	Rate	Application Program
Anthracnose Fusarium	Foliar	1.0 to 3.0 qt in a minimum of 20.0 gal of	<b>Disease Prevention Program*:</b> Apply lower rate at 2- to 4-week intervals after plants become established. Do not apply
Phytophthora or Pythium Rhizoctonia	or	water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	Rampart Fungicide at intervals less than 3 days. <b>Disease Control Program:</b> Apply higher rate at 2- to 3-week intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity. Do not apply
	Aerial Application	1.0 to 3.0 qt in a minimum of 10.0 gal of water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	Rampart Fungicide at intervals less than 3 days.
	Irrigation	Overhead: 2.0 to 4.0 qt in a minimum of 100 gal of water (5.0 to 10.0 L in a minimum of 1000 L of water) Drip: 2.0 to 3.0 qt in a minimum of 100 gal of water (5.0 to 7.0 L in a minimum of 1000 L of water)	Apply with normal irrigation schedule. Follow <b>Disease</b> <b>Prevention Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.
Downy mildew Powdery mildew	Foliar or	1.0 to 3.0 qt in a minimum of 20.0 gal of water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	Apply at 2- to 3-week intervals. Follow <b>Disease Prevention</b> <b>Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.
	Application	1.0 to 3.0 qt in a minimum of 10.0 gal of water/A (3.0 to 8.0 L in a minimum of 1000 L of water/ha)	

\* Check with your local Extension Agent if you are unsure these conditions exist.

**Herbs and Spices Crop Grouping:** 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, Grains 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.

Disease	Application Method	Rate	Application Program
Fusarium Phytophthora	Foliar	1.0 to 3.0 qt in a minimum of 20.0 gal of	<b>Disease Prevention Program*:</b> Apply lower rate at 2- to 4-week intervals after plants become established. Do not apply
Pythium Rhizoctonia	or	water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	Rampart Fungicide at intervals less than 3 days. <b>Disease Control Program:</b> Apply higher rate at 2- to 3-week intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity. Do not apply
	Aerial Application	1.0 to 3.0 qt in a minimum of 10.0 gal of water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	Rampart Fungicide at intervals less than 3 days.
	Irrigation	Overhead: 2.0 to 4.0 qt in a minimum of 100 gal of water (5.0 to 10.0 L in a minimum of 1000 L of water) Drip: 2.0 to 3.0 qt in a minimum of 100 gal of water (5.0 to 7.0 L in a minimum of 1000 L of water)	Apply with normal irrigation schedule. Follow <b>Disease</b> <b>Prevention Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.
Downy mildew Powdery mildew	Foliar or	1.0 to 3.0 qt in a minimum of 20.0 gal of water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	Apply at 2- to 3-week intervals. Follow <b>Disease Prevention</b> <b>Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.
	Aerial Application	1.0 to 3.0 qt in a minimum of 10.0 gal of water/A (3.0 to 8.0 L in a minimum of 1000 L of water/ha)	

\* Check with your local Extension Agent if you are unsure these conditions exist.

**Legume Vegetables Crop Grouping:** Bean (all types), Broad bean (fava bean), Chick pea (garbanzo bean), Guar, Jackbean, Lablab bean, Lentil, Pea (all types), Peanut, Pigeon pea, Soybean and Sword bean.

Disease	Application Method	Rate	Application Program
Anthracnose Early and Late leaf spot on Peanut ( <i>Cerospora</i> arachidicola and	Foliar or	1.0 to 3.0 qt in a minimum of 20.0 gal of water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	<b>Disease Prevention Program*:</b> Apply lower rate at 2- to 4-week intervals after plants become established. Do not apply Rampart Fungicide at intervals less than 3 days. <b>Disease Control Program:</b> Apply higher rate at 2- to 3-week intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity. Do not apply
Cercosporidium personatum) Fusarium Phytophthora Pythium	Aerial Application	1.0 to 3.0 qt in a minimum of 10.0 gal of water/A (3.0 to 8.0 L in a minimum of 1000 L of water/ha)	Rampart Fungicide at intervals less than 3 days.
Rhizoctonia Xanthomonas camestris			Table cont'd. next page

Disease	Application Method	Rate	Application Program
Anthracnose Early and Late leaf spot on Peanut (Cerospora arachidicola and Cercosporidium personatum) Fusarium Phytophthora Pythium Rhizoctonia Xanthomonas camestris cont'd.:	Irrigation	Overhead: 2.0 to 4.0 qt in a minimum of 100 gal of water (5.0 to 10.0 L in a minimum of 1000 L of water) Drip: 2.0 to 3.0 qt in a minimum of 100 gal of water (5.0 to 7.0 L in a minimum of 1000 L of water)	Apply with normal irrigation schedule. Follow <b>Disease</b> <b>Prevention Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.
Downy mildew Powdery mildew	Foliar or	1.0 to 3.0 qt in a minimum of 20.0 gal of water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	Apply at 2- to 3-week intervals. Follow <b>Disease Prevention</b> <b>Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.
+ Oheel	Aerial Application	1.0 to 3.0 qt in a minimum of 10.0 gal of water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	

\* Check with your local Extension Agent if you are unsure these conditions exist.

Pome Fruits Crop Grouping (Bearing and Non-Bearing) including Papaya: Apple, Crabapple, Loquat, Mayhaw, Papaya, Pear, and Quince.

Disease	Application Method	Rate	Application Program
Fire blight (Erwinia amylovora)	Foliar	1.0 to 3.0 qt in 100 gal of water/A (3.0 to 8.0 L	<b>Disease Prevention Program*:</b> Apply lower rate at 2- to 4-week intervals after plants become established. Do not apply
Fusarium Phytophthora	or	in 1000 L of water/ha)	Rampart Fungicide at intervals less than 3 days. <b>Disease Control Program:</b> Apply higher rate at 2- to 3-week
Pythium	Aerial	1.0 to 3.0 qt in a	intervals until control is reached. Consult with Farm Advisor or
Rhizoctonia	Application	minimum of 10.0 gal of	crop expert to determine disease severity. Do not apply
Xanthomonas camestris		water/A (3.0 to 8.0 L in	Rampart Fungicide at intervals less than 3 days.
		a minimum of 100 L of water/ha)	
	Root Dip	2.0 qt/100 gal of water, 0.6 fl oz/gal of water (5.0 L/1000 L of water)	Apply as pre-plant dip to the roots for 15 to 30 minutes. Plant within 24 hours after dipping.
	Irrigation	Överhead: 2.0 to 4.0 qt in a minimum of 100 gal of water (5.0 to 10.0 L in a minimum of 1000 L of water) Drip: 2.0 to 3.0 qt in a minimum of 100 gal of water (5.0 to 7.0 L in a minimum of 1000 L of	Apply with normal irrigation schedule. Follow <b>Disease</b> <b>Prevention Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.
		water)	Table cont'd. next page

Disease	Application Method	Rate	Application Program
Fire blight (Erwinia amylovora) Fusarium Phytophthora Pythium Rhizoctonia Xanthomonas camestris cont'd.:	Trunk Injection*	3.0 tsp/lin yd of canopy width or 2 inches of trunk diameter at breast ht (DBH) (15.0 mL/lin 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 to 4 times a year until control is reached. *Not for use in New York
Downy mildew Powdery mildew	Foliar or Aerial Application	1.0 to 3.0 qt in 100 gal of water/A (5.0 to 7.0 L in 1000 L of water/ha) 1.0 to 3.0 qt in a minimum of 10.0 gal of water/A (3.0 to 8.0 L in a minimum of 1000 L of water/ha)	Apply at 2- to 3-week intervals. Follow <b>Disease Prevention</b> <b>Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.

\* Check with your local Extension Agent if you are unsure these conditions exist.

Stone Fruits Crop Grouping including Olives: Apricot, Cherry, Nectarine, Olive, Peach, Plum, Plumcot and Prune.

Make applications prior to disease development in conjunction with good cultural management practices. Use the higher rate when disease pressure is severe. Use rates and frequency are designed to prevent plant injury. If more frequent applications are necessary for disease control, consult a crop expert and follow their instructions. 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 Rampart Fungicide foliarly to plants treated with copper based compounds at less than 20-day intervals unless instructed to do so by your consultant. Allow foliage to completely dry after application. Do not apply when conditions favor wet tissue for prolonged periods (>4 hours).

Disease	Application Method	Rate	Application Program
Fusarium Phytophthora	Foliar	1.0 to 3.0 qt in 100 gal of water/A (3.0 to 8.0 L	<b>Disease Prevention Program*:</b> Apply lower rate at 2- to 4-week intervals after plants become established. Do not apply
Pythium Rhizoctonia	or	in 1000 L of water/ha)	Rampart Fungicide at intervals less than 3 days. <b>Disease Control Program:</b> Apply higher rate at 2- to 3-week
Xanthomonas camestris	Aerial	1.0 to 3.0 qt in a	intervals until control is reached. Consult with Farm Advisor or
	Application	minimum of 10.0 gal of water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	crop expert to determine disease severity. Do not apply Rampart Fungicide at intervals less than 3 days.
	Root Dip	2.0 qt/100 gal of water, 0.6 fl oz/gal of water (5.0 L/1000 L of water)	Apply as pre-plant dip to the roots for 15 to 30 minutes. Plant within 24 hours after dipping.
	Irrigation	Överhead: 2.0 to 4.0 qt in a minimum of 100 gal of water (5.0 to 10.0 L in a minimum of 1000 L of water) Drip: 2.0 to 3.0 qt in a minimum of 100 gal of water (5.0 to 7.0 L in a minimum of 1000 L of water)	Apply with normal irrigation schedule. Follow <b>Disease</b> <b>Prevention Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.

Table cont'd. next page

Disease	Application Method	Rate	Application Program
Fusarium Phytophthora Pythium Rhizoctonia Xanthomonas camestris cont'd.	Trunk Injection*	3.0 tsp/lin yd of canopy width or 2 inches of trunk diameter at breast ht (DBH) (15.0 mL/lin 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 to 4 times a year until control is reached. *Not for use in New York
Downy mildew Powdery mildew	Foliar or	1.0 to 3.0 qt in 100 gal of water/A (3.0 to 8.0 L in 1000 L of water/ha)	Apply at 2- to 3-week intervals. Follow <b>Disease Prevention</b> <b>Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.
	Aerial Application	1.0 to 3.0 qt in a minimum of 10.0 gal of water/A (3.0 to 8.0 L in a minimum of 1000 L/ha)	

\* Check with your local Extension Agent if you are unsure these conditions exist.

**Tree Nuts Crop Grouping including Vines:** Almond, Beech nut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Grapes (all types), Raisins, Hickory nut, Kiwi, Macadamia nut, Pecan, Pistachio and Walnut.

Disease	Application Method	Rate	Application Program
Fusarium Phytophthora	Foliar	1.0 to 3.0 qt in 100 gal of water/A (3.0 to 8.0 L	<b>Disease Prevention Program*:</b> Apply lower rate at 2- to 4-week intervals after plants become established. Do not apply
Pythium Rhizoctonia	or	in 1000 L or water/ha)	Rampart Fungicide at intervals less than 3 days. <b>Disease Control Program:</b> Apply higher rate at 2- to 3-week
Xanthomonas camestris	Aerial Application	1.0 to 3.0 qt in a minimum of 10.0 gal of water/A (3.0 to 8.0 L in a minimum of 1000 L of water/ha)	intervals until control is reached. Consult with Farm Advisor or expert to determine crop disease severity. Do not apply Rampart Fungicide at intervals less than 3 days.
	Root Dip	2.0 qt/100 gal of water, 0.6 fl oz/gal of water (5.0 L/1000 L of water)	Apply as pre-plant dip to the roots for 15 to 30 minutes. Plant within 24 hours after dipping.
	Irrigation	Overhead: 2.0 to 4.0 qt in a minimum of 100 gal of water (5.0 to 10.0 L in a minimum of 1000 L of water) Drip: 2.0 to 3.0 qt in a minimum of 100 gal of water (5.0 to 7.0 L in a	Apply with normal irrigation schedule. Follow <b>Disease</b> <b>Prevention Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.
		minimum of 1000 L of water)	Table cont'd. next page

Disease	Application Method	Rate	Application Program
Fusarium	Trunk	3.0 tsp/lin yd of canopy	Apply according to injection equipment instructions. Adjust
Phytophthora Pythium	Injection*	width or 2 inches of trunk diameter at breast ht	rate based on injection equipment suggestions for specific applications. Repeat 2 to 4 times a year until control is
Rhizoctonia		(DBH) (15.0 mL/lin meter	
Xanthomonas camestris		of canopy width or 5 cm	*Not for use in New York
cont'd.		DBH). Inject directly into	
		tree.	
Downy mildew	Foliar	1.0 to 3.0 qt in 100 gal	Apply at 2- to 3-week intervals. Follow Disease Prevention
Powdery mildew		of water/A (3.0 to 8.0 L	<b>Program</b> or <b>Disease Control Program</b> as stated above. Do not
	or	in 1000 L of water/ha)	apply Rampart Fungicide at intervals less than 3 days.
	Aerial	1.0 to 3.0 gt in a	
	Application	minimum of 10.0 gal of	
		water/A (3.0 to 7.0 L in	
		a minimum of 100 L of	
		water/ha)	

\* Check with your local Extension Agent if you are unsure these conditions exist.

**Vegetables Crop Grouping Including Miscellaneous 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, Chilies, Chrysanthemum (edible), Chufa, Cinchona, 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), Sugarbeet, Sugarcane, Sweet potato, Swiss chard, Tanier, Tobacco, Tomato, Turmeric, Turnip, Yam (all types).

Disease	Application Method	Rate	Application Program
Anthracnose Fusarium	Foliar	1.0 to 3.0 qt in a minimum of 20.0 gal of	<b>Disease Prevention Program*:</b> Apply lower rate at 2- to 4-week intervals after plants become established. Do not apply
Phytophthora Pythium Rhizoctonia Xanthomonas camestris	or	water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	Rampart Fungicide at intervals less than 3 days. <b>Disease Control Program:</b> Apply higher rate at 2- to 3-week intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity. Do not apply
	Aerial Application	1.0 to 3.0 qt in a minimum of 10.0 gal of water/A (3.0 to 8.0 L in a minimum of 1000 L of water/ha)	Rampart Fungicide at intervals less than 3 days.
	Root Dip	2.0 qt/100 gal of water, 0.6 fl oz/gal of water (5.0 L/1000 L of water)	Apply as pre-plant dip immediately prior to planting. (100 gal is intended to treat the number of slips required to plant 1A.)
	Irrigation	Overhead: 2.0 to 4.0 qt in a minimum of 100 gal of water (5.0 to 10.0 L in a minimum of 1000 L of water) Drip: 2.0 to 3.0 qt in a minimum of 100 gal of water (5.0 to 7.0 L in a minimum of 1000 L of	Apply with normal irrigation schedule. Follow <b>Disease</b> <b>Prevention Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.
		water)	Table cont'd. next page

Disease	Application Method	Rate	Application Program
Downy mildew Powdery mildew	Foliar	1.0 to 3.0 qt in a minimum of 20.0 gal of	Apply at 2- to 3-week intervals. Follow <b>Disease Prevention</b> <b>Program</b> or <b>Disease Control Program</b> as stated above. Do not
	or	water/A (3.0 to 8.0 L in a minimum of 100 L of water/ha)	apply Rampart Fungicide at intervals less than 3 days.
	Aerial	1.0 to 3.0 qt in a	
	Application	minimum of 10.0 gal of	
		water/A (3.0 to 8.0 L in a minimum of 1000 L of	
		water/ha)	
Treatment of Potato	Foliar	3.0 to 5.0 qt in a	Apply at 2- to 3-week intervals. Follow Disease Prevention
vines for:		minimum of 20.0 gal of	<b>Program</b> or <b>Disease Control Program</b> as stated above. Do not
Late blight	or	water/A (5.0 to 7.0 L in	apply Rampart Fungicide at intervals less than 3 days.
(Phytophthora infestans)		100 L of water/ha)	
Pink rot	Aerial	3.0 to 5.0 qt in a	
(Phytophthora	Application	minimum of 20.0 gal of	
erythroseptica)		water/A (5.0 to 7.0 L in a	
		minimum of 100 L of	
		water/ha)	
Post-harvest	Spray, rinse	Dilute Rampart	Inject concentrate into water used in humidification or
treatment of	or inject into	Fungicide at 1:20	process water used for post-harvest storage, rinses and
Potatoes for:	humidification	ratio with application	associated tanks, flumes and lines.
Late blight	water prior to	water; 6.4 to 12.8	
(Phytophthora infestans)	or during	fl oz/0.5 gal of water/ton of tubers	
Pink rot	storage.	(100 to 200 mL/L	
( <i>Phytophthora</i>		of water)	
erytrhoseptica)			
	Extension Agent if	iou are uncure these conditi	

\* Check with your local Extension Agent if you are unsure these conditions exist.

### **ORNAMENTALS**

Rampart Fungicide is used for control of Pythium, Downy Mildew, Powdery Mildew, Phytophthora and various other diseases of ornamentals grown in commercial nurseries and greenhouses, golf courses, parks and commercial landscapes. Rampart Fungicide may be applied to all ornamental and landscape plants including (but not limited to): Aglaonema, Aphelandra, Arborvitae, Ash, Azaleas, Bougainvilles, Boxwood, Bushes, Cattleya skinneri, 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, Schefflera, Sedum, Sempervivum, Shrubs, Spathiphyllum, Sycamore, Taxus media, Zygocactus.

Apply Rampart Fungicide prior to disease development in conjunction with good cultural practices. Use the higher rate when disease pressure is severe. Use rates and frequency are designed to prevent plant injury. If more frequent applications are necessary for disease control, consult a crop expert and follow their instructions. 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 under heat or moisture stress. To avoid undesirable copper phytotoxicity, do not apply Rampart Fungicide foliarly to plants treated with copper based compounds at less than 20-day intervals unless instructed to do so by your consultant. Allow foliage to completely dry after application. Do not apply when conditions favor wet tissue for prolonged periods (>4 hours).

When applying to indoor plants, do not overspray and use care to apply only to target plants. If meeting these is not possible, remove plants to an outdoor location for treatment and drying before bringing back indoors.

Disease	Application Method	Rate	Application Program
Bacterial blight (Xanthomonas campestris) Fire blight (Erwinia amylovora) Fusarium Geranium wilt (Ralstonia spp.) Phytophthora Pythium	Foliar Spray	1.0 to 2.0 qt/100 gal of water or 0.3 to 0.6 fl oz /gal of water (2.5 to 5.0 L/1000 L of water)	<b>Disease Prevention Program*:</b> Apply lower rate at 2- to 4-week intervals after plants become established. Do not apply Rampart Fungicide at intervals less than 3 days. <b>Disease Control Program:</b> Apply higher rate at 2- to 3-week intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity. Do not apply Rampart Fungicide at intervals less than 3 days. Apply diluted solution to thoroughly wet foliage. Apply at 2- to 3-week intervals and repeat as needed. Do not apply Rampart Fungicide at intervals less than 3 days.
Ŕhizoctonia	Soil Drench	12.0 to 24.0 fl oz/100 gal of water or 0.125 to 0.25 fl oz/gal of water (1.0 to 2.0 L/1000 L of water)	Apply 1.0 to 2.0 pt of diluted solution/sq ft. Adjust volume as needed to thoroughly wet media. Apply at 2- to 3-week intervals and repeat as needed. Do not apply Rampart Fungicide at intervals less than 3 days.
	Soil Incorporation	1.0 to 2.0 pt/cu yd of soil mix (300 to 600 mL/cu meter)	Mix 1.0 to 2.0 pt of Rampart Fungicide with enough water to wet 1 cu yd 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: 1.0 to 2.0 qt/100 gal of water (2.5 to 5.0 L/1000 L of water) Drip: 1.0 to 2.0 qt/100 gal of water (2.5 to 5.0 L/1000 L of water)	Apply with normal irrigation schedule. Follow <b>Disease</b> <b>Prevention Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.
	Trunk Injection*	3.0 tsp/lin yd of canopy width or 2 inches of trunk diameter at breast ht (DBH) (15.0 mL/lin 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 to 4 times a yr until control is reached. *Not for use in New York
	Root Dip	2.0 qt/100 gal of water or 0.6 fl oz/gal of water (5.0 L/1000 L of water)	Dip transplants into diluted solution of Rampart Fungicide. Thoroughly wet plant root mass immediately before transplanting. Keep roots submerged for 1 to 2 minutes.
Downy mildew Powdery mildew	Foliar Spray	1.0 to 2.0 qt/100 gal of water or 0.3 to 0.6 fl oz /gal of water (2.5 to 5.0 L/1000 L of water)	Apply diluted solution to thoroughly wet foliage. Apply at 2- to 3-week intervals and repeat as needed. Follow <b>Disease</b> <b>Prevention Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.

\* Check with your local Extension Agent if you are unsure these conditions exist.

# **BEDDING PLANTS**

Rampart Fungicide is used for control of Downy mildew, Powdery mildew, Pythium, Phytophthora and various other diseases of bedding plants grown in commercial nurseries and greenhouses, golf courses, parks and commercial landscapes. Rampart Fungicide may be applied to all bedding plants including: Ageratum, Algerian ivy, Alyssum, Anthurium, Artemisia, Aster, Baby's breath, Begonia, Caladium, Carnation, Chrysanthemum, Coleus, Columbine, Daisy, Delphinium, Easter Iily, English ivy, Foxglove, Gaillardia, Geranium, Gloxinia, Impatiens, Marigold, Pansy, Petunia, Phlox, Pinks, Poinsettia, Primrose, Prostrate Rosemary, Salvia, Snapdragon, Verbena, Vinca, and Zinnia.

Make applications prior to disease development in conjunction with good cultural management practices. Use the higher rate when disease pressure is severe. Use rates and frequency are designed to prevent plant injury. If more frequent applications are necessary for disease control, consult a crop expert and follow their instructions. 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 Rampart Fungicide foliarly to plants treated with copper based compounds at less than 20-day intervals unless instructed to do so by your consultant. Allow foliage to completely dry after application. Do not apply when conditions favor wet tissue for prolonged periods (>4 hours).

When applying to indoor plants, do not overspray and use care to apply only to target plants. If meeting these is not possible, remove plants to an outdoor location for treatment and drying before bringing back indoors.

Disease	Application Method	Rate	Application Program
Fire blight (Erwinia amylovora) Fusarium Phytophthora Pythium Rhizoctonia	Foliar Spray	1.0 to 2.0 qt/100 gal water or 0.3 to 0.6 fl oz/gal of water (2.5 to 5.0 L/1000 L water)	<b>Disease Prevention Program*:</b> Apply lower rate at 2- to 4-week intervals after plants become established. Do not apply Rampart Fungicide at intervals less than 3 days. <b>Disease Control Program:</b> Apply higher rate at 2- to 3-week intervals until control is reached. Consult with Farm Advisor or crop expert to determine disease severity. Apply diluted solution to thoroughly wet foliage. Apply at 2- to 3-week intervals and repeat as needed. Do not apply Rampart Fungicide at intervals less than 3 days.
	Root Dip	2.0 qt/100 gal of water or 0.6 fl oz/gal of water (5.0 L/1000 L of water)	Dip transplants into diluted solution of Rampart Fungicide. Thoroughly wet plant root mass immediately before transplanting. Keep roots submerged for 1 to 2 minutes.
	Soil Drench	12.0 to 24.0 fl oz/100 gal of water or 0.125 to 0.25 fl oz/gal of water (1.0 to 2.0 L/1000 L of water)	Apply 1.0 to 2.0 pt of diluted solution per sq ft. Adjust volume as needed to thoroughly wet media. Apply at 2- to 3-week intervals and repeat as needed. Do not apply Rampart Fungicide at intervals less than 3 days.
	Irrigation	Overhead: 1.0 to 2.0 qt /100 gal of water (2.5 to 5.0 L/1000 L of water) Drip: 1.0 to 2.0 qt/100 gal of water (2.5 to 5.0 L/1000 L of water)	Apply with normal irrigation schedule. Follow <b>Disease</b> <b>Prevention Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.
Downy mildew Powdery mildew	Foliar Spray	1.0 to 2.0 qt/100 gal water (0.3 to 0.6 fl oz /gal of water) (2.5 to 5.0 L/1000 L of water)	Apply diluted solution to thoroughly wet foliage. Apply at 2- to 3-week intervals and repeat as needed. Do not apply more than 6 times/crop cycle or year. Follow <b>Disease</b> <b>Prevention Program</b> or <b>Disease Control Program</b> as stated above. Do not apply Rampart Fungicide at intervals less than 3 days.

\*Check with your local Extension Agent if you are unsure these conditions exist.

# CONIFERS AND TREES IN COMMERCIAL NURSERIES, PLANTATIONS AND FORESTS, LANDSCAPES AND PARKS (INCLUDING CHRISTMAS TREES, OAKS and PINES) Rampart Fungicide applied in conjunction with good cultural management practices will control *Phytophthora* root rot of conifers includ-

Rampart Fungicide applied in conjunction with good cultural management practices will control *Phytophthora* root rot of conifers including (but not limited to): Douglas fir, Spruce and Pines, also other *Phytophthora* disease of oaks (Sudden oak death) and forest trees. Use the higher rates when disease pressure is severe. Do not apply to trees that are under heat or moisture stress.

Disease	Application Method	Rate	Application Program
Phytophthora	Foliar Spray	1.0 to 2.0 qt/100 gal of water/A (2.5 to 5.0 L /1000 L water/ha) or 0.3 to 0.6 fl oz/gal of water	<b>Disease Prevention Program*:</b> Apply lower rate at 2- to 4-week intervals after plants become established. Do not apply Rampart Fungicide at intervals less than 3 days. <b>Disease Control Program:</b> Apply higher rate at 2- to 3-week intervals until control is reached. Do not apply Rampart Fungicide at intervals less than 3 days. Apply diluted solution to thoroughly wet foliage. Apply at 2- to 3-week intervals and repeat as needed.
	Soil Drench	12.0 to 24.0 fl oz/100 gal of water or 0.125 to 0.25 fl oz/gal of water (1.0 to 2.0 L/1000 L of water)	Apply 1.0 to 2.0 pt of diluted solution per sq ft. Adjust volume as needed to thoroughly wet media. Apply at 2- to 3-week intervals and repeat as needed. Do not apply Rampart Fungicide at intervals less than 3 days.

Table cont'd. next page

Disease	Application Method	Rate	Application Program
Phytophthora	Root Dip	2.0 qt/100 gal of water or 0.6 fl oz/gal of water (5.0 L/1000 L water)	Apply as a pre-plant dip to the roots for 15 to 30 minutes. Plant within 24 hours after dipping.
	Trunk Injection*	3.0 tsp/lin yd of canopy width or 2 inches of trunk diameter at breast ht (DBH) (15.0 mL/lin meter of canopy width or 5 cm DBH). Inject directly into tree.	suggestions for specific applications.

Do not graze livestock in treated conifer nurseries and/or plantations. Do not feed forage to livestock from treated nurseries and/or plantations.

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

Rampart Fungicide is a systemic fungicide, which is used for the control of Pythium blight, Summer complex (Bermuda and others), Dollar spot, Grey leaf spot, Brown patch, Anthracnose and damping-off diseases to turf grasses on sod farms and lawns, commercial turf production, golf courses (including tees and greens), parks and commercial landscapes. Begin preventative applications when conditions first favor disease and repeat at described intervals. Use higher rates under severe disease conditions.

Disease	Application Method	Rate	Application Program
Alternaria Anthracnose (Colletotrichum graminicola) Helminthosporium Pythium (Yellow turf) Rhizoctonia Sclerotinia	Foliar Spray	2.0 to 3.0 fl oz/ 1000 sq ft (50.0 to 100.0 mL/100 sq meters) or	Apply amount in minimum of 2.0 gal of water/1000 sq ft. Apply at 10- to 21-day intervals as needed. Do not mow or irrigate treated areas until sprays have completely dried.
		1.0 to 3.0 qt/100 gal of water/A (3.0 to 8.0 L/1000 L of water/ha)	For sod farms and large areas: Apply diluted solution to thoroughly wet foliage. Apply at 2- to 3-week intervals and repeat as needed.
	Irrigation	Overhead: 2.0 to 3.0 qt/A (5.0 to 7.0 L/ha) in a minimum of 100 gal (1000 L) of water	Apply with normal irrigation schedule. Apply at 10- to 21-day intervals and repeat as needed.

\* Check with your local Extension Agent if you are unsure these conditions exist. Do not graze animals on treated turf. Do not feed clippings from treated turf to livestock and poultry.

# **STORAGE AND DISPOSAL**

**PESTICIDE STORAGE:** Do not contaminate water, food, or feed by storage or disposal. 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: Nonrefillable container.** Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.acrecycle.org. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

For packages up to 5 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 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 the flow begins to drip. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

For packages greater than 5 gallons and less than 56 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back

#### Storage & Disposal cont'd.:

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. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. **For packages greater than 56 gallons:** To clean the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

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

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**BEFORE BUYING OR USING THIS PRODUCT**, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

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