

Mr. Nick Somma  
Registration Manager  
Rhone-Poulenc AG Company  
P.O. Box 12014  
2 T.W. Alexander Drive  
Research Triangle Park, N.C. 27709

Dear Mr. Somma:

Subject: Rovral 4F Fungicide  
EPA Reg. No. 264-482  
Application for Pesticide Amendment of 06/25/92  
General Label Modifications

The amendment referred to above, submitted in connection with registration under FIFRA section 3(c)(7)(A) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), is acceptable provided you:

1. Make the following labeling change before you release the product for shipment bearing the amended labeling:
  - a. After Container Disposal use the wording: "Triple rinse (or equivalent). Then 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."
  - b. Under Strawberries, revise the statement: "Application can be made by aerial methods at reduced gallonage per acre" to indicate the minimum gallonage which may be applied aurally. Make a similar revision to the label for Rovral Fungicide, EPA Reg. No. 264-453. This change was overlooked when that label was reviewed.
2. Submit five (5) copies of your final printed labeling.

A stamped copy of the label is enclosed for your record

Sincerely yours,

*Susan T. Lewis*

Susan T. Lewis  
Product Manager (21)  
Fungicide-Herbicide Branch  
Registration Division (H7505C)

Enclosure

**BEST AVAILABLE COPY**

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# ROVRAL<sup>®</sup> 4 Flowable Fungicide

**ACTIVE INGREDIENT:**

Iprodione: 3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide\* .....41.6%

**INERT INGREDIENTS:** .....58.4%

\*Equivalent to 4 Lbs. Iprodione per gallon.

EPA Reg. No. 264-482

EPA Est. No.: 1812-GA-3

## KEEP OUT OF REACH OF CHILDREN CAUTION

### STATEMENT OF PRACTICAL TREATMENT

IN CASE OF CONTACT: Wash skin with soap and water.

IF IN EYES: Flush with water for 15 minutes and get medical attention.

For PRODUCT USE Information Call 1-800-334-9745

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

### PRECAUTIONARY STATEMENTS

#### CAUTION

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed, inhaled or absorbed through skin. Avoid breathing vapor or spray mist, or contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Get medical attention if irritation persists. Remove contaminated clothing and wash before reuse.

#### PRECAUTIONS FOR PRE PLANT DIP APPLICATIONS

When applying ROVRAL<sup>®</sup> as a strawberry preplant dip, wear a long sleeve shirt, chemical resistant gloves and goggles or a face shield.

#### ENVIRONMENTAL HAZARDS

This pesticide is toxic to aquatic invertebrates. 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 washwater. Drift or runoff from treated areas are hazardous to aquatic invertebrates in neighboring areas.

#### DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN ANY MANNER  
INCONSISTENT WITH ITS LABELING.

#### REENTRY STATEMENT

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons. Do not enter treated areas without protective clothing until sprays have dried.

Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information. Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers and given in a language customarily understood by the workers. Oral and written warning must include the STATEMENT OF PRACTICAL TREATMENT and REENTRY STATEMENTS as they appear on the label.

#### STORAGE AND DISPOSAL

##### STORAGE

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

##### PESTICIDE DISPOSAL

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

##### CONTAINER DISPOSAL

Triple rinse (or equivalent). Then dispose of empty container in a sanitary landfill or by incineration, or by other procedures approved by State and local authorities.

ACCEPTED  
with COMMENTS  
to EPA

JUL 13 1992

Under  
Fungicide  
Label  
Revised

264-482

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**GENERAL CAUTIONS AND RESTRICTIONS**

**CROP ROTATION RESTRICTIONS FOR BEANS, BROCCOLI, CARROTS, CHINESE MUSTARD, DRY BULB ONIONS, GARLIC, LETTUCE, POTATOES AND PEANUTS.**

The following crops may be rotated after harvest: Garlic, Dry Bulb Onions, Broccoli, Lettuce, Peanuts, Carrots, Beans, and Potatoes.  
The following crops may be rotated 1 month following the last Iprodione application: Root crops, Tomatoes, and Cotton.

**GRAZING RESTRICTIONS FOR STONE FRUIT, ALMONDS AND GRAPES.**

Do not graze animals in treated orchards. Do not feed cover crops grown in treated orchards to livestock.

**FUNGICIDE RESISTANCE STATEMENT**

ROVRAL® 4 Flowable Fungicide is a dicarboximide fungicide. Resistance developed to other dicarboximide, such as Ronilan® may result in resistance to ROVRAL®. Therefore, DO NOT EXTEND THE TOTAL NUMBER OF APPLICATIONS PER CROP ON THIS LABEL WITH Ronilan®.

**HOW TO USE ROVRAL® 4 FLOWABLE FUNGICIDE**

Partially fill the spray tank with clean water. Measure the required amount of ROVRAL® 4 Flowable Fungicide and pre-mix with a small volume of water, add this to the tank. Agitate to ensure thorough mixing while filling tank with remaining water. Maintain agitation during application and apply with properly calibrated application equipment. Do not allow spray mixture to stand overnight or for prolonged periods, as some chemical breakdown may occur, particularly in water with a high pH. The spray solution should be buffered to a PH of 5.0 - 7.0. A high quality, nonionic spreader can be used as a spray tank additive for every application with the exception of in-furrow sprays. ROVRAL® should be added to the tank prior to the addition of any adjuvant. Consult the adjuvant label or manufacturer for crop tolerance and safety information when used with ROVRAL®.

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**ROVRAL® 4 FLOWABLE FUNGICIDE IS REGISTERED  
FOR USE ON THE FOLLOWING:**

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**Field and Row Crops**  
Peanuts  
Rice (not registered for use in California)

**Small Fruit**  
Caneberries  
Grapes  
Strawberries

**Fruit Trees and Nuts**  
Almonds  
Stone Fruits  
Apricots  
Cherries  
Nectarines  
Peaches  
Plums  
Prunes

**Vegetables**  
Beans (Snap, Dry, and Lima)  
Broccoli  
Carrots  
Chinese Mustard (Florida Only)  
Dry Bulb Onions  
Garlic  
Lettuce (Head & Leaf types)  
Potatoes

**Ginseng**

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**FIELD AND ROW CROPS**

**PEANUTS**

HOW TO USE	DISEASE	DOSAGE RATE		WHEN TO APPLY	USE RESTRICTIONS
		PINTS PER ACRE	GALS. WATER PER ACRE		
<p>Apply using a tractor mounted spray boom equipped with hollow cone or low pressure nozzles (e.g. 8008LP, 8010LP or TK7.5 that produce large droplets). Nozzles should be adjusted to provide complete coverage of the row.</p> <p>Vine spreaders may be used in combination with flat fan nozzles for banding. The two pint per acre rate needs to be used in the band.</p> <p>Applications may also be made by chemigation.</p>	<p><b>Sclerotinia Blight</b> (<i>Sclerotinia minor</i>)</p>	2.0	40 Minimum	<p>Make the initial application when conditions first become favorable for disease development. Up to two subsequent applications should be made at 14 to 21 day intervals.</p> <p>For best results apply using a preventive program.</p>	<p>Do not apply within 10 days of harvest. (PHI = 10 days).</p> <p>A maximum of 3 applications can be made per season.</p> <p>Do not apply by air.</p>

**RICE**

HOW TO USE	DISEASE	DOSAGE RATE		WHEN TO APPLY	USE RESTRICTIONS
		PINTS PER ACRE	GALS. WATER PER ACRE		
<p>Apply as a broadcast spray using aerial equipment.</p>	<p><b>Sheath blight</b> (<i>Rhizoctonia solani</i>)</p> <p><b>Brown Spot</b> (<i>Helminthosporium oryzae</i>)</p> <p><b>Sheath Spot</b> (<i>Rhizoctonia oryzae</i>)</p> <p><b>*Narrow Brown Leaf spot</b> (<i>Cercospora oryzae</i>)</p>	1.0	10 Minimum	<p>The first foliar application should be made between joint movement and booting. If favorable disease conditions continue a second application can be applied 2 weeks after the first application, but no later than 75% heading.</p>	<p>Maximum of 2 applications can be made per season.</p> <p>Not registered for use in California</p> <p>* ROVRAL® will suppress or give partial control of this disease.</p>

Do not apply in areas where catfish and crayfish are commercially cultivated.

**ENDANGERED SPECIES RESTRICTIONS IN THE STATE OF ARKANSAS**

The use of Iprodione on rice is restricted to protect the endangered fat pocketbook pearly mussel (*Potamilus capax*) and its habitat. Use is prohibited in the following areas of Arkansas.

**Mississippi County:** Within the basin that drains directly into the Right Hand Chute of Little River, south of Big Lake National Wildlife Refuge.

**Polk County:** Between Crowley's Ridge and the levee east of the Right Hand Chute of Little River and the St. Francis Floodway. Use is also prohibited west of Rt. 140 and north of Rt. 63 at the SIPHON near Marked Tree. Except that the prohibited area does not include the area bounded by Arkansas Highway 373 on the west, Highway 63 on the east and Highway 14 on the south.

**Cross, St. Francis, and Lee Counties:** Between Crowley's Ridge and the levee east of the Right Hand Chute of Little River and the St. Francis Floodway as far south as the confluence of L'Anquille River (Lee County).

**FRUIT TREE AND NUTS**

**ALMONDS**

HOW TO USE	DISEASE	DOSAGE RATE		WHEN TO APPLY	USE RESTRICTIONS
		PINTS PER ACRE	PINTS PER 100 GAL.		
Apply as a foliar spray in sufficient water to obtain thorough coverage of bloom, foliage, and/or fruit (20 to 400 gallons per acre by ground equipment and in a minimum of 15 gals. per acre by air). * The use of aerial application is not recommended after Petal Fall.	Brown Rot Blossom Blight ( <i>Monilinia laxa</i> )  Shothole ( <i>Stigmina carpophila</i> )	1.0	0.25	Brown Rot, Blossom Blight and Shothole: Apply first at pink bud and, if conditions favorable for disease development persist or reoccur up to 3 subsequent applications can be made at: 1) full bloom 2) petal fall 3) up to 5 weeks after petal fall.	Do not make more than 4 applications per season.

\*The rate of ROVRAL® is based on a standard of 400 gallons per acre dilute spray for mature trees. If less than 400 gallons of spray solution per acre is applied to mature trees use the rate per acre listed in the table above.

**STONE FRUITS**

Apricots, Cherries, Nectarines, Peaches, Plums, and Prunes

HOW TO USE	DISEASE	DOSAGE RATE		WHEN TO APPLY	USE RESTRICTIONS
		PINTS PER ACRE	PINTS PER 100 GAL.		
Apply as a foliar spray in sufficient water to obtain thorough coverage of bloom, foliage, and/or fruit (20 to 400 gallons per acre by ground equipment and in a minimum of 15 gals. per acre by air). * The use of aerial application is not recommended after Petal Fall.	Brown Rot Blossom Blight ( <i>Monilinia spp.</i> )	1.0 - 2.0	0.25 - 0.5	Brown Rot Blossom Blight: Apply between pink bud and early bloom (approximately 5% bloom). If conditions are favorable for disease development, apply again at full bloom and at petal fall.	Do not make more than 5 applications of this product per season.  Preharvest applications may be made up to and including the day of harvest (PHI=0 day)  Under severe disease conditions, the higher rate and shorter spray interval is recommended.
	Fruit Brown Rot ( <i>Monilinia spp.</i> )	1.0 - 2.0	0.25 - 0.5	Fruit Brown Rot: An application should be made whenever temperatures and moisture conditions favor disease infection in the 5-week period prior to harvest. If these conditions persist or reoccur, additional applications should be made. Applications can be made on a 7-14 day interval following the first preharvest application if needed.	
	Cherry Leaf Spot ( <i>Coccomyces hiemalis</i> )	1.0 - 2.0	0.25 - 0.5	Cherry Leaf Spot: Follow the Brown Rot Blossom Blight and Fruit Rot spray program. At least one foliar spray should be made between petal fall and shuck split, with an additional foliar spray applied 14 days after harvest.	

\*The rate of ROVRAL® is based on a standard of 400 gallons per acre dilute spray for mature trees. If less than 400 gallons of spray solution per acre is applied to mature trees use the rate per acre listed in the table above.

**GINSENG**

HOW TO USE	DISEASE	DOSAGE RATE		WHEN TO APPLY	USE RESTRICTIONS
		PINTS PER ACRE	GALS. WATER PER ACRE		
<p>Apply as a foliar spray in sufficient water to obtain thorough coverage using ground equipment.</p> <p>ROVRAL® should be used as part of a complete spray program.</p> <p><b>Alternating Program:</b></p> <p>Use as an alternating treatment on a 14 day interval with another fungicide registered for control of Alternaria Blight.</p>	<p><b>Alternaria Blight</b> (<i>Alternaria panax</i>)</p>	1.5 - 2.0	<p>10 Minimum</p>	<p>Make the first application when conditions become favorable for disease development. Continue applications on a 14 day interval if using the alternating spray program or on a 7 day interval if using the tank mix program.</p>	<p>Do not apply within 36 days of harvest (PHI = 36 days).</p> <p>Do not apply more than 10 pints of product per season.</p>
<p><b>Tank Mix Program:</b></p> <p>Apply at the reduced rate on a 7 day interval when combined in a tank mix with another fungicide registered for control of Alternaria Blight.</p>		1.0 - 1.5			

**SMALL FRUIT**

**CANEBERRIES**

HOW TO USE	DISEASE	DOSAGE RATE		WHEN TO APPLY	USE RESTRICTIONS
		PINTS PER ACRE	GALS. WATER PER ACRE		
<p>Apply as a foliar spray with ground equipment in sufficient water to obtain thorough coverage at bloom and/or fruit.</p>	<p><b>Botrytis Fruit Rot</b> (<i>Botrytis cinerea</i>)</p>	1.0 - 2.0	<p>100 Minimum</p>	<p>Make the first application at early bloom (5 to 10% bloom) and again at full bloom. Two additional applications can be applied at 14 day intervals or as required.</p>	<p>The final application can be made up to and including the day of harvest. (PHI = 0 day).</p> <p>Do not make more than 4 applications per season.</p> <p>Under severe disease conditions, the higher rate is recommended.</p>

### GRAPES

HOW TO USE	DISEASE	DOSAGE RATE		WHEN TO APPLY	USE RESTRICTIONS
		PINTS PER ACRE	GALS. WATER PER ACRE		
<p>Apply as a foliar spray in sufficient water to obtain thorough coverage. The application equipment should be calibrated and adjusted to direct the spray at the bunches to insure thorough bunch coverage.</p> <p>Thorough Coverage of the Bunches is Essential.</p>	<p><b>Bunch Rot</b> (<i>Botrytis spp.</i>)</p>	1.0-2.0	<p>50 Minimum</p>	<p>Apply in accordance with the directions provided in the table below.</p> <p><b>Spray Schedule</b></p> <p>1) Early mid-bloom</p>	<p>The final application may be made up to and including the day of harvest.(PHI=0 day).</p> <p>Under severe disease conditions, the higher rate is recommended.</p> <p>This product must be used in conjunction with good cultural practices designed to minimize conditions conducive for Bunch Rot development.</p>
		1.5-2.0		2) Prior to bunch closing	
		1.5-2.0		3) Beginning of fruit ripening (veraison)	
		1.5-2.0		4) Final application prior to harvest as needed.	

### STRAWBERRIES

HOW TO USE	DISEASE	DOSAGE RATE		WHEN TO APPLY	USE RESTRICTIONS
		PINTS PER ACRE	PINTS PER 100 Gallons		
<p><b>DIP</b></p> <p>Dip the transplants in the solution for 5 minutes and plant immediately.</p>	<p><b>Botrytis Crown Rot</b> (<i>Botrytis spp.</i>)</p>	-	2.0	<p>Apply as a preplant dip immediately prior to planting.</p>	<p>For pre plant and dip use see Precautionary Statement.</p> <p>ROVRAL® may be applied up to and including the day of harvest. (PHI = 0 days).</p>
<p><b>FOLIAR SPRAY</b></p> <p>Apply as a foliar spray in not less than 100 gallons of water per acre.</p> <p>Applications can be made by aerial methods at reduced gallonage per acre.</p> <p>Thorough coverage is essential for disease control.</p> <p>The highest rate and/or shortest spray interval should be used under severe disease conditions.</p>	<p><b>Gray Mold</b> (<i>Botrytis cinerea</i>)</p> <p><b>Stem End Rot</b> (<i>Gnorronia comari</i>)</p> <p><b>Phomopsis Soft Rot</b> (<i>Phomopsis obscurans</i>)</p> <p><b>Purple Leaf Spot</b> (<i>Mycosphaerella spp.</i>)</p> <p><b>Anthraco nose*</b> (<i>Colletotrichum spp.</i>)</p>	1.5 - 2.0	-	<p>Make the first application no later than 10% bloom. Additional sprays may be made on a 10-14 day interval.</p>	<p>Do not make more than 4 applications per season.</p> <p>Under severe disease conditions, the higher rate and shorter spray interval is recommended.</p> <p>*ROVRAL® will suppress or give partial control of this disease.</p>

**VEGETABLES**

**BEANS (Snap, Dry, and Lima)**

HOW TO USE	DISEASE	DOSAGE RATE		WHEN TO APPLY	USE RESTRICTIONS
		PINTS PER ACRE	GALS. WATER PER ACRE		
<p>Apply using ground equipment with a spray pressure of 50-100 PSI using a three nozzle/row boom arranged with one directly over the row and a drop on each side of the row.</p> <p>Application can also be made by chemigation.</p> <p>Though coverage is essential for disease control.</p>	<p>Gray Mold (<i>Botrytis spp.</i>)</p> <p>White Mold (<i>Sclerotinia spp.</i>)</p>	1.5 to 2.0	40 Minimum	<p>Apply as a foliar spray at first bloom to when 10% of the plants have one open bloom and again 5-7 days later or up to peak bloom, if conditions are favorable for disease development.</p>	<p>Do not allow foraging for 14 days after last application.</p> <p>Do not feed snap bean hay to livestock.</p> <p>Do not feed dry bean hay to livestock until 45 days after last application.</p> <p>Do not feed succulent bean hay to livestock.</p> <p>Two applications maximum per season, with the last application made no later than full bloom.</p> <p>Under severe disease conditions the higher rate and shorter spray interval should be used.</p>

**BROCCOLI**

HOW TO USE	DISEASE	DOSAGE RATE		WHEN TO APPLY	USE RESTRICTIONS
		PINTS PER ACRE	GALS. WATER PER ACRE		
<p>Application should be made with a tractor-mounted boom sprayer with 2 flat fan nozzles per row (one on either side) directed at the base of the plant and the adjacent soil surface. Position nozzles to ensure thorough coverage of the stem.</p> <p>Application may be made by chemigation.</p>	<p>Black Leg (<i>Phoma lingam</i>)</p>	2.0	40 Minimum	<p>Apply immediately after thinning (2 to 4 leaf state) as a directed spray to the base of the plant and the adjacent soil surface. If disease conditions persist or reoccur, a second application may be made up to the day of harvest.</p>	<p>This product can be applied up to the day of harvest (PHI = 0 days). Do not drench.</p>

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## CARROTS

HOW TO USE	DISEASE	DOSAGE RATE		WHEN TO APPLY	USE RESTRICTIONS
		PINTS PER ACRE	GALS. WATER PER ACRE		
<p>Apply as a foliar spray in sufficient water to obtain thorough coverage.</p> <p>May be applied by ground, chemigation, or aerial equipment.</p>	<p><b>Alternaria Blight</b> (<i>Alternaria dauci</i>)</p> <p><b>Black Crown Rot</b> (<i>Alternaria radicina</i>)</p>	1.0 - 2.0	10 Minimum	<p>Make the first application as conditions become favorable for disease development. Continue applications on a 7 to 14 day interval as long as conditions favor disease development.</p>	<p>Do not make more than 4 applications of this product per season.</p> <p>This product can be applied up to the day of harvest (PHI = 0 days).</p> <p>The higher rate and/or shorter spray interval should be used under severe disease conditions.</p>

### CHINESE MUSTARD (For Use In Florida Only)

HOW TO USE	DISEASE	DOSAGE RATE		WHEN TO APPLY	USE RESTRICTIONS
		PINTS PER ACRE	GALS. WATER PER ACRE		
<p>Apply as a foliar spray in sufficient water to obtain thorough coverage.</p>	<p><b>Alternaria Leafspot</b> (<i>Alternaria spp.</i>)</p>	1.0	50 Minimum	<p>Make the first application as conditions become favorable for disease development. Continue applications on a 10-14 day interval as long as conditions favor disease development.</p>	<p>Do not make more than 4 applications of this product per season.</p> <p>Do not apply within 10 days of harvest. (PHI = 10 days).</p>

### DRY BULB ONIONS

HOW TO USE	DISEASE	DOSAGE RATE		WHEN TO APPLY	USE RESTRICTIONS
		PINTS PER ACRE	GALS. WATER PER ACRE		
<p>Apply using ground, air, or chemigation equipment.</p> <p>Use a boom sprayer with either a single or multiple nozzles per row adjusted to provide complete coverage of each row.</p>	<p><b>Botrytis Leaf Blight</b> (<i>Botrytis squamosa</i>)</p> <p><b>Purple Blotch</b> (<i>Alternaria porri</i>)</p>	1.5	10 Minimum (aerial)	<p>Apply as a foliar spray as soon as conditions become favorable for disease development. Continue application on a 14 day interval as long as conditions favor disease development. Do not apply more than 5 applications per season.</p>	<p>Do Not apply within 7 days of harvest. (PHI = 7 days).</p>
<p><b>Tank Mix</b></p> <p>Apply at the reduced rate when combined in a tank mix with another fungicide registered for the control of Botrytis Leaf Blight, Botrytis Neck Rot or Purple Blotch as described for ground application.</p>	<p><b>Botrytis Neck Rot</b> (<i>Botrytis allii</i>)</p>	Tank Mix  1.0 - 1.5	50 Minimum (ground)	<p><b>Tank Mix</b></p> <p>Apply as a foliar spray as soon as conditions become favorable for disease. Continue applications on a 7 day interval as long as conditions favor disease development.</p>	<p>Under severe disease conditions use the higher rate.</p>

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## GARLIC

HOW TO USE	DISEASE	DOSAGE RATE		WHEN TO APPLY	USE RESTRICTIONS
		PINTS PER ACRE	GALS. WATER PER ACRE		
Apply as an in-furrow spray in sufficient water to obtain thorough coverage of the open furrow and covering soil.	White Rot ( <i>Sclerotium cepivorum</i> )	4.0*	20 Minimum	Apply in the furrow at planting.	*This rate is based on pints product/treated acre and represents the rate for a 38-40 inch bed spacing.

## LETTUCE (head & leaf types)

HOW TO USE	DISEASE	DOSAGE RATE		WHEN TO APPLY	USE RESTRICTIONS
		PINTS PER ACRE	GALS. WATER PER ACRE		
<p>Apply as a foliar spray in sufficient water to obtain thorough coverage. Application should be made with a tractor mounted boom sprayer equipped with three nozzles per seed line (one centered over the row and one on each side of the row) with two nozzles directed to ensure thorough coverage of the lower portion of the plants and the surrounding soil surface.</p> <p>* When applying in a band do not reduce the acre rate.</p> <p>Applications may also be made by chemigation.</p>	<p>Lettuce Drop (<i>Sclerotinia spp.</i>)</p> <p>Bottom Rot (<i>Rhizoctonia solani</i>)</p>	1.5 - 2.0*	40 Minimum	Apply from the 3 leaf stage to just after thinning and again 10 days later. If conditions still favor disease development, a third application should be made 10 days after the second spray.	<p>Under severe disease conditions the higher rates should be used.</p> <p>Do Not make more than three applications to each crop.</p> <p>Do Not apply within 14 days of harvest (PHI=14 days).</p> <p>Do Not cultivate after application. If necessary make a application during or immediately after cultivation. Do Not drench.</p>

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## POTATOES

HOW TO USE	DISEASE	DOSAGE RATE		WHEN TO APPLY	USE RESTRICTIONS
		PINTS PER ACRE	GALS. WATER PER ACRE		
<p><b>Early Blight</b></p> <p>Apply with a boom sprayer with a single or multiple nozzles adjusted to provide thorough coverage of the foliage particularly the older leaves.</p> <p>Application can also be made by chemigation or by air.</p> <p>Thorough coverage of the foliage is essential for control.</p>	<p><b>Early Blight</b> (<i>Alternaria solani</i>)</p>	1.0 - 2.0	10 Minimum	<p>For Early Blight, begin applications when conditions first become favorable for disease development. Up to 3 subsequent applications can be applied at 10-14 day intervals or as required.</p>	<p>A maximum of 4 total applications can be made per season.</p> <p>Do not apply within 14 days of harvest. (PHI = 14 days).</p>
<p><b>White Mold</b></p> <p>Apply with a boom sprayer with a single or multiple nozzles adjusted to provide thorough coverage of the lower stems and branches and the soil surface surrounding the plants or by chemigation.</p> <p>Do not apply by air.</p>	<p><b>White Mold</b> (<i>Sclerotinia spp.</i>)</p>	2.0	10 Minimum	<p>For White Mold, apply just prior to row closing, or at early first sign of disease, and repeat on a 14-28 day interval, if favorable conditions for disease development continues.</p>	<p>Under severe disease conditions the higher rate should be used for Early Blight.</p> <p>When applying through irrigation deliver between 0.1 to 0.3 inches of water per acre. Do not irrigate for 24 hours after application.</p> <p>Do not apply by air for White Mold control.</p>

### DIRECTIONS FOR USE THROUGH SPRINKLER IRRIGATION SYSTEMS

Apply this product only through sprinkler irrigation systems including microjet, solid set, wheel lines and center pivot. Do not apply this product through any other type of irrigation system.

**SPRAY PREPARATION:** Remove scale, pesticide residues, and other foreign matter from the chemical tank and entire injector system. Flush with clean water.

**APPLICATION INSTRUCTIONS:** First prepare a suspension of ROVRAL® 4 Flowable Fungicide in a mix tank. Fill tank with 1/2 to 3/4 the desired amount of water. Start mechanical or hydraulic agitation. Add the required amount of ROVRAL® 4 Flowable Fungicide. Add then the remaining volume of water. (Suspension concentrations using the appropriate dosage per acre recommended on this label of ROVRAL® 4 Flowable Fungicide per 1 to 4 gallons of water are recommended). The spray solution should be buffered to a PH of 5.0-7.0. Then set sprinkler to deliver 0.1 to 0.3 inch of water per acre. Start sprinkler and uniformly inject the suspension of ROVRAL® 4 Flowable Fungicide into the irrigation water line so as to deliver the desired rate per acre. The suspension of ROVRAL® 4 Flowable Fungicide should be injected with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing. If you should have any other questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

**NOTE:** When treatment with ROVRAL® 4 Flowable Fungicide has been completed, further field irrigation over the treated area should be avoided for 24 hours to prevent washing the chemical off the crop.

### GENERAL PRECAUTIONS FOR APPLICATIONS THROUGH SPRINKLER IRRIGATION SYSTEMS

Maintain continuous agitation in mix tank during mixing and application to assure a uniform suspension. Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute solution per unit time. 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 backflow. 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 shutdown. 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.

Do not apply when wind speed favors drift, when system connection or fittings leak, when nozzles do not provide uniform distribution when lines containing the product must be dismantled and drained. Crop injury, lack of effectiveness, or illegal pesticide residues the crop may result from nonuniform distribution of treated 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 the system down and make necessary adjustments should the need arise.

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

### LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label; (b) that this product is reasonably for the purposes set forth in the directions for use when it is used in accordance with such directions; and (c) that the directions, warning and other statements on this label are based upon responsible experts' evaluation of reasonable tests of effectiveness, toxicity to laboratory animals and to plants, and of residues on food crops and upon reports of field experience. Tests have not been made on all varieties or in all states or under all conditions. THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE, ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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