

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

May 7, 2020

Rodney Akers, Ph.D. Regulatory Manager Arysta LifeScience North America, LLC 15401 Weston Parkway, Suite 150 Cary, NC 27513

Subject: Label Amendment – Removal of Rice From the List of Approved Rotational Crop

Product Name: Iprodione 4L AG EPA Registration Number: 66330-297

Application Date: 12/12/2016

Decision Number: 524299

Dear Mr. Akers:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

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

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance

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with FIFRA section 6. If you have any questions, please contact Marcel Howard by phone at (703)305-6784, or via email at howard.marcel@epa.gov.

Maryam K. Muhammad, Acting Product Manager 21 Fungicide Branch Registration Division (7505P) Office of Pesticide Programs

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Enclosure

ACCEPTED

05/07/2020

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

° 66330-297

# Iprodione GROUP 2 Fungicide

# **IPRODIONE 4L AG**

# Flowable Fungicide

**ACTIVE INGREDIENT:** 

Iprodione: 3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide* .	41.6%
INERT INGREDIENTS:	58.4%
TOTAL:	100.0%

<sup>\*</sup>Equivalent to 4 lbs. iprodione per gallon

# KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguie ara que se la explique a usted en detalle.

(If you do not understand this label, find someone to explain it to you in detail.)

See inside [booklet] for complete First Aid, Precautionary Statements, and Directions for Use

FIRST AID		
If swallowed	Call a poison control center or doctor immediately for treatment advice.	
	Do not induce vomiting unless told to do so by the poison control center or doctor.  Do not give any liquid to the paragraph.	
	Do not give any liquid to the person.	
	Do not give anything by mouth to an unconscious person.	
If on skin or	Take off contaminated clothing.	
clothing	Rinse skin immediately with plenty of water for 15-20 minutes.	
	Call a poison control center or doctor for treatment advice.	
If in eyes	Hold eye open and rinse slowly and gently with water for 15-20 minutes.	
	• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.	
	Call a poison control center or doctor for treatment advice.	

#### **HOT LINE NUMBER**

**EMERGENCY TELEPHONE NUMBERS:** Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

FOR 24-HOUR MEDICAL EMERGENCY ASSISTANCE CALL PROPHARMA:

1-866-303-6952 or 1-651-603-3432.

FOR 24-HOUR CHEMICAL EMERGENCY (Spill, leaks, fire, exposure, or accident) CALL CHEMTREC: 1-800-424-9300 or 1-703-527-3887.

For Product Use Information Call 1-866-761-9397

EPA Reg. No. 66330-297

EPA Est. No.
NET CONTENTS:

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Produced for: Arysta LifeScience North America, LLC 15401 Weston Parkway, Suite 150 Cary, NC 27513

# PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders, others exposed to the concentrate, cleaners/repairers of equipment, and applicators applying as a dip treatment must wear:

- 1. Long-sleeve shirts and long pants
- Chemical resistant gloves such as barrier laminate, butyl rubber (>14 mils), neoprene rubber (>14 mils), nitrile rubber (>
  14 mils), polyvinyl chloride (PVC)(>14 mils), or viton (>14 mils).
- 3. Chemical resistant apron
- 4. Chemical resistant footwear plus socks

Applicators using hand held equipment must wear:

- 1. Coveralls over long-sleeve shirts and long pants
- 2. Chemical resistant gloves such as barrier laminate, butyl rubber (>14 mils), neoprene rubber (>14 mils), nitrile rubber (> 14 mils), polyvinyl chloride (PVC)(>14 mils), or viton (>14 mils).
- 3. Chemical resistant footwear plus socks
- 4. Chemical resistant headgear for overhead exposure
- 5. A dust/mist filtering respirator (MSHA/NIOSH approval number TC-21C) or a NIOSH approved respirator with any N, R, P or HE filter

Applicators using aircraft or mechanical ground equipment (groundboom, airblast, etc.) and flaggers for aerial applications must wear:

- 1. Long sleeve shirt and long pants
- 2. Shoes plus socks.

Applicators and all other handlers not specified above must wear:

- 1. Long-sleeve shirt and long pants
- Chemical resistant gloves such as barrier laminate, butyl rubber (>14 mils), nitrile rubber (> 14 mils), neoprene rubber (>14 mils), polyvinyl chloride (PVC)(>14 mils), or viton (>14 mils).
- 3. Shoes plus socks

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

Discard clothing or other materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

#### **ENGINEERING CONTROLS**

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 RECOMMENDATIONS**

Users should:

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

#### **ENVIRONMENTAL HAZARDS**

This chemical can contaminate surface water through aerial and ground spray applications. Under some conditions, it may also have a high potential for runoff into surface water after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

This pesticide is toxic to invertebrates. 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 washwater. Drift or run-off from treated areas is 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.

Read entire label before using this product.

This label must be in the possession of the user at the time of application.

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

# AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural 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 Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval of 48 hours for grapes. The restricted entry interval for all other WPS uses is 24 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:

- 1. Coveralls over long-sleeved shirt and long pants
- 2. Chemical-resistant gloves made of any waterproof material.
- 3. Shoes plus socks

# **PRODUCT RESTRICTIONS**

Use of this product at residential sites is prohibited.

If applying this product adjacent to a water body such as a lake, reservoir, river, permanent stream, marsh or natural pond, estuary, or commercial fish pond, there must be at least a 25-foot vegetative buffer strip between the water body and the point of application.

Do not apply this product when the wind direction is toward aquatic areas as listed above.

#### **CROP ROTATION RESTRICTIONS**

After harvest, the following crops may be rotated: Garlic, Lettuce, Chinese Mustard, Cotton, Potatoes, Dry Bulb Onions, Beans, Broccoli, Carrots, and Peanuts.

#### **GRAZING RESTRICTIONS**

The following grazing restrictions apply for stone fruit, almonds and grapes: Do not feed treated crops to livestock, or allow animals to graze in treated orchards.

For advice regarding disease conditions, please contact your local extension agent.

#### RESISTANCE MANAGEMENT RECOMMENDATIONS:

For resistance management, IPRODIONE 4L AG contains a Group 2 fungicide. Any fungal population may contain individuals naturally resistant to IPRODIONE 4L and other Group 2 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed. To delay fungicide resistance, take one or more of the following steps:

- Rotate the use of IPRODIONE 4L or other Group 2 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicide from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or 1PM recommendations for specific crops and pathogens.
- For further information or to report suspected resistance contact Arysta LifeScience North America, LLC. at **1-866-761-9397** or at www.arysta-na.com. You can also contact your pesticide distributor or university extension specialist to report resistance.

#### **HOW TO USE IPRODIONE 4L AG**

- Make sure spray equipment is clean and properly calibrated before mixing IPRODIONE 4L AG.
- Fill spray-tank approximately 1/4 full clean water.
- Add labeled rate of **IPRODIONE 4L AG**. Pre-mixing labeled rate in small amount of water prior to adding to spray tank will enhance mixing process.
- Agitate mixture while adding remaining water.
- Maintain agitation during application.
- Spray solution should be applied within 24 hours of preparation to avoid potential active ingredient degradation.
- pH of spray solution should be buffered to 5.0 to 7.0 if necessary to minimize potential active ingredient degradation.
- If using a spray adjuvant (not recommended for in-furrow applications), use only nonionic products that experience or manufacturer advice has shown to be crop tolerant. Avoid acidic products.

# HOW TO APPLY IPRODIONE 4L IN-FURROW FOR COTTON

Spray solution should be applied with properly calibrated spray equipment into the open furrow after the seed has been dropped and prior to furrow closure.

# IPRODIONE 4L MAY BE USED ON THE CROPS LISTED IN THE TABLE BELOW.

Field and Row Crops	Peanuts*
·	Cotton*
Fruit Trees and Nuts	Almonds
	Stone Fruits
	Apricots
	Cherries
	Nectarines
	Peaches
	Plums
	Prunes
Small Fruit	Berries
	Grapes
	Strawberries
Vegetables	Beans (Snap, Dry, and Lima)
	Broccoli
	Carrots
	Chinese Mustard (Florida Only)
	Dry Bulb Onions
	Garlic
	Lettuce (Head & Leaf types)
Ginseng*	-

<sup>\*</sup> Not Registered For Use ON COTTON, PEANUTS AND GINSENG IN CALIFORNIA.

# **FIELD AND ROW CROPS**

# COTTON

DISEASE	APPLICATION RATE		COMMENT
	Fluid Ounces per 1000 Row Feet	Total Fluid Ounces per Row Spacing per Acre	
Damping-off, "Sore Shin"	0.25 - 0.5	40" = 3.2 - 6.5	At planting application should be made with spray nozzles mounted to direct spray solution
(Rhizoctonia solani)		38" = 3.4 - 6.9	into furrow after seed has dropped and prior to furrow closure.
		36" = 3.6 - 7.3	Use the higher rate in areas where disease pressure has been more severe or if cool and
		30" = 4.4 - 8.7	wet weather conditions may promote disease development.
			Apply in a minimum of 2.5 gallons of water per acre.

# **RESTRICTIONS:**

• Do not feed cotton forage to livestock, or allow animals to graze in treated areas.

### **PEANUTS**

DISEASE	APPLICATION RATE (Pints per Acre)	COMMENTS
Sclerotinia Blight (Sclerotinia minor)	2.0	The product should be initially applied when weather conditions lend themselves to development of the disease.
		Make up to 2 follow up applications at 14 - 21 day intervals as a preventative program.
		Use low-pressure nozzles that produce large droplets adjusted to cover entire row.
		Vine spreaders may be used with flat fan nozzles for banding applications.
		Do not reduce 2 pint rate if banded application made.
		Use a minimum of 40 gallons of water per acre.
		If applied by chemigation, follow all precautions and restrictions in Sprinkler Chemigation section of label.

### **RESTRICTIONS:**

- The product MUST NOT be applied by air.
- The product MUST NOT be applied within 10 days of harvest.
- Peanut hay MUST NOT be fed to livestock.
- Do not exceed 3 applications per season.
- Do not exceed 6 pints of product per acre per season (3 lbs ai per acre per season).

# FRUIT TREE AND NUTS ALMONDS

DISEASE	APPLICATION RATE	COMMENTS
	(Pints per Acre)	
Blossom Blight	1.0	Use sufficient water to achieve thorough coverage.
(Monilinia laxa)		Thorough coverage after petal fall may be difficult with aerial application due to lack of canopy penetration.
Brown Rot		The following spray schedule is a general guide only. Applications should be made based on local disease pressure and as part of a complete disease control program.
Shot Hole		1st spray – Apply at pink bud.
(Stigmina	2 <sup>nd</sup> spray – Apply at full bloom.	
carpophila)		3 <sup>rd</sup> spray – Apply at petal fall.
		4 <sup>th</sup> spray – Apply up to 5 weeks after petal fall.
		Use 20 – 400 gallons of water for ground application or 15 gallons minimum for aerial.

- Do not exceed a maximum of 4 applications per season.
- Do not exceed 4 pints product (2 lbs ai) per acre per season.

# STONE FRUITS APRICOTS, CHERRIES, NECTARINES, PEACHES, PLUMS AND PRUNES

DISEASE	APPLICATION RATE	COMMENTS
	(Pints per Acre)	
Brown Rot Blossom Blight (Monilinia spp.)	1.0 - 2.0	The product should be initially applied when the bud tissue favors development of the disease. This is usually indicated by a pink, white or red bud. If favorable disease conditions linger, or repeat, the product should be applied during full bloom or petal fall.
Shothole		The product should be used as a fundamental component of a thorough disease control program.
(Stigmina carpophilia)		In order to achieve maximum coverage of blossoms and foliage, the product should be applied as a foliar spray in an ample amount of water.
Scab (Ventura		Use the higher rate and shorter spray interval when disease pressure is high.
carpophila)		If additional applications are required, <b>IPRODIONE 4L</b> may be substituted for by other properly registered fungicides.  Use 20 – 400 gallons of water for ground application or 15 gallons minimum for aerial.

### **RESTRICTIONS:**

- Do not exceed a 2-applications maximum per season.
- Do not exceed 4 pints product (2 lbs ai) per acre per season.
- Do not apply after petal fall.

#### **GINSENG**

DISEASE	APPLICATION RATE (Pints per Acre)	COMMENTS
Alternaria Blight (Alternaria panax)	1.5 - 2.0	Apply as a foliar spray with ground equipment as part of a complete spray program. Thorough coverage is essential.
		May be used as an alternating treatment with another registered fungicide on a 14-day spray interval.
Alternaria Blight	1.0 - 1.5	Use in a minimum of 10 gallons of water per acre.
(Alternaria panax)	1.0 - 1.5	Apply with another registered fungicide as a tank mix on a 7 – 10 spray interval.
		Use in a minimum of 10 gallons of water per acre.

- Do not exceed a 5-application maximum per season.
- Do not exceed a maximum application of 10 pints of product per acre per season (5 lbs ai per acre per season).
- The product MUST NOT be applied within 36 days of harvest.

#### **SMALL FRUIT**

**CANEBERRY:** Blackberry, loganberry, red and black raspberry; cultivars and/or hybrids of these. **BUSHBERRY:** Blueberry, highbush and lowbush; currant; elderberry; gooseberry; huckleberry.

DISEASE	APPLICATION RATE	COMMENTS
	(Pints per Acre)	
Botrytis Fruit Rot (Botrytis cinerea)	1.0 - 2.0	The product should be initially applied during 5 to 10% bloom ("early bloom"). Make a secondary application at full bloom.
		If necessary, the product can be applied up to two additional times. The product should be applied at 14 day intervals or as otherwise required.
		Use the higher rate when disease pressure is severe.
		Apply in a minimum of 100 gallons of water per acre.

#### **RESTRICTIONS:**

- Do not exceed a maximum of 4 applications per season.
- Do not exceed 8 pints product per acre per season (4 lbs ai per acre per season).
- Final application of the product can be made on the day of harvest, as well as any day leading up to harvest.

#### **GRAPES**

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DISEASE	APPLICATION RATE	COMMENTS
	(Pints per Acre)	
Bunch Rot (Botrytis cinera)	Wine and Sherry Grapes:	Please note that the schedule below is only for general information purposes. Local conditions will dictate actual applications of the product. For advice or recommendations regarding treatment, please contact your local extension agent.
		Spray Schedule:
	1.0 - 2.0	First application: Early mid-bloom
	1.5 - 2.0	Second Application: Before bunch closing
	1.5 - 2.0	Third Application: VeraisonWhen fruit begins to ripen.
	1.5 - 2.0	Final Application: As needed before harvest.
	Table and Raisins Grapes: 1.0 - 2.0	Apply only one application per season at early to mid-bloom.

- Apply in a minimum of 50 gallons of water per acre to achieve thorough coverage.
- Do not exceed a maximum of 4 applications per season for wine and sherry grapes. Do not exceed a maximum of 8 pints per acre per season for wine and sherry grapes (4 lbs ai per acre per season).
- Do not exceed a maximum of 1 application per season for table and raisin grapes.
- Do not exceed a maximum of 2 pints per acre per season for table and sherry grapes (1 lbs ai per acre per season).
- For wine and sherry grapes, final application of the product may be made up to 7 days prior to harvest.

# **STRAWBERRIES**

# **FOLIAR**

DISEASE	APPLICATION RATE (Pints per Acre)	COMMENTS
Anthracnose* (Colletotrichum	1.5 - 2.0	The product should be applied when weather conditions lend themselves to development of the disease.
spp.) Gray Mold		In order to properly control the disease, the crop must be thoroughly covered by the product.
(Botrytis cinerea)		Use higher rate when disease pressure is high.
Phomopsis Soft Rot (Phomopsis obscurans)		*Anthracnose (Colletorichum spp.) will be partially controlled or suppressed by <b>IPRODIONE 4L</b> . Apply in a minimum of 100 gallons of water per acre by ground. Apply in a minimum of 10 gallons of water per acre by air.
Purple Leaf Spot (Mycosphaerella spp.)		
Stem End Rot (Gnomonia comari)		

# **RESTRICTIONS:**

- Do not exceed a maximum of 1 application per season. Do not exceed a maximum of 2 pints per acre per season (1 lb ai per acre per season).
- This product must not be applied after first fruiting flower.

# STRAWBERRY DIP TREATMENT

DISEASE	APPLICATION RATE	COMMENTS
	(Pints per 100 gallons water)	
Botrytis Crown Rot (Botrytis spp.)	2.0	Dip the transplants in the solution for 5 minutes and plant immediately.

- Do not exceed a maximum of 1 application.
- Do not exceed a maximum of 2 pints per acre per season (1 lbs ai per acre per season).

#### **VEGETABLES**

# BEANS (SNAP, DRY AND LIMA)

DISEASE	APPLICATION RATE	COMMENTS
	(Pints per Acre)	
Gray Mold (Botrytis cinera)	1.5 - 2.0	Initial application should be made from first bloom to when 10% of plants have at least one bloom.
White Mold (Sclerotinia sclerotorum)		Make second application if necessary 5-7 days later or up to peak bloom.
		Ground equipment should be arranged so as to include a three-nozzle/row boom positioned with one placed directly over the row, and a drop on each side of the row. 50-100 PSI spray pressure is recommended for canopy penetration.
		Acceptable alternate methods of application include chemigation or application by air.
		Use the higher rate and shorter spray interval when disease pressure severe.
		In order to properly control the disease, the crop must be thoroughly covered by the product.
		Apply in a minimum of 40 gallons of water per acre by ground.  Apply in a minimum of 10 gallons of water per acre by air.  The product should be last applied no later than peak bloom.

# **RESTRICTIONS:**

- Do not make more than two applications per season.
- Do not exceed a maximum of 4 pints per acre per season (2 lbs ai per acre per season).
- The interval between last application and foraging is no less than 14 days.
- Snap or succulent bean hay must not be fed to livestock.
- Dry bean hay to must not be fed to livestock until 45 days after last application.
- This product must not be used on cowpeas.

#### BROCCOLL

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DISEASE	APPLICATION RATE	COMMENTS
	(Pints per Acre)	
Black Leg (Leptosphaeria maculans)	2.0	Make initial application of the product directly following thinning at the 2 to 4 leaf stage. If needed, make a second application of the product up to the day of harvest.
		The product should be applied using a tractor-mounted boom sprayer that includes 2 flat fan nozzles per row (one on either side) directed at the plant base and adjacent soil surface. The nozzles should be properly positioned so as to ensure thorough and complete stem coverage.
		The product may be applied by chemigation.
		Apply in a minimum of 40 gallons of water per acre by ground. Avoid drenching.

- Do not exceed a maximum of 2 applications per crop.
- Do not exceed 4 pints per acre per crop (2 lbs ai per acre per crop).
- Application of this product can be made up to the day of harvest.

### **CARROTS**

DISEASE	APPLICATION RATE	COMMENTS
	(Pints per Acre)	
Alternaria Blight (Alternaria dauci)	1.0 - 2.0	Make initial application when conditions favor disease development. Make additional applications every 7 to 14 days as needed.
Black Crown Rot (Alternaria radicina)		Apply as a foliar spray in sufficient water to obtain thorough coverage.  This product can be applied by aerial equipment, chemigation, or by ground.  If dealing with severe disease conditions, utilize the higher specified rate and/or shorter spray interval.  Apply in a minimum of 10 gallons of water per acre.
Alternaria Blight (Alternaria dauci) Black Crown Rot (Alternaria radicina)	1.0	TANK MIX PROGRAM For control of Alternaria on Carrots: Product may be applied to crop as a tank mix with another fungicide. Apply in a minimum of 10 gallons of water per acre.

# **RESTRICTIONS:**

- At the 2-pint rate, do not exceed a maximum of 4 applications per season (8 pints per acre per season)4 lbs ai per acre per season).
- In a Tank-Mix Program, do not exceed a maximum of 10 applications per season (10 pints per acre per season)5 lbs ai per acre per season).
- Product application may be made up to the day of harvest.

# **CHINESE MUSTARD**

(Florida Use Only)

DISEASE	APPLICATION RATE	COMMENTS
	(Pints per Acre)	
Alternaria Leaf Spot (Alternaria spp.)	1.0	Make initial application when conditions favor disease development. As long as conditions support development of disease, applications of the product should be continued on a 10-14 day interval.
		Thorough coverage is essential for control.
		Use in a minimum of 50 gallons of water per acre.

- Do not exceed a maximum of 4 applications per season. Do not exceed 4 pints per acre per season (2 lbs ai per acre per season).
- This product must not be applied within 10 days of harvest.

### **DRY BULB ONIONS**

DISEASE	APPLICATION RATE	COMMENTS
	(Pints per Acre)	
Botrytis Leaf Blight (Botrytis	1.5	Ground, air, or chemigation equipment can be used to apply this product.
squamosa)		If applied by ground, use a boom sprayer. The boom sprayer
Botrytis Neck Rot (Botrytis allii)		nozzle(s) should be properly adjusted for each row in order to provide adequate coverage.
Purple Blotch (Alternaria porri)		Make initial spray as soon as conditions favor disease development. As long as conditions support development of disease, applications of the product should be continued on a 10-14 day interval.
Botrytis Leaf Blight (Botrytis squamosa)	1.0	Tank Mix Program: The product may be applied as a tank mix with other fungicides registered for the control of Botrytis Leaf Blight, Botrytis Neck Rot
Botrytis Neck Rot (Botrytis allii)		or Purple Blotch (as described above for ground application).
		The product should be initially sprayed once conditions support the development of disease. As long as conditions support
Purple Blotch (Alternaria porri)		development of disease, applications of the product should be continued on a 10-14 day interval.

### **RESTRICTIONS:**

- Apply in a minimum of 50 gallons of water per acre by ground.
- Apply in a minimum of 10 gallons of water per acre by air.
- At the 1.5-pint rate, do not exceed a maximum of 5 applications per season (7.5 pints per acre per season/3.75 lb ai per acre per season).
- Under the Tank-Mix Program, do not exceed a maximum of 10 applications per season (10 pints per acre per season)5 lbs ai per acre per season).
- The product must NOT be applied within 7 days of harvest.

#### **GARLIC**

DISEASE	APPLICATION RATE	COMMENTS
	(Pints per Acre)	
White Rot (Sclerotitum cepivorum)	4.0*	In order to obtain thorough coverage of the open furrow and covering soil, the product should be applied at planting as an in-furrow spray in an adequate amount of water.  Apply in a minimum of 20 gallons of water per acre.

### **RESTRICTIONS:**

• Do not exceed a maximum of 1 application per year (4 pints per acre per year/2 lbs ai per acre per year).

<sup>\*</sup> The above rate reflects a 38-40 inch row spacing rate, and is based on pints product/treated acre.

# LETTUCE (leaf lettuce and head lettuce)

DISEASE	APPLICATION RATE	COMMENTS
	(Pints per Acre)	
	1.5 - 2.0*	Thorough coverage is essential for control.
Bottom Rot (Rhizoctonia solani)  Lettuce Drop (Sclerotinia spp.)		Make ground application with a boom sprayer mounted on a tractor. The boom sprayer should be outfitted with three nozzles per seed line (one nozzle should be centered over the row and one nozzle should be on each side of the row). Two nozzles should be properly pointed so as to guarantee total coverage of the lower portion of the plants as well as complete coverage of the adjacent soil surface.
		Make initial application between the 3 leaf stage to just after thinning. Repeat 10 days later.
		Make a third application of the product 10 days after the second spray if conditions continue to support development of disease.
		Utilize higher rates when dealing with severe disease conditions.
		Chemigation may also be used to apply the product. Apply in a minimum of 40 gallons of water per acre. Avoid cultivation following application. If required, apply the product during cultivation or immediately thereafter. Avoid drenching.

# RESTRICTIONS:

Do not exceed a 3-application maximum to each crop.

Do not exceed 6 pints product per acre per season (3 lbs ai per acre per season).

The product must not be applied within 14 days of harvest.

<sup>\*</sup>Do not reduce the per acre rate when applying product in a band.

#### **POTATOES**

DISEASE	APPLICATION RATE (Pints per Acre)	COMMENTS
Early Blight (Alternaria solani)	1.0 - 2.0	Make application with a boom sprayer with nozzle(s) properly placed so as to provide thorough foliage coverage, with specific focus on the older leaves.
		Use the higher rate when Early Blight disease pressure is high.
		The product can also be applied by air or by chemigation.
		Note on Sprinkler Chemigation: Deliver between 0.1 to 0.4 inches of water per acre.
		Initiate application of the product when conditions first start to support development of disease. The product can be applied up to 3 subsequent times, at 10-14 day intervals, or as required. Use in a minimum of 10 gallons of water per acre. Allow 24 hours to pass following application before irrigating.
White Mold (Sclerotinia sclerotiorum)	2.0	Make application with a boom sprayer with nozzle(s) properly placed so as to provide thorough lower stem and branch coverage, as well as thorough coverage of the adjacent soil surface.
		May be applied by chemigation also.
		Thorough and complete foliage coverage is vital to proper disease control.
		Product should be applied at first detection of disease, or just prior to row closing. If conditions continue to support disease development, applications can be repeated on a 14-21 day interval.  Use in a minimum of 10 gallons of water per acre.
		Allow 24 hours to pass following application before irrigating.

# **RESTRICTIONS:**

- Do not exceed a 4-application maximum per season.
- Do not exceed 8 pints product per acre per season (4 lbs ai per acre per season).
- The product must not be applied within 14 days following a harvest.
- For control of White Mold, do not apply product by air (except in California).

#### SPRINKLER IRRIGATION SYSTEM DIRECTIONS

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: All pesticide residues, scale, and other foreign matter should be removed from the chemical tank and entire injector system. Clean water should be used to flush out chemical tank and injector system.

APPLICATION INSTRUCTIONS: First prepare a suspension of **IPRODIONE 4L** in a mix tank. The mix tank should be filled with 1/2 to 3/4 the desired amount of water. Next, begin hydraulic or mechanical agitation. Then add the necessary amount of **IPRODIONE 4L**, followed by the remaining volume of water. (recommended suspension concentrations: those that use the appropriate dosage per acre recommended on this label of **IPRODIONE 4L** per 1 to 4 gallons of water ) Buffer the spray solution to a pH of 5.0-7.0. Position the sprinkler to deliver 0.1 to 0.4 inch of water per acre. Start sprinkler and uniformly inject the suspension of **IPRODIONE 4L** into the irrigation water line in order to deliver the desired rate per acre. To insure adequate mixing, with a positive displacement pump, inject into the main line ahead of a right angle the suspension of **IPRODIONE 4L**. All questions regarding calibration should be directed to a State Extension Service Specialist, equipment manufacturer or other expert.

NOTE: In order to avoid washing the chemical off the crop, do not irrigate the field over the treated area for 24 hours following completion of treatment with **IPRODIONE 4L**.

#### SPRINKLER IRRIGATION SYSTEM APPLICATION PRECAUTIONS

In order to assure a uniform suspension, it is important to maintain continuous agitation in the mix tank both during mixing and application. In order to achieve greater accuracy in both calibration and distribution, inject 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. If you are unsure of wind conditions, contact your local extension agent.

Do not apply when wind speed favors drift beyond the area intended for treatment. The product should not be applied when the sprinkler system connection or fittings leak, when lines containing the product must be dismantled or drained, when the speed of the wind supports spray drift or when system nozzles do not provide for uniform distribution of the product. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop may result from nonuniform distribution of treated water.

Prior to turning off irrigation water, allow ample time for the pesticide to be properly flushed through all lines and nozzles. 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.

#### **SPRAY DRIFT MANAGEMENT**

SENSITIVE AREAS: The pesticide should only be applied when the potential for drift to adjacent areas (e.g., residential areas, bodies of water, known habitats for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

- 1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information below.

The following sections are advisory in nature and do not supersede the mandatory label requirements.

#### INFORMATION ON DROPLET SIZE:

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (See Wind, Temperature and Humidity, and Temperature Inversions below).

#### CONTROLLING DROPLET SIZE:

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure
  produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing
  pressure.
- Number of Nozzles Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets
  than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size
  and increase drift potential.
- Nozzle Type Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray
  angles produces larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produces
  the largest droplets and the lowest drift.

#### **BOOM LENGTH:**

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

#### APPLICATION HEIGHT:

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

#### SWATH ADJUSTMENT:

When applications are made with a crosswind, the swath will be displaced windward. Therefore, on the up and downwind edges of the field, the applicator should compensate for the displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with the increasing drift potential (higher wind, smaller drops, etc.).

#### WIND:

Drift potential is lowest between winds speeds of 2 - 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

# TEMPERATURE AND HUMIDITY:

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

#### TEMPERATURE INVERSIONS:

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

# 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 HANDLING:**

Non-refillable Container. Equal to or less than 5 gallons: Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. 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 ¼ 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. Offer for recycling, if available, 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.

### **Warranty and Disclaimer Statement**

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America, LLC ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. All such risks shall be assumed by the user or buyer.

Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions. This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta,and is subject to the inherent risks described above.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF ARYSTA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF ARYSTA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT ARYSTA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.