# PREVICUR® FLEX Fungicide

ACCEPTED

MAR 29 2002'

Under the Federal Insecticide. Fungicide, and Redonticide Act as amended, for the pesticide registered under

# For Protection of Potatoes From Late Blight and Tuber Blight

EPA Reg No. 264-678

EPA Est. No. 407-IA-002

# CAUTION

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

For <u>PRODUCT USE Information Call 1-888-AVENTIS</u> (1-888-283-6847)

# **FIRST AID**

IF SWALLOWED:	Call a physician or Poison Control Center or doctor immediately for treatment advice.					
	Have person sip a glass of water if able to swallow.					
	Do not induce vomiting unless told to do so by a poison control center or doctor.					
	Do not give anything by mouth to an unconscious person.					
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.					
IF ON SKIN OR CLOTHING:	Take off contaminated clothing.					
	Rinse skin immediately with plenty of water for 15-20 minutes.					
	Call a poison control center or doctor for treatment advice.					

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577.

# PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling. Avoid contact with skin, eyes or clothing.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

### Applicators and other handlers must wear:

- Long sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
- Shoes plus socks

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

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in 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.

#### **ENVIRONMENTAL HAZARDS**

**Do not** apply directly to water, to areas where surface water is present, or to intertidal areas below the high water mark. **Do not** contaminate water when disposing of equipment washwaters. **Do not** apply when weather conditions favor drift from the treated areas.

# STORAGE AND DISPOSAL

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

Storage: Store in original container and keep tightly closed. Store in a cool, dry place.

**Pesticide disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide spray, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label directions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container disposal: Do not reuse empty container. 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.

# **DIRECTIONS FOR USE**

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

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 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 of this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker reentry into treated areas during the restricted entry interval (REI) of 12 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
- · Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

### **GENERAL INFORMATION**

PREVICUR® FLEX in a tank mixture combines the systemic action of propamocarb hydrochloride with the contact activity of the tank mix partner (chlorothalonil, maneb or mancozeb) to give protection against late blight (*Phytophthora infestans*) and early blight (*Alternaria solani*). A PREVICUR® FLEX tank mixture will reduce the incidence of tuber blight caused by *Phytophthora infestans* when used as part of a disease management program. A PREVICUR® FLEX tank mixture is an excellent disease control product combination when used according to label directions for control of these diseases.

A PREVICUR® FLEX tank mixture is recommended for use in programs following Integrated Pest Management (IPM) principles that attempt to minimize disease resistance to fungicides. This includes the use of disease-resistant crop varieties, cultural practices, pest scouting, and disease forecasting systems which reduce unnecessary applications of pesticides. Review State Cooperative Extension Service recommendations for effective disease resistance management programs in your area. PREVICUR® FLEX can be applied both as a broadcast or as an over the row banded application.

# APPLICATION TIMING AND DOSAGE

Use PREVICUR® FLEX only in a tank mixture with other fungicides. Mixtures with chlorothalonil, maneb or mancozeb are recommended. Mixtures with chlorothalonil generally give superior results. Use in a preventative program for control of late blight and tuber blight in potatoes. Begin applications when conditions are favorable for disease, but before infection, according to the use directions below.

Banded applications: Seed potatoes can be a significant primary source of late blight, and an early fungicide application can minimize this threat. PREVICUR® FLEX may be applied as an early season post emergence banded application. When applying PREVICUR® FLEX in a band, do not concentrate the dose rate in the banded area. Thorough coverage of the plants is essential for optimum disease control, therefore adjust the band width depending on plant height or size. Repeated applications will result in improved disease control.

When using a banded application, the actual amount of PREVICUR® FLEX applied will be proportionately less than what would be applied with a broadcast spray. Use the following formula to calculate the amount of PREVICUR® FLEX needed per crop acre when making band applications.

Band width in inches				
	X	Broadcast rate (1.2 pt/acre)	=	Amount needed per acre of field in pt/A.
Row spacing in inches		<b>,</b> - <b>,</b> ,		, , , , , , , , , , , , , , , , , , , ,

Apply PREVICUR® FLEX in a minimum of 5 gallons of water per acre.

**Broadcast applications:** Using ground spray equipment, apply PREVICUR® FLEX in a tank mixture with chlorothalonil, maneb or mancozeb at the rates specified below. Thorough uniform coverage is essential for disease control. Apply a PREVICUR® FLEX tank mixture in a *minimum* of 15 gallons of water per acre.

Aerial applications: Apply PREVICUR® ELEX in a tank mixture with chlorothalonil, maneb or mancozeb at the rates specified below using fixed wing or rotary aircraft equipment in a minimum of 6 gallons of water per acre to assure uniform coverage of the foliage. Thorough uniform coverage is essential for disease control.

Chemigation applications: See application techniques below. Apply PREVICUR® FLEX Fungicide in a tank mixture with chlorothalonil, maneb or mancozeb at the rates specified below in an adequate volume of irrigation water to ensure uniform coverage.

#### IPM STRATEGY FOR LATE BLIGHT AND TUBER BLIGHT CONTROL IN POTATOES

For IPM, use the following guidelines when adjusting the rate and timing based on local late blight conditions. Tuber blight control will result as a consequence of good foliar blight control, complete killing of vines before harvest, and proper tuber storage conditions. Always consult your agricultural advisor, University contact or Extension Service for recommended pest management practices for your area.

Disease Risk	PREVICUR® FLEX Rate pt/A	Tank Mix + Partner	Schedule	Suggested Decision Criteria
Low	0.7	At low recommended label rate	7 days	When vines emerge and leaf wetness occurs.
Medium	0.9	At mid recommended label rate	7 – 10 days	Periods of rapid vine growth, as canopy closes within the rows or when weather conditions favor infection.
High	1.2	At high recommended label rate	7 – 10 days	Evidence of infected seed pieces, blight in the area or late blight forecasting models call for higher fungicide rates or shorter spray intervals.

Under conditions favoring rapid disease development and severe disease conditions, apply PREVICUR® FLEX at 1.2 pt/A with a tank mix partner on a 10 day schedule alternating on the fifth day with a contact fungicide.

Do not apply more than 6.0 pints of PREVICUR® FLEX (4.5 lb. total ai/A) in a single growing season. Do not apply within 14 days before harvest.

#### IPM STRATEGY FOR MIXED INFECTIONS OF LATE BLIGHT AND EARLY BLIGHT IN POTATOES

PREVICUR® FLEX mixed with chlorothalonil, maneb or mancozeb is an excellent tank mix combination for control of late blight (*Phytophthora infestans*) and early blight (*Alternaria solani*). Follow use directions and rates specified above for late blight and tuber blight control. When the threat of early blight is moderate to severe, then additional amounts of the tank-mix partner are needed. Read and follow the use directions on the tank mix partner label.

# MIXING THE SPRAY

Follow the recommendations of your State Cooperative Extension Service for tank-mixing with wettable powders, emulsifiable concentrates, suspension concentrates or flowables. In general, add one-half of the required amount of water to the spray or mixing tank and start agitation. Add the required quantity of PREVICUR® FLEX Fungicide and the tank mix partner to the water and complete filling with water to the required total volume. Maintain agitation throughout spraying. Do not allow spray mixture to remain in the tank overnight, or for long periods during the day without agitation.

#### Spray Drift Management

# 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 is 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 outermost 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.
- 3. To avoid spray drift, do not apply when winds exceed 10 mph.

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 Spray Drift Reduction Advisory.

### APPLICATION AND CALIBRATION TECHNIQUES FOR SPRINKLER IRRIGATION

Apply this product only through center pivot, motorized lateral move, traveling gun, solid set or portable (wheel move, side roll, end tow, or hand move) irrigation system(s). Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not apply this product through irrigation systems connected to a public water system. 'Public water system' means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days per year.

Controls for both irrigation water and pesticide injection systems must be functionally interlocked, so as to automatically terminate pesticide injection when the irrigation water pump motor stops. A person knowledgeable of the irrigation system and responsible for its operation shall shut the system down and make necessary adjustments should the need arise.

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The irrigation water pipeline must be fitted with a functional, automatic, quick-closing check valve to prevent the flow of treated irrigation water back toward the water source. The pipeline must also be fitted with a vacuum relief valve and low pressure drain, located between the irrigation water pump and the check valve, to prevent back-siphoning of treated irrigation water into the water source.

Always inject this product into irrigation water after it discharges from the irrigation pump and after it passes through the check valve. Never inject pesticides into the intake line on the suction side of the pump.

Pesticide injection equipment must be fitted with a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump. Interlock this valve to the power system, so as to prevent fluid from being withdrawn from the chemical supply tank when the irrigation system is either automatically or manually turned off.

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 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.

Spray mixture in the chemical supply tank must be agitated at all times, otherwise settling and uneven application may occur. Do not apply when wind speed favors drift beyond the area intended for treatment.

This product may be used through two basic types of sprinkler irrigation systems as outlined in Sections A and B below. Determine which type of system is in place, then refer to the appropriate directions provided for each type.

#### A. Center Pivot, Motorized Lateral Move and Traveling Gun Irrigation Equipment

For injection of pesticides, these continuously moving systems must use a positive displacement injection pump, of either diaphragm or piston type, constructed of materials that are compatible with pesticides, capable of being fitted with a system interlock, and capable of injection at pressures approximately 2-3 times those encountered within the irrigation water line. Venturi applicator units cannot be used on these systems.

Thoroughly mix recommended amount of this product for acreage to be covered into same amount of water used during calibration and inject into system continuously for one revolution or run. Mixture in the chemical supply tank must be continuously agitated during the injection run. Shut off injection equipment after one revolution or run, but continue to operate irrigation system until this product has been cleared from last sprinkler head.

### B. Solid Set and Portable (Wheel Move, Side Roll, End Tow, or Hand Move) Irrigation Equipment

With stationary systems, an effectively designed in-line Venturi applicator unit is preferred which is constructed of materials that are compatible with pesticides; however, a positive-displacement pump can also be used. Determine acreage covered by sprinkler. Fill tank of injection equipment with water and adjust flow to use contents over a thirty to forty-five minute period. Mix desired amount of this product with water for acreage to be covered so that the total mixture of this product plus water in the injection tank is equal to the quantity of water used during calibration. Operate entire system at normal pressures recommended by the manufacturer of injection equipment used, for amount of time established during calibration. Agitation is recommended. This product can be injected at the beginning or end of the irrigation cycle or as a separate application. Stop injection equipment after treatment is completed and continue to operate irrigation system until this product has been cleared from last sprinkler head.

# **Use Precautions**

- Do not rotate to root and leafy vegetables for 30 days following the last application of PREVICUR® FLEX Fungicide.
- Do not rotate to winter wheat and all other crops for 120 days following the last application of PREVICUR® FLEX Fungicide.

# **IMPORTANT: READ BEFORE USE**

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and should be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Aventis CropScience. All such risks shall be assumed by the user or buyer.

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NET CONTENTS: 2.64 US Gallons (10 liters)

Previour is a registered trademark of the Aventis Group.

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