



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

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Dr. Jeffrey H. Birk BASF Corporation 26 Davis Drive Research Triangle, Park, NC 27709-3528 APR 22 2004

Subject: Acrobat 50WP Fungicide

EPA Reg. No. 241-410

Your Submission on March 15, 2004

Dear Dr. Birk:

The amended label and supplemental label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended is acceptable provided the following change is made:

Delete the second period within the sentence "EXCEPT MEFENOXAM.... to these fungicides." located on page 5 under the heading TANK MIXES WITH FUNGICIDES.

Delete reference to metalaxyl as it is only registered for seed uses.

One copy of the label stamped "Accepted with comments" is enclosed for your records. This label supercedes all labels previously accepted for this product. Please submit one copy of the final printed label that incorporates the required changes before the product is released for shipment.

If you have any questions, please contact Tamue Gibson by phone at (703) 305-9096 or via email at gibson.tamue@epa.gov.

Sincerely,

Mary Waller

Product Manager (21)

Fungicide Branch

Registration Division (7505C)

Mary J. Waller

## ACROBAT® 50WP fungicide

For Use in Bulb Vegetables, Cucurbit Vegetables, Fruiting Vegetables, Leafy Brassica Greens, Hops, Lettuce, Potatoes, Taro, Tobacco and Field Grown Tomatoes

ACTIVE INGREDIENT:
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Dimethomorph	50.0%
INERT INGREDIENTS:	50.0%
TOTAL:	100.0%

EPA Reg. No. 241-410 U.S. Patent No. 5,952,496 EPA Est. No. 241-MO-001

## KEEP OUT OF REACH OF CHILDREN

## CAUTION!/PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

In case of an emergency endangering life or property involving this product, call day or night 800-832-HELP.

See inside for Additional Precautionary Statements

**BASF Corporation** 26 Davis Drive Research Triangle Park, NC 27709

Net Contents: 4 Pounds

® Registered Trademark of BASF.

ACCEPTED with COMMENTS In EPA Letter Dated:

APR 22 2004

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as emended, for the pesticide registered under EPA Reg. No. 241-410



## FIRST AID

If Swallowed: Call a 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 by a poison control

center or doctor. Do not give anything by mouth to an unconscious person.

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.

#### HOT LINE NUMBER

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

You may also contact BASF Corporation for emergency medical treatment information/ 1-800-832 ELP (4357).

## PRECAUTIONARY STATEMENTS

## HAZARDS TO HUMANS AND DOMESTIC ANIMALS

## **CAUTION**

Harmful if swallowed or absorbed through skin. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling.

## Personal Protection 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 and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

## User Safety Recommendations:

#### User 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.

## **ENVIRONMENTAL HAZARDS**

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 cleaning equipment or disposing of equipment washwaters.



## **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 when wind conditions favor drift.

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 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 (REI) of 12 hours.

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, wear:

coveralls

chemical resistant gloves made of any waterproof material, such as polyethylene or polyvinyl chloride.

shoes plus socks

## STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

## Storage:

Store in a cool, well-ventilated area. DO NOT allow to become overheated in storage. Keep container closed when not in use.

#### 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: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

## GENERAL INFORMATION

THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF FUNGICIDE APPLICATION. Do not apply this product through any type of irrigation system unless the label instructions on chemigation are followed. See below for Chemigation Use Directions.

ACROBAT 50WP should be used in a preventative spray program to manage the target diseases. Maximum results can only be achieved by thorough plant coverage. ACROBAT 50WP must be used in accordance with this label. It is recommended that this product be used within an Integrated Pest Management Program.



Fungus strains have developed resistance to some fungicides after repeated use. Since the development of resistance cannot be predicted, ACROBAT 50WP should always be used in a resistance management program. Tank mixing and thorough spray coverage are necessary to minimize the development of fungus strains with resistance to ACROBAT 50WP.

In order to reduce the risk of the development of fungicide resistance, ACROBAT 50WP must be used as a tank-mix with fungicides active against the target diseases (EXCEPT MEFENOXAM OR METALAXYL where the target disease has shown reduced sensitivity to these fungicides.), DO NOT apply ACROBAT 50WP alone.

The use of ACROBAT 50WP in all tobacco transplant production systems (including greenhouse, float-beds, and traditional ground beds) is STRICTLY PROHIBITED. DO NOT use ACROBAT 50WP in transplant water.

Carefully read, understand, and follow all directions and precautions.

Disease pressure, plant growth rate, and environmental conditions will determine the length of the spray interval and the rate of ACROBAT 50WP. Consult local disease forecast advisory system recommendations to determine the predicted disease pressure and the associated application rates and intervals. Sprayers should be properly calibrated before application. Determine the size of the area to be sprayed and the output rate to determine the quantities of ACROBAT 50WP and water needed for accurate application. Apply material with adequate spray pressure, water volume, and proper nozzle arrangement to provide full coverage.

## ADDITIVES AND GENERAL TANK MIXING INFORMATION

ACROBAT 50WP can be tank mixed with most recommended fungicides, insecticides, herbicides, liquid fertilizers, biological control products, adjuvants, and additives as specified in the cropspecific recommendations in the DIRECTIONS FOR APPLICATION section of this label. Under some conditions, the use of additives or adjuvants may improve the performance of ACROBAT 50WP. However, all varieties and cultivars have not been tested with possible tank mix combinations. Local conditions can also influence crop tolerance and may not match those under which BASF has conducted testing. Physical incompatibility, reduced disease control, or crop injury may result from mixing ACROBAT 50 WP with other products. Therefore, before using any tank mix (fungicides, insecticides, herbicides, liquid fertilizers, biological control products, adjuvants and additives), test the combination on a small portion of the crop to be treated to ensure that a phytotoxic response will not occur as a result of application.

## MIXING INSTRUCTIONS

Fill the spray tank until it is approximately 1/2 full with clean water. Slowly, add ACROBAT 50WP to the spray tank while agitating. Agitation must be engaged prior to the addition of the product to obtain a complete and uniform mixture of ACROBAT 50WP.

Limit amount of spray mixture prepared to that needed for immediate use.

## Mixing Order:

- 1) Water: Begin by agitating a thoroughly clean sprayer tank half full of clean water.
- Products in PVA bags: Place the water-soluble PVA bag into the mixing tank. The water-soluble PVA bag will dissolve in water to allow the contents to disperse. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
- Water-dispersible products: (wettable powders including ACROBAT 50WP, dry flowables, suspension concentrates, or suspo-emulsions)
- 4) Water-soluble products
- 5) Emulsifiable concentrates: (oil concentrate or methylated seed oil when applicable)
- 6) Water-soluble additives: (ammonium sulfate or urea ammonium nitrate when applicable)
- 7) Remaining quantity water

Maintain maximum constant agitation during application. Thorough agitation is required if the mixture is allowed to stand for a prolonged period of time.



## COMPATIBILITY

The tank mixing behavior of this fungicide with other pesticides has not been fully investigated. If tank mixing with other pesticides is desirable, conduct a jar test with rates and volumes of carrier typically used in an agricultural application. Look for signs of separation, globules, sludge, flakes or other precipitates. DO NOT tank mix with the other pesticide if the jar test with ACROBAT 50WP has indicated incompatibility.

## TANK MIXES WITH FUNGICIDES

DO NOT apply ACROBAT 50WP alone. ACROBAT 50WP must be used in a tank-mix with fungicides that are active against the target disease, EXCEPT MEFENOXAM OR METALAXYL when the target disease has shown reduced sensitivity to these fungicides. Refer to the respective tank-mix partner labeling for rates, methods of applications, proper timing, restrictions and precautions. Always use in accordance with the more restrictive label restrictions and precautions. Do not use a pesticide product which contains a prohibition against tank mixing.

## **AERIAL SPRAY APPLICATIONS**

Prior to aerial application, check the aircraft for uniformity of spray pattern, spray swath width and output. If hollow cone or whirlplate nozzles are used, it is recommended that they be positioned straight down or slightly backwards. When using nozzles that produce relatively straight streams (e.g., D-series orifice with no core), the recommended positioning is straight back or slightly down from back. Uniformly apply with properly calibrated aerial equipment in 5 or more gallons of water per acre. If foliage is dense, use an output that will ensure optimum fungicide penetration. Spray swaths should be marked using flaggers who are in completely enclosed vehicles, by counting rows, or by using some other marking device.

DO NOT apply when weather conditions favor drift.

## CHEMIGATION USE DIRECTIONS

ACROBAT 50WP can be applied prior to the onset of disease infection on a regular protectant spray schedule, not an irrigation schedule. Chemigation applications must be made according to the crop specific spray schedule interval recommendation in the DIRECTIONS FOR APPLICATION section of this label, and may depend on disease pressure and environmental conditions. Consult local late blight advisory system recommendations to determine the predicted disease pressure and the associated application rates and intervals. Chemigation applications may need to be supplemented with ground or aerial applications if irrigation cycles are less frequent than what is recommended on the label to obtain optimum control.

Apply ACROBAT 50WP fungicide only through sprinkler irrigation systems including center-pivot, lateral move, side (wheel) roll, solid set, or hand move irrigation systems. DO NOT apply 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.

The irrigation system must be correctly calibrated (with water only) to ensure that the recommended rate of ACROBAT 50WP is applied.

DO NOT connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

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Chemigation systems connected to public water systems must contain a functional reduced-pressure zone (RPZ), backflow preventer or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

The system should have properly working nozzles providing the recommended output and pattern. The chemigation system should also be free of leaks.

## Overhead Sprinkler Irrigation System Requirements

- 1. The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 5. The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point that pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. DO NOT apply when wind speed favors drift beyond the area intended for treatment.

The following routine checks will help to ensure that the sprinkler irrigation system is working properly.

- 1. Use a calibrated injection metering pump as specified by the manufacturer.
- 2. Metering pumps, the supply tank, and any associated equipment must be clean and dry before adding diluted ACROBAT 50WP to the system for injection.
- 3. Check the metering pump periodically to confirm that ACROBAT 50WP is being injected continuously and at the proper calibration throughout the irrigation period.
- 4. Continuous agitation must be maintained in the supply tank during the entire overhead sprinkler irrigation period.

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## Center Pivot, and Lateral Move Irrigation Equipment

(Use only with electric or oil hydraulic drive systems which provide a uniform water distribution)

1. Determine size of area to be treated

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- 2. Determine the time required to apply the least amount of water. No more than 0.2 inches of water should be applied over the area to be treated when the system and injection equipment are operated at normal pressures recommended by the equipment manufacturer's rated capacity.
- 3. Using only water, determine the injection pump output when operated at normal line pressure.
- 4. Determine the amount of ACROBAT 50WP fungicide required to treat area.
- 5. Add the required amount of ACROBAT 50WP fungicide and sufficient water to meet the injection time requirements of the solution tank.
- 6. Maintain constant solution tank agitation during the injection period.
- 7. Stop injection equipment after treatment is completed. Continue to operate the system until ACROBAT 50WP fungicide solution has cleared the last sprinkler head.

## Solid-set, Side (wheel) Roll, and Hand Move Irrigation Equipment:

- 1. Determine acreage covered by sprinkler.
- 2. Fill injector solution tank with water and adjust flow rate to use contents over a 10 to 30 minute interval.
- 3. Determine the amount of ACROBAT 50WP fungicide required to treat the area.
- 4. Add the required amount of ACROBAT 50WP fungicide into the same quantity of water used to calibrate the injection equipment.
- 5. Maintain constant solution tank agitation during the injection period.
- 6. Operate system at normal pressures recommended by the manufacturer of the injection equipment and use for the time interval established during calibration.
- 7. Inject ACROBAT 50WP fungicide at the end of the irrigation cycle or as a separate application to maximize foliar fungicide retention.
- 8. Stop injection equipment after treatment is completed. Continue to operate the system until ACROBAT 50WP fungicide solution has cleared the last sprinkler head.

## **DIRECTIONS FOR APPLICATION**

Maximum benefit of ACROBAT 50WP from foliar applications requires thorough coverage of the plant. To obtain thorough coverage of foliage, use proper spray pressure and a minimum of 20 gallons per acre.

Crop	Target Disease	Use Rate: Oz Product / Acre / Application	General Recommendations	Restrictions
Bulb Vegetables:  Garlic Garlic, great-headed  Leek Onion, dry bulb Onion, green Onion, Welch Shallot	Downy Mildew (Peronospora destructor)	6.4	ACROBAT 50WP must be applied as a tank mix with another fungicide active against downy mildew. Do not make more than two sequential applications of ACROBAT 50WP before alternating to another effective fungicide with a mode of action different from ACROBAT 50WP for at least one application.  Begin applications when conditions favor disease development. Continue applications on a 5-7 day spray schedule as needed until weather conditions favoring infection and sporulation decrease.	DO NOT make more than 5 applications per season.  DO NOT exceed 32 oz per acre per growing season.  DO NOT use less than 20 gallons of water per acre for ground applications and 5 gallons per acre for aerial applications.  Bulbs or leaves may be harvested on the day of the last application after sprays have dried.
Cucurbit Vegetables:  Cantaloupe Chayote Chinese waxgourd Citron melon Cucumber Gherkin Gourd, edible Melon Momordica spp. Muskmelon Pumpkin Squash, summer Squash, winter Watermelon	Phytophthora Blight or Crown Rot (Phytophthora capsici)	6.4	ACROBAT 50WP must be applied as a tank mix with another fungicide active against downy mildew. Do not make more than two sequential applications of ACROBAT 50WP before alternating to another effective fungicide with a mode of action different from ACROBAT 50WP for at least one application.  Begin applications prior to the onset of disease infection. Continue applications on a 5-10 day spray schedule. Use shorter spray intervals when disease pressure is higher.  ACROBAT 50WP must be applied as a tank mix with another fungicide active against Phytophthora blight. Do not make more than two sequential applications of ACROBAT 50WP before alternating to another effective fungicide with a mode of action different from ACROBAT 50WP for at least one application.  Begin applications when plants are 4-6 inches high or prior to the onset of disease infection and spray to runoff. Applications should be made on a 5-7 day spray schedule under higher disease pressure and on a 7-10 day spray schedule under low to moderate disease pressure.	DO NOT make more than 5 applications per season.  DO NOT exceed 32 oz per acre per growing season.  DO NOT use less than 20 gallons of water per acre for ground applications and 5 gallons per acre for aerial applications.  Cucurbits may be harvested on the day of the last application after sprays have dried.

Стор	Target Disease	Use Rate: Oz Product / Acre / Application	General Recommendations	Restrictions
Fruiting Vegetable Group (except Tomato)*  Eggplant Ground cherry Pepino Pepper (all varieties) Tomatillo	Suppression only Phytophthora blight (Phytophthora capsici)	6.4	ACROBAT 50WP must be applied as a tank mix with another fungicide active against downy mildew. Do not make more than two sequential applications of ACROBAT 50WP before alternating to another effective fungicide with a mode of action different from ACROBAT 50WP for at least one application.  Begin applications when plants are 4-6 inches high and prior to the onset of disease infection. Apply on a 5-10 day spray schedule. Prior to the onset of conditions favoring infection, apply every 7-10 days. When environmental conditions have been conducive for diseases, or when disease has been detected within the field or nearby, a 5-7 day schedule is recommended.	DO NOT make more than 5 applications per season.  DO NOT exceed 32 oz per acre per growing season.  DO NOT use less than 20 gallons of water per acre for ground applications and 5 gallons per acre for aerial applications.  Not registered for use on these crops in California
Leafy Brassica Greens*	Suppression only  Downy Mildew (Peronospora parasitica)	6.4	Apply spray to runoff.  ACROBAT 50WP must be applied as a tank mix with another fungicide active against downy mildew. Do not make more than two sequential applications of ACROBAT 50WP before alternating to another effective fungicide with a mode of action different from ACROBAT 50WP for at least one application.  Begin applications when conditions favor disease development. Continue applications on a 7 day spray schedule as needed until weather conditions favoring infection and sporulation decrease.	DO NOT make more than 5 applications per season.  DO NOT exceed 32 oz per acre per growing season.  DO NOT use less than 20 gallons of water per acre for ground applications and 5 gallons per acre for aerial applications.  Greens may be harvested on the day of the last application after the spray has dried.  Not registered for use on these crops in California
Hops	Downy Mildew (Pseudoperonospora humuli)	6.4	ACROBAT 50WP must be applied as a tank mix with another fungicide active against downy mildew. Applications of ACROBAT 50WP must be alternated with at least one application of an effective downy mildew fungicide with a mode of action different from ACROBAT 50WP.  Use ACROBAT 50WP as a preventive foliar spray before infection occurs. The application interval for ACROBAT 50WP is 10 days.	DO NOT make more than 3 applications per season.  DO NOT exceed 19.2 oz per acre per growing season.  DO NOT use less than 20 gallons of water per acre.  DO NOT apply within 7 days of harvest.

Crop	Target Disease	Use Rate: Oz Product / Acre / Application	General Recommendations	Restrictions
Lettuce (head and leaf)	Downy Mildew (Bremia lactucae)	6.4	ACROBAT 50WP must be applied as a tank mix with another fungicide active against downy mildew. Do not make more than two sequential applications of ACROBAT 50WP before alternating to another effective fungicide with a mode of action different from ACROBAT 50WP for at least one application.  Begin applications prior to the onset of disease infection. Continue applications on a 5-10 day spray schedule. Use shorter spray intervals when disease pressure is higher.	DO NOT make more than 5 applications per season.  DO NOT exceed 32 oz per acre per growing season.  DO NOT use less than 20 gallons of water per acre for ground applications and 5 gallons per acre for aerial applications.  Plants may be harvested on the day of the last application after sprays have dried.
Potato	Late Blight (Phytophthora infestans)	4 - 6.4	Applications should begin prior to the onset of disease infection and based on the recommendation of the local late blight advisory system. Apply on 5-10 day application intervals. Disease pressure and environmental conditions should determine application rates and spray intervals. Use higher rates and shorter spray intervals when disease pressure is higher. Consult local late blight advisory system recommendations to determine the predicted levels of disease pressure and the associated application rates and intervals.  Apply spray to obtain thorough and complete plant coverage.  ACROBAT 50WP may be applied after vine kill.	DO NOT exceed 32 oz per acre per growing season.  DO NOT use less than 20 gallons of water per acre for ground applications and 5 gallons per acre for aerial applications  DO NOT apply within 4 days of harvest in all states.
	Tuber Blight (Phytophthora infestans) MANAGEMENT OR SUPPRESSION	6.4	When used according to label recommendations for Late Blight control, ACROBAT 50WP can also reduce tuber blight.  To maximize activity against tuber blight, begin fungicide applications before disease onset occurs and in accordance with local late blight advisory system recommendations. Also, maintain regular application schedules and obtain thorough plant coverage.  ACROBAT 50WP may be applied after vine kill.	



Сгор	Target Disease	Use Rate: Oz Product / Acre / Application	General Recommendations	Restrictions
Taro*	Suppression only Phytophthora rot and leaf blight (Phytophthora spp.)	6.4	ACROBAT 50WP must be applied as a tank mix with another fungicide active against leaf blight. Do not make more than two sequential applications of ACROBAT 50WP before alternating to another effective fungicide with a mode of action different from ACROBAT 50WP for at least one application.  Begin applications when conditions favor disease development. Continue applications on a 7 day spray schedule as needed until weather conditions favoring infection and sporulation decrease.	DO NOT make more than 5 applications per season.  DO NOT exceed 32 oz per acre per growing season.  DO NOT use less than 20 gallons of water per acre for ground applications and 5 gallons per acre for aerial applications.  DO NOT apply within 7 or 30 days of harvest for the greens and corms, respectively.  Not registered for use on these crops in California
Tobacco	Blue Mold (Peronospora tabacina)	2 - 8	See specific use directions in the section titled DIRECTIONS FOR USE IN FIELD GROWN TOBACCO	DO NOT exceed 32 oz per acre per growing season.  DO NOT exceed 8 oz per acre per application  Tobacco may be harvest the day of the last application, after spray has dried.
Tomato - Non-staked	Late Blight (Phytophthora infestans)		Begin applications when plants are 4-6 inches high and prior to the onset of disease infection. Apply on a 5-10 day spray schedule. Prior to the onset of conditions favoring infection, apply every 7-10 days. When environmental conditions have been conducive for diseases, or when disease has been detected within the field or nearby, a 5-7 day schedule is recommended.  Apply spray to obtain thorough and complete plant coverage.	DO NOT exceed 32 oz per acre per growing season.  DO NOT use less than 20 gallons of water per acre for ground applications and 5 gallons per acre for aerial applications.  DO NOT apply within 4 days of harvest in all states

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Стор	Target Disease	Use Rate: Oz Product / Acre / Application	General Recommendations	Restrictions
Tomato - Staked	Late Blight (Phytophthora infestans)	6.4	Begin applications when plants are 4-6 inches high and prior to the onset of disease infection. Apply on a 5-10 day spray schedule. Prior to the onset of conditions favoring infection, apply every 7-10 days.	DO NOT apply more than 32 oz per acre per growing season.
		]	When environmental conditions have been conducive for diseases, or when disease has been detected within the field or nearby, a 5-7 day schedule is recommended.	DO NOT use less than 20 gallons of water per acre for ground applications.
			For ground application us a minimum of 20 gallons of spray volume and increase the spray volume as the plants grow during the season. Spray volume should be proportional to the amount of plant tissue to be covered such that 100 gallons of spray per acre is used on mature plants.  For aerial applications, follow the directions for non-staked tomatoes above.	DO NOT apply within 4 days of harvest in all states.
		,	Apply spray to obtain thorough and complete plant coverage.	

<sup>\* -</sup> Not registered for use on these crops in California



## DIRECTIONS FOR USE IN FIELD GROWN HOBACCO ....

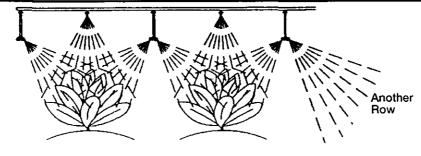
ACCEPTABLE CONTROL OF BLUE MOLD AND MANAGEMENT OF FUNGICIDE RESISTANCE WITH ACROBAT 50WP REQUIRES THOROUGH COVERAGE TO LEAF SURFACES THROUGHOUT THE ENTIRE PLANT CANOPY.

The use of ACROBAT 50WP in all tobacco transplant production systems (including greenhouse, float-beds, and traditional ground beds) is STRICTLY PROHIBITED. DO NOT use ACROBAT 50WP in transplant water.

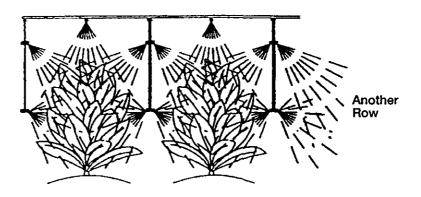
## TRACTOR-DRIVEN SPRAYER APPLICATIONS TO TOBACCO

To obtain thorough coverage of the foliage, use proper spray pressure, fungicide nozzles (such as hollow cones), proper nozzle spacing (nozzles over the row and multiple nozzles on the drops, SEE DIAGRAM below), and slow tractor speed. The following diagram outlines the correct spray nozzle configuration for field applications in tobacco.

## Application Following Transplanting Up To 3 Weeks

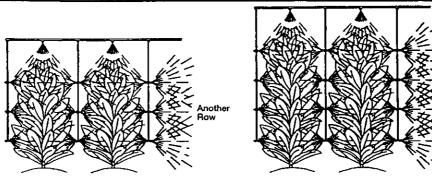


## Application To Mid - Size Plants (3-5 Weeks After Transplanting)



## Application To Large Plants (6 Weeks After Transplanting Up To Topping)

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## BACKPACK SPRAYER APPLICATIONS TO TOBACCO

ACROBAT 50WP can be applied with backpack mist blowers or air-blast blowers. DO NOT apply with hand-pumped backpack sprayers due to low pressures and poor plant coverage. Spray to foliar run-off. Thorough plant coverage is essential for preventative control of blue mold.

## TANK MIXES WITH INSECTICIDES

On tobacco, ACROBAT 50WP may be tank mixed with Orthene® or endosulfan. The crop safety and tank mix compatibility of tank mixes with insecticides other than those previously listed have not been fully investigated.

**DO NOT** mix ACROBAT 50WP with surfactants, foliar fertilizers, household bleach, or sucker control materials when making applications to tobacco.

## Application Timing, Rates and Spray Volumes To Control Blue Mold in Tobacco

Weeks of Growth After Transplant	Rate of ACROBAT 50WP (Oz. of Product)	Spray Volume for Tractor- Driven Sprayer (Gallons/Acre)	Spray Volume for Backpack Sprayer (Gallons/Acre)
Recently transplanted to 3 weeks after transplanting	2	20	10
3-4 Weeks after transplanting (Knee High)	3	40	20
4-5 Weeks after transplanting (Waist High)	4	60	30
6-7 Weeks after transplanting (Chest High)	6	80	40
7 Weeks after transplanting and beyond (Shoulder Height Up to Topping)	7	100	50

## **AERIAL SPRAY APPLICATIONS TO TOBACCO**

Aerial applications can be used by growers who have limitations with ground applications, or when weather conditions are unfavorable for timely applications by ground. Aerial sprayers should be properly calibrated before application. Determine the area to be sprayed and the output rate to determine the quantities of ACROBAT 50WP and water needed for accurate application. To obtain thorough coverage of the foliage, use a minimum of 15 gallons per acre, with nozzle positioning and orientation that favors plant coverage while minimizing drift.

For aerial applications, use 8 oz. of ACROBAT 50WP per acre for applications at all growth stages. DO NOT use rates lower than 8 oz. of ACROBAT 50WP per acre for aerial application.

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## APPLICATION TIMING AND FREQUENCY IN TOBACCO

Begin applications when the Blue Mold Advisory states that conditions favor development of blue mold, and before the onset of disease infection. Continue applications on a 5-7 day spray schedule until weather conditions favoring infection and sporulation decrease.

## TOBACCO USE RESTRICTIONS

**DO NOT** exceed 8 oz./acre per application. **DO NOT** exceed 32 oz./acre of ACROBAT 50WP per season for all types of applications. ACROBAT 50WP preharvest interval is zero days. Refer to tank-mix partner labeling for preharvest interval restrictions.

The use of ACROBAT 50WP in all tobacco transplant production systems (including greenhouses, float-beds, and traditional ground beds) prior to transplanting is **STRICTLY PROHIBITED**.

To reduce the possibility of developing blue mold resistance to both ACROBAT 50WP and to mefenoxam or metalaxyl products, the tank mixing of ACROBAT 50WP with any of these products is <u>STRICTLY PROHIBITED</u>. DO NOT use ACROBAT 50WP in transplant water.

Blue mold fungal strains have developed resistance to some crop protection products after repeated use. Since the development of resistance cannot be predicted, ACROBAT 50WP should always be used in a blue mold resistance management program. Tank mixing and thorough spray coverage are necessary to minimize the development of blue mold strains with resistance to ACROBAT 50WP.

## ROTATIONAL CROP GUIDELINES

After making the last ACROBAT 50WP application, rotational crops may be planted at the following intervals:

## 1. Any time

Potatoes, Tomatoes, Tobacco, Bulb Vegetables, Cucurbit Vegetables, Hops, Lettuce (head and leaf), taro and leafy brassica greens

## 2. One month

Barley, Oats, Wheat
Leafy vegetables, such as spinach, and celery
Brassica vegetables, such as broccoli, cabbage, and cauliflower
Root/tuber vegetables, such as carrot, radish, and sugar beet

#### 3. Seven months

Alfalfa Peas
Beans Rice
Clover Sorghum
Corn Soybeans

#### 4. Twelve months

All other crops

## **DISCLAIMER**

The label instructions for the use of this product reflect the opinion of experts based on research and field use. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with 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 use of, or application of the product contrary to label instructions, all of which are beyond the control of BASF Corporation (BASF). All such risks shall be assumed by the user.

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BASF shall not be responsible for losses or damages resulting from use of this product in any manner not set forth on this label. User assumes all risks associated with the use of this product in any manner not specifically set forth on this label.

BASF warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the directions for use, subject to the risks referred to above.

BASE DOES NOT MAKE OR 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.

BUYER'S EXCLUSIVE REMEDY AND BASF'S EXCLUSIVE LIABILITY, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF ACROBAT 50WP. In no case shall BASF or the seller be liable for consequential, special or indirect damages resulting from the use or handling of this product.

## USES WITH OTHER PRODUCTS (TANK MIXES)

If this product is used in combination with any other product except as specifically recommended in writing by BASF, then BASF shall have no liability for any loss, damage, or injury arising out of its use in any such combination not so specifically recommended. If used in a combination recommended by BASF, the liability of BASF shall in no manner extend to any damage, loss or injury not directly caused by the inclusion of the BASF product in such combination use, and in any event shall be limited to return of the amount of the purchase price of the product.

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# Supplemental Labeling

EPA Reg. No. 241-410

U.S. Patent No. 5,952,496

## For Disease Control in Fruiting Vegetables, Leafy Brassica Greens, and Taro

ALL APPLICABLE DIRECTIONS, RESTRICTIONS AND PRECAUTIONS ON THE ACROBAT 50WP CONTAINER LABEL MUST BE FOLLOWED. THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF APPLICATION.

## **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 when wind conditions favor drift. 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.

#### GENERAL INFORMATION

ACROBAT 50WP may be used in a preventative spray program to manage downy mildew and Phytophthora rot and leaf blight diseases. Thorough plant coverage is necessary for effective disease control. ACROBAT 50WP must be used in accordance with this label. It is recommended that this product be used within an Integrated Pest Management Program.

In order to reduce the risk of development of fungicide resistance, ACROBAT 50WP must be used as a tank-mix with fungicides active against the target diseases. DO NOT apply ACROBAT 50WP alone.

Disease pressure, plant growth rate, and environmental conditions will determine the length of the spray interval and frequency of application. Sprayers should be properly calibrated before application. Apply material with adequate spray pressure and gallonage and using proper nozzle arrangement to provide full coverage.

ACROBAT 50WP may be applied by ground, aerial or chemigation according to label directions.

Refer to the respective tank-mix partner labeling for rates, methods of application, proper timing, restrictions and precautions. Always use in accordance with the more restrictive label restrictions and precautions. Do not use a pesticide product that contains a prohibition against tank mixing.

> ACCEPTED with COMMENTS In EPA Letter Dated:

APR 22 2004

Under the Federal Insecticide, Fungicide, and Rodenticide Act, Pungetide, and nonemucine and attended, for the pesticide registered under EPA Reg. No. 241-410

## APPLICATION INSTRUCTIONS

Crop	Target Disease	Use Rate: Oz Product / Acre / Application	General Recommendations	Restrictions
Fruiting Vegetable Group (except Tomato)*	Suppression only Phytophthora blight (Phytophthora capsici)	6.4	ACROBAT 50WP must be applied as a tank mix with another fungicide active against downy mildew. Do not make more than two sequential applications of ACROBAT 50WP before alternating to another effective fungicide with a mode	DO NOT make more than 5 applications per season.  DO NOT exceed 32 oz per acre per growing season.
Ground cherry Pepino Pepper (all varieties) Tomatillo			of action different from ACROBAT 50WP for at least one application. Begin applications when plants are 4- 6 inches high and prior to the onset of disease infection. Apply on a 5-10 day spray schedule. Prior to the onset of conditions favoring infection, apply every 7-10 days. When environmental conditions have been conducive for diseases, or when disease has been detected within the field or nearby, a 5-7 day schedule is recommended.  Apply spray to runoff.	DO NOT use less than 20 gallons of water per acre for ground applications and 5 gallons per acre for aerial applications.  Not registered for use on these crops in California
Leafy Brassica Greens*	Suppression only Downy Mildew (Peronospora parasitica)	6.4	ACROBAT 50WP must be applied as a tank mix with another fungicide active against downy mildew. Do not make more than two sequential applications of ACROBAT 50WP before alternating to another effective fungicide with a mode of action different from ACROBAT 50WP for at least one application.  Begin applications when conditions favor disease development. Continue applications on a 7 day spray schedule as needed until weather conditions favoring infection and sporulation decrease.	DO NOT make more than 5 applications per season.  DO NOT exceed 32 oz per acre per growing season.  DO NOT use less than 20 gallons of water per acre for ground applications and 5 gallons per acre for aerial applications.  Greens may be harvested on the day of the last application after the spray has dried.  Not registered for use on these crops in California
Taro*	Suppression only Phytophthora rot and leaf blight (Phytophthora spp.)	6.4	ACROBAT 50WP must be applied as a tank mix with another fungicide active against leaf blight. Do not make more than two sequential applications of ACROBAT 50WP before alternating to another effective fungicide with a mode of action different from ACROBAT 50WP for at least one application.  Begin applications when conditions favor disease development. Continue applications on a 7 day spray schedule as needed until weather conditions favoring infection and sporulation decrease.	DO NOT make more than 5 applications per season.  DO NOT exceed 32 oz per acre per growing season.  DO NOT use less than 20 gallons of water per acre for ground applications and 5 gallons per acre for aerial applications.  DO NOT apply within 7 or 30 days of harvest for the greens and corms, respectively.  Not registered for use on this

## RESISTANCE MANAGEMENT

Downy mildew and Phytophthora rot and leaf blight fungus strains may develop resistance to some crop protection products after repeated use. Since the development of resistance cannot be predicted, ACROBAT 50WP should always be used in a resistance management program. In order to reduce the risk of development of fungicide resistance, ACROBAT 50WP must be used as a tank-mix with fungicides active against the target diseases. DO NOT apply ACROBAT 50WP alone. Alternate ACROBAT 50WP with other effective fungicides with different modes of action according to label recommendations.

## ROTATIONAL CROP GUIDELINES

After making the last ACROBAT 50WP application, rotational crops may be planted at the following intervals:

## 1. Any time

Potatoes, Tomatoes, Tobacco, Bulb Vegetables, Cucurbit Vegetables, Hops, Lettuce (head and leaf), taro and leafy brassica greens

#### 2. One month

Barley, Oats, Wheat Leafy vegetables such as Spinach and Celery Brassica vegetables, such as Broccoli, Cabbage and Cauliflower Root and Tuber vegetables such as Carrot, Radish and Sugar Beet

#### 3. Seven months

Alfalfa Peas
Beans Rice
Clover Sorghum
Corn Soybeans

## 4. Twelve months

All other crops

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