

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Charlotte Sanson BASF Corporation 26 Davis Drive

AUG 28 2003

Research Triangle Park, North Carolina 27709

Subject:

CabrioTM EG Fungicide

EPA Registration No. 7969-187

Your label amendment application dated May 21, 2003

Dear Ms. Sanson,

The amended labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable, provided that you comply with the following conditions.

- 1. Make the following changes to the label. In the "Resistance Management:" section on both page 14 (for the Fruiting Vegetable Group) and page 21 (for Tomatoes), in the second sentence change "...immediately rotate to the fungicide with a..." to "...immediately rotate to a fungicide with a...".
- 2. Submit one copy of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration may be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

If you have questions about this letter, please contact John Bazuin at (703)305-7381.

Sincerely yours.

Cynthia Giles-Parker Product Manager (22)

Fungicide Branch

Registration Division (7505C)

Attachment: Label copy stamped "Accepted with Comments"

BASF

GROUP

11

FUNGICIDE



For use in berries, bulb vegetables, cucurbit vegetables, fruiting vegetables, grapes, pistachios, root vegetables, tree nuts, stone fruits, and strawberries

Active Ingredient:

Pyraclostrobin (carbamic acid, [2-[[[1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxy]methyl]

 phenyl|methoxy-, methyl ester)
 20.0%

 Other ingredients
 80.0%

 Total
 100.0%

EPA Reg. No.: 7969-187

Est. No.:

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 this label, find someone to explain it to you in detail.)

See inside booklet for complete First Aid, Precautionary Statements, Directions For Use, and Conditions of Sale and Warranty.

Net contents:

ACCEPTED
with COMMENTS
In EPA Letter Dated:

AUG 28 2003

BASF Corporation 26 Davis Drive Research Triangle Park, NC 27709 Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No.

7969-

| | 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 do so 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. |
| If in eyes | Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. |
| If inhaled | Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further 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-HELP (4357).

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)

Some materials that are chemically resistant to this product are listed below. For more options, refer to 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 Nitrile, Butyl, Neoprene, and/or Barrier Laminate)
- Shoes plus socks

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Follow the 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.

Engineering Controls Statement

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 gurn, 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 product may contaminate water through drift of spray in wind. This product has a potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

This pesticide is toxic to fish and aquatic invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not apply directly to water, areas where surface water is present, or intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate.

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), notification to workers, 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 all crop uses except berries and grapes. REI for treated berries is **24 hours** (see **section VI. Crop-Specific Recommendations**, page 8, for complete list of included berry crops). REI for treated grapes is **5 days**

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 (such as Nitrile, Butyl, Neoprene, and or Barrier Laminate)
- Shoes plus socks

Storage and Disposal

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

- Pesticide Storage: Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to label.
- Pesticide Disposal: Wastes resulting from using this product may be disposed of on site or at an approved waste disposal facility. If these wastes cannot be disposed of according to label instructions, contact your State Pesticide or

Environmental Control Agency, or the Hazardous Waste representatives at the nearest EPA Regional Office for guidance.

Container Disposal:Triple rinse (or equivalent).
 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.

In Case of Spill

In case of large-scale spillage regarding this product, call:

CHEMTREC

800-424-9300

BASF Corporation

800-932-HELP (4357)

Steps to be taken in case material is released or spilled:

Dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal. Remove contaminated clothing, and wash affected skin areas with soap and water. Wash clothing before re-use. Keep the spill out of all sewers and open bodies of water.

I. General Information

This package contains Cabrio™ EG fungicide, a water dispersable granule (EG). The active ingredient in Cabrio, pyraclostrobin, is a member of the strobilurin class of chemistry and is derived from a natural antifungal substance. Optimum disease control is achieved when Cabrio is applied in a regularly scheduled protective spray program and is used in a rotation program with other fungicides. Because of its high specific activity, Cabrio has good residual activity against target fungi.

Cabrio is not for use in greenhouse or transplant production.

Mode of Action:

Pyraclostrobin, the active ingredient of **Cabrio** belongs to the group of respiration inhibitors classified by the U.S. EPA and Canada PMRA as Quinone Outside Inhibitors (QoI), or Target Site of Action **Group 11** Fungicides.

Resistance Management

Cabrio contains pyraclostrobin, a Group 11 fungicide, and is effective against pathogens resistant to fungicides with modes of action different from those of Qol fungicides (Target site Group 11), such as for example, dicarboximides, sterol inhibitors, benzimidazoles, or phenylamides. Fungal isolates resistant to Group 11 fungicides, such as pyraclostrobin, azoxystrobin, trifloxystrobin, and kresoxim-methyl, may eventually dominate the fungal population if Group 11 fungicides are used

predominantly and repeatedly in the same field in successive years as the primary method of control for the targeted pathogen species. This may result in reduction of disease control by **Cabrio™ EG fungicide** or other **group 11** fungicides.

To maintain the performance of **Cabrio** in the field, do not exceed the total number of sequential applications of **Cabrio** and the total number of applications of **Cabrio** per season stated in Sections V. and VI. Adhere to the label instructions regarding the consecutive use of **Cabrio** or other target site of action **Group 11** fungicides that have a similar site of action on the same pathogens.

The following recommendations may be considered to delay the development of fungicide resistance:

- 1. Tank mixtures: Use tank mixtures with fungicides from different target site of action Groups that are registered/permitted for the same use and that are effective against the pathogens of concern. BASF recommends using at least the minimum labeled rates of each fungicide in the tank mix.
- 2. IPM: Cabrio should be integrated into an overall disease and pest management program. Cultural practices known to reduce disease development should be followed. Consult your local extension specialist, certified crop advisor and/or BASF representative for additional IPM strategies established for your area. Cabrio may be used in Agricultural Extension advisory (disease forecasting) programs, which recommend application timing based on environmental factors favorable for disease development.
- 3. Monitoring: Monitor efficacy of all fungicides used in the disease management program against the targeted pathogen and record other factors that may influence fungicide performance and/or disease development. If a **Group 11** target site fungicide, such as **Cabrio**, appears to be less effective against a pathogen that it previously controlled or suppressed, contact a BASF representative, local extension specialist, or certified crop advisor for further investigation.

Cleaning Spray Equipment

Spraying equipment must be cleaned thoroughly before and after applying this product, particularly if a product with potential to injure crops was used prior to **Cabrio**.

II. Application Instructions

Apply recommended rates of **Cabrio** as instructed by **Section VI. Crop-Specific Recommendations**. Apply **Cabrio** with ground sprayer, aerial equipment or through sprinkler irrigation equipment. Equipment, should be checked frequently for calibration.

Under low-level disease conditions, the minimum application rates can be used while maximum application rates and shortened spray schedules are recommended for severe or threatening disease conditions.

Ground Application: Apply **Cabrio** in sufficient water to ensure thorough coverage of foliage, blooms, and fruit. Thorough coverage is required for optimum disease control.

Aerial Application: Use no less than 5 gallons of spray solution per acre. For aerial application to tree crops, use no less than 10 gallons of spray solution per acre. Do not apply when conditions favor drift from target area. Drift potential is lowest when windspeed does not exceed 10 mph.

Directions for Use Through Sprinkler Irrigation Systems.

Sprayer Preparation: Chemical tank and injector system should be thoroughly cleaned. Flush system with clean water.

Application Instructions: Apply **Cabrio** at rates and timings as described in this label.

Use Precautions for Sprinkler Irrigation Applications:

- Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side [wheel] roll, traveler, big gun, solid set, or hand move irrigation systems. Do not apply this product through any other type of irrigation system.
- Add this product to the pesticide supply tank containing sufficient water to maintain a continuous flow by the injection equipment. In continuous moving systems, inject this product-water mixture continuously, applying the labeled rate per acre for that crop. Do not exceed 1/2 inch (13,577 gallons) per acre. In stationary or non-continuous moving systems, inject the product-water mixture in the last 15-30 minutes of each set allowing sufficient time for all of the required pesticide to be applied by all the sprinkler heads and applying the labeled rate per acre for that crop. Do not apply when wind speed favors drift beyond the area intended for treatment. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. Thorough coverage of foliage is required for good control. Good agitation should be maintained during the entire application period.
- If you have questions about calibration you should contact State Extension Service specialist, equipment manufacturers or other experts.
- 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 shut down.
- The system-must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a
 positive displacement injection pump (e.g.,
 diaphragm pump), effectively designed and
 constructed of materials that are compatible with
 pesticides and capable of being fitted with a system
 interlock.
- Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. A person knowledgeable of the chemigation system and responsible for its operation, or under supervision of the responsible person, 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 pesticide labelprescribed safety devices for public water systems are in place.

Specific Instructions for Public Water Systems:

- 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.
- 2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back-flow preventer (RPZ) 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.

- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4. The pesticide injection pipeline must 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.
- 5. 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.
- 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.

III. Additives and General Tank Mixing Information

Cabrio™ EG fungicide can be tank mixed with most recommended fungicides, insecticides, herbicides, liquid fertilizers, biological control products, adjuvants, and additives as specified in Section VI. Crop-Specific Recommendations.

Under some conditions, the use of additives or adjuvants may improve the performance of **Cabrio**. 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 **Cabrio** 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.

Consult a BASF representative or local agricultural authorities for more information concerning additives.

IV. Mixing Order

- Water. Begin by agitating a thoroughly clean sprayer tank three-quarters full of clean water.
- 2) **Agitation.** Maintain constant agitation throughout mixing and application.
- Inductor. If an inductor is used, rinse it thoroughly after each component has been added.
- 4) Products in PVA bags. Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
- 5) Water-dispersible products (such as Cabrio™ EG fungicide, dry flowables, wettable powders, suspension concentrates, or suspo-emulsions).
- 6) Water-soluble products.
- Emulsifiable concentrates (such as oil concentrates when applicable).
- 8) Water-soluble additives (such as AMS or UAN when applicable).
- 9) Remaining quantity of water.

Make sure that each component is thoroughly mixed and suspended before adding tank mix partners. Maintain constant agitation during application. See **Section VI. Crop-Specific Recommendations** for more details.

V. General Restrictions and Limitations All Crops

- Maximum seasonal use rate: Do not apply more than the maximum rate per acre per season as listed in Table A. Crop-Specific Restrictions and Limitations and Section VI. Crop-Specific Recommendations.
- Maximum rate per application: Do not apply more than the maximum rate per acre per application as listed in Table A. Crop-Specific Restrictions and Limitations and Section VI. Crop-Specific Recommendations.
- Do not make more than the total number of applications of Cabrio per season, as listed in Table A. Crop-Specific Restrictions and Limitations and not exceeding the maximum seasonal use rate. Also see Section VI. Crop-Specific Recommendations.
- Pre-harvest Interval (PHI): See Table A. Crop-Specific Restrictions and Limitations and Section VI. Crop-Specific Recommendations.
- **Cabrio** is not for use in greenhouse or transplant production.

Crop Rotation Restriction: Crops listed on the Cabrio™ EG fungicide and Headline® fungicide labels may be planted immediately following the last application.

All other crops can be planted 14 days after the last application.

| Crop ¹ | Minimum Time from Application to Harvest (PHI) (days) | Maximum Rate per Acre per Application (oz.) | Maximum Number of Sequential Applications | Maximum Number of Applications per Season | Maximum Rate per Acre per Season (oz.) | Livestock Grazing or Feeding |
|---|--|---|--|--|---|------------------------------------|
| Berry Group¹: Blueberry, Caneberry, Raspberry | 0 | 14 | 2 | 4 | 56 | NA ³ |
| Bulb Vegetables Group¹: Onion, Garlic, Leeks | 7 | 12 | 2 | 6 | 72 | NA |
| Cucurbit Vegetables Group ¹ : Cantaloupe, Cucumber, Melon, Squash, Pumpkin, Watermelon | 0 | 16 | 1 | 4 | 64 | NA |
| Fruiting Vegetables Group ¹ : Tomato , Bell pepper, Chili pepper, Eggplant | 0 | 16 | 2 | 6 | 96 | NA |
| Grapes ² | 14 | 12 | 2 | 6 | 72 | NA |
| Pistachio | 14 | 16 | 2 | 4 | 64 | NA |
| Root Vegetables (except sugar beet) Subgroup ¹ : Carrot, Radish (roots & tops) | | 16 | 2 | 3 | 48 | Yes for carrot culls |
| Stone Fruits Group ¹ : Apricot, Cherry, (sweet and tart) Nectarine, Peach, Plum, Prune | 0 | 9.5 | 2 | 5 | 47.5 | NA |
| Strawberries | 0 | 14 | 2 | 5 | 70 | NA |
| Tree Nuts Group ¹ : Almond, Pecan | 14 (For almond - 5 weeks after petal fall) | 9.5 | 2 | 4 | 38 | Yes for almono hulls |

For a complete list of crops within a crop group, see Section VI. Crop-Specific Recommendations.
 Do not use on Concord, Worden, or Fredonia varieties due to possible foliar injury.

³ NA = not applicable

Aerial Application is permitted for all labeled crop uses.

| Crop | Target Diseases | Use Rate per Application | Maximum Number of Applications per Season | Maximum Rate per Season | Minimum Time from Application to Harvest (PHI) |
|---|--|-----------------------------|--|-------------------------------|--|
| Berry Group | Alternaria leaf spot and fruit rot (Alternaria spp.) | 14 oz. per acre | 4 | 56 oz. per acre | 0 days |
| Blackberry (all varieties) Blueberry Currant Elderberry Gooseberry Huckleberry Loganberry | Anthracnose (Colletotrichum spp., Elsinoe spp.) Leaf spot and blotch (Mycosphaerella spp., Septoria spp.) Phomopsis leaf spot, | | | | |
| Rašpberry (black and red | twig blight, and fruit rot (Phomopsis spp.) | | | | |
| | Powdery mildew (Sphaerotheca spp., Microsphaera spp., Oidium spp.) | | | | |
| | Rust (Puccianiastrum spp., Arthuriomyces spp., Phragmidium spp., Kuehneola spp.) | | | | |
| | Spur blight (<i>Didymella</i> spp., <i>Phoma</i> spp.) | | | | |
| | Suppression only Botrytis gray mold (Botrytis cinerea) | | | | |
| | Monilinia blight (Monilinia spp.) | | | | |
| | Application Directions: Begin development and continue on a | | | gicide prior to dis | ease |
| | Use the shorter interval when di | isease pressure is | high. | | |
| | Do not enter treated area wit Refer to the "Agricultural Us entry to treated areas as per | e Requirements | " box on page | 3 for PPE require | d for early |
| | Resistance Management: To more than four (4) applications of | | | | |
| | Do not make more than two (2) fungicide with a different mode | | ations of Cabric | before alternating | to a labeled |

| Crop | Target Diseases | Use Rate per Application | Maximum Number of Applications per Season | Maximum Rate per Season | Minimum Time from Application to Harvest (PHI) | | |
|---|--|-----------------------------|--|-------------------------------|--|--|--|
| Bulb Vegetables Group Onions (all varieties) Garlic Leek Shallot | Purple blotch and leaf blight (Alternaria porri, Stemphylium vesicarium) Powdery mildew (Leveillula taurica) Rust (Puccinia porri) | 8 to 12 oz. per acre | 6 | 72 oz. per acre | 7 days | | |
| | Downy mildew (Peronospora destructor) Suppression only Botrytis leaf blight (Botrytis squamosa) | 12 oz. per acre | | | | | |
| | Application Directions: For control of purple blotch and leaf blight, powdery mildew, and rust begin applications of Cabrio™ EG fungicide prior to disease development and continue on a 14-day interval. If application intervals shorter than14 days are needed, rotate to another fungicide. Use the higher rate when disease pressure is high. Applications made to control purple blotch, powdery mildew, and rust will also suppress downy mildew. If downy mildew occurs during a Cabrio application for these diseases, immediately follow the Cabrio application with another downy mildew fungicide with a different mode of action. | | | | | | |
| | For downy mildew, do not make more than one (1) application of Cabrio before alternatiliabeled fungicide with a different mode of action. Resistance Management : To limit the potential for development of resistance, do not more than six (6) applications of Cabrio or other Qol (Group 11) fungicides per season. Do not make more than two (2) sequential applications of Cabrio before alternating to a | | | | | | |

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| Crop | Target Diseases | Use Rate per Application | Maximum Number of Applications per Season | Maximum Rate per Season | Minimum Time from Application to Harvest (PHI) |
|--|--|---|---|---|--|
| 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Alternaria leaf spot (Alternaria spp.) (Cercospora leaf spot (Cercospora spp.) (Cerc | on a 7- to 14-day shorter interval w To limit the pote pplications of Cab | interval. Then disease pre- ential for develop- orio or other Qol oplications of Cal | ssure is high. ment of resistan (Group 11) fung | ce, do not icides |

| Cucurbit Vegetables Group Chayote Chinese waxgourd Citron melon Cucumber Gherkin Pumpkin Watermelon Edible gourd Hyotan Cucuzza Chinese okra Momordica Spp. Balsam apple Balsam pear Bitter melon Chinese cucumber Muskmelon Cantaloupe Casaba Crenshaw melon Golden pershaw melon Honeydew melon Honeydew melon Honeydew melon Honeydew melon Honeydew melon Persian melon Pineapple melon Santa Claus melon Santa Claus melon Sinake melon | Target Diseases | Use Rate per Application | Maximum Number of Applications per Season | Maximum Rate per Season | Minimum Time from Application To Harvest (PHI) |
|---|--|-----------------------------|--|-------------------------------|--|
| Chinese waxgourd (Alter waxgourd Citron melon Cucumber Gherkin Pumpkin (Co Watermelon Edible gourd Hyotan Cucuzza Chinese okra Momordica Spp. Balsam apple Balsam pear Bitter melon Chinese cucumber Muskmelon Cantaloupe Casaba Crenshaw melon Colden pershaw melon Honeydew melon Honeydew melon Honeydew melon Persian melon Persian melon Persian melon Santa Claus melon Santa | owny mildew Pseudoperonospora ubensis) | 8 to 12 oz. per acre | 4 | 64 oz. | 0 days |
| Vegetable marrow | ernaria blight Alternaria ucumerina) Inthracnose Colletotrichum rbiculare) ercospora leaf spot Cercospora citrulina) Ilicrodochium blight Plectosporium Ibacinum) Ilicrodochium blight Plectosporium Ilicrodochium blight Ilicrodochium blight Plectosporium Ilicrodochium blight Ilicrodochium b | | 4 | 6 4 oz. | 0 days |
| Zucchini Winter squash Butternut squash Calabaza Hubbard squash Acorn squash Spaghetti | | | | | |

For further instructions see next page .

Cucurbit Vegetables Group Information

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Application Directions: Begin applications of **Cabrio™ EG fungicide** prior to disease development and continue on a 7- to 14-day interval. Use the higher rate and the shorter interval when disease pressure is high.

Do not use **Cabrio** for control of gummy stem blight where resistance to QoI (Group 11) fungicides exists.

Use of Adjuvants: Do not use **Cabrio** tank mixes with additives or adjuvants on muskmelon crops such as cantaloupe and honeydew or crop injury may result.

For cucurbit crops other than melons, the use of additives or adjuvants may improve the performance of **Cabrio**. However, BASF evaluations also indicate that under some conditions (particularly high temperatures and/or high additive rates), application of **Cabrio** in combination with certain rates of silicone-based or oil-containing (petroleum or crop) additives or adjuvants can cause injury to some cucurbit crops.

BASF has not tested all varieties and cultivars with all possible tank mix combinations and rates of additives or adjuvants. Local environmental conditions 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 **Cabrio** with other products.

The user assumes all risks associated with adding products to the **Cabrio** spray solution. BASF cannot be held responsible for crop injury, reduced disease control or incompatibility due to additives, adjuvants or other products used in combination with **Cabrio**. Refer also to the **Conditions of Sale** and **Warranty** section of this label.

To minimize the likelihood of crop injury, BASF recommends testing **Cabrio** in combination with other products for crop safety on a small portion of the crop. However, environmental variability precludes direct and consistent projection of small area test results to future use.

Consult a BASF representative for more information concerning additives or adjuvants.

Do not tank mix **Cabrio** with Malathion, Kelthane*, Thiodan*, Phaser*, Lannate*, Lorsban*, M-Pede*, or Botran* as crop injury may result.

Resistance Management: To limit the potential for development of resistance, do not make more than four (4) applications of **Cabrio** or other Qol (Group 11) fungicides per crop growing season.

Do not make more than one (1) application of **Cabrio** before alternating to a labeled function with a different mode of action.

For additional resistance management information, refer to **Section I. General Information**, **Resistance Management**.

| Crop | Target Disease | Use Rate p s Applicatio | er n | Maximum Number of Applications per Season | Maximum Rate per Season | Minimum Time from Application to Harvest (PH!) |
|---|---|---|---------|--|-------------------------------|--|
| Fruiting Vegetable Group Eggplant Ground cherry Pepino Pepper (all varieties) Tomatillo Tomato | Anthracnose (Colletotrichum spp.) Black Mold (Alternaria alternata) Early blight (Alternaria solani) Septoria leaf spot (Septoria lycopersici) Target spot (Corynespora cassiicola) | 8 to 12 oz. per acre or 8 to 12 oz. per 100 gallo of spray volume (dilute | | 6 | 96 oz. per acre | 0 days |
| | Late blight (Phytophthora infestans) Powdery mildew (Leveillula taurica) Suppression Onl Botrytis gray mold (Botrytis cinerea) | 8 to 16 oz. per acre | | | | |

For further instructions see next page .

Application Directions: Begin applications of **CabrioTM EG fungicide** prior to disease development and continue on a 7- to 14-day interval for anthracnose, early blight, powdery mildew, and Septoria leaf spot. For control of late blight, begin applications prior to disease development, then follow each application of **Cabrio** with a labeled fungicide with a different mode of action 5 to 7 days later. Use the higher rate and the shorter interval when disease pressure is high.

*For applications based on dilute volume, plants should be sprayed to runoff. Apply a minimum of 20 gallons of spray volume per acre, 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.

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Use of Adjuvants: The use of additives or adjuvants may improve the performance of **Cabrio** on fruiting vegetables. However, BASF evaluations also indicate that under some conditions (particularly high temperatures and/or high additive rates), application of **Cabrio** in combination with certain rates of silicone-based or oil-containing (petroleum or crop) additives or adjuvants can cause injury.

BASF has not tested all varieties and cultivars with all possible tank mix combinations and rates of additives or adjuvants. Local environmental conditions 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 **Cabrio** with other products.

The user assumes all risks associated with adding products to the **Cabrio** spray solution. BASF cannot be held responsible for crop injury, reduced disease control or incompatibility due to additives, adjuvants or other products used in combination with **Cabrio**. Refer also to the **Conditions of Sale** and **Warranty** section of this label.

To minimize the likelihood of crop injury, BASF recommends testing **Cabrio** in combination with other products for crop safety on a small portion of the crop. However, environmental variability precludes direct and consistent projection of small area test results to future use.

Consult a BASF representative for more information concerning additives or adjuvants.

For control of late blight, do not make more than one (1) application of **Cabrio** before alternating to a labeled fungicide with a different mode of action.

Resistance Management: To limit the potential for development of resistance, do not make more than six (6) applications of Cabrio or other Qol (Group 11) fungicides per crop growing season. If late blight develops during a spray program for these diseases, immediately rotate to the fungicide with a different mode of action. For control of diseases other than late blight, do not make more than two (2) sequential applications of Cabrio before alternating to a labeled fungicide with a different mode of action. For additional information pertaining to resistance management, refer to Section I. General Information, Resistance Management.

| Сгор | Target Diseases | Use Rate per Application | Maximum Number of Applications per Season | Maximum Rate per Season | Minimum Time from Application to Harvest (PHI) | | | |
|---|---|-----------------------------|--|-------------------------------|--|--|--|--|
| Grapes Vitis vinifera and rotundifolia (Muscadine) varieties only | Angular leaf spot (Mycosphaerella angulata) Anthracnose (Elsinoe ampelina) Black rot (Guignardia bidwellii) Downy mildew (Plasmopara viticola) Mycosphaerella leaf blight (Pseudocercospora vitis) Phomopsis (Phomopsis viticola) Powdery mildew (Uncinula necator) Ripe rot (Colletotrichum gloeosporioides) Suppression only Botrytis gray mold (Botrytis cinerea) | | | | | | | |
| | fungicide at pre-bloom on a 10- to 21-day interval. For black rot and downy mildew control, begin applications of Cabrio at pre-bloom on a 10- to 14-day interval. For all other diseases listed above, begin applications of Cabrio prior to disease development and continue on a 10 to 14 day interval. Use the higher rate and the shorter interval when disease pressure is high. | | | | | | | |
| | Do not enter treated area "Agricultural Use Requirer treated areas as permitted | ments" box on p | age 3 for PPE r | equired for early | | | | |
| | Do not use on Concord, W | /orden, or Fredo | nia varieties du | e to possible fol | iar injury. | | | |
| | Resistance Management: more than six (6) applications | | | | | | | |
| | Do not make more than two fungicide with a different mod | | olications of Cabr | io before alternati | ng to a labeled | | | |

| Сгор | Target Diseases | Use Rate per Application | Maximum Number of Applications per Season | Maximum Rate per Season | Minimum Time from Application to Harvest (PHI) |
|-----------|---|--|---|--|--|
| Pistachio | Late blight (Alternaria alternata) Shoot blight (Botryosphaeria dothidea) Application Directions: continue on a 10- to 30- Resistance Manageme make more than four (4) per season. Do not make more than labeled fungicide with a continue of the season of the season. | 16 oz. per acre Apply Cabrio™ day interval. ent: To limit the p applications of Ca two (2) sequential | EG fungicide priotential for develonabrio or other Qolapplications of C | pment of resistan (Group 11) fungio | 14 days elopment and ce, do not cides |
| | For aerial application to pacre. | oistachio trees, us | e no less than 10 | gallons of spray s | solution per |

| Сгор | Target Diseases | Use Rate per Application | Maximum Number of Applications per Season | Maximum Rate per Season | Minimum Time from Application to Harvest (PHI) |
|---|--|---|--|---|--|
| Root Vegetables (except sugar beet) Subgroup: | Alternaria leaf spot (Alternaria spp.) Cercospora leaf spot (Cercospora spp.) | 8 to 12 oz. per acre | 3 | 48 oz. per acre | 0 days |
| Carrot Radish (roots and tops) Garden beet Edible burdock | Powdery mildew (Erysiphe spp.) | | | | |
| Celeriac Chervil | White rust (Albugo spp.) | 8 to 16 oz. per acre | i | | _ |
| | Application Directions: development and continue Use the higher rate and the Resistance Management make more than three (3) a per crop growing season. Do not make more than two labeled fungicide with a diff | on a 7- to 14-day shorter interval w To limit the pote pplications of Cal | interval. Then disease pre- Th | ssure is high. ment of resistan (Group 11) fung | ice, do not jicides |

| Crop | Target Diseases | Use Rate per Application | Maximum Number of Applications per Season | Maximum Rate per Season | Minimum Time from Application to Harvest (PHI) |
|--|---|-----------------------------|--|-------------------------------|--|
| Apricot Cherry (sweet and tart) Nectarine Peach Plum (all varieties) Plumcot Prune | Alternaria leaf spot (Alternaria spp.) Anthracnose (Colletotrichum spp.) Monilinia blossom blight (Monilinia spp.) Powdery mildew (Sphaerotheca spp., Podosphaera spp.) Scab (Cladosporium carpophilum) Shothole (Wilsonomyces carpophilus) | 9.5 oz. per acre | 5 | 47.5 oz. per acre | 0 days |

Application Directions: Begin applications of **Cabrio™ EG fungicide** at pink bud or prior to disease development and continue on a 7- to 14-day interval.

Use the shorter interval when disease pressure is high.

Resistance Management: To limit the potential for development of resistance, do not make more than five (5) applications of **Cabrio** or other QoI (Group 11) fungicides per season.

Do not make more than two (2) sequential applications of **Cabrio** before alternating to a labeled fungicide with a different mode of action.

For aerial application to stone fruit trees, use no less than 10 gallons of spray solution per acre.

| Сгор | Target Diseases | Use Rate per Application | Maximum Number of Applications per Season | Maximum Rate per Season | Minimum Time from Application to Harvest (PHI) |
|--------------|--|---|--|---|--|
| Strawberries | Anthracnose (Colletotrichum spp.) Leaf spot (Mycosphaerella fragariae) Powdery mildew (Sphaerotheca macularis) Suppression only Botrytis gray mold | 12 to 14 oz. per acre | 5 | 70 oz. per acre | 0 days |
| | (Botrytis cinerea) Application Directions: E bloom or prior to disease d. Use the higher rate and the The restricted entry interval Use Requirements" box on permitted under the Worker Resistance Management make more than five (5) apper crop growing season. Do not make more than two labeled fungicide with a diff | evelopment and construction shorter interval work (REI) for treated Stand page 3 for PPE reprotection Stand To limit the potential approximately (2) sequential approximately (2) sequential approximately (2) sequential approximately (3) | ontinue on a 7-then disease presentations is 12 equired for early eard. ential for developing or or other QoI (Complications of Cal | so 14-day intervalsure is high. Thours. Refer to entry to treated a ment of resistance on 11) fungic | al. the "Agricultural areas as ce, do not ides |

| Crop | Target Diseases | Use Rate per Application | Maximum Number of Applications per Season | Maximum Rate per Season | Minimum Time from Application to Harvest (PHI) |
|--------|---|---|--|-------------------------------|--|
| Tomato | Anthracnose (Colletotrichum spp.) Black mold (Alternaria alternata) Early blight (Alternaria solani) Septoria leaf spot (Septoria lycopersici) Target spot (Corynespora cassiicola) | 8 to 12 oz. per acre or 8 to 12 oz. per 100 gallons of spray volume (dilute)* | 6 | 96 oz. per acre | O days |
| | Late Blight (Phytophthora infestans) Powdery mildew (Leveillula taurica) Suppression only Botrytis gray mold (Botrytis cinerea) | 8 to 16 oz. per acre | | | |

For further instructions see next page .

Application Directions: Begin applications of **Cabrio™EG fungicide** prior to disease development and continue on a 7- to 14-day interval for anthracnose, early blight, powdery mildew, and Septoria leaf spot. For control of late blight, begin applications prior to disease development, then follow each application of **Cabrio** with a labeled fungicide with a different mode of action 5 to 7days later. Use the higher rate and the shorter interval when disease pressure is high.

*For applications based on dilute volume, plants should be sprayed to runoff. Apply a minimum of 20 gallons of spray volume per acre, 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.

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Use of Adjuvants: The use of additives or adjuvants may improve the performance of **Cabrio** on tomatoes. However, BASF evaluations also indicate that under some conditions (particularly high temperatures and/or high additive rates), application of **Cabrio**in combination with certain rates of silicone-based or oil-containing (petroleum or crop) additives or adjuvants can cause injury.

BASF has not tested all varieties and cultivars with all possible tank mix combinations and rates of additives or adjuvants. Local environmental conditions 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 **Cabrio** with other products.

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To minimize the likelihood of crop injury, BASF recommends testing **Cabrio** in combination with other products for crop safety on a small portion of the crop. However, environmental variability precludes direct and consistent projection of small area test results to future use.

Consult a BASF representative for more information concerning additives or adjuvants.

For control of late blight, do not make more than one (1) application of **Cabrio** before alternating to a labeled fungicide with a different mode of action.

Resistance Management: To limit the potential for development of resistance, do not make more than six (6) applications of Cabrio or other Qol (Group 11) fungicides per crop growing season. If late blight develops during a spray program for these diseases, immediately rotate to the fungicide with a different mode of action. For control of diseases other than late blight, do not make more than two (2) sequential applications of Cabrio before alternating to a labeled fungicide with a different mode of action. For additional information pertaining to resistance management, refer to Section I. General Information, Resistance Management.

| Сгор | Target Diseases | Use Rate per Application | Maximum Number of Applications per Season | Maximum Rate per Season | Minimum Time from Application to Harvest (PHI) |
|--|--|---|--|--|--|
| Tree Nuts Group Almond Beech nut Brazil nut Butternut Cashew Chestnut Chinquapin Filbert Hickory nut Macadamia nut Pecan Walnut (black and English) | Anternaria leaf spot (Alternaria spp.) Anthracnose (Colletotrichum spp.) Blossom blight (Monilinia spp.) Eastern filbert blight (Anisogramma anomala) Leaf rust (Tranzschelia discolor) Scab (Cladosporium carpophilum, C. caryigenum) Shothole (Wilsonomyces carpophilus) Application Directions: Ibud and continue on a 7-t budbreak, prior to infection to cover and protect new gdisease development and cabove, apply Cabrio prior tin all cases, use the shorter rapid. Resistance Management make more than four (4) apseason. Do not make more than two a labeled fungicide with a defendance of the cover and polication to tree. | 9.5 oz. per acre n almond, begin a o 14-day interval. and disease development of the potential applications of Cab o (2) sequential appliferent mode of a different mode of a | applications of Call In filbert, begin elopment. Continued to begin application of 21-day interval or onent and continue are pressure is ential for developing or other Qoi opplications of Call Incident. | abrio™ EG funapplications at applications at a fundament of cabrio prioue on a 7- to 2 and of cabrio or shoot of the fundament of resistant (Group 11) fungabrio before alternal | gicide at pink budswell to 14-day interval or to crops listed 18-day interval. Growth is very ce, do not picides per |

Conditions of Sale and Warranty

The **Directions For Use** of this product reflects the opinion of experts based on field use and tests. 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 use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. All such risks shall be assumed by the Buyer. BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions For Use, subject to the inherent risks, referred to above. BASE MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. IN NO CASE SHALL BASE OR THE SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing Conditions of Sale and Warranty which may be varied only by agreement in writing signed by a duly authorized representative of BASF.

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