11-5-200

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#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Charlotte Sanson BASF Corporation 26 Davis Drive

Research Triangle Park, North Carolina 27709

NOV 0 5 2007

Subject: Cabrio® EG Fungicide

EPA Registration No. 7969-187

Your master label amendment application dated June 15, 2007 and resubmitted by e-mail on July 11 and October

31, 2007

Dear Ms. Sanson,

We have reviewed the subject amended labeling, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended. The amended labeling is acceptable, provided that you:

1. Make the following change to the label:

In the second sentence in the third paragraph of the "CONDITIONS OF SALE AND WARRANTY" section, move the clause "TO THE EXTENT CONSISTENT WITH APPLICABLE LAW," to the beginning of the same sentence and delete the comma that precedes it.

2. Submit one copy of your final printed label before you release product bearing this amended labeling for shipment.

If you have any questions about this letter, please contact John Bazuin at (703)305-7381 or bazuin.john@epa.gov.

Sincerely yours, Dand While hurst for

Tony Kish, Product Manager (22)

Fungicide Branch

Registration Division (7505C)

Attachment: Label copy stamped "ACCEPTED with COMMENTS"



For use in disease control and plant health in the following crops:

Berries, brassica, bulb vegetables, cucurbit vegetables, fruiting vegetables, grapes, hops, leafy vegetables, leaves of root and tuber vegetables, pistachio, pome fruit, root vegetables, tree nuts, stone fruits, and strawberries

#### **Active Ingredient:**

| EPA Reg. No.: 7969-187                       | EPA Est. No.:      |           |
|--|--------------------|-----------|
| Total:                                       |                    | )%        |
| Other Ingredients:                           |                    | <u>)%</u> |
| pyrazol-3-yl]oxy]methyl]phenyl]methoxy-, r   | methyl ester) 20.0 | )%        |
| pyraclostrobin: (carbamic acid, [2-[[[1-(4-c |                    |           |

# KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCIÓN

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 for additional First Aid, Precautionary Statements, Directions For Use, Conditions of Sale and Warranty, and state-specific crop and/or use site restrictions.

| Net | <b>Contents:</b> |  |
|-----|------------------|--|
|     |                  |  |

BASF Corporation, Agricultural Products 26 Davis Drive, Research Triangle Park, NC 27709 No aerial application in New York State except as permitted under FIFRA Section 24(c), Special Local Need Registration.

ACCEPTED
with COMMENTS
in EPA Letter Dated:

NOV 0 5 2007

Under the Fairre, lascelidia Fungicide, and Rodonticide Act as amended, for the possibility registered under EPA flee. In 1919-187

| FIRST AID              |  |  |  |
|------------------------|--|--|--|
| lf swallowed           | <ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>DO NOT induce vomiting unless told to do so by a poison control center or doctor.</li> <li>DO NOT give anything by mouth to an unconscious person.</li> </ul> |  |  |
| lf on skin or clothing | <ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>  |  |  |
| If in eyes             | <ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after first 5 minutes, then continue rinsing eyes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>   |  |  |
| if inhaled             | <ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>  |  |  |
|                        | 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

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.

#### **User Safety Recommendations**

#### Users should:

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

#### **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.

#### **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 forecast 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 when performing cane tying, cane turning or cane girdling on grapes. The REI is **5 days** for treated grapes when conducting cane tying, cane turning or cane girdling.

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 1-800-424-9300

BASF Corporation 1-800-832-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 reuse. Keep the spill out of all sewers and open bodies of water.

#### I. GENERAL INFORMATION

This package contains **Cabrio® EG fungicide**, a water dispersible 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. Preventive applications optimize disease control resulting in improved plant health. To maximize disease control, apply **Cabrio** in a regularly scheduled protective spray program and use 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 US EPA and Canada PMRA as **Quinone Outside Inhibitors** (**QoI**), or target site of action **Group 11** fungicides.

**Resistance Management** 

Cabrio® EG fungicide 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 dicarboximides, sterol inhibitors, benzimidazoles, or phenylamides. Fungal isolates resistant to Group 11 fungicides, such as pyraclostrobin, azoxystrobin, fluoxastrobin, 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 or other Group 11 fungicides.

To maintain the performance of **Cabrio** in the field, **DO NOT** exceed the maximum seasonal use rate or the total number of applications of **Cabrio** per season and the maximum number of applications of **Cabrio** stated in sections **V** and **VI**. Adhere to the label instructions regarding the use of **Cabrio** or other target site of action **Group 11** fungicides that have a similar site of action on the same pathogens.

When using a **Group 11** fungicide as a solo product, the number of applications should be no more than % of the total number of fungicide applications per season.

In programs in which tank mixes or pre-mixes of a **Group 11** fungicide with a fungicide of another group are utilized, the number of **Group 11** fungicide (QoI)-containing applications should be no more than ½ of the total number of fungicide applications per season.

In programs in which applications of **Group 11** fungicides are made with both solo products and mixtures, the number of **Group 11** fungicide (QoI)-containing applications should be no more than  $\frac{1}{2}$  of the total number of fungicide applications per season.

In fungicide alternation programs of **Group 11** (Qol)-containing fungicides with non-**Group 11** fungicides of different modes of action; the maximum number of sequential applications stated in the crop-specific applications in sections **V** and **VI** should be alternated with at least an equal number of applications of a non-**Group 11**-containing fungicide prior to using the **Group 11** (Qol)-containing fungicide again. For example, in cases where two sequential applications of a **Group 11** (Qol)-containing fungicide are made, this block of applications should be followed by two or more applications of a non-**Group 11**-containing fungicide prior to using the **Group 11** (Qol)-containing fungicide again.

#### Resistance Management Advisory

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

1. Tank mixtures: Use tank mixtures with effective 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. Use 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 rates of **Cabrio** as instructed by section **VI. Cropspecific Requirements**. 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.

No aerial application in New York State except as permitted under FIFRA Section 24(c), Special Local Need Registration.

#### **Spray Drift Management**

**DO NOT** spray when conditions favor drift beyond area intended for application. Conditions which may contribute to drift include thermal inversion, wind speed and direction, spray nozzle/pressure combinations, spray droplet size, temperature/humidity, etc. Contact your state extension agent for spray drift prevention guidelines in your

area. All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers. Avoiding spray drift at the application site is the responsibility of the applicator.

#### **Aerial Application Methods and Equipment**

The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

**DO NOT** apply under circumstances where possible drift to unprotected persons, to food, forage, or other plantings that might be damaged, or crops thereof rendered unfit for sale, use or consumption can occur.

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

- The distance of the outermost nozzles on the boom must not exceed ¾ the length of the wingspan or rotor.
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45 degrees.

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

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

#### Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. Use the largest droplet size consistent with acceptable efficacy. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly or under unfavorable environmental conditions (see **Wind**; **Temperature and Humidity**; and **Temperature Inversions**).

#### **Controlling Droplet Size**

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

using low-drift nozzles. Solid-stream nozzles oriented straight back produce the largest droplets and the lowest drift.

#### Wind

Drift potential is lowest when wind speed does not exceed 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

#### **Temperature and Humidity**

Low humidity and high temperatures increase the evaporation of spray droplets and, therefore, the likelihood of increased spray drift. Avoid spraying during conditions of low humidity and/or high temperatures. When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

#### **Temperature Inversions**

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light, variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning.

Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### **Sensitive Areas**

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. bodies of water or nontarget crops) is minimal and when wind is blowing away from the sensitive areas.

## **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® EG fungicide** at rates and timings as required 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 ½ inch (13,577 gallons) per acre. In stationary or non-continuous moving systems, inject the product-water mixture in the last 15 to 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 a 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 label-prescribed 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, backflow 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.
- 3. 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 Requirements.

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® EG fungicide** 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.

When an adjuvant (or a specific adjuvant product, such as a drift control agent) is to be used with this product, the use of a Chemical Producers and Distributors Association (CDPA) certified adjuvant is recommended.

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**, 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. Cropspecific Requirements** 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 Requirements.
- 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 Requirements.
- 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 Requirements.

- Preharvest Interval (PHI): See Table A. Cropspecific Restrictions and Limitations and section VI. Crop-specific Requirements.
- DO NOT use Cabrio in greenhouse or transplant production.

#### **Crop Rotation Restriction**

Crops listed on the **Cabrio**, **Headline®** fungicide and **Pristine®** fungicide labels may be planted immediately following the last application. For all other crops, **DO NOT** plant sooner than 14 days after the last application.

### Instructions for Directed or Banded Crop Sprays Related to Ground Applications

The application rates shown in the following tables pertain to both aerial and ground (broadcast) methods of application. **Cabrio** may also be applied as a directed or banded spray over the rows or plant beds, with alleys or row middles left unsprayed. For such uses, reduce the rate of **Cabrio** in proportion to the area actually sprayed. This adjustment is necessary to prevent applying the product at use rates higher than permitted on this label.

The following formula may be used to determine the broadcast equivalent rate for doing directed or banded sprays:

sprayed bed width + unsprayed row middles width

total row width

sprayed bed width in inches total row width in inches total row width in inches treated acre = band rate field acre

**Example:** A directed spray application will be made to 45" plant beds that are separated by 15" of unsprayed row middles. 45" sprayed bed width + 15" unsprayed row middles = 60" total row width

The calculations to determine the appropriate equivalent rate of product to use for this situation based on a label broadcast rate of 12 oz/acre follows:

45" sprayed bed width x 12 oz Cabrio 60" total row width treated acre = 9 oz Cabrio field acre

| Crop¹   | Minimum Time<br>from Application<br>to Harvest (PHI)<br>(days) | Maximum Product Rate per Acre per Application (oz) | Maximum Number of Sequential Applications | Maximum Product Rate per Acre per Season (oz) (Ib ai pyraclostrobin) |
|---|--|--|---|--|
| Berry Group':<br>Blueberry<br>Caneberry<br>Raspberry                              | 0  | 14   | 2   | 56<br><i>(0.7)</i>   |
| Brassica, Head and<br>Stem¹:<br>Broccoli<br>Cabbage<br>Cauliflower                | 0  | 16   | 2   | 64<br><i>(0.8)</i>   |
| Brassica:<br>Leafy Greens¹  | 3  | 16   | 1 .                                       | 64<br>(0.8)  |
| Bulb Vegetables Group¹:<br>Garlic<br>Leeks<br>Onion                               | 7  | 12   | 1   | 72<br>(0.9)  |
| Cucurbit Vegetables Group': Cantaloupe Cucumber Melon Pumpkin Squash Watermelon   | 0  | 16   | 1   | 64<br><i>(0.8)</i>   |
| Fruiting Vegetables Group': Bell pepper Chili pepper Eggplant Tomato <sup>3</sup> | 0  | 16   | 1   | 96<br><i>(1.2)</i>   |
| Grapes²   | 14   | 12   | 2   | 72<br>(0.9)  |
| Hops  | 0 ,  | 16   | 2   | 48<br>(0.6)  |
| Leafy Vegetables (except<br>Brassica) Group¹:<br>Celery<br>Lettuce<br>Spinach     | 0  | 16   | 2   | 64<br><i>(0.8)</i>   |
| Leaves of Root and<br>Tuber Vegetables'<br>(except sugar beet)                    | 0  | 16   | 1   | 48<br><i>(0.6</i> )  |

For a complete list of crops within a crop group, see section VI. Crop-specific Requirements.

DO NOT use on Concord, Worden, Fredonia, and related varieties due to possible foliar injury.

Aerial application is permitted for all labeled crops except for hops. No aerial application in New York State except as permitted under FIFRA Section 24(c), Special Local Need Registration.

See the separate crop-specific requirements for tomato for the maximum number of sequential applications pertaining to this use.

| Crop¹  | Minimum Time<br>from Application<br>to Harvest (PHI)<br>(days) | Maximum Product Rate per Acre per Application (oz) | Maximum Number of Sequential Applications | Maximum Product Rate<br>per Acre per Season<br>(oz)<br>(lb ai pyraclostrobin) |
|--|--|--|---|---|
| Pistachio  | 14   | 16   | 2   | 64<br><i>(</i> 0.8)   |
| Pome Fruit':<br>Apple<br>Pear                              | 0  | 12   | 2   | 48<br>(0.6)   |
| Root Vegetables (except sugar beet)                        | 0  | 16   | 1   | 48<br>(0.6)   |
| Subgroup¹:<br>Carrot<br>Radish                             |  |  |   | •   |
| Apricot Cherry (sweet and tart) Nectarine Peach Plum Prune | 0  | 9.5  | 2   | 47.5<br>(0.6)   |
| Strawberries   | 0  | 14   | 2   | 70<br><i>(0.875)</i>  |
| Tree Nuts Group':<br>Almond<br>Pecan<br>Walnut             | 14<br>(for almond -<br>25 days)                                | 9.5  | 2   | . 38<br>. (0.475)   |

<sup>&</sup>lt;sup>1</sup> For a complete list of crops within a crop group, see section **VI. Crop-specific Requirements**.

<sup>&</sup>lt;sup>2</sup> DO NOT use on Concord, Worden, Fredonia, and related varieties due to possible foliar injury. Aerial application is permitted for all labeled crops except for hops. No aerial application in New York State except as permitted under FIFRA Section 24(c), Special Local Need Registration.

| Crop  | Target Disease  | Product Use<br>Rate per<br>Application | Maximum Number of Sequential Applications | Maximum<br>Product Rate<br>per Season | Minimum Time<br>from Application<br>to Harvest<br>(PHI) |
|---|---|--|---|---------------------------------------|---|
| Berry Group Blackberry (all varieties)                    | Alternaria leaf spot and fruit rot (Alternaria spp.)  | 14 oz<br>per acre                      | 2   | 56 oz<br>per acre                     | 0 days  |
| Blueberry Currant Elderberry Gooseberry                   | Anthracnose (Colletotrichum spp., Elsinoe spp.)   |  |   | (0.7 lb<br>ai/acre)                   |   |
| Huckleberry<br>Loganberry<br>Raspberry<br>(black and red) | Leaf spot and blotch (Mycosphaerella spp., Septoria spp.)   | ·                                      |   |                                       |   |
|   | Phomopsis leaf spot, twig blight, and fruit rot (Phomopsis spp.)  |  |   |                                       |   |
|   | Powdery mildew (Sphaerotheca spp., Microsphaera spp., Oidium spp.) Spur blight (Didymella spp., Phoma spp.) |  |   |                                       |   |
|   |   |  |   |                                       |   |
|   | Suppression only  |  |   |                                       |   |
| Botrytis gray mold<br>(Botrytis cinerea)                  |   | · .                                    |   |                                       |   |
| •   | Monilinia blight (Monilinia spp.)   |  |   | ,                                     |   |
|   | Rust (Pucciniastrum spp., Arthuriomyces spp., Phragmidium spp., Kuehneola spp.)                             |  |   |                                       |   |

Application Directions: Begin applications of Cabrio 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** apply more than 0.7 lb ai pyraclostrobin (= 56 oz **Cabrio**) per acre per season. **DO NOT** make more than two (2) sequential applications of **Cabrio** before alternating to a labeled non-**Group 11** fungicide with a different mode of action.

| Crop   | Target Disease   | Product Use<br>Rate per<br>Application | Maximum Number of Sequential Applications | Maximum<br>Product Rate<br>per Season    | Minimum Time<br>from Application<br>to Harvest<br>(PHI) |
|--|--|--|---|--|---|
| Brassica, Head and Stem Broccoli Broccoli, Chinese Brussels sprouts Cabbage Cabbage, Chinese Cabbage, Chinese mustard Cauliflower Cavalo broccolo Kohlrabi | Alternaria leaf spot (Alternaria spp.)  Anthracnose (Colletotrichum spp.)  Black leg (Phoma lingan)  Cercospora leaf spot (Cercospora brassicicola)  Downy mildew (Peronospora parasitica)         | 12 to 16 oz<br>per acre                | 2   | 64 oz<br>per acre<br>(0.8 lb<br>ai/acre) | 0 days  |
|  | Powdery mildew (Erysiphe polygoni)  Rhizoctonia blight (Rhizoctonia solani)  Ring spot (Mycosphaerella brassicicola)  White leaf spot (Pseudocercosporella capsellae)  White rust (Albugo candida) |  |   |  |   |

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

Resistance Management: To limit the potential for development of resistance, DO NOT apply more than 0.8 lb ai pyraclostrobin (= 64 oz Cabrio) per acre per season. DO NOT make more than two (2) applications of Cabrio before alternating to a labeled non-Group 11 fungicide with a different mode of action.

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| Crop   | Target Disease   | Product Use<br>Rate per<br>Application | Maximum Number of Sequential Applications | Maximum<br>Product Rate<br>per Season    | Minimum Time<br>from Application<br>to Harvest<br>(PHI) |
|--|--|--|---|--|---|
| Brassica Leafy Greens Broccoli raab Chinese cabbage (bok choy) Collards Kale Mizuna Mustard greens Mustard spinach Rape greens | Altemaria leaf spot (Alternaria spp.) Anthracnose (Colletotrichum spp.) Cercospora leaf spot (Cercospora brassicicola) Downy mildew (Peronospora parasitica) Powdery mildew (Erysiphe polygoni) Ringspot (Mycosphaerella brassicicola) White rust (Albugo candida) Suppression only Rhizoctonia stem rot (Rhizoctonia stem rot (Sclerotinia sclerotiorum) Southern blight (Sclerotium rolfsii) | 12 to 16 oz<br>per acre                | 1   | 64 oz<br>per acre<br>(0.8 lb<br>ai/acre) | 3 days  |

**Application Directions:** Begin applications of **Cabrio** prior to disease development and continue on a 7- to 10-day interval. Use the shorter interval when disease pressure is high.

Resistance Management: To limit the potential for development of resistance, DO NOT apply more than 0.8 lb ai pyraclostrobin (= 64 oz Cabrio) per acre per season. DO NOT make more than one (1) application of Cabrio before alternating to a labeled non-Group 11 fungicide with a different mode of action.

| Crop                                | Target Disease   | Product Use<br>Ràte per<br>Application | Maximum<br>Number of<br>Sequential<br>Applications | Maximum<br>Product Rate<br>per Season | Minimum Time<br>from Application<br>to Harvest<br>(PHI) |
|-------------------------------------|--|--|--|---------------------------------------|---|
| Bulb Vegetables                     | Powdery mildew   | 8 to 12 oz                             | . 1  | 72 oz                                 | 7 days  |
| <b>Group</b><br>Garlic              | (Leveillula taurica)   | per acre                               |  | per acre                              |   |
| Leek Onions (all varieties) Shallot | Purple blotch and leaf blight (Alternaria porri, Stemphylium vesicarium) |  |  | (0.9 lb<br>ai/acre)                   |   |
| F                                   | Rust<br>( <i>Puccinia porri</i> )  |  | ,  |                                       |   |
|                                     | Downy mildew<br>(Peronospora<br>destructor)                              | 12 oz<br>per acre                      |  |                                       |   |
|                                     | Suppression only   |  |  |                                       |   |
|                                     | Botrytis leaf blight (Botrytis squamosa)                                 | _                                      |  |                                       |   |
|                                     |  | ,                                      |  |                                       |   |

**Application Directions:** Begin applications of **Cabrio** prior to disease development. Make each application of **Cabrio** in rotation with at least one (1) application of another labeled non-**Group 11** fungicide on a 7-day interval.

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.

Resistance Management: To limit the potential for development of resistance, DO NOT apply more than 0.9 lb pyraclostrobin (= 72 oz Cabrio) per acre per season. DO NOT make more than one (1) application of Cabrio before alternating to a labeled non-Group 11 fungicide with a different mode of action.

| Crop    | Target Disease   | Product Use<br>Rate per<br>Application | Maximum Number of Sequential Applications | Maximum<br>Product Rate<br>per Season    | Minimum Time<br>from Application<br>to Harvest<br>(PHI) |
|---------|--|--|---|--|---|
| Carrots | Alternaria leaf spot (Alternaria spp.)  Cercospora leaf spot (Cercospora spp.)  Powdery mildew (Erysiphe spp.) | 8 to 12 oz<br>per acre                 | 1   | 48 oz<br>per acre<br>(0.6 lb<br>ai/acre) | 0 days  |

Application Directions: Begin applications of Cabrio 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.

No restriction on livestock grazing or feeding for carrot culls.

Resistance Management: To limit the potential for development of resistance, **DO NOT** apply more than 0.6 lb ai pyraclostrobin (= 48 oz **Cabrio**) per acre per crop growing season. **DO NOT** make more than one (1) application of **Cabrio** before alternating to a labeled fungicide with a different mode of action.

| Crop  | Target Disease   | Product Use<br>Rate per<br>Application | Maximum<br>Number of<br>Sequential<br>Applications | Maximum<br>Product Rate<br>per Season                      | Minimum Time<br>from Application<br>to Harvest<br>(PHI) |
|---|--|--|--|--|---|
| Cucurbit Vegetables<br>Group<br>Includes all types and<br>hybrids of:   | Downy mildew<br>(Pseudoperono-<br>spora cubensis)  | 8 to 12 oz<br>per acre                 | 1  | 64 oz<br>(0.8 lb<br>ai/acre)                               | 0 days  |
| Cantaloupe Chayote Chinese waxgourd Citron melon Cucumber Edible gourds Gherkin Muskmelon Pumpkin Summer squash Watermelon Winter squash Zucchini  Momordica spp. (such as Balsam apple Balsam pear Bitter melon Chinese cucumber | Alternaria blight (Alternaria cucumerina) Anthracnose (Colletotrichum orbiculare) Cercospora leaf spot (Cercospora citrulina) Gummy stem blight (Didymella bryoniae) Microdochium blight (Plectosporium tabacinum) Powdery mildew (Sphaerotheca fuliginea, Erysiphe cichoracearum) Target leaf spot (Corynespora casslicola) | 12 to 16 oz<br>per acre                |  | DO NOT make more than 4 applications per growing sea- son. |   |

For further instructions see next page.

#### **Cucurbit Vegetables Group Information**

**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.

To the extent consistent with applicable law, 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** apply more than 0.8 lb ai pyraclostrobin (= 64 oz **Cabrio**) per acre per crop growing season. **DO NOT** make more than one (1) application of **Cabrio** before alternating to a labeled non-**Group 11** fungicide with a different mode of action.

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

| Crop  | Target Disease  | Product Use<br>Rate per<br>Application                                      | Maximum Number of Sequential Applications | Maximum<br>Product Rate<br>per Season    | Minimum Time<br>from Application<br>to Harvest<br>(PHI) |
|---|---|---|---|--|---|
| Fruiting Vegetables 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)  Late blight (Phytophthora infestans)  Powdery mildew (Leveillula taurica)  Suppression only  Botrytis gray mold (Botrytis cinerea) | 8 to 12 oz per acre or 8 to 12 oz per 100 gallons of spray volume (dilute)* |   | 96 oz<br>per acre<br>(1.2 lb<br>ai/acre) | 0 days  |

See the separate Crop-specific Requirements for tomato for the maximum number of sequential applications pertaining to this use.

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 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.

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.

To the extent consistent with applicable law, 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.

#### **Resistance Management**

To limit the potential for development of resistance, **DO NOT** apply more than 1.2 lb ai pyraclostrobin (= 96 oz **Cabrio**) per acre per crop growing season. **DO NOT** make more than one (1) application of **Cabrio** before alternating to a labeled non-**Group 11** fungicide with a different mode of action. In tomato, **DO NOT** make more than two (2) applications of **Cabrio** before alternating to a labeled non-**Group 11** fungicide with a different mode of action. For additional information pertaining to resistance management, refer to section **General Information**, **Resistance Management**.

| Crop  | Target Disease                                      | Product Use<br>Rate per<br>Application | Maximum Number of Sequential Applications | Maximum<br>Product Rate<br>per Season | Minimum Time<br>from Application<br>to Harvest<br>(PHI) |
|---|---|--|---|---------------------------------------|---|
| <b>Grapes</b> Vitis vinifera and              | Angular leaf spot<br>(Mycosphaerella angulata)      | 8 to 12 oz<br>per acre                 | 2   | 72 oz<br>per acre                     | 14 days   |
| rotundifolia<br>(Muscadine<br>varieties only) | Anthracnose<br>(Elsinoe ampelina)                   |  |   | (0.9 lb<br>ai/acre)                   |   |
|   | Black rot<br>(Guignardia bidwellii)                 |  |   |                                       |   |
|   | Downy mildew<br>( <i>Plasmopara viticola</i> )      | ·                                      |   |                                       |   |
|   | Mycosphaerella leaf blight (Pseudocercospora vitis) |  | · · · · · · · · · · · · · · · · · · ·     | ·                                     |   |
|   | Phomopsis<br>(Phomopsis viticola)                   |  |   |                                       |   |
|   | Powdery mildew<br>(Uncinula necator)                |  | ·   |                                       |   |
|   | Ripe rot<br>(Colletotrichum<br>gloeosporioides)     |  |   |                                       |   |
|   | Suppression only                                    |  |   |                                       |   |
|   | Botrytis gray mold (Botrytis cinerea)               |  |   |                                       | ,   |

**Application Directions:** For powdery mildew control, begin applications of **Cabrio** 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 or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours except when performing cane tying, cane turning, or cane girdling. The REI is 5 days for treated grapes when conducting cane tying, cane turning or cane girdling.

DO NOT use on Concord, Worden, Fredonia, or related varieties due to possible foliar injury.

Resistance Management: To limit the potential for development of resistance, DO NOT apply more than 0.9 lb ai pyraclostrobin (= 72 oz Cabrio) per acre per season. DO NOT make more than two (2) sequential applications of Cabrio before alternating to a labeled non-Group 11 fungicide with a different mode of action.

| Crop | Target Disease   | Product Use<br>Rate per<br>Application   | Maximum<br>Number of<br>Sequential<br>Applications | Maximum<br>Product Rate<br>per Season    | Minimum Time<br>from Application<br>to Harvest<br>(PHI) |
|------|--|--|--|--|---|
| Hops | Downy mildew (Pseudoperonospora humuli) Powdery mildew (Erysiphe cichoracearum, Sphaerotheca spp.) | 8 to 12 oz<br>per 100 gallons<br>of dilute spray<br>( <b>DO NOT</b> use<br>more than 16 oz<br>per acre) <sup>1</sup> | 2.   | 48 oz<br>per acre<br>(0.6 lb<br>ai/acre) | 0 days  |

**Application Directions:** Begin applications of **Cabrio** prior to disease development and continue on a 10- to 21-day interval. Prior to trellising, use 8 oz per 100 gallon dilute rate. Use the shorter interval when disease pressure is high. Application rates are based on 100 gallons of dilute spray. Adjust water volume to maintain thorough coverage up to a maximum of 200 gallons per acre. Use 25 to 50 gallons of dilute spray per acre prior to trellising and 100 to 200 gallons of dilute spray per acre thereafter. **DO NOT** use more than 200 gallons per acre of this mixture.

'If additional spray volume is needed for thorough coverage, use 16 oz of Cabrio per acre in the required spray volume.

Aerial application is not permitted for use of Cabrio in hops.

Resistance Management: To limit the potential for development of resistance, DO NOT apply more than 0.6 lb ai pyraclostrobin (= 48 oz Cabrio) per acre per season. DO NOT make more than two (2) sequential applications of Cabrio before alternating to a labeled non-Group 11 fungicide with a different mode of action.



| Crop                             | Target Disease                           | Product Use<br>Rate per<br>Application | Maximum Number of Sequential Applications | Maximum<br>Product Rate<br>per Season | Minimum Time<br>from Application<br>to Harvest<br>(PHI) |
|----------------------------------|--|--|---|---------------------------------------|---|
| Leafy Vegetables                 | Alternaria leaf spot                     | 12 to 16 oz                            | 2   | 64 oz                                 | 0 days  |
| (except Brassica) Amaranth       | (Alternaria spp.)                        | per acre                               |   | per acre                              |   |
| Arugula                          | Anthracnose                              |  |   | (0.8 lb                               | ,   |
| Cardoon                          | (Colletotrichum spp.)                    |  |   | ai/acre)                              |   |
| Celery                           |  |  |   | <b>.</b>                              |   |
| Celery (Chinese)                 | Ascochyta leaf spot                      |  |   |                                       |   |
| Celtuce                          | (Ascochyta spp.)                         |  |   |                                       | •   |
| Chervil                          | Cercospora leaf spot                     |  |   |                                       |   |
| Chrysanthemum                    | (Cercospora spp.)                        |  |   | ·                                     |   |
| (edible-leaved and               | Downy mildew                             |  |   |                                       | ·   |
| garland)                         | (Peronospora spp.)                       |  |   |                                       |   |
| Corn salad<br>Cress (garden and  |  |  |   |                                       |   |
| Upland)                          | Powdery mildew                           |  |   |                                       |   |
| Dandelion                        | (Erysiphe spp.,                          |  |   |                                       |   |
| Dock                             | Phyllactinia spp.,<br>Sphaerotheca spp.) |  |   | İ                                     |   |
| Endive                           | Spriaerotrieca spp.)                     |  | ,   | 1                                     |   |
| Fennel (Florence)                | Rust                                     |  |   |                                       |   |
| Lettuce (head and                | (Puccinia spp.,                          |  | •   | ļ                                     |   |
| leaf)                            | Uromyces spp.)                           |  |   |                                       | ·   |
| Orach<br>Parslev                 | Septoria leaf spot                       |  |   |                                       |   |
| Purslane (garden                 | (Septoria spp.)                          |  |   |                                       |   |
| and winter)                      |  |  |   |                                       |   |
| Radicchio (red                   |  |  |   |                                       | •   |
| chicory)                         |  |  | i   |                                       | ,   |
| Rhubarb                          | Lettuce downy mildew                     | 16 oz                                  |   |                                       |   |
| Spinach                          | (Bremia spp.)                            | per acre                               |   |                                       |   |
| Spinach (New                     |  | ļ· -·                                  |   |                                       |   |
| Zealand and vine)<br>Swiss chard |  |  |   |                                       |   |
| CANICO OF ICITA                  | 100-1                                    | 0 to 10 ==                             |   |                                       | , i   |
|                                  | White rust                               | 8 to 12 oz                             |   |                                       |   |
|                                  | (Albugo candida)                         | per acre                               |   |                                       |   |
| •                                |  |  |   |                                       |   |
|                                  |  |  |   |                                       | ,   |
|                                  | <u> </u>                                 |  |   |                                       |   |

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

Cabrio has been reported to cause speckling of spinach leaves under certain conditions. It is impossible for BASF to test all varieties of spinach for sensitivity to Cabrio under all environments and all potential product mixture combinations. To reduce the risk of spinach injury, BASF recommends testing Cabrio or Cabrio tank mixtures on a small portion of the crop before broadscale use. Refer to section Additives and General Tank Mixing Information of this label. To the extent consistent with applicable law, the user assumes all risks associated with use of Cabrio. Refer also to the Conditions of Sale and Warranty section of this label.

Resistance Management: To limit the potential for development of resistance, **DO NOT** apply more than 0.8 lb ai pyraclostrobin (= 64 oz **Cabrio**) per acre per season. **DO NOT** make more than two (2) applications of **Cabrio** before alternating to a labeled non-**Group 11** fungicide with a different mode of action.

| Crop   | Target Disease                            | Product Use<br>Rate per<br>Application | Maximum Number of Sequential Applications | Maximum<br>Product Rate<br>per Season | Minimum Time<br>from Application<br>to Harvest<br>(PHI) |
|--|---|--|---|---------------------------------------|---|
| Leaves of Root                                     | Alternaria leaf spot                      | 8 to 12 oz                             | 1   | 48 oz                                 | 0 days  |
| and Tuber  | (Alternaria spp.)                         | per acre                               |   | per acre                              |   |
| Vegetables (except<br>sugar beet)<br>Black salsify | Cercospora leaf spot<br>(Cercospora spp.) |  |   | (0.6 lb<br>ai/acre)                   |   |
| Carrot   | Powdery mildew                            |  |   |                                       |   |
| Cassava, bitter and                                | (Erysiphe spp.)                           | 1                                      | · ·                                       |                                       |   |
| sweet  |   |  |   |                                       |   |
| Celeriac   | -   |  |   |                                       |   |
| Chervil  | 1A (la ida a mana)                        | 8 to 16 oz                             |   |                                       |   |
| (turnip-rooted)                                    | White rust                                |  |   |                                       |   |
| Chicory  | (Albugo spp.)                             | per acre                               |   | j                                     |   |
| Dasheen  | ·   |  |   |                                       |   |
| Edible burdock<br>Garden beet                      |   | İ                                      |   | }                                     |   |
| Oriental radish                                    |   |  |   |                                       |   |
| Parsnip  |   | •                                      |   | ,                                     |   |
| Radish   |   |  |   |                                       |   |
| Rutabaga   |   | ,                                      |   |                                       |   |
| Sweet potato                                       |   |  |   |                                       |   |
| Tanier   |   |  |   |                                       |   |
| Turnip   | ·   |  |   | :                                     | •   |
| Yam, true  |   |  |   |                                       |   |

**Application Directions:** Begin applications of **Cabrio** 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.

NO restriction on livestock grazing or feeding.

Resistance Management: To limit the potential for development of resistance, DO NOT apply more than 0.6 lb ai pyraclostrobin (= 48 oz Cabrio) per acre per season. DO NOT make more than one (1) application of Cabrio before alternating to a labeled non-Group 11 fungicide with a different mode of action.

| Crop      | Target Disease  | Product Use<br>Rate per<br>Application | Maximum Number of Sequential Applications | Maximum<br>Product Rate<br>per Season    | Minimum Time<br>from Application<br>to Harvest<br>(PHI) |
|-----------|---|--|---|--|---|
| Pistachio | Late blight (Alternaria alternata) Shoot blight (Botryosphaeria dothidea) | 16 oz<br>per acre                      | 2   | 64 oz<br>per acre<br>(0.8 lb<br>ai/acre) | 14 days   |

Application Directions: Apply Cabrio prior to disease development and continue on a 10- to 30-day interval.

Resistance Management: To limit the potential for development of resistance, DO NOT apply more than 0.8 lb ai pyraclostrobin (= 64 oz Cabrio) per acre per season. DO NOT make more than two (2) sequential applications of Cabrio before alternating to a labeled non-Group 11 fungicide with a different mode of action.

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

| Crop                          | Target Disease  | Product Use<br>Rate per<br>Application | Maximum Number of Sequential Applications | Maximum<br>Product Rate<br>per Season          | Minimum Time<br>from Application<br>to Harvest<br>(PHI) |
|-------------------------------|---|--|---|--|---|
| Pome fruit<br>Apple           | Alternaria blotch.<br>(Alternaria mali)                       | 9 to 12 oz<br>per acre                 | 2   | 48 oz<br>per acre                              | 0 days  |
| Pear Oriental pear Quince     | Apple scab<br>(Venturia inaequalis)                           |  |   | (0.6 lb<br>ai/acre)                            |   |
| Crabapple<br>Loquat<br>Mayhaw | Bitter rot<br>(Colletotrichum spp.)                           |  |   | DO NOT make<br>more than<br>4 applications per |   |
| · ·                           | Black rot and Frogeye leaf spot (Botryosphaeria obtusa)       |  |   | season.  |   |
|                               | Cedar Apple rust<br>(Gymnosporangium<br>juniperi-virginianae) | ·                                      |   |  |   |
|                               | Flyspeck<br>(Zygophiala jamaicensis)                          | ·                                      |   |  | •   |
|                               | Pear scab<br>(Venturia pirina)                                | -                                      | •   |  |   |
|                               | Powdery mildew (Podosphaera leucotricha)                      |  |   |  |   |
|                               | Quince rust<br>(Gymnosporangium clavipes)                     |  |   |  |   |
| •                             | Sooty blotch<br>(Fungal disease complex)                      |  |   |  |   |
| ·                             | White rot<br>(Botryosphaeria dothidea)                        |  |   |  |   |

Application Directions for scab, powdery mildew, rust and frogeye leaf spot: Begin applications of Cabrio prior to disease development and continue on a 7- to 10-day interval.

Use the shorter interval when disease pressure is high. Application rates are based on a tree size requiring a standard dilute spray of 300 gallons per acre. **DO NOT** apply less than 9 oz/A of **Cabrio** when spraying based on tree row volume.

Application Directions for sooty blotch, fly speck, white rot, black rot, bitter rot, and Alternaria blotch: Begin applications of Cabrio prior to disease development and continue on a 7- to 14-day interval. Use the shorter interval when disease pressure is high. Application rates are based on a tree size requiring a standard dilute spray of 300 gallons per acre. DO NOT apply less than 9 oz/A of Cabrio when spraying based on tree row volume.

NO restriction on livestock grazing or feeding.

Resistance Management: To limit the potential for development of resistance, **DO NOT** apply more than 0.6 lb ai pyraclostrobin (= 48 oz **Cabrio**) per acre per season. **DO NOT** make more than four (4) applications of **Cabrio** or other **Group 11** fungicides per season. **DO NOT** make more than two (2) sequential applications of **Cabrio** before alternating to a labeled non-**Group 11** fungicide with a different mode of action for at least one (1) application.

| Crop   | Target Disease                            | Product Use<br>Rate per<br>Application | Maximum Number of Sequential Applications | Maximum<br>Product Rate<br>per Season | Minimum Time<br>from Application<br>to Harvest<br>(PHI) |
|--|---|--|---|---------------------------------------|---|
| Root Vegetables<br>(except sugar beet)   | Alternaria leaf spot<br>(Alternaria spp.) | 8 to 12 oz<br>per acre                 | 1   | 48 oz<br>per acre                     | 0 days  |
| Subgroup: Black salsify  | Cercospora leaf spot<br>(Cercospora spp.) |  |   | (0.6 lb<br>ai/acre)                   |   |
| Carrot Celeriac Chervil (turnip-rooted) Chicory Edible burdock Garden beet     | Powdery mildew (Erysiphe spp.)            |  |   |                                       |   |
| Ginseng<br>Horseradish<br>Oriental radish<br>Parsley                           | White rust<br>(Albugo spp.)               | 8 to 16 oz<br>per acre                 |   | ·                                     |   |
| (turnip-rooted) Parsnip Radish Rutabaga Salsify Skirret Spanish salsify Turnip |   |  |   |                                       |   |

Application Directions: Begin applications of Cabrio 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.

 $\ensuremath{\mathbf{NO}}$  restriction on livestock grazing or feeding for carrot culls.

Resistance Management: To limit the potential for development of resistance, **DO NOT** apply more than 0.6 lb ai pyraclostrobin (= 48 oz **Cabrio**) per acre per crop growing season. **DO NOT** make more than one (1) application of **Cabrio** before alternating to a labeled non-**Group 11** fungicide with a different mode of action.

| Crop                                    | Target Disease   | Product Use<br>Rate per<br>Application | Maximum Number of Sequential Applications | Maximum<br>Product Rate<br>per Season | Minimum Time<br>from Application<br>to Harvest<br>(PHI) |
|---|--|--|---|---------------------------------------|---|
| Stone Fruits Group<br>Apricot           | Alternaria leaf spot<br>(Alternaria spp.)                  | 9.5 oz<br>per acre                     | 2   | 47.5 oz<br>per acre                   | 0 days  |
| Cherry<br>(sweet and tart)<br>Nectarine | Anthracnose (Colletotrichum spp.)                          |  | ·   | (0.6 lb<br>ai/acre)                   |   |
| Peach Plum (all varieties)              | Monilinia blossom blight (Monilinia spp.)                  |  |   |                                       |   |
| (all varieties)<br>Plumcot<br>Prune     | Powdery mildew<br>(Sphaerotheca spp.,<br>Podosphaera spp.) |  |   |                                       |   |
|   | Scab<br>(Cladosporium<br>carpophilum)                      |  |   |                                       |   |
|   | Shothole<br>(Wilsonomyces<br>carpophilus)                  |  |   |                                       |   |

Application Directions: Begin applications of Cabrio 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** apply more than 0.6 lb ai pyraclostrobin (= 47.5 oz **Cabrio**) per acre per season. **DO NOT** make more than two (2) sequential applications of **Cabrio** before alternating to a labeled non-**Group 11** 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.

| Crop         | Target Disease   | Product Use<br>Rate per<br>Application | Maximum Number of Sequential Applications | Maximum<br>Product Rate<br>per Season      | Minimum Time<br>from Application<br>to Harvest<br>(PHI) |
|--------------|--|--|---|--|---|
| Strawberries | Anthracnose (Colletotrichum spp.)  Leaf spot (Mycosphaerella fragariae)  Powdery mildew (Sphaerotheca macularis) | 12 to 14 oz<br>per acre                | 2   | 70 oz<br>per acre<br>(0.875 lb<br>ai/acre) | 0 days  |
|              | Botrytis gray mold (Botrytis cinerea)  | -                                      |   |  |   |

Application Directions: Begin applications of Cabrio no later than bloom or 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.

Resistance Management: To limit the potential for development of resistance, DO NOT apply more than 0.875 lb ai pyraclostrobin (= 70 oz Cabrio) per acre per crop growing season. DO NOT make more than two (2) applications of Cabrio before alternating to a labeled non-Group 11 fungicide with a different mode of action.

| Crop   | Target Disease                                  | Product Use<br>Rate per<br>Application | Maximum Number of Sequential Applications | Maximum<br>Product Rate<br>per Season | Minimum Time<br>from Application<br>to Harvest<br>(PHI) |
|--------|---|--|---|---------------------------------------|---|
| Tomato | Anthracnose (Colletotrichum spp.)               | 8 to 12 oz<br>per acre<br>or           | 2   | 96 oz<br>per acre                     | 0 days  |
|        | Black mold<br>(Alternaria alternata)            | 8 to 12 oz<br>per 100 gallons          |   | (1.2 lb<br>ai/aċre)                   |   |
| ·      | Early blight (Alternaria solani)                | of spray<br>volume (dilute)*           |   |                                       |   |
|        | Septoria leaf spot<br>(Septoria lycopersici)    |  |   |                                       |   |
| · .    | Target spot<br>(Corynespora cassiicola)         |  |   |                                       |   |
| ·      | Late Blight (Phytophthora infestans)            | 8 to 16 oz<br>per acre                 |   |                                       |   |
|        | Powdery mildew<br>( <i>Leveillula taurica</i> ) | ·                                      |   |                                       |   |
|        | Suppression only                                |  |   |                                       |   |
|        | Botrytis gray mold (Botrytis cinerea)           |  |   |                                       |   |

**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 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.

**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.

To the extent consistent with applicable law, 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.

#### **Resistance Management**

To limit the potential for development of resistance, **DO NOT** apply more than 1.2 lb ai pyraclostrobin (= 96 oz **Cabrio**) per acre per crop growing season. **DO NOT**make more than two (2) applications of **Cabrio** before alternating to a labeled non-**Group 11** fungicide with a different mode of action. For additional information pertaining to resistance management, refer to section **General Information**, **Resistance Management**.

#### VI. Cabrio® EG fungicide Crop-specific Requirements (continued)

| Crop  | Target Diseases  | Product Use<br>Rate per<br>Application | Maximum Number of Sequential Applications | Maximum<br>Product Rate<br>per Season      | Minimum Time<br>from Application<br>to Harvest<br>(PHI) |
|---|--|--|---|--|---|
| Tree Nuts Group Almond Beech nut Brazil nut Butternut Cashew Chestnut Chinquapin Filbert Hickory nut Macadamia nut Pecan Walnut (black and English) | Alternaria 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) | 9.5 oz<br>per acre                     | 2   | 38 oz<br>per acre<br>(0.475 lb<br>ai/acre) | 14 days<br>(for almond -<br>25 days)                    |

Application Directions: In almond, begin applications of Cabrio at pink bud and continue on a 7- to 14-day interval. In filbert, begin applications at budswell to budbreak, prior to infection and disease development. Continue on a 7- to 14-day interval to cover and protect new growth. In pecan, begin application of Cabrio prior to disease development and continue on a 7- to 21-day interval. For all other crops listed above, apply Cabrio prior to disease development and continue on a 7- to 28-day interval. In all cases, use the shorter interval when disease pressure is high or shoot growth is very rapid.

No restriction on livestock grazing or feeding for almond hulls.

Resistance Management: To limit the potential for development of resistance, DO NOT apply more than 0.475 lb ai pyraclostrobin (= 38 oz Cabrio) per acre per season. DO NOT make more than two (2) sequential applications of Cabrio before alternating to a labeled non-Group 11 fungicide with a different mode of action.

For aerial application to tree nuts, use no less than 10 gallons of spray solution per acre.

#### Conditions of Sale and Warranty

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or 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. To the extent consistent with applicable law, 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.

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