7969-199

04/06/2005

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BASF

The Chemical Company

Pristine® fungicide

Supplemental Labeling

For Use in Pome fruits and Hops

Active Ingredients:

Pyraclostrobin - (carbamic acid, [2-[[[1-(4-chlorophenyl)-1*H*-pyrazol-3-yl] oxy]methyl]phenyl]methoxy-, methyl ester	12.8%
Boscalid - (3-pyridinecarboxamide, 2-chloro-N-(4'-chloro(1,1'-biphenyl)-2-yl)	25.2%
Inert ingredients	62.0%
Total	100.0%

EPA Reg. No. 7969-199

Precautionary Statements

Endangered Species Concerns

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is violation of federal law. This pesticide is toxic to fish and aquatic invertebrates and must be used strictly in accordance with drift precautions on this label in order to minimize off-site exposures. **DO NOT** apply when weather conditions favor drift from treated areas to aquatic habitats. Notify State and/or Federal authorities and BASF immediately if you observe any adverse environmental effects due to use of this product.
To determine whether your county has endangered aquatic species, consult the County Bulletins at http://www.epa.gov/espp/usa-map.htm.

Endangered Species Bulletins may also be obtained from extension offices or state pesticide agencies. If a bulletin is not available for your specific area, check with the appropriate local state agency to determine if known populations of endangered aquatic species occur in the area to be treated.

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. Refer to the **Pristine® fungicide** main label for precautionary statements, first aid and personal protective equipment requirements.

This supplemental label must be in the user's possession during application.

General Information

Pristine provides optimum disease control when applied in a regularly scheduled protective fungicide program and is used in a spray program that rotates fungicides with different modes of action. Refer to the **Pristine** main label for general resistance management information and to the crop specific use recommendations and restrictions found in this label.

Application Information

Apply **Pristine** according to the rate, timing, resistance management and adjuvant use recommendations in the Crop Specific Use Directions (**Table A**) in this label. **Pristine** may be applied by ground sprayer, aerial equipment (all crops **except hops**) or through sprinkler irrigation systems. Refer to the **Pristine** main label for specific instructions on these methods.

ACCEPTED
APR 6 2005
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide Registered under EPA Reg. No. 7969-199

Restrictions and Limitations

Pristine is not for use in greenhouse or transplant production systems for food crops.

Follow the restrictions and limitations outlined in the Crop Specific Restrictions and Limitations table (**Table B**) in this label for:

- Minimum pre-harvest interval
- Maximum rate per acre per application
- Maximum number of applications per season
- Maximum rate per season
- Livestock grazing or feeding restrictions

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of **12 hours.**

No aerial application in New York except as permitted under Section 24 (c), Special Local Needs 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 nd 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 determine 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 endangered species, 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.

1. The distance of the outer most 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 should be observed.

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

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

\pplications 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 non-target crops) is minimal and when wind is blowing away from the sensitive areas.

Table A - Pristine® Fungicide Crop-Specific Use Directions

Crop	Target Diseases	Use Rate per Application[1]	Maximum Number of Applications per Season	Maximum Rate Per Season	Minimum Time From Application to Harvest (PHI)
Pome fruits Group Apple Pear Oriental pear Quince Crabapple Loquat	Alternaria blotch *(Alternaria mali)* Apple scab *(Venturia inaequalis)* Bitter rot *(Colletotrichum spp.)* Black rot/ Frogeye leaf spot *(Botryosphaeria obtusa)* Brooks spot *(Mycosphaerella pomi)* Flyspeck *(Zygophiala jamaicensis)* Pear scab *(Venturia pirina)* Powdery mildew *(Podosphaera leucotricha)* Sooty blotch *(disease complex)* White rot *(Botryosphaeria dothidea)* **Suppression Only** Cedar Apple rust *(Gymnosporangium juniperi-virginianae)* Quince rust *(Gymnosporangium clavipes)*	14.5 to 18.5 oz. per acre	4	74 oz. per acre	0 days

Application Directions for scab, powdery mildew, frogeye leaf spot and rust: Begin applications of **Pristine** prior to disease development and continue on a 7- to 10-day interval. Use the higher rate and 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 14.5 oz/A of Pristine when spraying based on tree row volume.

Application Directions for sooty blotch, flyspeck, white rot, black rot, bitter rot and Alternaria blotch: Begin applications of **Pristine** 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. Application rates are based on a tree size requiring a standard dilute spray of 300 gallons per acre. DO NOT apply less than 14.5 oz/A of Pristine when spraying based on tree row volume.

No restriction on livestock grazing or feeding for pome fruits feed items.

Resistance Management: To limit the potential for development of resistance, do not make more than four (4) applications of **Pristine** per season. **DO NOT** make more than two (2) sequential applications of **Pristine** before alternating to a labeled fungicide with a different mode of action.

[1] Application rates are based on a tree size requiring a standard dilute spray of 300 gallons per acre. **DO NOT** apply less than 14.5 oz. of Pristine when spraying based on tree row volume.

Table A - Pristine® Fungicide Crop-Specific Use Directions (*continued*)

Crop	Target Diseases	Use Rate per Application	Maximum Number of Applications per Season	Maximum Rate Per Season	Minimum Time From Application to Harvest (PHI)
Hops	Powdery mildew (*Erysiphe cichoracearum, Sphaerotheca* spp.) Downy mildew (*Pseudoperonospora humuli*)	14 oz. per 100 gallons of dilute spray (do not use more than 28 oz. per acre)	3	84 oz. per acre	14 days
	Application Directions: Begin applications of **Pristine** prior to disease development and continue on a 10 -to 21-day interval. Use the shorter interval when disease pressure is high. Application rates are based on a 100 gallons of dilute spray applied to runoff. Adjust water volume to maintain thorough coverage. Use 25-50 gallons of dilute spray per acre prior to trellising and 100-200 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 28 oz. of **Pristine** per acre in the required spray volume. **Resistance Management:** To limit the potential for development of resistance, do not make more than three (3) applications of **Pristine** per season. **DO NOT** make more than two (2) sequential applications of **Pristine** before alternating to a labeled fungicide with a different mode of action. **Restrictions: DO NOT use more than 200 gallons per acre of this mixture. If additional spray volume is needed for thorough coverage, use 28 oz. of Pristine per acre in the required spray volume.**				

Table B - Pristine® Fungicide Use Restrictions and Limitations

Crop	Minimum Time from Application to Harvest (PHI days)	Maximum Rate per Acre per Application (oz.)	Maximum Number of Applications per Season	Maximum rate per Acre per Season (oz.)
Pome fruits[1] Apple Pear, etc.	0	18.5	4	74
Hops	14	28	3	84

[1] For a complete list of crops within a crop group, see **Table A- Pristine Fungicide Crop-Specific Use Directions.**

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

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. BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. IN NO CASE SHALL BASF OR THE SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. 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. Refer to main **Pristine® fungicide** label for further **Conditions of Sale** and **Warranty** information.

Pristine is a registered trademark of BASF.

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