Pristine®

fungicide

Supplemental Labeling

For use in Soybeans

EPA Reg. No. 7969-199

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%

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 applications. 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 preventatively (prior to infection). Refer to the **Pristine** main label for general resistance management information and to the **Disease Specific Use Directions** and restrictions found in this label.

Application Information

Apply **Pristine** according to the rate, timing, resistance management and adjuvant use recommendations in the **Disease Specific Use Directions** (**Table 1**) in this label.

Pristine may be applied by ground sprayer, aerial equipment or through sprinkler irrigation systems. Refer to the **Pristine** main label for specific instructions on these methods.

Restrictions and Limitations

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

Follow the restrictions and limitations outlined in the **Crop Specific Restrictions and Limitations** table (**Table 4**) 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 State except as permitted under FIFRA 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 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 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 the information covered in the Aerial Drift Reduction Advisory Information.

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

Table 1 – Pristine® fungicide Disease Specific Use Directions

Target Disease	Use Rate per Application	Maximum Number of Applications per Season	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI)
Alternaria leaf spot *(Alternaria spp.)* Anthracnose *(Colletotrichum truncatum)* Brown Spot *(Septoria glycines)* Cercospora blight *(Cercospora kikuchii)* Frogeye leaf spot *(Cercospora sojina)* Pod & Stem blight *(Diaporthe phaseolorum)* Rhizoctonia aerial blight *(Rhizoctonia solani)*	8 to 16 oz. per acre	2	32 oz. per acre	21 days
Asian soybean rust* *(Phakopsora pachyrhizi)*	12.5 to 16 oz. per acre			
Southern blight *(Sclerotium rolfsii)* White mold (Sclerotinia sclerotiorum)	16 oz.per acre			

For optimal disease control, apply **Pristine** at early flowering (R1-R3 growth stage) or prior to disease development, whichever is earlier. Make a second application 7 to 21 days later if monitoring shows disease development or if conditions are conducive for disease infection. Use the higher labeled rate and shorter interval when disease pressure is high.

Pristine may be applied with adjuvants.

* See the section entitled **Management of Asian Soybean Rust** for specific instructions on use of **Pristine** to control Asian Soybean rust.

Soybean forage may be fed no sooner than 14 days after last application. Soybean hay may be fed no sooner than 21 days after last application.

Management of Asian Soybean Rust

If Asian soybean rust spores are present in the area, soybeans may be infected, even if symptoms are not present. Once Asian soybean rust is established (infection level* greater than 3-5%) on the soybean plant, control is difficult to achieve with a curative approach. Optimum disease control is achieved by utilizing the combination of a preventative fungicide like **Pristine® fungicide** plus an EPA approved fungicide (non-QoI mode of action) with known curative activity** against Asian soybean rust.

A comprehensive monitoring and scouting program must be continued after initial fungicide applications. Fungicide treatments that include **Pristine** will protect soybeans against Asian soybean rust for up to 21 days, but subsequent disease infection of treated leaves can occur earlier if conditions are favorable for disease development. New leaves emerging after treatment will not be protected from new infection pressure.

Monitoring for Asian Soybean Rust Presence
Information on the geographic distribution of Asian soybean rust can be gathered from multiple sources including local retailers, University Extension, USDA, the internet and BASF. These sources must be evaluated frequently during the growing season to determine the risk and local presence of rust spores in your geography. Rust spores can move hundreds of miles in only a few days based on wind direction and speed. If soybean rust is present in the area or if conditions exist where spore movement from infected areas are expected or predicted, soybean fields should be treated utilizing the **Pristine** program described in **Table 2**.

Field Scouting
Scout soybean fields for presence of Asian soybean rust frequently. Soybean rust establishment is favored by high humidity, free moisture present on soybean leaves and moderate air temperatures. Asian soybean rust, in most cases, becomes especially aggressive and visible when soybean plants reach the reproductive stage of growth (flowering). Check higher risk areas of soybean field for signs of the disease first. These include: earlier planted or maturing soybeans; high moisture areas near lakes, rivers or other water sources that keep humidity high; areas in the field that remain shaded longer resulting in higher free leaf moisture; low areas of fields where humidity (dew) can settle and persist longer. Look for any signs or symptoms of soybean rust presence. If Asian soybean rust is present in your field immediately implement **Pristine** program described in **Table 2**.

Scouting tip: Collect leaves from suspected plants, place suspect leaves in a clear plastic bag, inflate bag with breath (adds humidity to bag) and seal, place in warm (75-90° F) environment and incubate in humid plastic bags for 24 hours. Leaves in the bags should display accelerated disease development and show spore pustule development within 24 hours. Spore development should occur approximately two times faster than under normal field conditions.

Pristine - Recommendations for the Management of Asian Soybean Rust

Preventative + Curative Treatment
Existing Infections and/or if Asian Soybean Rust Spores Are Present or Predicted to be in the Area
A tank mixture with an EPA approved fungicide (non-QoI mode of action) with known curative activity** against Asian soybean rust is required for control of existing Asian soybean rust infections, even if symptoms are not present. If symptoms or soybean rust lesions and/or pustules are present on soybean plants, some yield loss may have already occurred.

The **Pristine** program described in **Table 2** below must be used for Asian soybean rust if one or more of the following conditions exists:

1) Asian soybean rust is present in the soybean field based on field scouting;
2) Asian soybean rust is present in the local area;
3) Predictive models based on weather/wind have predicted that spores have reached or will soon reach your area; or
4) USDA and/or University Extension report that Asian soybean rust (including spores) has been identified in your geographical area.

* Infection level = number of leaves with symptoms/signs of Asian soybean rust per 100 leaves.

** Contact your local state or federal agricultural authorities or local retailer for a list of fungicides approved in your state with known curative properties against Asian soybean rust.

Fungicide treatments that include **Pristine® fungicide** plus an EPA approved fungicide (non-QoI mode of action) with known curative activity** against Asian soybean rust will protect soybeans for up to 21 days, but subsequent infection of treated leaves can occur earlier if conditions are favorable for disease development. New leaves emerging after treatment will not be protected from new infection pressure.

Since a second fungicide application may be required, a comprehensive monitoring and scouting program must be continued after the initial fungicide application. Base the need for a second application on soybean growth stage, yield potential and conditions favorable for continued Asian soybean rust infection.

*Additional fungicide applications may be needed if Asian soybean rust pressure is extremely high and conditions are favorable for disease development later in the growing season. Continue the monitoring and scouting program and apply an EPA approved fungicide (non-QoI mode of action) with known curative activity** if a third application is needed.*

Preventative Treatment
Asian Soybean Rust (including spores) Not Present or Predicted to be Present in the Field or Area
The preventative **Pristine** program described in **Table 3** below should only be used if none of the conditions described in one through four of the section immediately above exist. Growers must continue to monitor and scout soybean fields as described in sections entitled **Monitoring for Asian Soybean Rust Presence** and **Field Scouting**.

A second fungicide application may be needed, if Asian soybean rust (including spores) is detected or identified in the treated field or geographical area. Continue a comprehensive monitoring and scouting program after the initial application of **Pristine**. Infection of treated soybean leaves can occur and new leaves emerging after treatment will not be protected from Asian soybean rust. The need for a second application should be based on soybean growth stage, yield potential and environmental conditions. If a second application is necessary, apply **Pristine** plus an effective, EPA approved fungicide (non-QoI mode of action) with known curative activity** against Asian soybean rust.

*Additional fungicide applications may be needed if Asian soybean rust pressure is extremely high and conditions are favorable for disease development later in the growing season. Continue the monitoring and scouting program and apply an EPA approved fungicide (non-QoI mode of action) with known curative activity**if a third application is needed.*

Need for Season Long Monitoring, Regardless of Pristine Program Selected
The key to adequate season long control of Asian soybean rust is careful monitoring and scouting of soybean fields all season, especially from initiation of flowering through pod fill. After the first application, maintain a thorough monitoring and scouting program. Apply follow-up fungicide treatments as needed, based on crop stage of growth, yield potential and as the residual protection of the first application begins to wane.

Thorough spray coverage of soybean plants is essential for optimum control. Utilize spray application techniques including sufficient water carrier per acre, pressure and proper nozzle selection that ensure thorough coverage. See the **Pristine** main label and your local retailer for recommendations.

* Infection level = number of leaves with symptoms/signs of Asian soybean rust per 100 leaves.

** Contact your local state or federal agricultural authorities or local retailer for a list of fungicides approved in your state with known curative properties against Asian soybean rust.

Table 2 — Pristine® fungicide application instructions when Asian soybean rust has been identified in the soybean field to be treated, is present in the local geographical area or spores have been predicted to be in the local geographical area.

Application 1:	Treatment:	**Pristine** (12.5 -16 oz./acre) [1] + adjuvant + EPA approved fungicide (non-QoI mode of action) with known curative activity against Asian soybean rust [2]
	Timing:	This application must be made soon after first rust infection, preventatively, or at blooming start (Growth Stage R1-R3), even if symptoms have not appeared. Refer to section entitled **Pristine fungicide Recommendations for Management of Asian Soybean Rust** and repeat application as necessary, depending on disease evolution.
Application 2[3]:	Treatment:	**Pristine** (12.5 -16 oz./acre) [1] + adjuvant + EPA approved fungicide (non-QoI mode of action) with known curative activity against Asian soybean rust[2]
	Timing:	21 days after Application 1 or Earlier (no sooner than 7 days) if monitoring shows active disease

1 Higher labeled rates of **Pristine** provide longer residual control of Asian soybean rust.

2 Contact your local state or federal agricultural authorities or local retailer for a list of approved fungicides in your state approved for this purpose.

3 Continue to carefully monitor and scout soybean fields as described in the section entitled **Management of Asian Soybean Rust**. Base need for second application on results of monitoring and scouting for disease, crop growth stage and yield potential. Consult with your local Retailer or University extension representative for guidance, as needed. *Additional fungicide applications may be needed if Asian soybean rust pressure is extremely high and conditions are favorable for disease development later in the growing season. Continue the monitoring and scouting program and apply an EPA approved fungicide (non-QoI mode of action) with known curative activity if the third application is needed.*

Table 3. Pristine® fungicide application instructions when Asian soybean rust has not been identified in the soybean field to be treated, is not present in the local geographical area and spores are not present or predicted to be present in the local geographical area.

Application 1:	Treatment:	**Pristine** (12.5 -16 oz./acre) [1] + adjuvant
	Timing:	R1-R3 leaf stage (1st flower to beginning pod)
Application 2[3]	Treatment:	**Pristine** (12.5 -16 oz./acre) [1] + adjuvant + EPA approved fungicide (non-QoI mode of action) with known curative activity against Asian soybean rust [2]
	Timing:	21 days after Application 1 or Earlier (no sooner than 7 days) if monitoring shows active disease

1 Higher labeled rates of **Pristine** provide longer residual control of Asian Soybean Rust.

2 Contact your local state or federal agricultural authorities or local retailer for a list of approved fungicides in your state approved for this purpose.

3 Continue to carefully monitor and scout soybean fields as described in the section entitled **Management of Asian Soybean Rust.** If Asian soybean rust, including spores, is detected in your fields or local geography, the treatment described in Application 2 may be needed. Base the need for this treatment on crop stage of growth, environmental conditions and yield potential. Consult with your local Retailer or University extension representative for guidance, as needed. Refer to section entitled **Application Information** above. *Additional fungicide applications may be needed if Asian soybean rust pressure is extremely high and conditions are favorable for disease development later in the growing season. Continue the monitoring and scouting program and apply an EPA approved fungicide (non-QoI mode of action) with known curative activity if the third application is needed.*

Restrictions and Limitations

Follow the restrictions and limitations outlined in the **Disease Specific Use Directions** table. (**Table 1**)

Table 4. Soybean use restrictions and limitations.

CROP	Use Rate per Application	Maximum Number of Applications per season	Maximum Rate per Season	Minimum Time from Application to Harvest (PHI) (Days)
Soybean	8-16 oz./acre	2	32 oz./acre	21 days

Soybean forage may be fed no sooner than 14 days after last application. Soybean hay may be fed no sooner than 21 days after last application.

Aerial application is permitted. **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.

007969-00199.20041209.**NVA 2004-04-156-0332**.pdf
Supersedes: NVA 2003-04-156-0086

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