

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

January 11, 2017

Lydia Cox Regulatory Affairs Specialist Nichino America 4550 New Linden Hill Rd. Suite 501 Wilmington, DE 19808

Subject: Label Amendment – Flutolanil label mitigation Product Name: Artisan Fungicide EPA Registration Number: 71711-17 Application Date: 06/03/2016 Decision Number: 518006

Dear Ms. Cox:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance

Page 2 of 2 EPA Reg. No. 71711-17 Decision No. 518006

with FIFRA section 6. If you have any questions, please contact Lisa Pahel by phone at (703) 347-0459, or via email at <u>pahel.lisa@epa.gov</u>.

Shaga Bloguer

Shaja B. Joyner, Product Manager 20 Fungicide-Herbicide Branch Registration Division 7505P

Enclosure

#### GROUP 7 3 FUNGICIDES



## **ARTISAN®** Fungicide

#### **ACTIVE INGREDIENTS:**

Flutolanil: Benzamide, N-[3-(1-methylethoxy)phenyl]-2-(trifluoromethyl)	32.0%
Propiconazole: 1H-1,2,4-Triazole,1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]	6.0%
OTHER INGREDIENTS:	<u>62.0%</u>
TOTAL	100.0%

Contains 3.0 lbs flutolanil and 0.6 lb propiconazole as active ingredients per U.S. gallon

EPA Reg. No. 71711-17 EPA Est. No.

## KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID		
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 the first 5 minutes, then continue rinsing.</li> </ul>	
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
HOTLINE NUMBER		
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For additional information on this pesticide product, including human health concerns and medical emergencies, you may call 1-800-348-5832. In case of fire or spills, information may be obtained by calling 1-800-424-9300.		

Net Contents: \_\_\_\_\_

[Manufactured in \_\_\_\_\_,] [formulated in \_\_\_\_\_,] [and] [packaged in \_\_\_] for:

Nichino America, Inc. 4550 New Linden Hill Road Wilmington, DE 19808 888-740-7700

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Avoid contact with eyes or clothing.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below.

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, or Viton<sup>®</sup>
- Shoes plus socks

In addition, all handlers (mixers, loaders, and applicators, or individuals performing one or more of these tasks), who are applying this pesticide using hand-held equipment must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, or Viton
- Shoes plus socks

#### **User Safety Requirements**

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, 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/PPE 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

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.

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

#### **ENVIRONMENTAL HAZARDS**

This product is toxic to fish, shrimp, and aquatic invertebrates. For terrestrial uses, except when applying over rice crops, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwater or rinsate.

Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water.

This product is classified as having a high potential for reaching surface water via runoff for several months or more after application. 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 loading of flutolanil from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

#### **ENDANGERED SPECIES RESTRICTIONS**

#### Restrictions in the State of Arkansas:

The use of Artisan on rice is restricted to protect the endangered fat pocketbook pearly mussel (Potamilus capax) and its habitat. Use is prohibited in the following areas of Arkansas:

- **Mississippi County:** Within the basin that drains directly into the Right Hand Chute of Little River, south of Big Lake National Refuge.
- **Poinsett County:** Between Crowley's Ridge and the levee east of the Right Hand Chute of Little River and the St. Francis Floodway. Use is also prohibited west of Rt. 140 and north of Rt. 63 at the SIPHON near Marked Tree, except that the prohibited area does not include the area bounded by Arkansas Highway 373 on the west, Highway 63 on the east, and Highway 14 on the south.
- Cross, St. Francis, and Lee Counties: Between Crowley's Ridge and the levee east of the Right Hand Chute of Little River and the St. Francis Floodway as far south as the confluence of L'Anguille River (Lee County).

#### 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 State or Tribal agency responsible for pesticide regulation. Do not allow adults, children or pets to enter area until sprays have dried.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during restricted entry interval (REI) of 12 hours.

For early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, wear:

- Coveralls
- Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, or Viton
- Shoes plus socks

#### **USE INFORMATION**

ARTISAN fungicide is a systemic fungicide for control of soil-borne and foliar diseases. ARTISAN fungicide controls White mold - Southern stem rot, Southern blight (*Sclerotium rolfsii*); the Limb/Pod rot complex caused by *Rhizoctonia solani;* Early leaf spot (*Cercospora arachidicola*); and Late leaf spot (*Cercosporidium personatum*), in peanuts; and Sheath blight (*Rhizoctonia solani*) in rice.

Do not sell, sell into, distribute, and/or use Artisan Fungicide in Nassau and Suffolk counties of New York State.

#### **ROTATIONAL CROP RESTRICTIONS**

Crop/Crop Group	Plantback Timing
Cotton	
Peanuts	
Potatoes	0 days following application
Rice	
Soybeans	
Wheat	30 days following application
Leafy vegetables (such as lettuce, spinach, or celery)	
Small grain crops, other than wheat (such as barley,	150 days following application
rye, or oats)	
Corn (such as field, sweet, or popcorn)	240 days following application
Sorghum	240 days following application
All Other Crops	365 days following application

#### **RESISTANCE MANAGEMENT**

The flutolanil component of ARTISAN fungicide belongs to the succinate dehydrogenase inhibitor class (FRAC Group 7). The propiconazole component of ARTISAN fungicide belongs to the sterol biosynthesis inhibitor class (FRAC Group 3). Because resistance development cannot be predicted, the use of this product should conform to resistance management strategies established for the crop and use area. Such strategies may include rotating and/or tank mixing with products having different modes of action or limiting the total number of

applications per season. Nichino America, Inc. encourages responsible product stewardship to ensure effective long-term control of the fungal diseases on this label.

#### **APPLICATION DIRECTIONS**

Thorough coverage is necessary to provide good disease control. Applications using sufficient water volume to provide thorough and uniform coverage generally provide the most effective disease control.

**Ground Application -** Apply ARTISAN fungicide by ground equipment in a minimum of 10 gallons of water per acre.

**Aerial Application -** Apply by fixed-wing aircraft equipment in a minimum of 5 gallons of water per acre. Do not apply under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. Do not apply directly to humans or animals.

**Chemigation -** ARTISAN fungicide may be applied alone or in combination with other products which are registered for application through irrigation systems. Apply this product only through center pivot, solid set, hand move, or moving wheel irrigation systems. Do not apply this product through any other type of irrigation system. Crop injury, lack of performance, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts. Do not connect an irrigation system used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

#### **Using Water from Public Water Systems**

DO NOT APPLY ARTISAN FUNGICIDE THROUGH ANY IRRIGATION SYSTEM PHYSICALLY CONNECTED TO A PUBLIC WATER SYSTEM. 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. ARTISAN fungicide may be applied through irrigation systems which may be supplied by a public water system **only if** the water from the public water system is 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 to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. Before beginning chemigation, always make sure that the air gap exists and that there is no blockage of the overflow of the reservoir tank.

Any irrigation system using water supplied from a public water system must also meet the following requirements:

#### **Operating Instructions for All Recommended Types of Irrigation Systems**

- 1. The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.
- 2. 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.

- 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 also contain a functional, normally closed, solenoidoperated 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.
- 6. 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.
- 7. 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.
- 8. Do not apply when wind speed favors drift beyond the area intended.

#### **Chemigation Calibration and Application Instructions**

ARTISAN fungicide should be applied under the schedule specified in the specific crop use recommendations, not according to the irrigation schedule unless the events coincide.

In general, set the equipment to apply the minimum amount of water per acre. Run the system at 85 - 90% of the manufacturer's maximum rated travel speed.

The following calibration and application techniques are provided for user reference, but do not constitute a warranty of fitness for application through sprinkler irrigation equipment. Users should check with state and local regulatory agencies for potential use restrictions before applying any agricultural chemical through sprinkler irrigation equipment.

#### **Center Pivot Irrigation Equipment**

**Notes:** (1) Use only drive systems which provide uniform water distribution. (2) Do not use end guns when chemigating ARTISAN fungicide through center pivot systems because of non-uniform application. (3) Plug the first nozzle closest to the well head to protect the water source.

- 1. Determine the size of the area to be treated.
- 2. Determine the time required to apply <sup>1</sup>/<sub>4</sub> <sup>1</sup>/<sub>2</sub> inch water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. Run the system at 80 95% of the manufacturer's rated maximum travel speed.
- 3. Using water, determine the injection pump output when operated at normal line pressure.
- 4. Determine the amount of ARTISAN fungicide, and any tankmix partners, required to treat the area covered by the irrigation system.
- 5. Add the required amount of ARTISAN fungicide, any tankmix partners, and sufficient water to meet the injection time requirements to the solution tank. (See **Mixing Directions** section of this label).
- 6. Make sure the system is fully charged with water before starting injection of the ARTISAN fungicide solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
- 7. Maintain constant agitation in the solution tank during the injection period.
- 8. Inject the specified amount of ARTISAN fungicide per acre continuously for one complete revolution of the system.

- 9. Stop the injection equipment after treatment is completed. Continue to operate the system until the ARTISAN fungicide solution has cleared all of the sprinkler heads.
- 10. Allow time for all lines to flush the pesticide through all nozzles before turning off irrigation water.

#### Solid Set, Hand Move, and Moving Wheel Irrigation Equipment

- 1. Determine the acreage covered by the sprinklers.
- 2. Fill injector solution tank with plain water and calibrate the flow rate of the system to deliver the contents of the tank over a 20 40 minute time interval.
- 3. Determine the amount of ARTISAN fungicide required to treat the area covered by the irrigation system.
- 4. Add the required amount of ARTISAN fungicide, and any other tankmix partners, into the same quantity of water used to calibrate the injection period. (See **Mixing Directions** section of this label).
- 5. Operate the system at the same pressure and time interval established during the calibration.
- 6. Inject specified amount of ARTISAN fungicide per acre for: (1) a 20 40 minute period at the end of a regular irrigation set, or, (2) as a 20 40 minute injection as a separate application not associated with a regular irrigation to maximize retention of the fungicide by the foliage.
- 7. Stop injection equipment after treatment is completed. Continue to operate the system until the ARTISAN fungicide solution has cleared the last sprinkler head. To ensure lines are flushed and free from remaining pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

#### SPRAY EQUIPMENT

Equip sprayers with nozzles that provide accurate and uniform application. Be certain that nozzles are the same size and uniformly spaced across the boom. Calibrate sprayer before use. Use a pump with the capacity to: (1) maintain a minimum of 35 psi at nozzles, and (2) provide sufficient agitation in the tank to keep the mixture in suspension - this requires recirculation of 10% of the tank volume per minute. Use a jet agitator or liquid sparge tube for agitation. Use screens to protect the pump and to prevent nozzles from clogging. Screens placed on the suction side of the pump should be **16-mesh or coarser**. Do not place a screen in the recirculation line. Use 50-mesh or coarser screens between the pump and boom, and where required, at nozzles. Check nozzle manufacturers' recommendations. For information on spray equipment and calibration, consult sprayer manufacturers and state recommendations. For specific local directions and spray schedules, consult the current state agricultural experiment station recommendations.

#### **MIXING DIRECTIONS**

Prepare no more spray mixture than is needed for the immediate operation. Thoroughly clean spray equipment before using this product. Vigorous agitation is necessary for proper dispersal of the product. Maintain maximum agitation throughout the spraying operation. Do not let the spray mixture stand overnight in the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.

**ARTISAN Fungicide Alone:** Add ½ of the required amount of water to the mix tank. With the agitator running, add the entire contents in the ARTISAN fungicide container to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after the ARTISAN fungicide has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

#### ARTISAN Fungicide Tank Mixtures:

Begin with clean equipment. Fill spray tank with <sup>3</sup>/<sub>4</sub> of the amount of water needed for the intended application and turn on agitation. If using a buffering agent, add after filling the tank with <sup>3</sup>/<sub>4</sub> amount of water. Add the recommended amount of tankmix products in the following order while maintaining agitation:

- 1) products in water-soluble packets
- 2) wettable powders
- 3) water-dispersible granulars and/or soluble powders
- 4) flowable liquids (including Artisan Fungicide)
- 5) emulsifiable concentrates
- 6) adjuvants and/or oils
- 7) remaining amount of water to achieve the desired level

Keep agitation running during filling and spraying operations. If spraying must be stopped before emptying the sprayer, resume agitation before spraying the remainder of the load. Storage and use of the previous day's spray mix may result in reduced activity.

**Note:** When using ARTISAN fungicide in tank mixtures, all products in water-soluble packaging should be added to the tank before any other tankmix partner, including ARTISAN fungicide. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tankmix partner to the tank.

If using in a tank mixture, observe all directions for use, crop/sites, use rates, dilution ratios, precautions, and limitations appearing on the tankmix product label. No label dosage rate should be exceeded, and the most restrictive label precautions and limitations should be followed. This product should not be mixed with any product which prohibits such mixing. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are labeled. ARTISAN fungicide is compatible with most insecticide, fungicide, and foliar nutrient products. However, the physical compatibility with tankmix partners should be tested before use. To determine the physical compatibility with other products, use a jar test, as described below:

Using a quart jar, add the proportionate amounts of the products to 1 qt. of water. Add wettable powders and water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

#### THE CROP SAFETY OF ALL POTENTIAL TANKMIXES, INCLUDING ADDITIVES AND OTHER PESTICIDES, ON ALL CROPS HAS NOT BEEN TESTED. BEFORE APPLYING ANY TANK MIXTURE NOT SPECIFICALLY RECOMMENDED ON THIS LABEL, THE SAFETY TO THE TARGET CROP SHOULD BE CONFIRMED.

#### SPRAY DRIFT MANAGEMENT

Spray equipment and weather affect spray drift. Consider all factors when making application decisions. Where states have more stringent regulations, they must be observed. Avoiding spray drift is the responsibility of the applicator or grower. To reduce the potential for drift, the application equipment must be set to apply medium or larger droplets (i.e. ASABE Standard 572) with corresponding spray pressure. Use high flow rate nozzles to apply the highest

practical spray volume, using the appropriate droplet size to ensure adequate canopy distribution, coverage, and penetration. With most nozzle types, narrow spray angles produce larger droplets. Follow the nozzle manufacturer's directions on pressure, orientation, spray volume, etc., in order to minimize drift and optimize coverage and control.

A variety of factors including weather conditions (e.g. wind direction, wind speed, temperature, relative humidity) and method of application can influence pesticide drift. The applicator and the grower are responsible for considering all these factors when making decisions.

All application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops.

- 1. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
- 2. Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.
- 3. When applications are made with a crosswind, the swath must be displaced downwind. The applicator must compensate for this displacement at the up and downwind edge of the application area by adjusting the path of the aircraft upwind.

Applicators must follow all state and local pesticide drift requirements regarding application of this product.

#### Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. 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). Apply as a medium or coarser spray (ASABE Standard 572).

#### **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 the recommended practice. Significant deflection from 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. **Maintenance of Nozzles** – Periodically inspect and then replace nozzles to ensure proper chemical application.

#### **Boom Length**

For some use patterns, reducing the effective boom length to less than <sup>3</sup>/<sub>4</sub> of the wingspan or rotor length may further reduce drift without reducing swath width.

#### **Application Height**

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. For groundboom application, do not apply with a nozzle height greater than 4 feet above the crop canopy. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

#### Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

#### Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. Do not apply at wind speeds greater than 15 mph. **Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

#### **Temperature and Humidity**

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 and 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. If applying at wind speeds less than 3 mph, the applicator must determine if a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

#### **Sensitive Areas**

Only apply the pesticide when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

#### **APPLICATION RATE CHART**

Peanut			
Disease	Rate/Acre	Directions for Use	
White mold - Southern stem rot, Southern blight ( <i>Sclerotium rolfsii</i> ) Limb/Pod rot complex ( <i>Rhizoctonia solani</i> ) Early leaf spot ( <i>Cercospora arachidicola</i> ) Late leaf spot ( <i>Cercosporidium personatum</i> )	26.0 to 32.0 fl oz/acre 13.0 to 21.0 fl oz/acre as a tank mixture with 0.75 lb active ingredient chlorothalonil per acre (see table below)	<ul> <li>For ground application, use a minimum of 10 gallons of water per acre.</li> <li>For aerial application, use a minimum of 5 gallons of water per acre.</li> <li>Use the higher rate of ARTISAN fungicide in fields where known heavy infestations of white mold, or other diseases listed on this label, have occurred.</li> <li>Begin applications approximately 45 to 60 days after planting, depending on disease development. Initial application may be prior to, or at, first sign of disease.</li> <li>Make sequential applications as needed at 21 to 30 day intervals, depending on severity of disease.</li> <li>An application of a different leaf spot fungicide, other than ARTISAN fungicide, should be made 14 days after the initial application of ARTISAN fungicide program should both precede and follow the ARTISAN fungicide applications.</li> <li>For ground application, use a minimum of 10 gallons of water per acre.</li> <li>For aerial application, use a minimum of 5 gallons of water per acre.</li> <li>For aerial application, use a minimum of 5 gallons of water per acre.</li> <li>Water he higher rate of ARTISAN fungicide in fields where known heavy infestations of white mold, or other diseases listed on this label, have occurred.</li> <li>Begin applications approximately 45 to 60 days after planting, depending on disease development. Initial application may be prior to, or at, first sign of disease.</li> <li>Make sequential applications as needed at 10 to 14 day intervals.</li> <li>A regularly scheduled leaf spot fungicide program should both precede and follow the ARTISAN fungicide applications.</li> <li>Make sequential applications as needed at 10 to 14 day intervals.</li> <li>A regularly scheduled leaf spot fungicide program should both precede and follow the ARTISAN fungicide applications.</li> <li>A regularly scheduled leaf spot fungicide program should both precede and follow the ARTISAN fungicide applications.</li> </ul>	
USE RESTRICTIONS			
• Do not apply more than 84.0 fl oz per acre of ARTISAN fungicide per calendar year.			
<ul> <li>Do not apply more than a</li> <li>Do not apply within 40 data</li> </ul>		ie of Arthomic Infigure per calendar year.	

Use the table below as a guide to determine the amount of product needed for the recommended tankmix ratios of ARTISAN fungicide with various chlorothalonil formulations.				
Number of acres to	<b>5</b> 1 1 1		red for treated	
be treated		6 lbs. a.i. per gallon	4.17 lbs. a.i. per gallon	
1	13.0 to 21.0 fl oz	1.0 pint	1.5 pints	
5	65.0 to 105.0 fl oz	5.0 pints	7.5 pints	
10	(8.0 pt + 2.0 fl oz) to (13.0 pt + 2.0 fl oz)	10.0 pints	15.0 pints	
50	(40.0 pt + 10.0 fl oz) to (65.0 pt + 10.0 fl oz)	50.0 pints	75.0 pints	

Rice		
Disease	Rate/Acre	Directions for Use
Sheath blight	40.0	One Application Program:
(Rhizoctonia solani)	fl oz/acre	<ul> <li>For aerial application, use a minimum of 5 gallons of water per acre.</li> </ul>
	(0.9375 lbs	Artisan must be applied by air.
	flutolanil / acre)	Apply 7 to 14 days after panicle differentiation.
	(0.1875 lbs propiconazole / acre)	
	20.0	Two Application Program:
	fl oz/acre	<ul> <li>For aerial application, use a minimum of 5 gallons of water per acre.</li> </ul>
	(0.46875 lbs	Artisan must be applied by air.
	flutolanil / acre)	• Apply 7 to 14 days after panicle differentiation and follow with a second application 10 to 14 days later.
	(0.09375 lbs	
	propiconazole	
	/ acre)	

#### USE RESTRICTIONS

- Do not apply more than 40.0 fl oz per acre per calendar year.
- Do not apply within 35 days prior to harvest, or beyond 75% heading development stage, whichever occurs first.
- This pesticide is toxic to shrimp. Do not apply this product within three miles of any estuarine/marine waterways or watershed.

This product may have effects on endangered species. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the county in which you are applying the product. To obtain Bulletins, no more than six months before using this product, consult http://www.epa.gov/espp/ or call 1-800-447-3813. You must use the Bulletin valid for the month in which you will apply the product.

#### **Specific Use Restrictions:**

- 1) Do not use on rice in California.
- 2) In Arkansas, do not use on rice in areas of the following counties: Mississippi, Poinsett, Cross, St. Francis, and Lee.
- 3) Do not apply to stubble or ratoon crop rice.
- 4) Do not use in rice fields where commercial farming of crayfish will be practiced.
- 5) Do not drain water from treated rice fields into ponds used for commercial fish farming.
- 6) Do not use water drained from treated fields to irrigate other crops.
- 7) Do not apply more than 0.34 lb. a.i. propiconazole-containing products/acre per season.
- 8) Do not release flood water within 7 days of an application.

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in original container, and keep tightly closed when not in use. Store in a cool, dry place.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

#### CONTAINER HANDLING:

#### Nonrefillable plastic container (Less than 5 gallons)

Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

#### IMPORTANT: READ BEFORE USE

By using this product, user or buyer accepts the following conditions, warranty, disclaimer of warranties and limitations of liability.

**CONDITIONS:** The directions for use of this product are believed to be accurate and must be followed carefully. However, because of extreme weather and soil conditions, use methods and other factors beyond the control of Nichino America, Inc. (NAI), it is impossible for NAI to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. To the extent consistent with applicable law, all such risks are assumed by the user or buyer.

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