

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

May 20, 2022

David Ouimette Regulatory Manager Dow AgroSciences 9330 Zionsville Road Indianapolis, IN 46268

Subject: Registration Review Label Mitigation for Quinoxyfen Product Name: Quintec EPA Registration Number: 33906-26 (formerly 62719-375) Application Date: 9/24/2018 Decision Number: 555805

Dear Mr. Ouimette:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Quinoxyfen Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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.

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 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently Page 2 of 2 EPA Reg. No. 33906-26 Decision No. 555805

approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact Darius Stanton by phone at 202-566-2332, or via email at <u>stanton.darius@epa.gov</u>.

Sincerely,

- 2 2

Linda Arrington, Branch Chief Risk Management and Implementation Branch 4 Pesticide Re-Evaluation Division Office of Pesticide Programs

Enclosure

(Base label):

QUINOXYFEN GROUP 13 FUNGICIDE

Quintec[®]

FUNGICIDE

A protectant fungicide for the control of powdery mildew in artichoke, gourds, lettuce, melons, pepper, pumpkin, stone fruits, strawberry, tomato, winter squash, cherry, grapes, and hops.

Active Ingredient:	
quinoxyfen: 5,7-dichloro-4-(p-fluorophenoxy)	
quinoline	22.58%
Other Ingredients	77.42%
Total	00.00%

Contains 2.08 lb of active ingredient per gallon.

Keep Out of Reach of Children CAUTION

Precautionary Statements

Hazards to Humans and Domestic Animals

Harmful If Swallowed • Harmful If Absorbed Through Skin

Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves
- Shoes plus socks

User Safety Requirements

Follow 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

ACCEPTED

May 20, 2022 Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the

EPA Reg. No. 33906-26

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 cab that meets the definition listed in the WPS for agricultural pesticides [40 CFR 170.305].

First Aid

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

Environmental Hazards

This product is toxic to fish and aquatic invertebrates. 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 apply when weather conditions favor runoff or drift from the target area. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

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 watertables are more prone to produce runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. Refer to the label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

(Storage and Disposal for rigid containers 5 gal or less)

Storage and Disposal

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

Pesticide Storage: Avoid freezing. Store in original container only. In case of leak or spill, use absorbent materials to contain liquids and dispose as waste.

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 container. Do not reuse or refill this container.

Triple rinse or pressure rinse container (or equivalent) 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 1/4 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. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then

offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

(Storage and Disposal for refillable rigid containers larger than 5 gal)

Storage and Disposal

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

Pesticide Storage: Avoid freezing. Store in original container only. In case of leak or spill, use absorbent materials to contain liquids and dispose as waste.

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: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

(Storage and Disposal for nonrefillable rigid containers larger than 5 gal)

Storage and Disposal

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

Pesticide Storage: Avoid freezing. Store in original container only. In case of leak or spill, use absorbent materials to contain liquids and dispose as waste.

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 container. Do not reuse or refill this container.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or mix tank or collect rinsate for later use or disposal. Insert upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Refer to label booklet for Directions for Use.

Notice: Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

Agricultural Chemical: Do not ship or store with food, feeds, drugs, or clothing.

EPA Reg. No. 62719-375

EPA. Est. _____

[®]Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

Produced for Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268

NET CONTENTS

(Cover, shipping container)

QUINOXYFEN GROUP 13 FUNGICIDE

Quintec[®]

FUNGICIDE

A protectant fungicide for the control of powdery mildew in artichoke, gourds, lettuce, melons, pepper, pumpkin, stone fruits, strawberry, tomato, winter squash, cherry, grapes, and hops.

Active Ingredient:	
quinoxyfen: 5,7-dichloro-4-(p-fluorophenoxy)	
quinoline	22.58%
Other Ingredients	77.42%
Total	100.00%

Contains 2.08 lb of active ingredient per gallon.

Keep Out of Reach of Children CAUTION

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. Refer to the label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Refer to inside of label booklet for additional precautionary information including Directions for Use.

Notice: Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

Agricultural Chemical: Do not ship or store with food, feeds, drugs, or clothing.

EPA Reg. No. 62719-375

EPA. Est. _____

[®]Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow Produced for Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268

NET CONTENTS _____

(Page 1 through end)

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

Harmful If Swallowed • Harmful If Absorbed Through Skin

Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves
- · Shoes plus socks

User Safety Requirements

Follow 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 cab that meets the definition listed in the WPS for agricultural pesticides [40 CFR 170.305].

First Aid

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

Environmental Hazards

This product is toxic to fish and aquatic invertebrates. 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 apply when weather conditions favor runoff or drift from the target area. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

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 watertables are more prone to produce runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

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.

Do not apply this product one-half hour before dusk to one-half hour after dawn in counties east of the Rocky Mountains where the gray bat, Indiana bat, and the Ozark big-eared bat occur.

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 the restricted entry interval (REI) of 12 hours.

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
- Shoes plus socks

Storage and Disposal

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

Pesticide Storage: Avoid freezing. Store in original container only. In case of leak or spill, use absorbent materials to contain liquids and dispose as waste.

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

Nonrefillable containers 5 gallons or less:

Container Handling: Nonrefillable container. Do not reuse or refill this container.

Triple rinse or pressure rinse container (or equivalent) 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 1/4 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. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and

rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Refillable containers 5 gallons or larger:

Container Handling: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Nonrefillable containers 5 gallons or larger:

Container Handling: Nonrefillable container. Do not reuse or refill this container.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Turn the container or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or mix tank or collect rinsate for later use or disposal. Insert upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Product Information

Quintec[®] fungicide is a protectant fungicide for the control of powdery mildew diseases. Quintec does not control existing or latent powdery mildew infections and must be applied on a protectant schedule (latency is the period between infection of plant tissues and the development of visible symptoms). Quintec is compatible with most commonly used insecticides, miticides and fungicides.

Use Restrictions

- Do not graze or harvest forage from cover crops within areas treated with Quintec.
- Do not aerially apply this product on stone fruits, cherry, grapes, or hops. Aerial application is permitted on other crops for which this product is registered for use.
- Chemigation: Do not apply this product through any type of irrigation system.
- Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels used in mixtures.
- Rainfast Requirement: When applied alone, Quintec is rainfast 1 hour after application.
- Not for use in greenhouses or nurseries

Rotational Crop Restrictions

The following rotational crops may be planted at intervals defined below following the final application of Quintec.

Crops Re-Planting Inte	
registered crops	no restrictions

all other crops grown for food or feed	30 days

Mixing Directions

Quintec may be applied in tank mix combination with labeled rates of other pesticides, including fungicides, insecticides, or other chemicals used in the culture of the labeled crop provided: (1) the tank mix product is labeled for the timing and method of application for the intended use; and (2) tank mixing with Quintec or other pesticides is not prohibited by the label of the tank mix product.

Fill the spray tank to at least one-half the required spray volume and start agitation. Add (in order) dry flowable, wettable powder, and Quintec or other flowable (aqueous suspension) products to the spray tank. Then add the specified rate of emulsifiable concentrate and solution products. Allow time for thorough mixing after adding each product. Finish filling spray tank and maintain continuous agitation in the spray tank during mixing, filling and spraying operations.

Oil Sprays

Oil sprays may be integrated as part of a powdery mildew management program. Consult local university extension for specific information.

Use of Surfactants

A moderate rate of a registered nonionic or organosilicone surfactant may improve crop coverage. Penetrants and stickers are not recommended.

Tank Mixing Directions

- Read carefully and follow all applicable use directions including application rates, use precautions, and limitations on the respective product labels.
- Do not exceed specified application rates or maximum use rates if products with the same active ingredient are applied together
- For tank mix partners packaged in water soluble packaging, do not use with products containing boron or mix in equipment previously used to apply boron-containing mixtures unless the tank and spray equipment have been adequately cleaned.
- Always perform a (jar) test to ensure compatibility of products used in tank mixtures.

Tank Mix Compatibility Testing

To determine the physical compatibility of Quintec with other pesticides, perform a jar test. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately 1/2 hour. If the mixture balls-up, forms flakes, sludges, jels, oily films or layers, or other precipitates, it is not compatible and the tank mix combination must not be used.

Spray Drift Management

Spray Drift Advisories

• The applicator is responsible for avoiding off-site spray drift. Be aware of nearby non-target sites and environmental conditions.

Aerial Applications

- Do not release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- The boom length must not exceed 75% of the wingspan for airplanes or 90% of the rotor blade diameter for helicopters
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

Airblast Applications

- Sprays must be directed into the canopy.
- User must turn off outward pointing nozzles at row ends and when spraying outer rows.

Ground Boom Applications:

- User must apply with nozzle height specified by the manufacturer, but no more than 4 feet above the ground or crop canopy
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

Boom-less Ground Application:

• Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

Handheld Technology Applications:

• Take precautions to minimize spray drift.

Importance of Droplet Size

• An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size – Ground Boom

- Volume Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Controlling Droplet Size – Aircraft

• Adjust Nozzles – Follow nozzle manufacturer's recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

Boom Height – Ground Boom – Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

Release Height - Aircraft - Higher release heights increase the potential for spray drift.

Shielded Sprayers – Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

Temperature and Humidity – When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

Temperature Inversions – Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or 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. Avoid applications during temperature inversions.

Wind - Drift potential generally increases with wind speed. **Avoid applications during gusty wind conditions.** Applicators need to be familiar with local wind patterns and terrain that could affect spray

Resistance Management

Repeated use of products for control of specific plant pathogens may lead to selection of resistant strains of fungi and result in a reduction of disease control. Quinoxyfen, the active ingredient in Quintec is one of EPA's Target Site of Action Group 13 fungicides. A disease management program that includes rotation and/or tank mixing with non-Group 13 fungicides is essential to reduce the risk of fungicide resistance development. If resistance to Group 13 fungicides is expected, then tank mix Quintec with an effective fungicide with different mode of action. For guidance on a particular crop and disease control situation, consult your state extension specialist for official state recommendations.

As part of a resistance management strategy:

- Apply no more than 2 sequential applications unless otherwise stated in the crop section.
- When tank mixing or alternating, use an effective partner one that provides satisfactory disease control when used alone at the mixture rate.
- Apply early to keep fungal populations low.
- Incorporate integrated pest management (IPM) practices into your program which can help reduce disease development and spread.
- To help manage fungicide resistance, do not use Quintec for commercial transplant production.

Disease Resistance Management

Cherry, Grapes, Hops, Stone Fruits:

Quintec is in mode of action Group 13. Do not make more than five applications of Quintec per calendar year, nor more than two consecutive applications of Quintec before alternating to a fungicide that has a different mode of action and that is effective on local populations of the target powdery mildew pathogen. Alternate product should be applied within 14 days of applying Quintec

Gourds, Lettuce, Melons, Pepper, Pumpkin, Strawberry, Tomato, and Winter Squash: Quintec is in mode of action Group 13. Do not make more than four applications of Quintec per crop nor more than two consecutive applications of Quintec before alternating to a fungicide that has a different mode of action and that is effective on local populations of the target powdery mildew pathogen. Alternate product should be applied within 14 days of applying Quintec. It is recommended that the total number of group 13 fungicide sprays per crop should not exceed 50% of the total number of powdery mildew sprays.

All Crops:

To delay development of fungicide/bactericide resistance:

- Avoid the consecutive use of Quintec or other target site of action Group 13 fungicides/bactericides that have a similar target site of action on the same pathogens.
- Use tank mixtures or premixes with fungicides/bactericides from different target site of action groups as long as the involved products are all registered for the same use and are both effective at the tank mix or prepack rate on the pathogen(s) of concern.
- Base fungicide/bactericide use on a comprehensive Integrated Pest Management (IPM) program.
- Monitor treated fungal/bacterial populations for loss of field efficacy.
- Contact your local extension specialist, certified crop advisors, and/or manufacturer for fungicide/bactericide resistance management and/or IPM recommendations for specific crops and resistant pathogens.
- For further information or to report suspected resistance, you may contact your local Dow AgroSciences representative or by calling 800-258-3033.

Application Directions

Application Timing

Apply Quintec before visible symptoms of powdery mildew appear. Quintec will not control latent or

established infections of powdery mildew. If powdery mildew infection is established, apply Quintec in tank mix combination with a curative fungicide or following application of a curative spray or, if multiple diseases are present, following application of a broad-spectrum fungicide. Under low disease conditions (as per a predictive modeling system), minimum label use rates per application can be used. For optimum results, use maximum label rates and short application intervals for severe or threatening disease conditions.

Application Method

Cherry, Grape, Hops, Stone Fruits:

Ground: Apply uniformly by ground application in a minimum spray volume of 30 gallons per acre. Disease control may be reduced at low spray volumes or if spray coverage is inadequate. Do not apply under conditions when uniform spray coverage cannot be obtained or when spray drift may occur.

Aerial: Do not aerially apply this product on cherry, grape, hops, and stone fruits.

Artichoke, Head and Leaf Lettuce, Melons, Pepper, Strawberry, Gourds and Pumpkin, Tomato, Winter Squash:

Ground: For thorough spray coverage and optimum disease control, apply Quintec by ground application. Apply in a minimum spray volume of 30 gallons per acre.

Aerial: Apply in a minimum spray volume of 5 gallons of water per acre. Higher spray volumes per acre and conditions that allow uniform spray coverage will provide the greatest level of disease control with Quintec. Do not apply under conditions when uniform spray coverage cannot be obtained or when spray drift may occur.

Artichoke, Cherry, Grape, Head and Leaf Lettuce, Hops, Melons (Subgroup 9A), Pepper, Stone Fruits, Strawberry, Tomato, Winter Squash, Gourds and Pumpkin

Сгор	Disease	Re-Treatment Interval (Days)	Rate of Quintec (fl oz/acre) ¹	Quinoxyfen rate (lb a.i./acre)
artichoke	powdery mildew <i>Leveillula taurica)</i>	10 - 14	4 – 6	0.065 - 0.098
cherry	powdery mildew (Podosphaera clandestina)	10 - 14	7	0.114
Grape ² (Subgroup 13-	powdery mildew (<i>Erysiphe necator</i>)	14	4	0.065
07F)		21	6.6	0.108
head and leaf lettuce	powdery mildew (Erysiphe cichoracearum)	10 – 14	4 – 6	0.065 - 0.098
hops	powdery mildew (Podosphaera_macularis)	14	4 - 8.2	0.065 - 0.134
melons (subgroup 9A) ³	powdery mildew (Erysiphe cichoracearum Sphaerotheca fuliginea)	10 - 14	4 – 6	0.065 - 0.098
pepper ⁴ (Subgroup 8-10B)	powdery mildew (Leveillula taurica, Oidiopsis tuarica)	10 - 14	4 – 6	0.065 - 0.098
stone fruits ⁵	powdery mildew (Sphaerotheca pannosa, Podosphaera leucotricha)	10 - 14	7	0.114
Strawberry ⁶ (Subgroup 13- 07G)	powdery mildew (<i>Sphaerotheca macularis</i>)	10 - 14	4 – 6	0.065 – 0.098
tomato	powdery mildew	10 - 14	4 – 6	0.065 – 0.098

Crop	Disease	Re-Treatment Interval (Days)	Rate of Quintec (fl oz/acre) ¹	Quinoxyfen rate (lb a.i./acre)
	(Leveillula taurica, Oidiopsis tuarica)			
winter squash,	powdery mildew	10 - 14	4 – 8	0.065 -0.098
gourds, pumpkin	(Erysiphe cichoracearum			
	Sphaerotheca fuliginea)			

¹When applied as a dilute spray, maintain the per acre use rate.

²Grapes (subgroup 13-07F) including: amur river grape, gooseberry, grape, kiwifruit, hardy, maypop, schisandra berry, cultivars, varieties and/or hybrids of these.

³Melons (subgroup 9A) including citron melon, muskmelon (cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon, true cantaloupe), watermelon

⁴Pepper (subgroup 8-10B) including: African eggplant; bell pepper, chili pepper, cooking pepper, eggplant, Martynia, non-bell pepper, okra, pea eggplant, pepino, pimento, roselle, scarlet eggplant, sweet pepper, cultivars, varieties, and/or hybrids of these.,
⁵Stone fruits including apricot, chickasaw plum, damson plum, Japanese plum, nectarine, peach, plum, plumcot, prune (fresh)
⁶Strawberry (subgroup 13-07G) including: bearberry, bilberry, lowbush blueberry, cloudberry, cranberry, lingonberry, muntries,

partridgeberry, strawberry, cultivars, varieties, and/or hybrids of these.

Specific Use Restrictions:

Artichoke

- Preharvest Interval: None
- Maximum Application Rate: Do not apply more than 32 fl oz of Quintec per acre per calendar year.
- Quintec is in mode of action Group 13. Do not make more than two consecutive applications of Quintec before alternating to a fungicide that has a different mode of action and that is effective on local populations of the target powdery mildew pathogen. Alternate product should be applied within 14 days of applying Quintec.
- Carefully inspect the crop several days after each application of Quintec and at regular intervals during crop development. Under certain environmental conditions, Quintec may cause leaf spotting and chlorosis. If these symptoms occur after applying Quintec, discontinue its use.

Cherry

- Preharvest Interval: Do not apply within 7 days of harvest.
- Maximum Application Rate: Do not apply more than 7 fl oz of Quintec per acre per application or more than 32 fl oz of Quintec per acre per calendar year.
- · Minimum Spray Interval: 10 days.
- Quintec is in mode of action Group 13. Do not make more than four applications of Quintec per calendar year, nor more than two consecutive applications of Quintec before alternating to a fungicide that has a different mode of action and that is effective on local populations of the target powdery mildew pathogen. Alternate product should be applied within 14 days of applying Quintec.

Grape (Subgroup 13-07F)

- Preharvest Interval: Do not apply within 21 days of harvest.
- Maximum Application Rate: Do not apply more than 6.6-fl oz of Quintec per acre per application or more than 33 fl oz of Quintec per acre per calendar year.
- Quintec is in mode of action Group 13. Do not make more than five applications of Quintec per calendar year, nor more than two consecutive applications of Quintec before alternating to a fungicide that has a different mode of action and that is effective on local populations of the target powdery mildew pathogen. Alternate product should be applied within 14 days of applying Quintec.

Head and Leaf Lettuce

- Preharvest Interval: Do not apply within 1 day of harvest.
- **Maximum Application Rate:** Do not apply more than 6 fl oz of Quintec per acre per application or more than 24 fl oz of Quintec per acre per crop.
- Quintec is in mode of action Group 13. Do not make more than four applications of Quintec per crop, nor more than two consecutive applications of Quintec before alternating to a fungicide that has a different mode of action and that is effective on local populations of the target powdery mildew

pathogen. Alternate product should be applied within 14 days of applying Quintec. It is recommended that the total number of group 13 fungicide sprays per crop should not exceed 50% of the total number of powdery mildew sprays.

• Carefully inspect the crop several days after each application of Quintec and at regular intervals during crop development. Under certain environmental conditions, Quintec may cause leaf spotting and chlorosis. If these symptoms occur after applying Quintec, discontinue its use.

Hops

- Preharvest Interval: Do not apply within 21 days of harvest.
- Maximum Application Rate: Do not apply more than 8.2 fl oz of Quintec per acre per application or more than 33 fl oz of Quintec per acre per calendar year.
- Minimum Spray Interval: 14 days.
- Quintec is in mode of action Group 13. Do not make more than four applications of Quintec per calendar year, nor more than two consecutive applications of Quintec before alternating to a fungicide that has a different mode of action and that is effective on local populations of the target powdery mildew pathogen. Alternate product should be applied within 14 days of applying Quintec.

Melons (Subgroup 9A)

- Preharvest Interval: Do not apply within 3 days of harvest.
- Maximum Application Rate: Do not apply more than 6 fl oz of Quintec per acre per application or more than 24 fl oz of Quintec per acre per crop.
- Quintec is in mode of action Group 13. Do not make more than four applications of Quintec per crop, nor more than two consecutive applications of Quintec before alternating to a fungicide that has a different mode of action and that is effective on local populations of the target powdery mildew pathogen. Alternate product should be applied within 14 days of applying Quintec. It is recommended that the total number of group 13 fungicide sprays per crop should not exceed 50% of the total number of powdery mildew sprays.
- Carefully inspect the crop several days after each application of Quintec and at regular intervals during crop development. Under certain environmental conditions, Quintec may cause leaf spotting and chlorosis. If these symptoms occur after applying Quintec, discontinue its use.

Pepper (Subgroup 8-10B)

- Preharvest Interval: Do not apply within 3 days of harvest.
- Maximum Application Rate: Do not apply more than 6 fl oz of Quintec per acre per application or more than 24 fl oz of Quintec per acre per calendar year.
- Quintec is in mode of action Group 13. Do not make more than four applications of Quintec per crop, nor more than two consecutive applications of Quintec before alternating to a fungicide that has a different mode of action and that is effective on local populations of the target powdery mildew pathogen. Alternate product should be applied within 14 days of applying Quintec. It is recommended that the total number of group 13 fungicide sprays per crop should not exceed 50% of the total number of powdery mildew sprays.
- Carefully inspect the crop several days after each application of Quintec and at regular intervals during crop development. Under certain environmental conditions, Quintec may cause leaf spotting and chlorosis. If these symptoms occur after applying Quintec, discontinue its use.

Stone Fruits

- Preharvest Interval: Do not apply within 7 days of harvest.
- **Maximum Application Rate:** Do not apply more than 7 fl oz of Quintec per acre per application or 28 fl oz of Quintec per acre per calendar year.
- Quintec is in mode of action Group 13. Do not make more than four applications of Quintec per crop, nor more than two consecutive applications of Quintec before alternating to a fungicide that has a different mode of action and that is effective on local populations of the target powdery mildew pathogen. Alternate product should be applied within 14 days of applying Quintec.

• Carefully inspect the crop several days after each application of Quintec and at regular intervals during crop development. Under certain environmental conditions, Quintec may cause leaf spotting and chlorosis. If these symptoms occur after applying Quintec, discontinue its use.

Strawberry (Subgroup 13-07G)

- Preharvest Interval: Do not apply within 1 day of harvest.
- Maximum Application Rate: Do not apply more than 6 fl oz of Quintec per acre per application or more than 24 fl oz of Quintec per acre per crop.
- Quintec is in mode of action Group 13. Do not make more than four applications of Quintec per crop nor more than two consecutive applications of Quintec before alternating to a fungicide that has a different mode of action and that is effective on local populations of the target powdery mildew pathogen. Alternate product should be applied within 14 days of applying Quintec. It is recommended that the total number of group 13 fungicide sprays per crop should not exceed 50% of the total number of powdery mildew sprays.
- Carefully inspect the crop several days after each application of Quintec and at regular intervals during crop development. Under certain environmental conditions, Quintec may cause leaf spotting and chlorosis. If these symptoms occur after the first application of Quintec, discontinue its use.

Tomatoes

- Preharvest Interval: Do not apply within 3 days of harvest.
- Maximum Application Rate: Do not apply more than 0.098 lbs a.i. (6 fl oz) of Quintec per acre per application or more than 0.390 lbs a.i. (24 fl oz) of Quintec per acre per calendar year.
- Quintec is in mode of action Group 13. Do not make more than four applications of Quintec per crop, nor more than two consecutive applications of Quintec before alternating to a fungicide that has a different mode of action and that is effective on local populations of the target powdery mildew pathogen. Alternate product should be applied within 14 days of applying Quintec. It is recommended that the total number of group 13 fungicide sprays per crop should not exceed 50% of the total number of powdery mildew sprays.
- Carefully inspect the crop several days after each Quintec application and at regular intervals during crop development. Under certain environmental conditions which cause plant stress, Quintec may cause leaf curling, spotting and/or chlorosis. These conditions may include water stress, adverse temperatures, pest infestations, fertilizer deficiency or excess and poor soil conditions. If symptoms occur after application of Quintec, discontinue its use.

Winter Squash, Gourds and Pumpkin

- Preharvest Interval: Do not apply within 3 days of harvest.
- Maximum Application Rate: Do not apply more than 8 fl oz of Quintec per acre per application or 32 fl oz of Quintec per calendar year.
- Quintec is in mode of action Group 13. Do not make more than four applications of Quintec per crop nor more than two consecutive applications of Quintec before alternating to a fungicide that has a different mode of action and that is effective on local populations of the target powdery mildew pathogen. Alternate product should be applied within 14 days of applying Quintec. It is recommended that the total number of group 13 fungicide sprays per crop should not exceed 50% of the total number of powdery mildew sprays.
- Carefully inspect the crop several days after each application of Quintec and at regular intervals during crop development. Under certain environmental conditions, Quintec may cause leaf spotting and chlorosis. If these symptoms occur after applying Quintec, discontinue its use.

Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. To the extent permitted by law, otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.

Warranty Disclaimer

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. To the extent permitted by law, Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. To the extent permitted by law, all such risks shall be assumed by buyer.

Limitation of Remedies

To the extent permitted by law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used.

To the extent permitted by law, Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. To the extent permitted by law, in no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or Limitation of Remedies in any manner.

[®]Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

EPA accepted __/_/_