PYRIFLUQUINAZON	GROUP 9B	INSECTICIDE

PQZ®
INSECTICIDE

ACTIVE INGREDIENT:

Pyrifluquinazon: 2(1H)-Quinazolinone, 1-acetyl-3, 4-dihydro-3-[(3-pyridinylmethyl)amino]-6-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- **20.0%**

OTHER INGREDIENTS:.....**80.0%**

TOTAL **100.0%**

Contains 1.87 lbs active ingredient per U.S. gallon

EPA Reg No. 71711-37

EPA Est. No. 54675-MEX-(AYE)-001 70815-GA-(CB)-001

superscript corresponds to lot number

KEEP OUT OF REACH OF CHILDREN

CAUTION

See inside booklet for First Aid, Precautionary Statements, and Directions for Use

NICHINO

NET CONTENTS: 1 quart

800104 01/24

FIRST AID

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.
If swallowed	• Call 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 by mouth to an unconscious person.

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, call 1-800-348-5832.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if absorbed through skin. Harmful if swallowed. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or Viton™ ≥ 14 mils
- 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 thoroughly 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.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to 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 contaminate water when disposing of equipment washwater or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

This product is potentially toxic to adult honeybees through residues in pollen and nectar. Repeated exposure of adult bees to residues on blooming crops may lead to effects on survival. See the **Use Directions** section of this label for specific crop application instructions that minimize risk to honeybees.

Surface Water Advisory

This product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow groundwater. This product is classified as having a medium potential for reaching both surface water and aquatic sediment via runoff for several days after application.

Vegetative Buffer Zone Advisory

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 pyrifluquinazon 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.

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.

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. For early entry into treated areas that is permitted under the Worker Protection Standard and that

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AGRICULTURAL USE REQUIREMENTS *(continued)*
involves contact with anything that has been treated such as plants, soil, or water, wear:

- Coveralls
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or Viton ≥ 14 mils
- Shoes plus socks

INFORMATION

PQZ® Insecticide is formulated as a suspension concentrate containing 1.87 lbs of active ingredient per gallon. **PQZ** Insecticide works primarily through contact action, by ingestion, and is translaminar.

PQZ Insecticide should be used in a program with other products to provide season-long protection. Apply as a spray as directed in the **Application Directions** section of this label.

RESISTANCE MANAGEMENT

For resistance management, **PQZ** Insecticide contains a Group 9B insecticide. Any insecticide population may contain individuals naturally resistant to **PQZ** Insecticide and other Group 9B insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Appropriate resistance management strategies should be followed.

To delay insecticide/acaricide resistance, take the following steps:

- Rotate the use of **PQZ** Insecticide or other Group 9B insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the in-

dividual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):

- Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
- Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
- When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
- Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
- The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of

insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.

- Adopt an integrated pest management program for insecticide/acaricide use that includes scouting, uses historical information related to pesticide use, crop rotation, record-keeping, and which considers cultural, biological, and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance, contact Nichino America representatives at 1-888-740-7700.

SPRAY DRIFT MANAGEMENT

Avoid spray drift to all other crops and nontarget areas. Do not apply when weather conditions may cause drift. Do not allow this product to drift onto nontarget areas. Drift may result in illegal residues or injury to adjacent crops and vegetation. To avoid spray drift, DO NOT apply aerially when wind speed is greater than 10 mph or during periods of temperature inversions.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

The interaction of equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making decisions. Droplet size, boom height, and wind speed are the primary factors determining drift. The specific application conditions required for the use of this product are described below.

Controlling Droplet Size – General Techniques

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. Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.

Controlling Droplet Size – Aircraft

Number of Nozzles

Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.

Nozzle Orientation

Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orienta-

tions 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.

Boom Height and Length – Ground and Aircraft

Boom Height (ground): Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

Boom Height (aircraft): Application more than 10 feet above the canopy increases the potential for spray drift.

Boom Length (aircraft): The minimum boom length should not exceed ¾ of the wing length; using shorter booms decreases drift potential. For helicopters, the minimum boom length should not exceed 9/10 of the rotary blade to prevent droplets from entering the rotor vortices.

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 when wind speed is greater than 10 mph. Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY CONDITIONS. **Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect 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 close to the ground and move laterally 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.

Sensitive Areas

The pesticide should only be applied 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).

Shielded Sprayers

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with the uniform deposition of the product.

Air Assisted (Air Blast) Field Crop Sprayers

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the

potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring.

Note: Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration.

Air Assisted (Air Blast) Tree and Vine Sprayers

Air assisted tree and vine sprayers carry droplets into the canopy of trees and vines via a radially or laterally directed air stream. In addition to the general drift management practices already described, the following specific practices will further reduce the potential for drift:

- Adjust the deflectors and aiming devices so that spray is only directed into the canopy.
- Block off upward pointed nozzles when there is no overhanging canopy.
- Use only enough air volume to penetrate the canopy and provide good coverage.

- Do not allow spray to go beyond the edge of the cultivated area. Spray the outside row only from outside the planting.

APPLICATION RESTRICTIONS

Chemigation is limited to brassica head and stem vegetables (Crop Group 5-16), cotton, cucurbit vegetables (Crop Group 9), fruiting vegetables (Crop Group 8-10), leaf petiole vegetables (Crop Subgroup 22B), leafy vegetables (Crop Group 4-16), tuberous and corm vegetables (Crop Subgroup 1C) only.

ROTATIONAL CROP RESTRICTIONS

Crop	Plantback Timing
All crops on this label	0 days after application
Herbs (Crop Subgroup 19A) Stalk and Stem Vegetables (Crop Subgroup 22A)	60 days after application
All other crops	365 days after application

BUFFER ZONES

Vegetative Filter (Buffer) Strip

All crops: 15-foot vegetative filter (buffer) strip
Construct and maintain the vegetative filter (buffer) strip of grass or other permanent vegetation between field edge and down gradient aquatic habitat (not limited to lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds).

Only apply products containing pyrifluquinazon onto fields where a maintained vegetative filter (buffer) strip of at least 15 feet exists between the field edge and down gradient aquatic habitat. For guidance, refer to the following publication for information on constructing and maintaining effective buffers: Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. USDA, https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs144p2_030970.pdf

Buffer Zone for Ground Application

Do not apply within 15 feet of aquatic habitats (not limited to lakes, reservoirs, rivers, permanent streams, marshes, natural ponds, estuaries, and commercial fish ponds).

Buffer Zone for Aerial Application

Do not apply within 150 feet of aquatic habitats (not limited to lakes, reservoirs, rivers, permanent streams, marshes, natural ponds, estuaries, and commercial fish ponds).

SPRAY ADJUVANTS

For maximum performance, the use of an agricultural spray adjuvant with **PQZ** Insecticide is recommended to increase spray coverage of the crops and pests being treated. Select an adjuvant that is labeled for agricultural use and follow its use directions.

MIXING DIRECTIONS

Shake well before using. Read and follow all label directions for each tankmix product prior to any tank mixing with **PQZ** Insecticide. This product can be mixed with other registered pes-

ticides for use on labeled crops or sites in accordance with the most restrictive use directions and precautions. **Do not exceed any labeled dose rate**. **PQZ** Insecticide rapidly degrades in high pH conditions; optimal spray solution is pH 5-7.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

PQZ Insecticide is physically and biologically compatible with many registered pesticides, fertilizers, or micronutrients. Contact your supplier for advice when considering mixing **PQZ** Insecticide with other pesticides, fertilizers, or micronutrients. If you have no experience with the combination you are considering, you should conduct a test to determine physical compatibility. To determine physical compatibility, add the labeled proportions of each chemical

with the same proportion of water as will be present in the chemical supply tank into a suitable container; mix thoroughly and allow to stand for five minutes. If the combination remains mixed, or can be readily remixed, the mixture is considered physically compatible.

PQZ Insecticide Alone: Begin with clean equipment. Fill spray tank with ¾ of the amount of water needed for the intended application and then turn on agitation. Pour labeled amount of product on the surface of water in the spray tank. Add the remaining water volume to the spray tank with agitation running. 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.

PQZ Insecticide Tank Mixtures: Begin with clean equipment. Fill spray tank with ¾ 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 ¾ 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 **PQZ** Insecticide)
5) emulsifiable concentrates
6) adjuvants and/or oils
7) remaining amount of water to achieve the desired level

APPLICATION DIRECTIONS

- Applications should be made immediately after the spray solution is prepared.
- Apply with properly calibrated spray equipment.
- Apply by ground and air using the labeled water spray volume found in the **Application Rate Chart for PQZ Insecticide** section of this label.
- Applications may be made by ground with high or low volume spray equipment that provides thorough spray coverage of the plant.

- For aerial applications, use larger droplet size (greater than 200 microns).
- Do not apply **PQZ** Insecticide through any type of irrigation system except those described in the **Chemigation** section.
- Apply when pest populations are beginning to build, before reaching economic thresholds or as directed under application directions for specific crops. Consult your local agricultural advisor, state cooperative extension service, or regional Nichino America representative for further information.
- Use sufficient water volume to ensure thorough coverage of foliage. Thorough spray coverage is critical to obtain control of the target pest(s).

CHEMIGATION

Apply this product 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, contact state extension service specialists, equipment manufacturers, or other experts.
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- 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.

Chemigation Systems Connected to Public Water Systems

- Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly

serves an average of at least 25 individuals daily at least 60 days out of the year.

- Chemigation systems connected to public water systems must contain a functional, reduced pressure zone backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to

the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.
- Apply by chemigation using a minimum of 0.10 to 0.25 acre-inches of water.

Sprinkler Chemigation

- The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor

when the water pressure decreases to the point where pesticide distribution is adversely affected.

- Systems must use a metering pump such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.

Chemigation Calibration and Application Instructions

Apply **PQZ** Insecticide under the schedule specified in the **Use Directions**, not according to the irrigation schedule, unless the events coincide. 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. 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 **PQZ** Insecticide to avoid 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 ¼ - ½ inch of water over the area to be treated when the system and injection system area operate 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 **PQZ** Insecticide and any tankmix partners required to treat the area covered by the irrigation system.

5. Add to the solution tank the required amount of **PQZ** Insecticide, and tankmix partners, and sufficient water to meet the injection time requirements.
6. Make sure the system is fully charged with water before starting injection of the **PQZ** Insecticide 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 **PQZ** Insecticide 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 **PQZ** Insecticide solution has cleared all of the sprinkler heads.
10. Allow time for all lines to flush the **PQZ** Insecticide solution through all nozzles before turning off irrigation water.
11. Apply using a minimum of 0.10 to 0.25 acre-inches of 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 **PQZ** Insecticide required to treat the area covered by the irrigation system.
4. Add the required amount of **PQZ** Insecticide and any other tankmix partners into the same quantity of water used to calibrate the injection period.
5. Operate the system at the same pressure and time interval established during the calibration.
6. Inject specified amount of **PQZ** Insecticide 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 insecticide on the foliage.

7. Maintain constant agitation in the solution tank during the injection period.
8. Stop injection equipment after treatment is completed. Continue to operate the system until the **PQZ** Insecticide 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.
9. Apply using a minimum of 0.10 to 0.25 acre-inches of water.

Chemigation Monitoring

A person knowledgeable of the chemigation system and equipment responsible for its operation, or under the supervision of a responsible person, shall shut the system down and make necessary adjustments should the need arise. Follow the appropriate personal protective equipment (PPE) guidelines.

APPLICATION RATE CHART FOR PQZ INSECTICIDE

Brassica Head and Stem Vegetables (Crop Group 5-16) broccoli; Brussels sprouts; cabbage; cabbage, Chinese Napa; cauliflower; cultivars, varieties, and hybrids of these commodities	
Pest	**Rate/Acre**
Aphids Whiteflies	2.4 to 3.2 fl oz (0.035 to 0.047 lb ai)

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APPLICATION RATE CHART FOR PQZ INSECTICIDE
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Brassica Head and Stem Vegetables (Crop Group 5-16) *(continued)*
Use Directions
• Apply by ground using a minimum of 20 gallons of water per acre. • For aerial applications, apply using a minimum of 5 gallons of water per acre. **USE RESTRICTIONS** • Do not apply more than 4.8 fl oz (0.070 lb ai) per acre per crop cycle. • Do not make more than 2 applications per crop cycle. • Retreatment Interval: Minimum of 7 days between applications. • Do not apply more than 9.6 fl oz (0.140 lb ai) per acre per year. • Do not make more than 4 applications per year. • Preharvest Interval (PHI): 1 day

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APPLICATION RATE CHART FOR PQZ INSECTICIDE
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Citrus Fruits (Crop Group 10-10)
Australian desert lime; Australian finger lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; Mount White lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin, clementine); tangor; trifoliate orange; uniq fruit; cultivars, varieties, and/or hybrids of these

Pest	Rate/Acre
Citrus thrips	6.4 fl oz (0.094 lb ai)
Aphids	2.4 to 3.2 fl oz (0.035 to 0.047 lb ai)

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APPLICATION RATE CHART FOR PQZ INSECTICIDE
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Citrus Fruits (Crop Group 10-10) *(continued)*
Use Directions
• Apply by ground using a minimum of 100 gallons of water per acre. • For aerial applications, apply using a minimum of 10 gallons of water per acre. **USE RESTRICTIONS** • Do not apply this product while bees are foraging. • Do not apply this product until flowering is complete and all petals have fallen. • Do not apply through any type of irrigation system. • Do not apply to citrus nurseries or citrus in greenhouses. • Do not apply by Alternate Row Middle (ARM) spray method.

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APPLICATION RATE CHART FOR PQZ INSECTICIDE
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Citrus Fruits (Crop Group 10-10) *(continued)*
Use Directions
USE RESTRICTIONS • In Florida, do not apply more than 4.8 fl oz (0.070 lb ai) per acre per year. • In all other states, do not apply more than 12.8 fl oz (0.188 lb ai) per acre per year. • Do not make more than 2 applications per year. • Retreatment Interval: Minimum of 7 days between applications. • Preharvest Interval (PHI): 1 day

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APPLICATION RATE CHART FOR PQZ INSECTICIDE
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Cotton	
Pest	**Rate/Acre**
Aphids Whiteflies	2.4 to 3.2 fl oz (0.035 to 0.047 lb ai)
Use Directions	

- Apply by ground using a minimum of 20 gallons of water per acre.
- For aerial applications, apply using a minimum of 5 gallons of water per acre.

USE RESTRICTIONS

- Do not apply more than 4.8 fl oz (0.070 lb ai) per acre per year.
- Do not make more than 2 applications per year.
- Retreatment Interval: Minimum of 7 days between applications.
- Preharvest Interval (PHI): 7 days

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APPLICATION RATE CHART FOR PQZ INSECTICIDE
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Cucurbit Vegetables (Crop Group 9)
chayote (fruit); Chinese waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); *Momordica* spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber); muskmelon (hybrids and/or cultivars of *Cucumis melo*, includes true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon); pumpkin; squash, summer (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini); squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon (includes hybrids and/or varieties of *Citrullus lanatus*)

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APPLICATION RATE CHART FOR PQZ INSECTICIDE
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Cucurbit Vegetables (Crop Group 9) *(continued)*	
Pest	**Rate/Acre**
Aphids Whiteflies	2.4 to 3.2 fl oz (0.035 to 0.047 lb ai)
Leafhoppers	3.2 fl oz (0.047 lb ai)

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APPLICATION RATE CHART FOR PQZ INSECTICIDE
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Cucurbit Vegetables (Crop Group 9) *(continued)*
Use Directions
• Apply by ground using a minimum of 20 gallons of water per acre. • For aerial applications, apply using a minimum of 5 gallons of water per acre. **USE RESTRICTIONS** • Do not apply more than 4.8 fl oz (0.070 lb ai) per crop cycle. • Do not make more than 2 applications per crop cycle. • Retreatment Interval: Minimum of 7 days between applications. • Do not apply more than 9.6 fl oz (0.140 lb ai) per acre per year. • Do not make more than 4 applications per year. • Preharvest Interval (PHI): 1 day

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APPLICATION RATE CHART FOR PQZ INSECTICIDE
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Fruiting Vegetables (Crop Group 8-10) African eggplant; bush tomato; cocona; currant tomato; eggplant; garden huckleberry; goji berry; groundcherry; martynia; naranjilla; okra; pea eggplant; pepino; pepper, bell; pepper, nonbell; roselle; scarlet eggplant; sunberry; tomatillo; tomato; tree tomato; cultivars, varieties, and/or hybrids of these	
Pest	**Rate/Acre**
Aphids Whiteflies	2.4 to 3.2 fl oz (0.035 to 0.047 lb ai)
Leafhoppers	3.2 fl oz (0.047 lb ai)

(continued)

APPLICATION RATE CHART FOR PQZ INSECTICIDE
(continued)

Fruiting Vegetables (Crop Group 8-10) *(continued)*
Use Directions
• Apply by ground using a minimum of 20 gallons of water per acre. • For aerial applications, apply using a minimum of 5 gallons of water per acre. **USE RESTRICTIONS** • Do not apply more than 4.8 fl oz (0.070 lb ai) per acre per crop cycle. • Do not make more than 2 applications per crop cycle. • Retreatment Interval: Minimum of 7 days between applications. • Do not apply more than 9.6 fl oz (0.140 lb ai) per acre per year. • Do not make more than 4 applications per year. • Preharvest Interval (PHI): 1 day

(continued)

APPLICATION RATE CHART FOR PQZ INSECTICIDE
(continued)

Leaf Petiole Vegetables (Crop Subgroup 22B) cardoon; celery; celery, Chinese; fuki; rhubarb; udo; zuiki; cultivars, varieties, and hybrids of these commodities	
Pest	**Rate/Acre**
Aphids Whiteflies	2.4 to 3.2 fl oz (0.035 to 0.047 lb ai)

(continued)

APPLICATION RATE CHART FOR PQZ INSECTICIDE
(continued)

Leaf Petiole Vegetables (Crop Subgroup 22B) *(continued)*
Use Directions
• Apply by ground using a minimum of 20 gallons of water per acre. • For aerial applications, apply using a minimum of 5 gallons of water per acre. **USE RESTRICTIONS** • Do not apply more than 4.8 fl oz (0.070 lb ai) per acre per crop cycle. • Do not make more than 2 applications per crop cycle. • Retreatment Interval: Minimum of 7 days between applications. • Do not apply more than 9.6 fl oz (0.140 lb ai) per acre per year. • Do not make more than 4 applications per year. • Preharvest Interval (PHI): 1 day

(continued)

APPLICATION RATE CHART FOR PQZ INSECTICIDE

(continued)

Leafy Vegetables (Crop Group 4-16)

amaranth, Chinese; amaranth, leafy; arugula; aster, Indian; blackjack; broccoli, Chinese; broccoli raab; cabbage, abyssinian; cabbage, Chinese, bok choy; cabbage, seakale; cat's whiskers; cham-chwi; cham-na-mul; chervil, fresh leaves; chipilin; chrysanthemum, garland; cilantro, fresh leaves; collards; corn salad; cosmos; cress, garden; cress, upland; dandelion, leaves; dang-gwi, leaves; dillweed; dock; dol-nam-mul; ebolo; endive; escarole; fameflower; feather cockscomb; Good King Henry; hanover salad; huauzontle; jute, leaves; kale; lettuce, bitter; lettuce, head; lettuce, leaf; maca, leaves; mizuna; mustard greens; orach; parsley, fresh leaves; plantain, buckhorn; primrose, English; purslane, garden; purslane, winter; radicchio; radish, leaves; rape greens; rocket, wild; shepherd's purse; spinach; spinach, Malabar; spinach, New Zealand; spinach, tanier; Swiss chard; turnip greens; violet, Chinese, leaves; watercress; cultivars, varieties, and hybrids of these commodities

(continued)

APPLICATION RATE CHART FOR PQZ INSECTICIDE
(continued)

Leafy Vegetables (Crop Group 4-16) *(continued)*	
Pest	**Rate/Acre**
Aphids Whiteflies	2.4 to 3.2 fl oz (0.035 to 0.047 lb ai)
Use Directions	
• Apply by ground using a minimum of 20 gallons of water per acre. • For aerial applications, apply using a minimum of 5 gallons of water per acre. **USE RESTRICTIONS** • Watercress is not registered for use in California. • For applications made to watercress, production fields must be drained of water at least 24 hours prior to application and water must not be reapplied to the field for a minimum of 24 hours following the application.	

(continued)

APPLICATION RATE CHART FOR PQZ INSECTICIDE
(continued)

Leafy Vegetables (Crop Group 4-16) *(continued)*
Use Directions
USE RESTRICTIONS • Do not apply more than 4.8 fl oz (0.070 lb ai) per acre per crop cycle. • Do not make more than 2 applications per crop cycle. • Retreatment Interval: Minimum of 7 days between applications. • Do not apply more than 9.6 fl oz (0.140 lb ai) per acre per year. • Do not make more than 4 applications per year. • Preharvest Interval (PHI): 1 day

(continued)

APPLICATION RATE CHART FOR PQZ INSECTICIDE
(continued)

Pome Fruits (Crop Group 11-10) apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these	
Pest	**Rate/Acre**
Aphids (excluding woolly apple aphid)	2.4 to 3.2 fl oz (0.035 to 0.047 lb ai)

(continued)

APPLICATION RATE CHART FOR PQZ INSECTICIDE
(continued)

Pome Fruits (Crop Group 11-10) *(continued)*
Use Directions
• Apply by ground using a minimum of 100 gallons of water per acre. • For aerial applications, apply using a minimum of 10 gallons of water per acre. **USE RESTRICTIONS** • Do not apply this product while bees are foraging. • Do not apply this product until flowering is complete and all petals have fallen. • Do not apply through any type of irrigation system. • Do not apply by Alternate Row Middle (ARM) spray method. • Do not apply more than 4.8 fl oz (0.070 lb ai) per acre per year.

(continued)

APPLICATION RATE CHART FOR PQZ INSECTICIDE
(continued)

Pome Fruits (Crop Group 11-10) *(continued)*
Use Directions
USE RESTRICTIONS • Do not make more than 2 applications per year. • Retreatment Interval: Minimum of 7 days between applications. • Preharvest Interval (PHI): 14 days

(continued)

APPLICATION RATE CHART FOR PQZ INSECTICIDE
(continued)

Small Fruit Vine Climbing (Crop Subgroup 13-07F) Excluding Fuzzy Kiwifruit Amur River grape; gooseberry; grape; kiwifruit, hardy; Maypop; schisandra berry; cultivars, varieties, and/or hybrids of these	
Pest	**Rate/Acre**
Leafhoppers Mealybugs	3.2 fl oz (0.047 lb ai)

(continued)

APPLICATION RATE CHART FOR PQZ INSECTICIDE
(continued)

Small Fruit Vine Climbing (Crop Subgroup 13-07F) Excluding Fuzzy Kiwifruit *(continued)*
Use Directions
• Apply by ground using a minimum of 100 gallons of water per acre. • For aerial applications, apply using a minimum of 10 gallons of water per acre. **USE RESTRICTIONS** • Do not apply through any type of irrigation system. • Do not apply more than 4.8 fl oz (0.070 lb ai) per acre per year. • Do not make more than 2 applications per year. • Retreatment Interval: Minimum of 7 days between applications. • Preharvest Interval (PHI): 3 days

(continued)

APPLICATION RATE CHART FOR PQZ INSECTICIDE
(continued)

Stone Fruits (Crop Group 12-12) apricot; apricot, Japanese; capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; Jujube, Chinese; nectarine; peach; plum; plum, American; plum, beach; plum, Canada; plum, cherry; plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; sloe; cultivars, varieties, and/or hybrids of these	
Pest	**Rate/Acre**
Aphids	2.4 to 3.2 fl oz (0.035 to 0.047 lb ai)

(continued)

APPLICATION RATE CHART FOR PQZ INSECTICIDE
(continued)

Stone Fruits (Crop Group 12-12) *(continued)*
Use Directions
• Apply by ground using a minimum of 100 gallons of water per acre. • For aerial applications, apply using a minimum of 10 gallons of water per acre. **USE RESTRICTIONS** • Do not apply this product while bees are foraging. • Do not apply this product until flowering is complete and all petals have fallen. • Do not apply through any type of irrigation system. • Do not apply by Alternate Row Middle (ARM) spray method.

(continued)

APPLICATION RATE CHART FOR PQZ INSECTICIDE
(continued)

Stone Fruits (Crop Group 12-12) *(continued)*
Use Directions
USE RESTRICTIONS • Do not apply more than 4.8 fl oz (0.070 lb ai) per acre per year. • Do not make more than 2 applications per year. • Retreatment Interval: Minimum of 7 days between applications. • Preharvest Interval (PHI): 7 days

(continued)

APPLICATION RATE CHART FOR PQZ INSECTICIDE

(continued)

Tree Nuts (Crop Group 14-12)

African nut-tree; almond; beechnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; Cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; coquito nut; dika nut; ginkgo; Guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut; mongongo nut; monkey-pot; monkey puzzle nut; Okari nut; Pachira nut; peach palm nut; pecan; pequi; Pili nut; pine nut; pistachio; Sapucaia nut; tropical almond; walnut, black; walnut, English; yellowhorn; cultivars, varieties, and/or hybrids of these

Pest	Rate/Acre
Aphids	2.4 to 3.2 fl oz (0.035 to 0.047 lb ai)
Mealybugs	3.2 fl oz (0.047 lb ai)

(continued)

APPLICATION RATE CHART FOR PQZ INSECTICIDE
(continued)

Tree Nuts (Crop Group 14-12) *(continued)*
Use Directions
• Apply by ground using a minimum of 100 gallons of water per acre. • For aerial applications, apply using a minimum of 10 gallons of water per acre. **USE RESTRICTIONS** • Do not apply this product while bees are foraging. • Do not apply this product until flowering is complete and all petals have fallen. • Do not apply through any type of irrigation system. • Do not apply by Alternate Row Middle (ARM) spray method. • Do not apply more than 4.8 fl oz (0.070 lb ai) per acre per year. • Do not make more than 2 applications per year.

(continued)

APPLICATION RATE CHART FOR PQZ INSECTICIDE
(continued)

Tree Nuts (Crop Group 14-12) *(continued)*
Use Directions
USE RESTRICTIONS • Retreatment Interval: Minimum of 7 days between applications. • Preharvest Interval (PHI): 7 days

Tuberous and Corm Vegetables (Crop Subgroup 1C) arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; canna, edible; cassava, bitter and sweet; chayote (root); chufa; dasheen (taro); ginger; leren; potato; sweet potato; tanier; turmeric; yam bean; yam, true

Pest	Rate/Acre
Aphids	2.4 to 3.2 fl oz (0.035 to 0.047 lb ai)

(continued)

APPLICATION RATE CHART FOR PQZ INSECTICIDE
(continued)

Tuberous and Corm Vegetables (Crop Subgroup 1C) *(continued)*
Use Directions
• Apply by ground using a minimum of 20 gallons of water per acre. • For aerial applications, apply using a minimum of 5 gallons of water per acre. **USE RESTRICTIONS** • In Florida, do not apply more than 4.8 fl oz (0.070 lb ai) per acre per year. • In all other states, do not apply more than 6.4 fl oz (0.094 lb ai) per acre per year. • Do not make more than 2 applications per year. • Retreatment Interval: Minimum of 14 days between applications. • Do not feed tops to livestock. • Preharvest Interval (PHI): 14 days

(continued)

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 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. 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.

(continued)

STORAGE AND DISPOSAL *(continued)*

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.

In case of fire or spills, information may be obtained by calling 1-800-424-9300.

IMPORTANT: READ BEFORE USE

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

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