

# Rycar<sup>®</sup>

## Insecticide

SPECIMEN



PYRIFLUQUINAZON GROUP 9B INSECTICIDE

For Indoor Greenhouse Use on Lettuce, Tomato, Pepper, Cucumber, and Ornamental Plants

**Active Ingredient:**

Pyrifluquinazon2(1H)-Quinazolinone,1-acetyl-3,4-dihydro-3-[(3-pyridinyl)methyl] amino]-6-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-..... 20.2%

**Other Ingredients:**..... 79.8%

**Total** .....100.0%

Contains 1.87 lbs. active ingredient per U.S. gallon

## Keep Out of Reach of Children CAUTION

<sup>®</sup>Rycar is a registered trademark of Nichino America, Inc.

Manufactured in Japan for: SePRO Corporation

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EPA Reg. No. 71711-37-67690  
FPL20190110

### PRECAUTIONARY STATEMENTS

#### Hazards to Humans and Domestic Animals

**Caution.** Harmful if absorbed through skin. Harmful if swallowed. 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. Wear long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

FIRST AID	
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>

#### HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For additional information on this pesticide product, including human health concerns and medical emergencies, you may call **INFOTRAC** at **1-800-535-5053**.

#### 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 ≥, polyvinyl chloride (PVC) ≥ 14 mils, or Viton<sup>®</sup> ≥ 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.

#### SURFACE WATER ADVISORY

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

**Use of this product in residential areas is prohibited.**

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 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 ≥, polyvinyl chloride (PVC) ≥ 14 mils, or Viton<sup>®</sup> ≥ 14 mils.
- Shoes plus socks

#### GENERAL INFORMATION

**RYCAR** insecticide is formulated as a suspension concentrate containing 1.87 lbs. of active ingredient per gallon. **RYCAR** insecticide works primarily through contact action, by ingestion, and is translaminar. **RYCAR** 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, Rycar Insecticide contains a Group 9B insecticide. Any insecticide population may contain individuals naturally resistant to Rycar 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 Rycar 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 individual 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/acaricides 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 advisors 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.

#### MIXING DIRECTIONS

Shake well before using. Read and follow all label directions for each tankmix product prior to any tank mixing with **RYCAR** insecticide. This product can be mixed with other registered pesticides for use on labeled crops or sites, in accordance with the most restrictive use directions and precautions. Do not exceed any labeled dose rate.

It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

**RYCAR Insecticide Alone:** Begin with clean equipment. Fill spray tank with  $\frac{3}{4}$  of the amount of water needed for the intended application and then turn on agitation. Pour recommended 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.

**RYCAR** insecticide is physically and biologically compatible with many registered pesticides, fertilizers, or micronutrients. Contact your SePRO turf and ornamental specialist for advice when considering mixing **RYCAR** 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 recommended 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 re-mixed, the mixture is considered physically compatible.

**RYCAR Insecticide Tank Mixtures:** Begin with clean equipment. Fill spray tank with  $\frac{3}{4}$  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  $\frac{3}{4}$  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 RYCAR insecticide)
- 5) emulsifiable concentrates
- 6) adjuvants and/or oils
- 7) remaining amount of water to achieve the desired level

#### APPLICATION DIRECTIONS

The use directions for this product are based on the results of product testing programs on a wide variety of plants. No evidence of phytotoxic effects was observed. However, not all plant species and their varieties and cultivars have been tested with possible tankmix combinations, sequential pesticide treatments, and adjuvants and surfactants. Local conditions also can influence crop tolerance and may not match those under which testing has been conducted. Therefore, before using **RYCAR** insecticide, test the product on a sample of the crop to be treated to ensure that a phytotoxic response will not occur as a result of applications.

**RYCAR** insecticide works primarily through contact action, by ingestion, and is translaminar, so thorough spray coverage is necessary for control of listed insects on the label. Applications should be made immediately after the spray solution is prepared. Under severe insect pressure, use the maximum rates and the shorter spray interval as specified on the label. Dense foliage or excessive growth will often prevent adequate coverage; adjust spray volumes accordingly. Mix with sufficient water and apply as a foliar spray to obtain uniform coverage. Treat plants when pests are immature or at a susceptible stage and populations are building, before crop damage occurs.

Applications may be made with high or low volume spray equipment that provides thorough coverage of the plant. Apply with properly calibrated spray equipment. A wetting agent or other spray adjuvant, approved for use on the crop, may be added to spray solutions according to the manufacturer's use instructions to achieve optimum control.

#### Use Recommendations

Apply in sufficient water to obtain complete coverage of all plant parts. Follow the spray equipment manufacturer's directions to determine the amount of spray solution required to obtain thorough coverage. Consult the spray equipment manufacturer's operator's manual, spray nozzle catalogs and/or your crop advisor for more information.

#### Application Restrictions

Chemigation is limited to greenhouse lettuce, greenhouse tomato, greenhouse pepper, and greenhouse cucumber only.

#### Chemigation

Apply **RYCAR** only through overhead irrigation, or handheld or motorized calibrated irrigation equipment.

Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. Do not connect an irrigation system used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place. If you have questions about calibration, contact State Extension Service specialists, equipment manufacturers, or other experts.

The normal dilution ratio is 1:10 to 1:200, depending on the system. Always meter the product into the irrigation water during the first part of the irrigation cycle. The product may be mixed separately prior to injection. Agitation may be necessary if the mixture is allowed to stand more than 24 hours.

Remove scale, pesticide residue and other foreign matter from the tank and entire irrigation system.

**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.

#### Use Restrictions For Indoor Greenhouse Use

- **Florida:** Do not compost any discarded plant materials that have been treated with this product.
- Do not apply this product as a smoke or aerosol.
- Do not harvest cut flowers for 48 hours after spraying.
- Do not compost any discarded plant materials that have been treated with this product.
- Do not apply this product to plants used for food or animal feed that are not listed on this label.
- Do not apply to fruit trees and vines that will bear harvestable fruit within 12 months.

#### CONTROLLING PESTICIDE RUNOFF IN GREENHOUSES

Do not allow pesticide spray solution to run off outside of the application area. Do not use in green-houses that discharge irrigation runoff to surface water drains. If applied in an area with a non-permeable floor and a floor drainage system, excess application spray or irrigation runoff must be collected and subjected to secondary wastewater treatment.

**APPLICATION RATE CHART FOR RYCAR INSECTICIDE**

<b>GREENHOUSE CUCUMBERS, LETTUCE, PEPPERS, AND TOMATOES</b>		
<b>[Not for use in California]</b>		
<b>Pest</b>	<b>Dilution Rate</b>	<b>Directions for Use</b>
Whiteflies	1.6 to 3.2 fl oz / 100 gallons 47 to 95 mL / 100 gallons (0.023 to 0.047 lb ai / 100 gallons)	<b>USE RESTRICTIONS</b> <ul style="list-style-type: none"> <li>• 100 gallons of finished spray solution will typically cover 20,000 sq. ft. of greenhouse.</li> <li>• Do not make more than 2 applications per crop cycle.</li> <li>• Lettuce, tomatoes and cucumbers: Allow a minimum of 10 days between applications.</li> <li>• Peppers: Allow a minimum of 7 days between applications.</li> <li>• Preharvest Interval (PHI): 1 day.</li> <li>• Do not apply in Ultra Low Volume Equipment.</li> </ul>
Aphids	2.4 to 3.2 fl oz / 100 gallons 71 to 95 mL / 100 gallons (0.035 to 0.047 lb ai / 100 gallons)	
Leafhoppers (expect lettuce)	3.2 fl oz / 100 gallons 95 mL / 100 gallons (0.047 lb ai / 100 gallons)	
<b>GREENHOUSE ORNAMENTAL PLANTS</b>		
<b>Pests</b>	<b>Dilution Rate</b>	<b>Directions For Use</b>
Whiteflies	1.6 to 3.2 fl oz / 100 gallons 47 to 95 mL / 100 gallons (0.023 to 0.047 lb ai / 100 gallons)	<b>USE RESTRICTIONS</b> <ul style="list-style-type: none"> <li>• 100 gallons of finished spray solution will typically cover 20,000 sq. ft. of greenhouse.</li> <li>• Do not apply more than 12.8 fl oz or 378 mL (0.187 lb ai) per crop cycle.</li> <li>• Do not make more than 2 applications per crop cycle.</li> <li>• Allow a minimum of 10 days between applications.</li> <li>• Use in sufficient volume to obtain uniform plant coverage.</li> <li>• Do not harvest cut flowers for 48 hours after spraying.</li> </ul>
Aphids Leafhoppers Chilli Thrips	2.4 to 3.2 fl oz 71 to 95 mL / 100 gallons (0.035 to 0.047 lb ai / 100 gallons)	
Mealybugs	6.4 fl oz 189 mL / 100 gallons (0.094 lb ai / 100 gallons)	

**STORAGE AND DISPOSAL**

**Do not contaminate water, food, or feed by storage or disposal.**  
**PESTICIDE STORAGE:** Store in original container, and keep tightly closed when not in use. Store in a cool, dry place.  
**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.  
**CONTAINER HANDLING:**  
**Nonrefillable plastic container (less than 5 gallons)**  
 Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.  
 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.

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

**DISCLAIMER OF WARRANTIES:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, WHICH EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of SePRO is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, SePRO disclaims any liability whatsoever for incidental or consequential damages, including, but not limited to, liability arising out of breach of contract, express or implied warranty (including warranties of merchantability and fitness for a particular purpose), tort, negligence, strict liability, or otherwise.

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