

GROUP 9B INSECTICIDE

**Rycar<sup>®</sup> Insecticide**

Suspension Concentrate

COMMERCIAL

ACTIVE INGREDIENT: Pyrifluquinazon .....224 g/L

Contains 1,2-Benzisothiazolin-3-one at 0.02702% as a preservative.

READ THE LABEL BEFORE USING  
KEEP OUT OF REACH OF CHILDREN

REGISTRATION NUMBER: 34801 PEST CONTROL PRODUCTS ACT



CAUTION - POISON  
POTENTIAL SKIN SENSITIZER

NET CONTENTS: 0.5 - 1000L

Nichino America, Inc.  
4550 Linden Hill Road  
Suite 501  
Wilmington, DE 19808, U.S.A.  
1-888-740-7700

Distributed by:  
Plant Products Inc.  
50 Hazelton Street Leamington,  
Ontario, Canada N8H 3W1  
1-519-326-9037

## **FIRST AID**

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

**If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

**If in eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

You may also contact 1-800-348-5832 for emergency medical treatment information. In case of fire or spills, information may be obtained by calling 1-800-424-9300.

## **TOXICOLOGICAL INFORMATION**

There is no specific antidote. All treatments should be based on observed signs and symptoms of distress in the patient.

## **PRECAUTIONS**

Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. 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. Remove and wash contaminated clothing before reuse.

**DO NOT** apply using handheld mistblower/airblast or handheld fogging equipment.

**DO NOT** use on greenhouse ornamentals grown for cut flowers.

## **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Wear a long-sleeved shirt, long pants, chemical-resistant gloves made of barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, or Viton®, socks and shoes during mixing, loading, application, clean-up and repair.

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

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.

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

## **ENVIRONMENTAL PRECAUTIONS**

Toxic to aquatic organisms.

Toxic to bees. May harm bees, including those used in greenhouse production. Avoid application when bees are in the treatment area.

## **DIRECTIONS FOR USE**

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

DO NOT allow releases, effluent or runoff from greenhouses containing this product to enter lakes, streams, ponds or other waters.

## **GENERAL INFORMATION**

**Rycar<sup>®</sup> Insecticide** is formulated as a suspension concentrate containing 224 grams of active ingredient per litre. **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.

## **TANK MIXING**

This product may be tank mixed with a fertilizer, a supplement, or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Nichino America, Inc. at 1-888-740-7700 for information before applying any tank mix that is not specifically recommended on this label.

## **MIXING DIRECTIONS**

Shake well before using.

**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 supplier 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**

- Applications should be made immediately after the spray solution is prepared.
- Apply with properly calibrated spray equipment.
- Applications may be made through high or low volume spray equipment that provides thorough spray coverage of the plant.
- 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.
- Use sufficient water volume to ensure thorough coverage of foliage. Thorough spray coverage is critical to obtain control of the target pest(s).
- For best results, treat plants when pests are immature or at a susceptible stage and apply when pest populations are beginning to build, before reaching economic thresholds. Consult your local agricultural advisor or regional Nichino America representative for further information.
- 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.

**USE LIMITATIONS AND PRECAUTIONS FOR INDOOR GREENHOUSE USE**

- DO NOT apply this product as a smoke or aerosol.
- 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.

**For Indoor Greenhouse Use on Lettuce, Tomato, Eggplant, Pepper, Cucumber and Herbaceous and Woody Deciduous Ornamental Plants**

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 tank-mix 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.

<b>GREENHOUSE LETTUCE</b>		
<b>Pest</b>	<b>Application Rate</b>	<b>Directions for Use</b>
Whiteflies	125 - 250 mL / 1000 L	<ul style="list-style-type: none"> <li>• <b>DO NOT</b> exceed a maximum of 2041 L of finished spray solution per hectare.</li> <li>• <b>DO NOT</b> make more than 2 applications per crop cycle.</li> <li>• <b>DO NOT</b> apply more than 1020 mL/ha of <b>Rycar Insecticide</b> per crop cycle.</li> <li>• Lettuce: Allow 10 days between applications.</li> <li>• Preharvest Interval (PHI): 1 day</li> <li>• <b>DO NOT</b> apply in Ultra Low Volume Equipment.</li> </ul>
Aphids	187 – 250 mL / 1000 L	

<b>GREENHOUSE CUCUMBERS, EGGPLANT, PEPPERS, AND TOMATOES</b>		
<b>Pest</b>	<b>Application Rate</b>	<b>Directions for Use</b>
Aphids	125 – 164 mL / 1000 L	<ul style="list-style-type: none"> <li>• <b>DO NOT</b> exceed a maximum of 2041 L of finished spray solution per hectare.</li> <li>• <b>DO NOT</b> make more than 1 application per crop cycle.</li> <li>• <b>DO NOT</b> apply more than 335 mL/ha of <b>Rycar Insecticide</b> per crop cycle.</li> <li>• Preharvest Interval (PHI): 1 day</li> <li>• <b>DO NOT</b> apply in Ultra Low Volume Equipment.</li> </ul>
Whiteflies	125 - 164 mL / 1000 L	

<b>GREENHOUSE HERBACEOUS AND WOODY DECIDUOUS ORNAMENTAL PLANTS (EXCLUDING CUT FLOWERS)</b>		
<b>Pest</b>	<b>Application Rate</b>	<b>Directions for Use</b>
Whiteflies	125 - 250 mL / 1000 L	<ul style="list-style-type: none"><li>• <b>DO NOT</b> exceed a maximum of 2041 L of finished sprayed solution per hectare.</li><li>• <b>DO NOT</b> make more than 2 applications per crop cycle.</li><li>• <b>DO NOT</b> apply more than 1020 mL/ha of <b>Rycar Insecticide</b> per crop cycle.</li><li>• Allow 10 days between applications.</li><li>• <b>DO NOT</b> use on ornamentals grown for cut flowers.</li></ul>
Aphids	187 – 250 mL / 1000 L	

### **RESISTANCE MANAGEMENT**

For resistance management, **Rycar Insecticide** contains a Group 9B Insecticide. Any insect 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 is used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but are specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance:

- Where possible, rotate the use of **Rycar Insecticide** or other Group 9B insecticides with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that is effective on the target pest when such use is permitted.
- Insecticide use should be based on an IPM program that includes scouting and record keeping, and considers cultural, biological and other chemical control practices.
- Monitor treated pest populations for resistance development.
- 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, Inc. at 1-888-740-7700.

### **STORAGE**

Store this product away from food or feed.

Store in a cool, dry place. **DO NOT** use or store near heat or open flame.

### **DISPOSAL**

**DO NOT** reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

#### **NOTICE TO USER**

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

Rycar is a registered trademark of Nichino America, Inc.