GROUP 16 INSECTICIDE

APPLAUD® Insect Growth Regulator Dry Flowable

COMMERCIAL

ACTIVE INGREDIENT: Buprofezin......70%

READ THE LABEL BEFORE USING KEEP OUT OF REACH OF CHILDREN

Contains the allergen, sulfites

REGISTRATION NUMBER: 32341 PEST CONTROL PRODUCTS ACT

Caution - EYE IRRITANT

NET CONTENTS 50 g to 25 kg

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

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN

Harmful if swallowed. Wash thoroughly with soap and water after handling. May be harmful if absorbed through the skin. Avoid contact with skin and clothing. May irritate eyes. Avoid contact with eyes. Harmful if inhaled. Avoid breathing spray mist. Remove contaminated clothing and wash before reuse.

Wear long-sleeved shirt, long pants, chemical resistant gloves and shoes plus socks 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.

Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours for greenhouse ornamentals (excluding cut flowers), greenhouse ground covers, and landscape plants grown in greenhouses and 2 days for greenhouse vegetables.

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.

TOXICOLOGICAL INFORMATION

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

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

ENVIRONMENTAL HAZARDS

Do not contaminate water by cleaning of equipment or disposal of equipment washwaters.

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

GENERAL INFORMATION

APPLAUD® Insect Growth Regulator contains the active ingredient, buprofezin. It is effective against the nymph stages of whiteflies by inhibiting chitin biosynthesis, suppressing oviposition of adults, and reducing

viability of eggs. Treated susceptible pests may remain alive on the plant for 3-7 days, but feeding damage during this time is typically very low.

Good coverage is essential. Treatment should be applied when population level reaches economic threshold. Consult local agricultural authorities for details. Apply by ground application equipment with the spray volume approved under DIRECTIONS FOR USE. The restriction on spray volume will limit the size of plant treated in order to ensure complete coverage. Orient nozzles to assure good coverage. Applications may be made with high volume or low volume, or non-handheld mister/airblaster equipment only. Application with handheld ultra low volume (thermal and non-thermal foggers, misters, etc.) is prohibited. Application with any type of fogging equipment is prohibited. 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.

INSECTS CONTROLLED

Whiteflies

MIXING, LOADING, AND HANDLING INSTRUCTIONS

SPECIFIC MIXING INSTRUCTIONS

APPLAUD ALONE: Fill spray tank with 3/4 of the amount of water needed for the intended application and agitate. Pour recommended amount of product on the surface of water in the spray tank. Add the balance of the water to the spray tank while maintaining agitation. Maintain agitation during filling and spraying operations. If spraying must be stopped before emptying the sprayer, resume agitation before spraying the remainder of the load.

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.

RESISTANCE MANAGEMENT

For resistance management, please note that APPLAUD contains a Group 16 Insecticide. Any insect population may contain individuals naturally resistant to APPLAUD and other Group 16 Insecticides. The resistant individuals may dominate the insect population if this group of insecticides is used repeatedly in the same greenhouses. 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 APPLAUD or other Group 16 Insecticides with different groups that control the same pests in a greenhouse.
- Use tank mixtures with insecticides from a different group 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.
- o 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.

DIRECTIONS FOR USE

Applications may be made with high volume, low volume or non-handheld mister/airblaster equipment only. Application with handheld ultra low volume (thermal and non-thermal foggers, misters, etc.) is prohibited. Application with any type of fogging equipment is prohibited. 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 PRECAUTIONS

- o Do not apply this product through any type of irrigation system.
- o For use on greenhouse crops only. Not for field use.
- Do not apply to cut flowers.
- Phytotoxicity may occur in Oriental Pear varieties, normally limited to applications made prior to petal fall.
- o Do not exceed the maximum spray volume indicated under each application rate.
- Do not apply by air.

APPLICATION RATE CHART FOR APPLAUD INSECT GROWTH REGULATOR

Crops	Pest	Applaud	Application Directions and Restrictions
		Concentration	
Greenhouse Cucumbers,	Whiteflies	36-43g/100 L	Make the first application when adult whiteflies begin
Peppers, Tomatoes			to appear. Monitor whitefly populations to determine
			the need for a second application. Use the high
			concentration on high whitefly populations.
			Do not make more than 2 applications per crop cycle.
			Do not apply within 2 days of harvest for tomatoes and cucumbers and 3 days for peppers.
			Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days.
			Allow at least 21 days between applications.
			When using 43 g Applaud/100 L, apply no more than
			730 L of spray solution/ha.
			When using 36 g Applaud/100 L, apply no more than

Crops	Pest	Applaud	Application Directions and Restrictions
		Concentration	
			870 L of spray solution/ha.
Greenhouse ornamentals	Whiteflies	36-43 g/100	Apply when adult whiteflies begin to appear. Use the
(ground covers and		L	high concentration on high whitefly populations.
landscape plants;			
container-grown			Do not make more than 1 application per crop cycle.
ornamentals)			
Excludes cut flowers.			Apply no more than 1000 L of spray solution/ha.

STORAGE AND DISPOSAL

STORAGE

Keep pesticide in original container. Do not put concentrate or dilute solutions into food or drink container. Store in cool, dry, and well ventilated place away from seed, food, feed, fertilizer or other pesticides. Do not store diluted spray.

DISPOSAL

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Follow provincial instruction for any required additional cleaning of the container prior to its disposal.
- 3. Make the empty container unsuitable for further use.
- 4. Dispose of the container in accordance with provincial requirements.
- 5. 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.

Applaud is a registered trademark of Nichino America, Inc.