

FLUTIANIL

GROUP

U13

FUNGICIDE

GATTEN[®]

FUNGICIDE

A fungicide for control of powdery mildew.

ACTIVE INGREDIENT:

Flutianil: (2Z)-2-[[2-fluoro-5-(trifluoromethyl)phenyl]thio]-2-[3-(2-methoxyphenyl)-2-thiazolidinylidene]acetonitrile* **4.7%**

OTHER INGREDIENTS: **95.3%**

TOTAL **100.0%**

0.423 lbs flutianil/gal

*CAS No. 958647-10-4

GM**CB****E**

EPA Reg. No. 11581-6-71711 EPA Est. No. 67545-AZ-1 70815-GA-001 39578-TX-1
superscript corresponds with lot number

KEEP OUT OF REACH OF CHILDREN
WARNING - AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See additional precautionary statements inside booklet

NET CONTENTS: 1 quart

**NICHINO**

225109
07/23

FIRST AID

If in eyes	<ul style="list-style-type: none">• 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.• Call a poison control center or doctor for treatment advice.
If swallowed	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• DO NOT induce vomiting unless told to do so by a poison control center or doctor.• DO NOT give anything to an unconscious person.
If on skin or clothing	<ul style="list-style-type: none">• 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.

(continued)

FIRST AID *(continued)*

If inhaled

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

HOTLINE NUMBER

Have the product container or label with you when calling a poison control center, doctor, or going for treatment. For non-emergency information concerning this product, call 1-800-348-5832. In case of fire or spills, information may be obtained by calling 1-800-424-9300.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING - AVISO

Causes substantial but temporary eye injury. **DO NOT** get in eyes or on clothing. Wear protective eyewear (goggles, face shield, safety glasses). Prolonged or frequently repeated skin contact

may cause allergic reactions in some individuals. 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.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders, and other handlers must wear the following:

- Long-sleeved shirt and long pants
- Socks
- Shoes
- Chemical-resistant gloves made of barrier laminate or butyl rubber ≥ 14 mils
- Protective eyewear (goggles, face shield, or safety glasses)

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 must remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users must 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

For terrestrial uses, **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.

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 or pets, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, 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 workers to enter treated areas during the restricted-entry interval (REI) of 12 hours.

PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated including plants, soil, or water) is:

- Coveralls worn over short-sleeved shirt and short pants
- Socks
- Shoes
- Chemical-resistant gloves made of barrier laminate or butyl rubber ≥ 14 mils
- Protective eyewear

PRODUCT INFORMATION

GATTEN® is a fungicide for control of powdery mildew on crops listed in the **Directions for Application** section of this label. **GATTEN** may be used in programs that are compatible with the principles of Integrated Pest Management (IPM) which include the use of disease resistant crop varieties, cultural practices, pest scouting, and disease forecasting systems which reduce unnecessary applications of pesticides. Flutianil, the active ingredient in **GATTEN**, is a new chemical class of fungicide of the thiazolidine group and belongs to FRAC mode of action Group U13. **GATTEN** is effective for strategic use in programs that attempt to minimize disease resistance to fungicides.

This product is intended for use by professional applicators.

Directions for Ground or Aerial Spray Application

Users must read, understand, and follow the label use rates and restrictions. Minimum label rates may be used under low disease pressure conditions while maximum label rates and shortened specified spray intervals are advised under high disease pressure. For application, determine the number of acres to be treated, the specified label use rate, and the spray volume per acre. Prepare

only the amount of spray solution that is necessary to spray the measured acres. Calibrate spray equipment prior to use. For optimal disease control, use thorough spray coverage. Thorough spray coverage is a function of spray pressure, spray volume per acre, nozzle type and spacing, and application equipment speed. Calibrate spray equipment prior to use.

RESTRICTIONS

- **NEW YORK: Not for Sale, Sale Into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.**
- **NEW YORK: DO NOT** apply more than 16 fl oz product/acre per year. **DO NOT** exceed 0.0528 lb ai/acre per year.
- **DO NOT** apply via chemigation.
- **NOT** for use in greenhouses.

ROTATIONAL CROPS DIRECTIONS

Any crop may be planted immediately after the last application.

RESISTANCE MANAGEMENT

Fields must be scouted prior to application to identify the disease that is present and to determine if the intended application may be effective. Fields must be scouted at the appropriate period after application to verify that the treatment was effective. For further

information or to report suspected resistance, contact Nichino America <http://www.nichino.net/contact-us/>. You can also contact your pesticide distributor or university extension specialist to report resistance. If resistance is suspected, treat with an effective pesticide, if available, having a different mode of action and/or use nonchemical means to best manage the pest.

For resistance management, **GATTEN** contains a Group U13 fungicide. Any fungal population may contain individuals naturally resistant to **GATTEN** and other Group U13 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance management strategies must be followed. To delay fungicide resistance, take one or more of the following steps:

- **DO NOT** apply more than maximum number of applications for each labeled crop in the **Directions for Application** table below and avoid consecutive sprays of **GATTEN** or other fungicides in the same group in a season.
- Use tank mixtures with fungicides from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.

- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use, and crop rotation and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds as well as cultural, biological, and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.

MANDATORY SPRAY DRIFT REQUIREMENTS

Aerial Applications

- **DO NOT** release spray at a height greater than 10 ft above the vegetative canopy unless a greater application height is necessary for pilot safety.
- For all applications, applicators are required to use a medium or coarser spray droplet size (ASABE S572.1).
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- Applicators must use $\frac{1}{2}$ swath displacement upwind at the downwind edge of the field.
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

(continued)

Ground Applications

- Apply with the nozzle height recommended by the manufacturer but no more than 3 feet above the ground or crop canopy.
- For all applications, applicators are required to use a medium or coarser spray droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

Boomless Ground Applications

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1) for all applications.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.

BE AWARE OF NEARBY NONTARGET SITES AND ENVIRONMENTAL CONDITIONS.

Importance of Droplet Size

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

Controlling Droplet Size - Ground Boom

Volume: Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.

Pressure: Use the lowest spray pressure specified for the nozzle to produce the target spray volume and droplet size.

Spray Nozzle: Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Controlling Droplet Size – Aircraft

Adjust nozzles. Follow nozzle manufacturers' directions for setting up nozzles. To reduce fine droplets, nozzles must be oriented parallel with the airflow in flight.

Boom Height – Ground Boom

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

Release Height – Aircraft

Higher release heights increase the potential for spray drift. When applying aurally to crops, **DO NOT** release spray at a height greater than 10 feet above the crop canopy unless a greater application height is necessary for pilot safety.

Shielded Sprayers

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

Temperature and Humidity

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

Temperature Inversions

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to

no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

Wind

Drift potential increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

Boomless Ground Applications

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

Handheld Technology Applications

Take precautions to minimize spray drift.

MIXING DIRECTIONS

DO NOT combine **GATTEN** in the spray tank with other pesticides, surfactants, or fertilizers unless prior use has shown the combination physically compatible, effective, and non-injurious under con-

ditions of use. **GATTEN** is physically and biologically compatible with many registered pesticides, fertilizers, or micronutrients. Contact your supplier or a local extension for advice when considering mixing **GATTEN** with other products. If you have no experience with the combination you are considering, you must conduct a test to determine physical compatibility. To do so, add the specified proportions of both chemicals 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 must be physically compatible.

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.

DIRECTIONS FOR APPLICATION

Apples		
Target Disease	Application Rate fl oz product/A (lb ai/A)	PHI
<i>P. leucotricha</i> (powdery mildew)	6.0 (0.0198) to 8.0 (0.0264)	14
Directions		
<ul style="list-style-type: none"> • Apply by air using a minimum of 10 gallons of water per acre. • Apply by ground using water volumes of 20 to 100 gallons per acre for concentrate sprays and 101 to 200 gallons per acre for dilute sprays. • Repeat applications at 7 to 14- day intervals, depending on disease pressure. • Apply to foliage during the fruiting stage using airblast ground equipment or by air. 		

(continued)

Apples (*continued*)

Restrictions

- **Maximum Application Rate:** 8.0 fl oz product/A (0.0264 lb ai/A)
- **DO NOT** apply more than 4 applications per year.
- **Minimum Retreatment Interval (RTI):** 7 days
- **DO NOT** exceed a maximum of 0.1056 lb ai per acre per year.
- **DO NOT** apply within 14 days of harvest.
- **NEW YORK: DO NOT** apply more than 16 fl oz product/acre per year. **DO NOT** exceed 0.0528 lb ai/acre per year.

Berry, Low Growing (Subgroup 13-07G)

bearberry; bilberry; blueberry, lowbush; cloudberry; cranberry; lingonberry; muntries; partridgeberry; strawberry; cultivars, varieties, and/or hybrids of these

Target Disease	Application Rate fl oz product/A (lb ai/A)	PHI
<i>P. aphanis</i> (powdery mildew)	6.0 (0.0198) to 8.0 (0.0264)	0

(*continued*)

Berry, Low Growing (Subgroup 13-07G) (<i>continued</i>)
Directions
<ul style="list-style-type: none">• Apply by air using a minimum of 10 gallons of water per acre.• Apply by ground using water volumes of 50 to 200 gallons per acre for sprays.• Repeat applications at 7 to 14- day intervals, depending on disease pressure.• Apply to foliage during the fruiting stage using broadcast ground equipment or by air.
Restrictions
<ul style="list-style-type: none">• Maximum Application Rate: 8.0 fl oz product/A (0.0264 lb ai/A)• DO NOT apply more than 5 applications per year.• Minimum Retreatment Interval (RTI): 7 days• DO NOT exceed a maximum of 0.132 lb ai per acre per year.• Crop can be harvested after the product has dried.• NEW YORK: DO NOT apply more than 16 fl oz product/acre per year. DO NOT exceed 0.0528 lb ai/acre per year.

Cherry (Subgroup 12-12A)

capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; cultivars, varieties, and/or hybrids of these

Target Disease	Application Rate fl oz product/A (lb ai/A)	PHI
<i>P. clandestina</i> (powdery mildew)	6.0 (0.0198) to 8.0 (0.0264)	3
Directions		
<ul style="list-style-type: none">• Apply by air using a minimum of 10 gallons of water per acre.• Apply by ground using water volumes of 30 to 100 gallons per acre for concentrate sprays and 101 to 300 gallons per acre for dilute sprays.• Repeat applications at 7 to 14- day intervals, depending on disease pressure.• Apply to foliage during the fruiting stage using airblast ground equipment or by air.		

(continued)

Cherry (Subgroup 12-12A) (continued)

Restrictions

- **Maximum Application Rate:** 8.0 fl oz product/A (0.0264 lb ai/A)
- **DO NOT** apply more than 4 applications per year.
- **Minimum Retreatment Interval (RTI):** 7 days
- **DO NOT** exceed a maximum of 0.1056 lb ai per acre per year.
- **DO NOT** apply within 3 days of harvest.
- **NEW YORK: DO NOT** apply more than 16 fl oz product/acre per year. **DO NOT** exceed 0.0528 lb ai/acre per year.

Hops

Target Disease	Application Rate fl oz product/A (lb ai/A)	PHI
<i>P. macularis</i> (powdery mildew)	6.0 (0.0198) to 8.0 (0.0264)	7

(continued)

Hops (*continued*)

Directions

- Apply by air using a minimum of 10 gallons of water per acre.
- Apply by ground using water volumes of 50 to 200 gallons per acre for sprays.
- Repeat applications at 7 to 14-day intervals, depending on disease pressure.
- Apply to foliage during the fruiting stage using broadcast ground equipment or by air.

Restrictions

- **Maximum Application Rate:** 8.0 fl oz product/A (0.0264 lb ai/A)
- **DO NOT** apply more than 4 applications per year.
- **Minimum Retreatment Interval (RTI):** 7 days
- **DO NOT** exceed a maximum of 0.1056 lb ai per acre per year.
- **NEW YORK: DO NOT** apply more than 16 fl oz product/acre per year. **DO NOT** exceed 0.0528 lb ai/acre per year.

Melon (Subgroup 9A); Squash/Cucumber (Subgroup 9B)

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*)

Target Disease	Application Rate fl oz product/A (lb ai/A)	PHI
<i>G. cichoracearum</i> (powdery mildew)	6.0 (0.0198) to 8.0 (0.0264)	0

(continued)

Melon (Subgroup 9A); Squash/Cucumber (Subgroup 9B)
(continued)

Directions

- Apply by air using a minimum of 5 gallons of water per acre.
- Apply by ground using water volumes of 30 to 100 gallons per acre for sprays.
- Repeat applications at 7 to 14- day intervals, depending on disease pressure.
- Apply to foliage during seedling to the fruiting stage using broadcast ground equipment or by air.

Restrictions

- **Maximum Application Rate:** 8.0 fl oz product/A (0.0264 lb ai/A)
- **DO NOT** apply more than 5 applications during each growing season.
- **Minimum Retreatment Interval (RTI):** 7 days
- Maximum of two growing seasons per year.
- **DO NOT** exceed a maximum of 0.20 lb ai per acre per year.
- Crop can be harvested after product has dried.
- **NEW YORK: DO NOT** apply more than 16 fl oz product/acre per year. **DO NOT** exceed 0.0528 lb ai/acre per year.

**Small Fruit Vine Climbing, Except Fuzzy Kiwifruit
(Subgroup 13-07F)**

Amur River grape; gooseberry; grape; kiwifruit, hardy; Maypop; schisandra berry; cultivars, varieties, and/or hybrids of these

Target Disease	Application Rate fl oz product/A (lb ai/A)	PHI
<i>E. necator</i> (powdery mildew)	6.4 (0.0211)	14

Directions

- Apply by air using a minimum of 10 gallons of water per acre.
- Apply by ground using water volumes of 20 to 100 gallons per acre for **concentrate** sprays and 101 to 400 gallons per acre for **dilute** sprays.
- Repeat applications at 7 to 14- day intervals, depending on disease pressure.
- Apply to foliage during the fruiting stage using airblast ground equipment or by air.

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**Small Fruit Vine Climbing, Except Fuzzy Kiwifruit
(Subgroup 13-07F) (continued)**

Restrictions

- **Maximum Application Rate:** 6.4 fl oz product/A (0.0211 lb ai/A)
- **DO NOT** apply more than 4 applications per year.
- **Minimum Retreatment Interval (RTI):** 7 days
- **DO NOT** exceed a maximum of 0.0844 lb ai per acre per year.
- **DO NOT** apply within 14 days of harvest.
- **NEW YORK: DO NOT** apply more than 16 fl oz product/acre per year. **DO NOT** exceed 0.0528 lb ai/acre per year.

STORAGE AND DISPOSAL

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

STORAGE: Store product in a secure dry, cool, and well ventilated place. Store product in original container. **DO NOT** store for prolonged periods in direct sunlight.

PESTICIDE DISPOSAL: Pesticide wastes may be hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING: Nonrefillable container. **DO NOT** reuse or refill this container. Clean container promptly after emptying. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available, or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill or by incineration.

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 Nichino America, Inc. (NAI), it is impossible for NAI 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 NAI is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, NAI 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. **LIMITATIONS OF LIABILITY:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES, OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT THE ELECTION OF NICHINO AMERICA, THE REPLACEMENT OF PRODUCT.

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Product of Japan

Manufactured by OAT Agrio Co., Ltd.

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