

2022-3007
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GROUP	U 13	FUNGICIDE
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GATTEN®
Fungicide
Emulsifiable Concentrate

For control of powdery mildew on cherries (Crop Subgroup 12-09A); cucurbit vegetables (Crop Group 9);
and grape.

COMMERCIAL (AGRICULTURAL)

ACTIVE INGREDIENT: Flutianil.....50.7 g/L

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**WARNING – EYE AND SKIN IRRITANT
POTENTIAL SKIN SENSITIZER**

REGISTRATION NO. 34297 PEST CONTROL PRODUCTS ACT

READ THE LABEL BEFORE USING

KEEP OUT OF REACH OF CHILDREN

NET CONTENTS: 0.5 L – 1000 L

Manufactured [by/for] OAT Agrio Co., Ltd.	
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1. GENERAL INFORMATION

GATTEN® is a fungicide for controlling certain species of powdery mildew on cherries (Crop Subgroup 12-09A); cucurbit vegetables (Crop Group 9); and grape.

FOR OUTDOOR USE ONLY.

2. 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 Product Act to use this product in a way that is inconsistent with the directions on the label.

3. PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN

WARNING: Causes eye irritation. **DO NOT** get in eyes. May irritate the skin. Avoid contact with skin. 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.

Apply only to agricultural crops when the potential for drift to areas of human habitation and human activity, such as houses, cottages, schools and recreational areas, is minimal. Take into consideration wind speed, wind direction temperature inversions, application equipment, and sprayer settings.

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. In addition, wear protective eyewear (goggles or faceshield) during mixing and loading. Gloves and protective eyewear are not required during application within a closed cab.

Follow the manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

DO NOT apply via chemigation.

DO NOT apply by air.

DO NOT apply in greenhouses.

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

User Safety Recommendations

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

Users should 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.

Re-entry Restrictions

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

4. FIRST AID

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. Call a poison control centre or doctor for treatment advice.

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 by a poison control centre or doctor. DO NOT give anything 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 mouth-to-mouth if possible. Call a poison control centre or doctor for further treatment advice.

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

5. TOXICOLOGICAL INFORMATION

Treat symptomatically.

6. ENVIRONMENTAL PRECAUTIONS

Toxic to aquatic organisms and non-target terrestrial plants. Observe spray buffer zones specified under DIRECTIONS FOR USE.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative filter strip between the treated area and the edge of the water body.

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.

7. 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.

Store this product away from food or feed.

8. DISPOSAL

For recyclable containers:

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 returnable containers:

DO NOT reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

For containers that can be refilled for the user by the distributor/dealer:

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. DO NOT reuse this container for any other purpose.

Disposal of unused, unwanted product:

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

9. DIRECTIONS FOR USE

DO NOT apply this product in a way that will contact workers or other persons, or pets either directly or through drift.

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

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

Use Information

GATTEN® is a fungicide for control of certain species of powdery mildew on the following specified agricultural crops: cherries (Crop Subgroup 12-09A); cucurbit vegetables (Crop Group 9); and grape. 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 that reduce unnecessary applications of pesticides.

Flutianil, the active ingredient in GATTEN®, is a 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.

GATTEN® can be used effectively in dilute or concentrate sprays. Thorough, uniform coverage is essential for disease control. Apply via the following ground application methods: airblast broadcast and ground boom broadcast. Aerial application is prohibited. Use airblast broadcast for cherries (Crop Subgroup 12-09A) and grape. Use groundboom broadcast for cucurbit vegetables (Crop Group 9).

Directions for Ground 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 recommended under high disease pressure. For application, determine the number of hectares to be treated, the specified label use rate, and the spray volume per hectare. Prepare only the amount of spray solution that is necessary to spray the measured hectare. 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 hectare, nozzle type and spacing and application equipment speed. Calibrate spray equipment prior to use.

Field sprayer application: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) fine classification. Boom height must be 60 cm or less above the crop or ground.

Airblast application: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT direct spray above plants to be treated. Turn off outward pointing nozzles at row ends and outer rows. DO NOT apply when wind speed is greater than 16 km/h at the application site as measured outside of the treatment area on the upwind side.

Row Crops

Apply a minimum finished spray volume of 187 L per hectare by ground unless otherwise directed under crop specific directions. For best results, it is important to obtain thorough and uniform spray coverage of the plant.

To clean the sprayer after use, drain and flush with water. Use rinsate on crop according to label instructions or dispose of in an approved manner (See STORAGE AND DISPOSAL).

Orchard and Vine Crops

To achieve optimum disease control, it is important to obtain thorough and uniform spray coverage. Choose a finished spray volume appropriate for the size of tree or vine and amount of foliage which will provide thorough coverage throughout the canopy. Follow directions listed under crop specific directions.

To clean the sprayer after use, drain and flush with water. Use rinsate on crop according to label instructions or dispose of in an approved manner (See STORAGE AND DISPOSAL).

Restrictions

DO NOT apply via chemigation.

DO NOT apply by air.

DO NOT apply in greenhouses.

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

Rotational Crops Directions

Cucurbit vegetables may be planted immediately after the last application. For all other crops except for registered crops, **DO NOT** plant within 12 months after the last application.

Spray Drift Directions

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

Spray Buffer Zones

A spray buffer zone is NOT required for uses with hand-held application equipment permitted on this label.

The spray buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands) and sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands).

Method of application	Crop		Spray Buffer Zones (metres) Required for the Protection of:		
			Freshwater Habitat of Depths:		Terrestrial Habitat:
			Less than 1 m	Greater than 1 m	
Field sprayer	Cucurbit vegetables		10	1	1
Airblast	Cherries and small fruit, vine climbing, except fuzzy kiwifruit	Early growth stage	25	3	3
		Late growth stage	15	2	2

When tank mixes are permitted, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

The spray buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Spray Buffer Zone Calculator on the Pesticides portion of the Canada.ca website.

Resistance-Management Recommendations

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. Other resistance mechanisms that are not linked to site of action but are specific for individual chemicals, such as enhanced metabolism, may also develop. Appropriate resistance-management strategies should be followed.

To delay fungicide resistance, take one or more of the following steps:

- Where possible, rotate the use of GATTEN® or other Group U13 fungicides with different groups that control the same pathogens.
- Use tank mixtures with fungicides from different groups that are effective on the target pathogen when such use is permitted.
- Fungicide use should be based on an integrated disease management program that includes scouting, historical information related to pesticide use and crop rotation and 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.
- Monitor treated fungal populations for resistance development. Notify OAT Agrico Co., Ltd. if reduced sensitivity of the pathogen to GATTEN® is suspected.

- If disease continues to progress after treatment with this product, **DO NOT** increase the use rate. Discontinue use of this product, and switch to another fungicide with a different site of action, if available.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens.

For further information and to report suspected resistance, contact OAT Agrio Co., Ltd. company representatives at 1-800-526-3471 or www.oat-agrio.co.jp/en/.

10. DIRECTIONS FOR APPLICATION

Crop	PHI (Days)	Target Diseases	Application Rate mL product /ha (g a.i./ha)	Directions	Restrictions
Cherries (Crop Subgroup 12-09A) including: Capulin Cherry, black Cherry, Nanking Cherry, sweet Cherry, tart Cultivars, varieties, and/or hybrids of these	3	Powdery mildew <i>(Podosphaera clandestina)</i>	400 – 690 (20 – 35)	Use water volumes of 280 to 935 litres per hectare for concentrate sprays and 936 to 2800 litres per hectare for dilute sprays. Repeat applications at 7- to 14-day intervals. Within the stated ranges, use a higher rate and shorter interval under conditions that are conducive to high disease pressure. Apply to foliage during the fruiting stage using airblast ground equipment.	DO NOT apply more than 4 applications per year. DO NOT exceed a maximum of 140 g a.i. per hectare per year.

Crop	PHI (Days)	Target Diseases	Application Rate mL product /ha (g a.i./ha)	Directions	Restrictions
<p>Cucurbit vegetables (Crop Group 9) including:</p> <p>All types and hybrids of:</p> <p>Chayote Chinese waxgourd Citron melon Cucumber Gherkin Gourd, edible: Chinese okra Cucuzza Hechima Hyotan <i>Momordica</i> spp. Balsam apple Balsam pear Bitter melon Chinese cucumber Muskmelon Cantaloupe Casaba Crenshaw melon Golden pershaw melon Honeydew melon Honey balls Mango melon Persian melon Pineapple melon Santa Claus melon Snake melon Pumpkin Squash, summer Crookneck squash Scallop squash Straightneck squash Vegetable marrow Zucchini Squash, winter Acorn squash Butternut squash Calabaza Hubbard squash Spaghetti squash Watermelon</p>	0	Powdery mildew (<i>Sphaerotheca fuliginea</i> syn. <i>Podosphaera xanthii</i>)	400 – 690 (20 – 35)	Use water volumes of 280 to 935 litres per hectare for sprays. Repeat applications at 7- to 14-day intervals. Within the stated ranges, use a higher rate and shorter interval under conditions that are conducive to high disease pressure. Apply to foliage during seedling to the fruiting stage using broadcast ground equipment.	<p>DO NOT apply more than 5 applications per year.</p> <p>DO NOT exceed a maximum of 175 g a.i. per hectare per year.</p>

Crop	PHI (Days)	Target Diseases	Application Rate mL product /ha (g a.i./ha)	Directions	Restrictions
Grape	14	Powdery mildew (<i>Erysiphe necator</i>)	400 – 690 (20 – 35)	Use water volumes of 187 to 935 litres per hectare for concentrate sprays and 936 to 3740 litres per hectare for dilute sprays. Repeat applications at 7- to 14-day intervals. Within the stated ranges, use a higher rate and shorter interval under conditions that are conducive to high disease pressure. Apply to foliage during the fruiting stage using airblast ground equipment.	DO NOT apply more than 4 applications per year. DO NOT exceed a maximum of 140 g a.i. per hectare per year.