

# Wrath

## INSECTICIDE

### ACTIVE INGREDIENT:

|                     |        |
|---------------------|--------|
| Geraniol.....       | 30.00% |
| Peppermint oil..... | 1.00%  |
| Cottonseed oil..... | 0.10%  |
| Rosemary oil.....   | 0.01%  |

**OTHER INGREDIENTS:\*** ..... 68.89%

**TOTAL:**..... 100.00%

\*Canola oil, Water

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

**ENVIRONMENTALLY SAFE**  
When Used as Directed

**NET CONTENTS: ■ 2.5 Gal (9.5 L)**

This product has not been registered by the United States Environmental Protection Agency. GroPro represents that this product qualifies for exemption from registration under FIFRA.)

**How can we help?**  
**1-833-476-7761**

MANUFACTURED BY:



12600 West Frontage Road,  
Burnsville MN 55337  
Phone: 1-833-476-7761  
[www.groproag.com](http://www.groproag.com)

# AGRI LINE



## PRECAUTIONARY STATEMENTS

- Do not get in eyes, on skin or on clothing.
- Wash hands, forearms, and other exposed areas thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Do not breathe vapors, mist, or spray.

### 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 eye.
- Call a poison control center or doctor for further treatment advice.

#### IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Have a person sip a glass of water if able to swallow.
- **Do not** induce vomiting unless told to do so by the poison control center or doctor.
- **Do not** give anything to an unconscious person.

#### 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 center or doctor for further treatment advice.

#### IF ON SKIN OR CLOTHING:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for further treatment advice.

## POISONING HOTLINE

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

## ENVIRONMENTAL HAZARDS

**DO NOT** apply directly to water, areas where surface water is present, or intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwater or rinsate.

### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in original containers only. Keep container closed when not in use. **DO NOT** store near food or feed.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. If these wastes cannot be disposed of according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representatives at the nearest EPA Regional Office for guidance.

**CONTAINER HANDLING:** Nonrefillable container. **Do not** reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

**Triple rinse containers small enough to shake (capacity  $\leq$  5 gallons) 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.

**Pressure rinse as follows:** Empty the remaining contents into application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

## IN CASE OF EMERGENCY

In case of large-scale spill of this product, call:

- CHEMTREC
- 1-800-424-9300

In case of medical emergency regarding this product, call:

- Your local doctor for immediate treatment
- Your local poison control center (hospital)

Steps to take if this material is released or spilled:

- In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to label.
- Dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal.
- Remove contaminated clothing and wash affected skin areas with soap and water.
- Wash clothing before reuse.
- Keep the spill out of all sewers and open bodies of water.

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## PRODUCT INFORMATION

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WRATH® miticide is an oil based concentrate formulation containing the various active ingredients that are natural, and classified as essential oil class of chemistry. When used as directed, WRATH® provides knockdown and residual control of soft body insects on the crops listed on this label. WRATH® is a highly active contact insecticide on egg, nymph, and adult stage soft body insects. Because WRATH® is not systemic and has no translaminar activity, thorough coverage of plant surfaces is necessary for effective control. See Pests Controlled list for insects controlled.

WRATH® insecticide is compatible with other chemicals but a tank compatibility test is suggested as GROPRO has not been able to test every tank mix on the market.

**WRATH® is not systemic or translaminar; therefore, thorough coverage of plant surfaces is important for optimum performance.**

## **RESISTANCE MANAGEMENT**

Geraniol, the main active ingredient in WRATH®, belongs to the group of essential oils classified as a FIFRA 25B exempt material. Repeated use of insecticides with similar modes of action can lead to the buildup of resistant strains of insects.

No known resistance is known to the essential oil class but to reduce the potential for developing resistance, rotate to an insecticide with a different mode of action. Monitor treated insect populations for resistance development. Read product label before applying any insecticide and follow label directions. Contact your local extension specialist, certified crop advisor, and/or GROPRO representative for additional resistance management or IPM recommendations.

## **PLANT TOLERANCE**

Plant tolerance to WRATH® has been found to be acceptable in research trials for the crops listed on this label. However, due to the large number of plant species and their associated varieties or cultivars, and due to variable growing conditions, it is impossible to test every plant for tolerance to this product.

Neither the manufacturer or seller has determined whether this product can be used without injury on all varieties of plants. It is the responsibility of the user to determine if this product can be used without causing plant injury prior to commercial use. In a small test area, test the specified rates on plants for phytotoxicity prior to large-scale use. The end user assumes all risks arising from application of WRATH® in a manner inconsistent with the label requirements.

## PESTS CONTROLLED

When used according to label instructions, WRATH® is effective in controlling the following insects:

| COMMON NAME                    |                  |
|--------------------------------|------------------|
| Thrips                         | Leafhopper       |
| Aphids                         | Wireworm         |
| Mites                          | Fruitworm        |
| Whiteflies                     | Scale            |
| Caterpillars                   | Moth             |
| Cutworm                        | Earwig           |
| Leafroller                     | Psyllid          |
| Orange Tortrix                 | Lygus Instars    |
| Sharpshooter                   | Maggot           |
| Mealybug                       | Leaffooted bug   |
| Western Grapeleaf Skeletonizer | Orangeworm       |
| Plus More..                    | Stinkbug instars |

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## APPLICATION INSTRUCTIONS

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For maximum effectiveness, apply WRATH® at the first sign of mites before the population increases. Application should be timed to coincide with locally recommended treatment threshold levels in developing mite populations.

Apply to foliage using properly calibrated ground sprayers (refer to Crop-specific Application Instructions table). Thorough and uniform spray coverage of foliage, with direct contact to target pest, is required for effective control. Applications made at lower volumes may result in less than thorough coverage which can lead to slower activity and/or less control than those made with higher spray volumes. Consult with your local or state extension personnel for advice on insecticide use and selection.

Apply WRATH® in sufficient volume of water to ensure thorough coverage of foliage. For thorough coverage, use higher water volume.

Apply WRATH® in minimum water volume per acre as indicated in Crop-specific Application Instructions table. Because WRATH® is not systemic or translaminar, thorough coverage of plant surfaces is necessary for effective control. Applying WRATH® at spray volumes lower than directed can make it harder to obtain thorough crop coverage and may reduce performance.

### CONTROLLING SPRAY DRIFT

**Variable Winds.** DO NOT apply in variable wind conditions.

**Wind Direction.** Wind direction (e.g. away from nontarget areas) must be based on the average direction (not instantaneous).

**Wind Speed.** Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy, and equipment specifications determine drift potential at any given wind speed. DO NOT apply when winds are greater than 15 mph.

**Inversion Restriction.** DO NOT make applications during temperature inversions. Drift potential is high during temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light-to-no wind.

**Sensitive Areas.** To ensure the protection of threatened or endangered species, it is important to maintain spray drift loadings below levels of concern for any area adjacent to the application site that is not excluded as possible habitat for these organisms. The following restrictions apply:

- **Buffer distance - 15 feet**
- **Release height - 20 inches**
- **Droplet size** - A combination of spray nozzles and appropriate pressure must be selected to provide ASABE standard S571.1 droplet size category of fine (DV0.5 of  $\geq 180$  microns) or coarser than fine.
- **Maximum wind speed - 15 mph**

## **CLEANING SPRAY EQUIPMENT**

Before application, start with clean, well-maintained application equipment. Following spray application, thoroughly clean all application equipment. Drain application equipment of any excess product. Thoroughly rinse application equipment and flush hoses, boom, and nozzles with clean water. Clean all other associated application equipment. Take all necessary safety precautions when cleaning equipment. **DO NOT** clean equipment near wells, water sources, or desirable vegetation. Dispose of waste rinsewater in accordance with local regulations. Spraying equipment must be cleaned thoroughly before and after applying this product, particularly if a product with the potential to injure crops was used before WRATH® Insecticide.

## **ADDITIVES AND TANK MIXING INFORMATION**

Shake container well before use. WRATH® can be tank mixed with most recommended fungicides, insecticides, liquid fertilizers, biological control products, adjuvants, and additives. The use of additives or adjuvants can improve the performance of WRATH®. However, all varieties and cultivars have not been tested with all possible tank mix combinations. Local conditions can also influence crop tolerance and may not match those under which GROPRO has conducted testing. Physical incompatibility, reduced disease control, or crop injury can result from mixing WRATH® with other products.

Before using any tank mix (fungicides, insecticides, liquid fertilizers, biological control products, adjuvants, and additives), test the combination on a small portion of the crop to be treated (including plant cultivars) to ensure that a phytotoxic response will not occur as a result of application. Evaluate for crop response 3 to 7 days before making an application to the entire crop.

When an adjuvant is to be used with this product, GROPRO recommends the use of a Chemical Producers and Distributors Association certified adjuvant.

Consult a GROPRO representative or local agricultural authorities for more information concerning additives.



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## MIXING ORDER

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1. Water - Begin by agitating a thoroughly clean sprayer tank  $\frac{3}{4}$  full of clean water.
2. Agitation - Maintain constant agitation throughout mixing and application.
3. Inductor - If an inductor is used, rinse it thoroughly after each component has been added.
4. Products in PVA bags - Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
5. Essential Oil products (such as WRATH®)
6. Water-soluble products
7. Water-soluble additives (such as AMS or UAN when applicable)
8. Remaining quantity of water - Make sure each component is thoroughly mixed and suspended before adding tank mix partners. Maintain constant agitation during application.

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## RESTRICTIONS AND LIMITATIONS

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- **DO NOT** apply if rain is expected before the spray is dry for 1 hour. WRATH® is rainfast 1 hour after drying.

## CROP-SPECIFIC APPLICATION INSTRUCTIONS

| CROP  | PEST   | RATE FL OZ<br>PER ACRE | MINIMUM TIME FROM<br>APPLICATION TO<br>HARVEST (PHI) DAYS |
|---|--|------------------------|---|
| <b>Citrus Fruit Group</b><br>Calamondin<br>Citrus citron<br>Citrus hybrids<br>Chironja<br>Grapefruit<br>Kumquat<br>Lemon<br>Lime<br>Mandarin orange<br>(sour and sweet)<br>Pummelo<br>Satsuma<br>Tangelo<br>Tangerine<br>Tangor | See Pests Controlled<br>under Product<br>Information section | 22 to 48               | 0   |

For knockdown and residual control of soft body insects, apply WRATH® Insecticide at first sign of infestation.

**DO NOT** make WRATH® applications at intervals longer than 14 days.

For maximum effectiveness, apply WRATH® at the first sign of insects, and before the population increases. Application should be timed to coincide with locally recommended treatment threshold levels in developing insect populations.

Apply WRATH® in at least 100 gallons of spray solution per acre; for small nonbearing trees, apply in at least 50 gallons of spray solution per acre. Applying WRATH® at spray volumes lower than directed can make it harder to obtain thorough crop coverage and may reduce performance.

## CROP-SPECIFIC APPLICATION INSTRUCTIONS (continued)

| CROP                         | PEST   | RATE FL OZ<br>PER ACRE | MINIMUM TIME FROM<br>APPLICATION TO<br>HARVEST (PHI) DAYS |
|------------------------------|--|------------------------|---|
| Vine Crops<br>Grapes<br>Kiwi | See Pests Controlled<br>under Product<br>Information section | 23.5 to 48             | 0   |

For knockdown and residual control of soft body insects, apply WRATH® Insecticide at first sign of infestation.

**DO NOT** make WRATH® applications at intervals longer than 14 days.

For maximum effectiveness, apply WRATH® at the first sign of insects, and before the population increases. Application should be timed to coincide with locally recommended treatment threshold levels in developing insect populations.

Apply WRATH® in at least 50 gallons of spray solution per acre. Applying WRATH® at spray volumes lower than directed can make it harder to obtain thorough crop coverage and may reduce performance.

## CROP-SPECIFIC APPLICATION INSTRUCTIONS (continued)

| CROP   | PEST   | RATE FL OZ<br>PER ACRE | MINIMUM TIME FROM<br>APPLICATION TO<br>HARVEST (PHI) DAYS |
|--|--|------------------------|---|
| <b>Root and Tubers</b><br>Potato<br>Yam<br>Carrot<br>Beetroot<br>Radish<br>Tapioca<br>Dioscorea<br>Colocasia   | See Pests Controlled<br>under Product<br>Information section | 22 to 48               | 0   |
| <p>For knockdown and residual control of soft body insects, apply WRATH® Insecticide at first sign of infestation.</p> <p><b>DO NOT</b> make WRATH® applications at intervals longer than 14 days.</p> <p>For maximum effectiveness, apply WRATH® at the first sign of insects, and before the population increases. Application should be timed to coincide with locally recommended treatment threshold levels in developing insect populations.</p> <p>Apply WRATH® in at least 100 gallons of spray solution per acre; for small nonbearing trees, apply in at least 50 gallons of spray solution per acre. Applying WRATH® at spray volumes lower than directed can make it harder to obtain thorough crop coverage and may reduce performance.</p> |  |                        |   |

## CROP-SPECIFIC APPLICATION INSTRUCTIONS (continued)

| CROP   | PEST   | RATE FL OZ<br>PER ACRE | MINIMUM TIME FROM<br>APPLICATION TO<br>HARVEST (PHI) DAYS |
|--|--|------------------------|---|
| <b>Pome Fruit Group</b><br>Apple<br>Crabapple<br>Loquat<br>Mayhaw<br>Oriental pear<br>Pear<br>Quince | See Pests Controlled<br>under Product<br>Information section | 20 to 48               | 0   |

For knockdown and residual control of soft body insects, apply WRATH® Insecticide at first sign of infestation.

**DO NOT** make WRATH® applications at intervals longer than 14 days.

For maximum effectiveness, apply WRATH® at the first sign of insects, and before the population increases. Application should be timed to coincide with locally recommended treatment threshold levels in developing insect populations.

Apply WRATH® in at least 50 gallons of spray solution per acre. Applying WRATH® at spray volumes lower than directed can make it harder to obtain thorough crop coverage and may reduce performance.

## CROP-SPECIFIC APPLICATION INSTRUCTIONS (continued)

| CROP   | PEST   | RATE FL OZ<br>PER ACRE | MINIMUM TIME FROM<br>APPLICATION TO<br>HARVEST (PHI) DAYS |
|--|--|------------------------|---|
| <b>Berry Crops</b><br>Strawberry<br>Blackberry<br>Blueberry<br>Raspberry | See Pests Controlled<br>under Product<br>Information section | 18 to 48               | 0   |

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For maximum effectiveness, apply WRATH® at the first sign of insects, and before the population increases. Application should be timed to coincide with locally recommended treatment threshold levels in developing insect populations.

Apply WRATH® in enough water for proper coverage. Applying WRATH® at spray volumes lower than directed can make it harder to obtain thorough crop coverage and may reduce performance.

## CROP-SPECIFIC APPLICATION INSTRUCTIONS (continued)

| CROP   | PEST   | RATE FL OZ<br>PER ACRE | MINIMUM TIME FROM<br>APPLICATION TO<br>HARVEST (PHI) DAYS |
|--|--|------------------------|---|
| Tomato (all varieties<br>including tomato and<br>tomatillo)<br>Pepper (all varieties<br>including pimento and<br>bell, hot and sweet<br>peppers) | See Pests Controlled<br>under Product<br>Information section | 18 to 48               | 0   |

For knockdown and residual control of soft body insects, apply WRATH® Insecticide at first sign of infestation.

**DO NOT** make WRATH® applications at intervals longer than 14 days.

For maximum effectiveness, apply WRATH® at the first sign of insects, and before the population increases. Application should be timed to coincide with locally recommended treatment threshold levels in developing insect populations.

Apply WRATH® in enough water for proper coverage. Applying WRATH® at spray volumes lower than directed can make it harder to obtain thorough crop coverage and may reduce performance.

## CROP-SPECIFIC APPLICATION INSTRUCTIONS (continued)

| CROP  | PEST   | RATE FL OZ PER ACRE | MINIMUM TIME FROM APPLICATION TO HARVEST (PHI) DAYS |
|---|--|---------------------|---|
| <b>Tree Nuts Group</b><br>Almond<br>Beech nut<br>Brazil nut<br>Butternut<br>Cashew<br>Chestnut<br>Chinquapin<br>Filbert<br>Hickory nut<br>Macadamia nut<br>Pecan<br>Pistachio<br>Walnut (black and English) | See Pests Controlled under Product Information section | 25 to 48            | 0   |

For knockdown and residual control of soft body insects, apply WRATH® Insecticide at first sign of infestation.

**DO NOT** make WRATH® applications at intervals longer than 14 days.

For maximum effectiveness, apply WRATH® at the first sign of insects, and before the population increases. Application should be timed to coincide with locally recommended treatment threshold levels in developing insect populations.

Apply WRATH® in enough water for proper coverage; for small nonbearing trees, apply in at least 50 gallons of spray solution per acre. Applying WRATH® at spray volumes lower than directed can make it harder to obtain thorough crop coverage and may reduce performance.



## CROP-SPECIFIC APPLICATION INSTRUCTIONS (continued)

| CROP   | PEST   | RATE FL OZ<br>PER ACRE | MINIMUM TIME FROM<br>APPLICATION TO<br>HARVEST (PHI) DAYS |
|--|--|------------------------|---|
| Cucumber<br>Cantaloupe<br>Crenshaw<br>Pershaw<br>Honeydew<br>Honey Ball<br>Mango Melon<br>Persian Melon<br>Gourds<br>Gherkin<br>Muskmelon<br>Santa Claus Melon<br>Watermelon<br>Casaba<br>Snake Melon<br>Pumpkin<br>Zucchini<br>Okra<br>Squash | See Pests Controlled<br>under Product<br>Information section | 25 to 48               | 0   |

For knockdown and residual control of soft body insects, apply WRATH® Insecticide at first sign of infestation.

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For maximum effectiveness, apply WRATH® at the first sign of insects, and before the population increases. Application should be timed to coincide with locally recommended treatment threshold levels in developing insect populations.

Apply WRATH® in enough water for proper coverage. Applying WRATH® at spray volumes lower than directed can make it harder to obtain thorough crop coverage and may reduce performance.

## CROP-SPECIFIC APPLICATION INSTRUCTIONS (continued)

| CROP   | PEST   | RATE FL OZ<br>PER ACRE | MINIMUM TIME FROM<br>APPLICATION TO<br>HARVEST (PHI) DAYS |
|--|--|------------------------|---|
| Onion<br>Bulb Onion<br>Okra<br>Shallot<br>Ramp<br>Garlic | See Pests Controlled<br>under Product<br>Information section | 23.5 to 48             | 0   |

For knockdown and residual control of soft body insects, apply WRATH® Insecticide at first sign of infestation.

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For maximum effectiveness, apply WRATH® at the first sign of insects, and before the population increases. Application should be timed to coincide with locally recommended treatment threshold levels in developing insect populations.

Apply WRATH® in enough water for proper coverage. Applying WRATH® at spray volumes lower than directed can make it harder to obtain thorough crop coverage and may reduce performance.

## CROP-SPECIFIC APPLICATION INSTRUCTIONS (continued)

| CROP  | PEST   | RATE FL OZ<br>PER ACRE | MINIMUM TIME FROM<br>APPLICATION TO<br>HARVEST (PHI) DAYS |
|---|--|------------------------|---|
| Broccoli<br>Brussels Sprouts<br>Cabbage<br>Cauliflower<br>Mustard<br>Kohlrabi<br>Asparagus<br>Artichoke | See Pests Controlled<br>under Product<br>Information section | 20 to 48               | 0   |

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## CROP-SPECIFIC APPLICATION INSTRUCTIONS (continued)

| CROP                         | PEST   | RATE FL OZ<br>PER ACRE | MINIMUM TIME FROM<br>APPLICATION TO<br>HARVEST (PHI) DAYS |
|------------------------------|--|------------------------|---|
| Papaya and<br>Tropical Fruit | See Pests Controlled<br>under Product<br>Information section | 18 to 48               | 0   |

For knockdown and residual control of soft body insects, apply WRATH® Insecticide at first sign of infestation.

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For maximum effectiveness, apply WRATH® at the first sign of insects, and before the population increases. Application should be timed to coincide with locally recommended treatment threshold levels in developing insect populations.

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## CROP-SPECIFIC APPLICATION INSTRUCTIONS (continued)

| CROP  | PEST   | RATE FL OZ<br>PER ACRE | MINIMUM TIME FROM<br>APPLICATION TO<br>HARVEST (PHI) DAYS |
|---|--|------------------------|---|
| Leafy Greens<br>Spinach<br>Lettuces<br>Endive<br>Parsley<br>Radicchio<br>Chard<br>Purslane<br>Dock<br>Dandelion<br>Cilantro<br>Argula<br>Celery<br>Curry Leaf<br>Amaranthus | See Pests Controlled<br>under Product<br>Information section | 20 to 48               | 0   |

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## CROP-SPECIFIC APPLICATION INSTRUCTIONS (continued)

| CROP | PEST   | RATE FL OZ<br>PER ACRE | MINIMUM TIME FROM<br>APPLICATION TO<br>HARVEST (PHI) DAYS |
|------|--|------------------------|---|
| Hops | See Pests Controlled<br>under Product<br>Information section | 25 to 48               | 0   |

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For maximum effectiveness, apply WRATH® at the first sign of insects, and before the population increases. Application should be timed to coincide with locally recommended treatment threshold levels in developing insect populations.

Apply WRATH® in enough water for proper coverage. Applying WRATH® at spray volumes lower than directed can make it harder to obtain thorough crop coverage and may reduce performance.

## CROP-SPECIFIC APPLICATION INSTRUCTIONS (continued)

| CROP   | PEST   | RATE FL OZ<br>PER ACRE | MINIMUM TIME FROM<br>APPLICATION TO<br>HARVEST (PHI) DAYS |
|--|--|------------------------|---|
| <b>Tree Crops</b><br>Plum<br>Peach<br>Pear<br>Apricot<br>Pluot<br>Fig<br>Pomegranate<br>Avocado<br>Prune<br>Nectarine<br>Cherry Sweet<br>Cherry Tart | See Pests Controlled<br>under Product<br>Information section | 22 to 48               | 0   |

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Apply WRATH® in enough water for proper coverage; for small nonbearing trees, apply in at least 50 gallons of spray solution per acre. Applying WRATH® at spray volumes lower than directed can make it harder to obtain thorough crop coverage and may reduce performance.

## CROP-SPECIFIC APPLICATION INSTRUCTIONS (continued)

| CROP   | PEST   | RATE FL OZ<br>PER ACRE | MINIMUM TIME FROM<br>APPLICATION TO<br>HARVEST (PHI) DAYS |
|--|--|------------------------|---|
| Corn<br>Rice<br>Cotton<br>Soybean<br>Wheat<br>Barley<br>Sorghum<br>Alfalfa   | See Pests Controlled<br>under Product<br>Information section | 22 to 48               | 0   |
| <p>For knockdown and residual control of soft body insects, apply WRATH® Insecticide at first sign of infestation.</p> <p><b>DO NOT</b> make WRATH® applications at intervals longer than 14 days.</p> <p>For maximum effectiveness, apply WRATH® at the first sign of insects, and before the population increases. Application should be timed to coincide with locally recommended treatment threshold levels in developing insect populations.</p> <p>Apply WRATH® in enough water for proper coverage; Applying WRATH® at spray volumes lower than directed can make it harder to obtain thorough crop coverage and may reduce performance.</p> |  |                        |   |



## **CONDITIONS OF SALE AND WARRANTY**

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of GROPRO or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

GROPRO warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

**TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, GROPRO MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S EXCLUSIVE REMEDY AND GROPRO EXCLUSIVE LIABILITY, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF THE PRODUCT.**

**TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, GROPRO AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, EXEMPLARY, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.**

GROPRO and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing Conditions of Sale and Warranty which may be varied only by agreement in writing signed by a duly authorized representative of GROPRO.

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For control of mites, aphids, thrips in citrus, grapes, small fruit vine climbing, kiwi, head and stem brassica, hops, leafy greens, pineapples, papaya and tropical fruit, cucurbit vegetables, leafy greens, cherries, pome fruits, strawberries, tomatoes, and tree nuts.

#### CHEMIGATION General Requirements

1. Apply this product only through a drip system or sprinkler, including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, hand move, flood (basin), furrow, border or drip (trickle) irrigation systems. Do not apply this product through any other type of irrigation system.
2. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from the non-uniform distribution of treated water.
3. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.
4. Only connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system if the pesticide label-prescribed safety devices for public water systems are in place.
5. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

#### Specific Requirements for Chemigation Systems Connected to Public Water Systems

1. Public water system means providing piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ), or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank before pesticide introduction.

There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the reservoir tank's top or overflow rim of at least twice the inside diameter of the fill pipe.

3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent fluid flow back toward the injection pump.

4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials compatible with pesticides and capable of filling with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for

#### Specific Requirements for Flood (Basin), Furrow, and Border Chemigation

1. Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity, such as a drop structure or weir box, to decrease the potential for water source contamination from backflow if water flow stops.
2. The systems utilizing a pressurized water and pesticide injection system must meet the following requirements:
  - a. The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
  - b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent fluid flow back toward the injection pump.
  - c. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either water and then adding the product as needed.
  - d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
  - e. The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
  - f. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials compatible with pesticides and capable of being fitted with a system interlock.

### Specific Requirements for Drip (Trickle) Chemigation

1. The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent fluid flow back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials compatible with pesticides and capable of being fitted with a system interlock.

### Application Instructions for All Types of Chemigation

1. Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and the injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues, may cause the product to lose effectiveness or strength.
2. Determine the treatment rates as indicated in the directions for use and make proper dilutions. The product can be applied continuously or at any time during the water application.
3. Prepare a solution in the chemical tank by filling the tank with the required water and then adding the product as needed.

### SOIL TREATMENT USE DIRECTIONS

WRATH can be applied by soil drench, in-furrow spray, or soil injection to improve plant health and protect against certain soil-borne insects. In general, WRATH can be used by Sprinkler (pivot, solid set, micro, and wheel run), Flood (using slow feed applicator) or Drip applications at 64-128 fluid ounces per 0.1.

# Wrath

## INSECTICIDE

### ACTIVE INGREDIENT:

|                     |        |
|---------------------|--------|
| Geraniol.....       | 30.00% |
| Peppermint oil..... | 1.00%  |
| Cottonseed oil..... | 0.10%  |
| Rosemary oil.....   | 0.01%  |

**OTHER INGREDIENTS:\***..... 68.89%

**TOTAL:**..... 100.00%

\*Canola oil, Water

This product has not been registered by the United States Environmental Protection Agency. GroPro represents that this product qualifies for exemption from registration under FIFRA.

**How can we help?**

**1-833-476-7761**

MANUFACTURED BY:



12600 West Frontage Road,  
Burnsville MN 55337

Phone: 1-833-476-7761

[www.groproag.com](http://www.groproag.com)

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

**ENVIRONMENTALLY SAFE**  
When Used as Directed

**NET CONTENTS: ■ 2.5 Gal (9.5 L)**

**AGRI LINE**

