

**QUALI-PRO**

# Abamectin 0.15 EC

*Miticide/Insecticide*

For Agricultural/Commercial Use To Control Leafminers and Mites and To Suppress Aphids, Whiteflies, and Thrips on Ornamental Plants.

<b>ACTIVE INGREDIENT:</b>	<b>% BY WT.</b>
Abamectin (CAS No. 65195-56-4 and 65195-55-3): .....	1.9%
<b>INERT INGREDIENTS:</b> .....	<u>98.1%</u>
<b>TOTAL:</b> .....	100.0%

1 gallon contains 0.15 lb. abamectin

EPA Reg. No. 66222-210

## **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.)

For additional precautionary, handling, and use statements, see inside of this booklet.

Manufactured for:  
**Makhteshim Agan of North America, Inc.**  
4515 Falls of Neuse Road, Suite 300  
Raleigh, NC 27609

## FIRST AID

<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Do not give any liquid to the person.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes; then continue rinsing eye.</li><li>• Call a poison control center or doctor immediately for treatment advice.</li></ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of soap and water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>

## NOTE TO PHYSICIAN

- Early signs of intoxication include mydriasis (dilated pupils), ataxia (unsteadiness), and muscle tremors. Toxicity follows accidental ingestion of Quali-Pro Abamectin 0.15 EC and can be minimized by promptly administering activated charcoal.
- If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parenteral fluid replacement therapy should be given along with other required supportive measures (such as maintenance of blood pressure levels and respiratory functionality) as indicated by clinical signs, symptoms, and measurements.
- In severe cases, observations should continue for at least several days until clinical condition is stable and normal. Since abamectin is believed to enhance GABA activity in animals, it is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) in patients with potentially toxic abamectin exposure.

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

For medical emergencies involving this product, call ProSAR at 1-877-250-9291.

## **PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**WARNING:** May be fatal if swallowed. Causes substantial but temporary eye injury. Do not get in eyes. Harmful if absorbed through skin or inhaled. Avoid contact with skin or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

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

Some materials that are chemical resistant to this product are listed below. For more options, follow the instructions for Category B on an EPA chemical resistance category selection chart.

#### **Applicators and other handlers must wear:**

- Coveralls over short-sleeved shirt and short pants.
- Chemical-resistant gloves such as barrier laminate or butyl rubber  $\geq$  14 mils.
- Chemical-resistant footwear plus socks.
- Protective eyewear.
- Chemical-resistant headgear for overhead exposure.
- Chemical-resistant apron when cleaning equipment, mixing, or loading.
- For shadehouse and greenhouse uses, applicators and other handlers must wear a dust/mist filtering respirator (MSHA/NIOSH approval prefix number TC-21C or a NIOSH-approved respirator with any R, P, or HE filter).

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### **User Safety Recommendations**

#### **Users Should:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

**NOTICE:** This product contains a chemical (N-methyl pyrrolidone) known to the state of California to cause birth defects or other reproductive harm.

### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and wildlife. Do not apply directly to water, 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. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

Use of this product may pose a risk to threatened and endangered species of fish, amphibians, crustaceans (including freshwater shrimp), and insects. All use of this product in the state of California should comply with the recommendations of the California Endangered Species Project. Before using this product in California, consult with your county agriculture commissioner to determine use limitations that apply in your area.

### **PHYSICAL OR CHEMICAL HAZARDS**

Do not use or store near heat or open flame.

### **DIRECTIONS FOR USE**

It is a violation of federal law to use this product in a manner inconsistent with its labeling. Do not apply Quali-Pro Abamectin 0.15 EC through any type of irrigation system. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. 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 with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, 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 worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.**

(cont.)

## AGRICULTURAL USE REQUIREMENTS (cont.)

### Personal Protective Equipment (PPE)

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 such as plants, soil, or water is:

- Coveralls over short-sleeved shirt and short pants.
- Chemical-resistant gloves such as barrier laminate or butyl rubber  $\geq$  14 mils.
- Chemical-resistant footwear plus socks.
- Protective eyewear.
- Chemical-resistant headgear for overhead exposure.

## NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

**Do not re-enter treated areas until sprays have dried.**

### **For Use on Greenhouse-, Shadehouse-, and Field-Grown Ornamentals; Foliage Plants; Christmas Trees; and other Woody Ornamentals.**

Quali-Pro Abamectin 0.15 EC is an emulsifiable concentrate containing 0.15 lb. abamectin per gallon. When mixed with water according to the directions for use, Quali-Pro Abamectin 0.15 EC will control mites and leafminers and suppress thrips, aphids, and whiteflies on the following ornamental plants: Greenhouse-, shadehouse- and field-grown ornamentals; foliage plants; Christmas trees; and other woody ornamentals.

To control mites, apply Quali-Pro Abamectin 0.15 EC when mites initially appear; then repeat as needed to maintain control. To control leafminers, apply Quali-Pro Abamectin 0.15 EC and repeat every 7 days or as needed to maintain control.

To suppress whiteflies, thrips, and aphids, apply Quali-Pro Abamectin 0.15 EC when the young/immature stages of these pests are first seen; then repeat once per week for 2-3 weeks. Then rotate to other registered insecticides having a different mode of action for a minimum of 2-3 weeks before reverting to Quali-Pro Abamectin 0.15 EC. Please see the **Resistance Management** section of this label for additional information regarding rotating products. **Note:** For Quali-Pro Abamectin 0.15 EC to kill aphids, whiteflies, and thrips, it must come in direct contact with the pests.

To obtain uniform coverage, mix Quali-Pro Abamectin 0.15 EC with sufficient water and apply as a foliar spray. Residual control of pests can be improved on field-grown woody ornamentals, Christmas trees, and landscape plants by adding a Horticultural Spray Oil (not dormant oil) at 2-4 qts/100 gals. finished spray (equivalent to 0.5-1.0% of spray volume). To maintain control, repeat application of Quali-Pro Abamectin 0.15 EC as necessary, but not sooner than 7 days after previous application. Some plants are sensitive to oils. Therefore, unless prior experience has shown plant safety, the user should apply a Quali-Pro Abamectin 0.15 EC plus Horticultural Spray Oil mixture on a small number of plants and observe them for two weeks. If no plant damage is observed, then spray the remaining plants. Excessively warm or cold temperatures following treatment in combination with oils could increase the chances of plant damage. Read and follow label directions for both Quali-Pro Abamectin 0.15 EC and any Horticultural Spray Oil product to be used, and do not exceed the maximum rates detailed on either label.

Do not apply Quali-Pro Abamectin 0.15 EC in quantities less than 8 fl. oz. per acre or more than 16 fl. oz. per acre per application. Use a sufficient quantity of water to obtain thorough coverage on foliage. Review the **Resistance Management** and **Restrictions** sections (below) for additional guidance.

**Greenhouse-, Shadehouse-, and Field-Grown Ornamentals; Foliage Plants; Christmas Trees; and other Woody Ornamentals**

Pests	Amount of Quali-Pro Abamectin 0.15 EC fl. oz./100 gallons water	Notes
Mites: European Red Mite Two-spotted Spider Mite Carmine Spider Mite Southern Red Mite Spruce Spider Mite Tarsonemid Mites: Cyclamen and Broad Mites Eriophyid Mites: Rust and Bud Mites	4 <sup>a</sup>	For tarsonemid mites, multiple applications to newly developing tissue may be needed to maintain effective control.
Boxwood Leafminer	8	To control mining larvae, apply when adults begin to lay eggs onto new foliage.
<i>Liriomyza</i> Leafminers	8 <sup>b</sup>	Repeat at intervals of 7 days or as needed to maintain effective control.
Aphids, Thrips, and Whiteflies	8	Spray must contact young immatures.

<sup>a</sup>For example, apply in 200 – 400 gallons of water per acre. If water volume is less than 200 gals., use a minimum of 8 fl. oz. per acre. If water volume of 400 gals. or more per acre is required for sufficient plant coverage, apply at the maximum rate of 16 fl. oz. per acre. Another example: If a volume of 650 gals. of water is necessary, use 2.5 fl. oz. per 100 gals.

<sup>b</sup>For example, apply in 100-200 gals. of water per acre. If water volume is less than 100 gals., use at least 8 fl. oz. per acre. If water volume of 200 gals. or more per acre is required for sufficient plant coverage, apply the maximum rate of 16 fl. oz. per acre. Another example: If 400 gals. of water is necessary, apply 4 fl. oz. per 100 gals.

**Use Restrictions**

- Do not apply by air.
- Do not use Quali-Pro Abamectin 0.15 EC for suppressing thrips, whiteflies, and aphids on gerbera, chrysanthemums, and roses which are primary hosts of

*Liriomyza* leafminers and mites controlled by Quali-Pro Abamectin 0.15 EC. Additional applications of Quali-Pro Abamectin 0.15 EC on these plants will increase the selection pressure on mites and *Liriomyza* leafminers which could produce greater pest tolerance (resistance) to Quali-Pro Abamectin 0.15 EC.

- Do not use Quali-Pro Abamectin 0.15 EC in citrus nurseries.
- Do not use Quali-Pro Abamectin 0.15 EC on ferns or Shasta Daisy since phytotoxicity may occur on certain species of ferns (e.g., *Adiantum* spp.) and Shasta Daisy (*L. eucanthemum* spp.).
- Do not apply through any type of irrigation system.

Quali-Pro Abamectin 0.15 EC is non-phytotoxic on a wide range of ornamental plants. However, since all combinations or sequences of pesticide sprays including surfactants and adjuvants have not been tested, it is recommended that a small area be sprayed first to make certain that no phytotoxicity occurs.

### **Resistance Management**

To minimize potential development of pest resistance to abamectin, use of resistance management strategies is imperative, especially when applying Quali-Pro Abamectin 0.15 EC to ornamental plants that are hosts of pests on this label that have multiple generations per crop or per year. Examples of resistance management may include but are not limited to the following: use of various cultural practices, nonchemical alternatives (such as beneficial arthropods), rotating susceptible and nonsusceptible plants, rotating pesticides with different modes of action, avoiding use of the same product on successive pest generations, and using labeled rates at specified spray intervals. Consult your State Cooperative Extension Service to obtain additional information regarding the implementation of these or other resistance management strategies.

For managing susceptibility in *Liriomyza* leafminers, apply Quali-Pro Abamectin 0.15 EC no more than three times; then apply a registered alternative product with a different mode of action for no more than three times before rotating back to Quali-Pro Abamectin 0.15 EC or another alternative product. Product rotation intervals should be based on the generation time of *Liriomyza* leafminers to avoid applying Quali-Pro Abamectin 0.15 EC to successive generations.



## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

**PESTICIDE STORAGE:** Store in a tightly closed container in a cool, dry place.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

### **CONTAINER HANDLING:**

**Nonrefillable Container (five gallons or less):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container 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. Dispose of in an incinerator or landfill approved for pesticide containers.

**IMPORTANT:** Read the information below before using this product. If the terms are not acceptable, you should return the unopened product container immediately for a complete refund.

## LIMITATION OF WARRANTY AND LIABILITY

Read the entire directions for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following

**CONDITIONS, DISCLAIMER OF WARRANTIES and LIMITATIONS OF LIABILITY.**

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks 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 the manner of use or application, all of which are beyond the control of Makhteshim Agan of North America, Inc. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, Makhteshim Agan of North America, Inc. makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of Makhteshim Agan of North America, Inc. is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Makhteshim Agan of North America, Inc. disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

**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 Makhteshim Agan of North America, Inc.'s election, the replacement of product.

Quali-Pro is a registered trademark of Makhteshim Agan of North America, Inc.





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Abamectin (CAS No. 65195-56-4 and 65195-55-3):	1.9%
<b>INERT INGREDIENTS:</b>	<u>98.1%</u>
<b>TOTAL:</b>	100.0%

1 gallon contains 0.15 lb. abamectin

EPA Reg. No. 66222-210

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Manufactured for:  
**Makhteshim Agan of North America, Inc.**  
4515 Falls of Neuse Road, Suite 300  
Raleigh, NC 27609

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EPA Est. No. 37429-GA-001<sup>BT</sup>; 37429-GA-002<sup>BO</sup>

Letter(s) in lot number correspond(s) to superscript in EPA Est. No.

**Net Contents: 1 Quart**