

Avid[®] 0.15EC

MITICIDE/INSECTICIDE

For Control of Leafminers and Mites and Suppression of
Aphids, Whiteflies, and Thrips on Ornamental Plants
Recommended for Agricultural/Commercial Use

Active Ingredient:
Abamectin (CAS No. 65195-56-4
and 65195-55-3) 2.0%*

Other Ingredients: 98.0%

Total: 100.0%

*1 gal. contains 0.15 lb. abamectin

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 and directions for use inside booklet.

EPA Reg. No. 100-896
EPA Est. 39578-TX-001

NCP 896A-L1D 0300

ONE QUART

U.S. Standard Measure

NOVARTIS

DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

IMPORTANT: Read the entire **Directions for Use** and the **Conditions of Sale and Warranty** before using this product. If terms are not acceptable, return the unopened product container at once.

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 should be followed carefully. However, it is impossible to eliminate all risks inherently associated with 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 Novartis Crop Protection, Inc. or the Seller. All such risks shall be assumed by the Buyer.

Novartis 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.

Novartis makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall Novartis or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product. Novartis 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 Novartis.

DIRECTIONS FOR USE

It is a violation of Federal (U.S.A.) 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, 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.

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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.

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
- Chemical-resistant gloves, such as barrier laminate or butyl rubber
- Shoes 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 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 reenter treated areas until sprays have dried.

Avid 0.15EC is an emulsifiable concentrate containing 0.15 lb. abamectin per gallon which when mixed with water according to the directions for use will control leafminers and mites and suppress whiteflies, thrips, and aphids on ornamentals.

Mix with sufficient water and apply as a foliar spray to obtain uniform coverage. For mites, apply when mites first appear and repeat as necessary to maintain control. For leafminers, apply as needed and repeat at 7-day intervals or as necessary to maintain control.

For suppression of aphids, thrips, and whiteflies, apply when young, immature stages of these pests are first observed and repeat every 7 days for two or three weeks. After which time, rotate to other products that have different modes of action than Avid for at least two to three weeks. Refer to the **Resistance Management** section for additional comments on rotation. Aphids, thrips, and whiteflies are killed by direct contact with the Avid spray.

Residual control of pests may be enhanced with the addition of a horticultural spray oil at 0.5 to 1.0% of the spray volume on field-grown woody ornamentals, landscape plants, and Christmas trees. Repeat application as necessary, but no sooner than 7 days to maintain control. Some plants are sensitive to oils and so without prior experience the user should spray a small number of plants and observe plants for two weeks before spraying the remaining plants. Excessive cold or warm temperatures may increase the chance of plant damage following application with oils. Carefully read and follow directions on the oil label and do not exceed maximum rates listed on either label.

Shadehouse, Greenhouse, Field-Grown Ornamentals, Foliage Plants, Christmas Trees, and Other Woody Ornamentals

Pests	fl. oz./100 gals.	Comments
Mites ¹ : European Red Mite Twospotted Spider Mite Carmine Spider Mite Southern Red Mite Spruce Spider Mite Tarsonemid Mites ³ : Cyclamen and Broad Mites Eriophyid Mites: Rust and Bud Mites	4	³ For tarsonemid mites, repeat applications to newly developing tissue may be necessary to maintain control.
<i>Liriomyza</i> Leafminers ²	8	Repeat at 7-day intervals or as necessary to maintain control.
Boxwood Leafminer	8	For control of mining larvae, make the application when adults are beginning to lay eggs in the new foliage.
Aphids, Thrips, and Whiteflies	8	For suppression of pest populations, young immatures must be contacted by the spray.

General Information Per Application: Do not apply less than 8 fl. oz. or more than 16 fl. oz. per acre. Use sufficient water to obtain uniform plant coverage. Refer to the **Resistance Management** section and the **Restrictions** section for additional information.

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¹ Apply, for example, in 200-400 gals. of water per acre. In volumes of water below 200 gals., use a minimum of 8 fl. oz. per acre. If more than 400 gals. of water per acre are required for good plant coverage, apply a maximum rate of 16 fl. oz. per acre. For example, if 650 gals. of water are required, use 2.5 fl. oz. per 100 gals.

² Apply, for example, in 100-200 gals. of water per acre. In water volumes below 100 gals., use a minimum of 8 fl. oz. per acre. If more than 200 gals. of water per acre are required for good plant coverage, apply the maximum rate of 16 fl. oz. per acre. For example, if 400 gals. of water are required, use 4 fl. oz. per 100 gals.

Resistance Management

Treatment may not be effective against these pests if Avid-tolerant strains develop. Therefore, when applying Avid to plants that are hosts of labeled pests with multiple generations per crop or year, resistance management strategies must be used. Such strategies may include, but are not limited to, rotation of products with different modes of action, avoid treatment of successive generations with the same product, use of labeled rates at specified spray intervals, nonchemical alternatives such as beneficial arthropods, rotation of susceptible to nonsusceptible plants, and various cultural practices. For additional information on the implementation of these or other resistance management strategies, consult with your State Cooperative Extension Service.

To manage susceptibility in *Liriomyza* leafminer species, apply a maximum of three applications of Avid and then rotate to Citation® for a maximum of three applications, before rotating back to Avid or using another product. The rotation between these two products with different modes of action should be based on the generation time of *Liriomyza* specie to avoid applying Avid to successive generations.

Restrictions

Do not use Avid for suppression of aphids, whiteflies, and thrips on roses, chrysanthemums, and gerbera. These ornamentals are primary hosts of mites and *Liriomyza* leafminers for which Avid applications should be targeted. Additional applications of Avid to suppress aphids, thrips, and whiteflies on these plants will increase the selection pressure on mites and *Liriomyza* leafminers which may result in greater tolerance to Avid among these pests.

Do not apply this product through any type of irrigation system.

Not for aerial application.

Do not use in citrus nurseries.

Avid has been evaluated for phytotoxicity 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. Phytotoxicity has been observed following the use of Avid on certain species of ferns (e.g., *Adiantum* spp.) and Shasta Daisy (*L. eucanthemum* spp.). It is therefore recommended that Avid not be used on ferns or Shasta Daisy.

STORAGE AND DISPOSAL

Storage

Store in a tightly closed container in a cool, dry place.

Prohibitions

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

Pesticide Disposal

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

Container Disposal

Triple rinse (or equivalent) and dispose of in an incinerator or landfill approved for pesticide containers.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING

Causes substantial, but temporary eye injury. Do not get in eyes or on clothing. Prolonged or frequently repeated exposure may cause allergic skin reactions in some individuals. Harmful if inhaled or absorbed through the skin. Do not breathe spray mist. Avoid contact with skin. May be fatal if swallowed.

First Aid

If inhaled: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth.

If swallowed: Immediately give 1 or 2 glasses of water and induce vomiting by gently touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

If on skin: Wash with plenty of water.

If in eyes: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

Get medical attention in all cases.

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Recommendations for Medical Treatment for Abamectin Acute Toxicity: Early signs of intoxication include mydriasis (dilated pupils), ataxia (unsteadiness), and muscle tremors. Toxicity following accidental ingestion of the concentrate can be minimized by inducing vomiting within one-half hour of exposure.

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) 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.

Personal Protective Equipment

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

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves (such as barrier laminate or butyl rubber)
- Shoes plus socks
- Protective eyewear

For shadehouse and greenhouse uses, applicators and other handlers must wear a dust/mist filtering respirator (MSHA/NIOSH approval prefix number TC-21C).

Wear chemical-resistant headgear for overhead exposure. Wear chemical-resistant apron when cleaning equipment, mixing, or loading. 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 clothes immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

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 wash water 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.

Physical or Chemical Hazards

Do not use or store near heat or open flame.

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This booklet manufactured using post-consumer, recycled paper.