



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Michael Kellog  
Agent for Tide International, USA, Inc.  
Pyrus Regulatory Consulting, Inc.  
4110 136<sup>th</sup> St. N.W.  
Gig Harbor, WA 98332

APR 9 2008  
**NOTIFICATION**

Subject: Label Notification(s) for Pesticide Registration Notice 2007-4

Dear Mr. Kellog:

The Agency is in receipt of your Application(s) for Pesticide Notification under Pesticide Registration Notice (PRN) 2007-4 dated March 24, 2008 for:

**EPA Registration 84229-2**

**Tide Abama™ 0.15 EC Ag  
Insecticide/Miticide**

**EPA Registration 84229-1**

**Tide Abama™ 0.15 EC T&O  
Insecticide/Miticide**

The Registration Division (RD) has conducted a review of this request for applicability under PRN 2007-4 and finds that the label change(s) requested falls within the scope of PRN-2007-4. The label has been date-stamped "Notification" and will be placed in our records.

Please be reminded that 40 CFR Part 156.140(a)(4) requires that a batch code, lot number, or other code identifying the batch of the pesticide distributed and sold be placed on nonrefillable containers. The code may appear either on the label (and can be added by non-notification/PR Notice 98-10) or durably marked on the container itself.



PYXIS REGULATORY CONSULTING, INC.

4110 136<sup>th</sup> St. NW  
Gig Harbor, WA 98332

Phone: 253-853-7369  
Fax: 253-853-5516  
www.PyxisRC.com

March 24, 2008

COURIER DELIVERY

Tom Harris (PM 7)  
Document Processing Desk (NOTIF)  
Office of Pesticide Programs (7504P)  
U.S. Environmental Protection Agency  
Room S-4900, One Potomac Yard  
2777 S. Crystal Drive  
Arlington, VA 22202

RE: Tide International USA, Inc. – Tide Abama™ 0.15 EC Ag Insecticide/Miticide (EPA Reg. No. 84229-2)  
Revision to Container Disposal Instructions per PRN 2007-4

Dear Mr. Harris,

On behalf of Tide International USA, Inc. please find the enclosed label notification revising the container disposal instructions per PRN 2007-4.

In support of this notification submission, we submit the following documents:

1. Completed Application for Registration (EPA Form 8570-1)
2. One (1) copy of the Tide Abama™ 0.15 EC Ag Insecticide/Miticide labeling with changes tracked
3. One (1) copy of the Tide Abama™ 0.15 EC Ag Insecticide/Miticide labeling with changes incorporated

Please feel free to contact me by phone (253) 853-7369 or by email at Mike@PyxisRC.com if you have any questions or need any additional information.

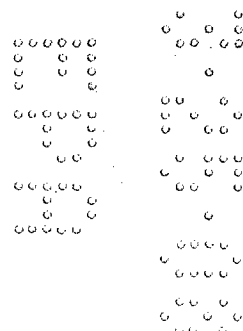
Sincerely,



Michael Kellogg

Enclosures

cc: Der-I Wang; Tide International USA, Inc.







United States  
Environmental Protection Agency  
Washington, DC 20460

☐ Registration  
☐ Amendment  
☒ Other

OPP Identifier Number

## Application for Pesticide - Section I

|   |                                      |  |
|---|--------------------------------------|--|
| 1. Company/Product Number<br>84229-2  | 2. EPA Product Manager<br>Tom Harris | 3. Proposed Classification<br><input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted   |
| 4. Company/Product (Name)<br>Tide International, USA, Inc./Tide Abama 0.15EC Ag Insecticide/Miticide  | PM#<br>7                             |  |
| 5. Name and Address of Applicant (Include ZIP Code)<br>Tide International, USA, Inc.<br>c/o Pyxis Regulatory Consulting, Inc.<br>4110 136th St. NW<br>Gig Harbor, WA 98332<br><input type="checkbox"/> Check if this is a new address |                                      | 6. Expedited Review. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to:<br>EPA Reg. No. <b>NOTIFICATION</b><br>Product Name <b>APR 09 2008</b> |

## Section - II

|  |  |
|--|--|
| <input type="checkbox"/> Amendment - Explain below.                            | <input type="checkbox"/> Final printed labels in response to Agency letter dated _____ |
| <input type="checkbox"/> Resubmission in response to Agency letter dated _____ | <input type="checkbox"/> "Me Too" Application.   |
| <input checked="" type="checkbox"/> Notification - Explain below.              | <input type="checkbox"/> Other - Explain below.  |

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Notification of label change per PR Notice 2007-4. This notification is consistent with the guidance in PR Notice 2007-4 and the requirements of EPA's regulations at 40 CFR 156.10, 156.140, 156.144, 156.146, and 156.156. No other changes have been made to the labeling or the Confidential Statement of Formula for this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if the amended label is not consistent with the requirements of 40 CFR 156.10, 156.140, 156.144, 156.146, and 156.156, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

## Section - III

|  |  |   |  |  |  |
|--|--|---|--|--|--|
| 1. Material This Product Will Be Packaged In:  |  |   |  | 2. Type of Container   |  |
| Child-Resistant Packaging<br><input type="checkbox"/> Yes<br><input checked="" type="checkbox"/> No  | Unit Packaging<br><input type="checkbox"/> Yes<br><input checked="" type="checkbox"/> No | Water Soluble Packaging<br><input type="checkbox"/> Yes<br><input checked="" type="checkbox"/> No |  | <input checked="" type="checkbox"/> Metal  |  |
|  |  |   |  | <input type="checkbox"/> Plastic   |  |
|  |  |   |  | <input type="checkbox"/> Glass   |  |
|  |  |   |  | <input type="checkbox"/> Paper   |  |
| * Certification must be submitted  |  |   |  | Other (Specify) _____  |  |
| 3. Location of Net Contents Information<br><input type="checkbox"/> Label <input checked="" type="checkbox"/> Container  |  | 4. Size(s) Retail Container<br>1 quart, 1 gallon  |  | 5. Location of Label Directions<br><input checked="" type="checkbox"/> On Label<br><input type="checkbox"/> On Labeling accompanying product |  |
| 6. Manner in Which Label is Affixed to Product<br><input checked="" type="checkbox"/> Lithograph<br><input type="checkbox"/> Paper glued<br><input type="checkbox"/> Stenciled |  | <input type="checkbox"/> Other _____  |  |  |  |

## Section - IV

|  |                    |   |   |
|--|--------------------|---|---|
| 1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)  |                    |   |   |
| Name<br>Michael Kellogg  | Title<br>Agent     | Telephone No. (Include Area Code)<br>(253) 853-7369 |   |
| Certification<br>I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete.<br>I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law. |                    |   | 6. Date Application Received<br>(Stamped) |
| 2. Signature<br>   | 3. Title<br>Agent  |   |   |
| 4. Typed Name<br>Michael Kellogg   | 5. Date<br>3/24/08 |   |   |
|  |                    |   |   |



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## RESTRICTED USE PESTICIDE

Toxic to Fish, Mammals and Aquatic Organisms

For retail sale to and use only by certified applicators or persons under their direct supervision, and only for those uses covered by the certified applicators certification.

# Tide Abama™ 0.15 EC Ag

Miticide/Insecticide

### ACTIVE INGREDIENT:

Abamectin:..... 1.9 %

OTHER INGREDIENTS:..... 98.1 %

TOTAL:..... 100.0 %

Tide Abama 0.15 EC contains 0.15 lbs active ingredient per gallon.

## 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.)

| FIRST AID   |   |
|---|---|
| If in eyes  | <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 for treatment advice.</li></ul>   |
| If swallowed  | <ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</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> |
| If on skin or clothing:   | <ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>   |
| If inhaled  | <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 further treatment advice.</li></ul>  |
| HOTLINE NUMBER  |   |
| Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact Chemtrec at 1-800-424-9300 for emergency medical treatment information. |   |

## NOTIFICATION

APR 09 2008



**NOTE TO PHYSICIAN**

Early signs of intoxication include dilation of pupils, muscular incoordination, and muscular tremors. Toxicity following accidental ingestion of this product can be minimized by early administration of chemical adsorbents (e.g., 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 parental fluid replacement therapy should be given, along with other required supportive measures (such as maintenance of blood pressure levels and proper 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.

**EPA Reg. No. 84229-2**

**EPA Est. No.**

**Manufactured for:**

Tide International USA Inc.

21 Hubble

Irvine, CA 92618

**Net Contents:**

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

**WARNING**

Causes substantial but temporary eye injury. Do not get in eyes. Harmful if absorbed through skin or if swallowed. Avoid contact with skin or clothing. 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**

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

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Socks and shoes.
- Chemical-resistant gloves (such as barrier laminate, nitrile rubber, neoprene rubber, viton).
- Protective eyewear.

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.

**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 apply when weather conditions favor drift from target areas. Do not contaminate water when disposing of equipment wash water or rinsate.



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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 fresh water 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 country agriculture commissioner to determine use limitations that apply in your area.

#### **PHYSICAL OR CHEMICAL HAZARDS**

Combustible: 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 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.

#### **IMPORTANT – READ BEFORE USE**

Read the entire Directions for Use, Limited Warranty and Disclaimer 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 warranty disclaimer, inherent risks of use and limitation of remedies.

#### **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 over short-sleeved shirt and short pants.
- Chemical-resistant gloves – EPA chemical-resistance category E (e.g., barrier laminate, nitrile rubber, neoprene rubber, viton).
- Chemical-resistant shoes and socks.
- Protective eyewear.

**FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR INSECT CONTROL, AND/OR ILLEGAL RESIDUES.**



Abama 0.15 EC is an insecticide that will control certain insect pests. The product must be mixed with water and applied to labeled crops according to the specific crop use directions for effective control of these insects. For good mite and insect control, Abama 0.15 EC needs to be applied so that the foliage is thoroughly covered by the spray solution.

**Phytotoxicity:** Abama 0.15 EC has been tested for phytotoxicity and has been proven to be safe on a variety of crops. Abama 0.15 EC is also compatible with many commonly used pesticides, crop oils, and nutritional sprays. However, it is impossible to test all crop varieties and combination of spray mixtures under all possible growing conditions. Prior to mixing, users should test the compatibility of Abama 0.15 EC with any combination product using physical compatibility jar tests. Before applying Abama 0.15 EC and combination products to large areas of the crop, test small areas for phytotoxicity.

**New York State Restriction:** Do not apply Abama 0.15 EC by aerial application in New York State.

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

**Spray Drift Precautions for Abama 0.15 EC Use on Celeriac, Cotton, Cucurbits, Fruiting Vegetables, Grapes, Hops, Leafy Vegetables, Potatoes, and Strawberries:**

- Do not apply with ground application equipment within 25 ft. or with aircraft within 150 ft. of lakes, reservoirs, rivers, permanent streams, marshes, potholes, natural ponds, and estuaries, or commercial fish farm ponds.
- All aerial and ground application equipment must be properly calibrated, using appropriate carriers, and maintained. For aerial applications, mount the spray boom on the aircraft in a manner that minimizes drift caused by wing tip vortices. Use the minimum practical boom length but do not exceed 75% of wingspan or rotor diameter.
- Use the largest droplet size consistent with pest control. Minimize the formation of very small droplets by selecting appropriate nozzles, orienting nozzles away from the air stream as much as possible, and avoiding excessive spray boom pressure. Release the spray at the lowest height consistent with pest control and flight safety. Avoid application more than 10 ft. above the crop canopy.
- Make aerial or ground applications when wind velocity favors on-target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph. Avoiding applications when wind direction is toward the aquatic area can reduce risk of exposure to aquatic areas. Do not cultivate within 25 ft. (10 ft. for cotton) of the aquatic area to allow growth of a vegetative filter strip.
- Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore increase the likelihood of spray drifting to aquatic areas. Avoid spraying during conditions of low humidity and/or high temperature.
- Do not make aerial or ground applications during temperature inversions. Inversions are characterized by stable air and temperatures that increase with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

**Resistance Management:** Abama 0.15 EC contains the active ingredient abamectin. There are inherent risks of pests developing resistance to any product, therefore, it is strongly advised that Abama 0.15 EC be used in a sound resistance management program (including practices such as non-chemical alternatives (beneficial arthropods), rotation of Abama 0.15 EC with insecticides that have different modes of action, rotation of susceptible and non-susceptible plants, etc.). Once insect or mite-tolerant strains develop, Abama 0.15 EC will not be effective against labeled pests. In crops that have pests with multiple generations per crop per year, resistance management practices help reduce the risk of resistance development to Abama 0.15 EC. Additional information is available on implementation of these or other resistance management practices from your local agricultural advisor or company representative.



## CROP USE DIRECTIONS

## ALMONDS AND WALNUTS

Abama 0.15 EC will control the following pests in almonds and walnuts:

*European red mite*  
*Pacific Spider mite*  
*Strawberry spider mite*  
*Twospotted spider mite*

| Rate of Abama 0.15 EC  | Directions for Application   | Restrictions   |
|--|--|--|
| <p>For Dilute Sprays<sup>a</sup>: 2.5 – 5.0 fl. oz./100 gals</p> <p>For Concentrate Sprays<sup>b</sup>: 10 – 20 fl. oz./A</p> <p><b>PLUS</b></p> <p>A Horticultural Spray Oil that is not a dormant oil</p> <p>For Dilute Sprays: 0.25% or 1 gal./A</p> <p>For Concentrate Sprays: Minimum of 1 gal./A</p>   | <p>Apply Abama 0.15 EC using conventional dilute or concentrate sprays using ground application equipment. Calibrate equipment prior to application to ensure sufficient water is used for thorough coverage. The size and number of trees per acre as well as foliage density will determine the gallons of spray required. Apply only in 40 gals. or more of water/A. Control of these mites/insects requires a thorough coverage of the spray solution on the tree foliage, and residual spider mite control increases if sprays are made to younger leaves.</p> <p>Time Abama 0.15 EC applications to occur when spider mites first appear. Repeat applications following the directions in the Restrictions column of this table.</p> | <p>Do not apply by air.</p> <p>Do not apply Abama 0.15 EC without a horticultural spray oil that is not a dormant oil (but one that is approved for use on almonds and walnuts).</p> <p>Do not apply more than 20 fl. oz. Abama 0.15 EC per application, and no more than 40 fl. oz. per growing season.</p> <p>Make only 2 applications per growing season 21 days or more apart.</p> <p>Do not allow livestock to graze in treated orchards.</p> <p>Preharvest Interval: 21 days</p> |
| <p><sup>a</sup> Dilute Spray Rate is based on a volume of 400 gals./A dilute spray.</p> <p><sup>b</sup> Concentrate Spray Rate: determine the amount of Abama 0.15 EC required in a full cover dilute spray. Then use the same amount of product per acre in concentrate sprays that would be required for the dilute sprays to the same orchard/grove. Note that for small trees, the amount may be less than 10 fl. oz./A.</p> |  |  |
| <p><b>Buffer Zone:</b> To reduce the risk to aquatic organisms, maintain a 25-yard buffer zone around all water bodies containing aquatic life (streams, ponds, lakes, rivers, springs, irrigation canals containing water year-round, swamps, bogs and marshes).</p>  |  |  |



# APPLES

Abama 0.15 EC will control the following pests in almonds and walnuts:

European red mite  
McDaniel spider mite  
Tentiform leafminer  
Twospotted spider mite  
White apple leafhopper

| Rate of Abama 0.15 EC  | Directions for Application   | Restrictions  |
|--|--|---|
| <p>For Dilute Sprays<sup>a</sup>: 2.5 – 5.0 fl. oz./100 gals</p> <p>For Concentrate Sprays<sup>b</sup>: 10 – 20 fl. oz./A</p> <p><b>And add (for best results)</b></p> <p>A Horticultural Spray Oil that is not a dormant oil</p> <p>For Dilute Sprays: 0.25% or 1 gal./A</p> <p>For Concentrate Sprays: Minimum of 1 gal./A</p> | <p>Apply Abama 0.15 EC using conventional dilute or concentrate sprays using ground application equipment. Calibrate equipment prior to application to ensure sufficient water is used for thorough coverage. The size and number of trees per acre as well as foliage density will determine the gallons of spray required. Apply only in 40 gals. or more of water/A. Control of these mites/insects requires a thorough coverage of the spray solution on the tree foliage.</p> <p>Time Abama 0.15 EC applications to occur when spider mites first appear or when insect thresholds are reached. Repeat applications following the directions in the Restrictions column of this table. <b>Spider Mites:</b> Apply before a threshold of 5 spider mites per leaf is reached. For residual spider mite control with Abama 0.15 EC, apply in combination with horticultural spray oil (not a dormant oil) to newer leaves of trees. Apply Abama 0.15 EC for spider mite control from petal fall through 6 weeks following petal fall.</p> <p><b>Tentiform leafminer:</b> Apply onto eggs for control of new hatches and to early sap-feeder stages of first and second-generation tentiform leafminers when locally established thresholds have been reached. Do not apply during bloom.</p> <p><b>White Apple Leafhopper (Not for use west of the Rocky Mountains):</b> Apply Abama 0.15 EC only to the first generation of white apple leafhoppers, just after petal fall and in combination with horticultural spray oil (not a dormant oil).</p> | <p>Do not apply by air.</p> <p>Reduced efficacy and/or residual control may occur if Abama 0.15 EC is not applied in combination with a horticultural spray oil (not a dormant oil). Follow all directions on the spray oil label or in spray guides. Use caution when applying Abama 0.15 EC with a horticultural spray oil or injury may occur with certain apple varieties (such as russetting on light-skinned Golden Delicious apples). In some cases, phytotoxicity and crop loss has been observed when Abama 0.15 EC plus a horticultural spray oil was applied less than 14 days before or after a captan application.</p> <p>Do not apply more than 20 fl. oz. Abama 0.15 EC per application, and no more than 40 fl. oz. per growing season.</p> <p>Make only 2 applications per growing season 21 days or more apart.</p> <p>Do not allow livestock to graze in treated orchards.</p> <p>Preharvest Interval: 28 days</p> |

<sup>a</sup> Dilute Spray Rate is based on a volume of 400 gals./A dilute spray.

<sup>b</sup> Concentrate Spray Rate: determine the amount of Abama 0.15 EC required in a full cover dilute spray. Then use the same amount of product per acre in concentrate sprays that would be required for the dilute sprays to the same orchard/grove. Note, that for small trees, the amount may be less than 10 fl. oz./A.



**Spray Drift Precautions:** Observe the following precautions when spraying in the vicinity of aquatic areas such as lakes, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farms:

- Spray last 3 rows upwind of aquatic areas using nozzles on one side only, with spray directed away from aquatic areas
- Avoid spray going over tops of trees by adjusting or turning off top nozzles. Shut off nozzles on the side away from the grove/orchard when spraying the outside row. Shut off nozzles when turning at ends of row and passing tree gaps in rows.
- Do not apply Abama 0.15 EC when weather conditions favor drift to aquatic areas.
- Do not apply within 110 feet upwind of aquatic areas or when wind speed is above 8 miles per hour.
- Do not apply during a temperature inversion.

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### AVOCADOS

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Abama 0.15 EC will control the following pests in avocados:

*Avocado thrips (Scirtothrips perseae)*  
*Persea Mite (Oligonychus perseae)*

| Rate of Abama 0.15 EC | Directions for Application | Restrictions |
|-----------------------|----------------------------|--------------|
|-----------------------|----------------------------|--------------|



|   |   |  |
|---|---|--|
| <p>10 – 20 fl. oz./A<br/>(Do NOT use less than 10 fl. oz. of Abama 0.15 EC/A)</p> <p><b>And add (for best results):</b><br/>a Horticultural Spray Oil that is not a dormant oil</p> <p>Minimum of 1 to 4% v/v<br/>(Follow all directions on the spray oil label. Test small areas with oil concentrations greater than 2.0% before making applications to large areas.)</p> | <p>Apply Abama 0.15 EC using conventional dilute or concentrate sprays using ground or air application equipment. Although aerial application is permitted, best control of thrips is achieved with ground applications which provide better spray coverage. The user accepts all liability for thrip level and duration of control if Abama 0.15 EC is applied by air.</p> <p>Calibrate equipment prior to application to ensure sufficient water is used for thorough coverage. The size and number of trees per acre as well as foliage density will determine the gallons of spray required. Apply only in 100 gals. or more of water/A by ground and 50 gals. of water by air application. [For ground applications where the spray volume is greater than 400 gals./A, use 2.5 fl. oz. Abama 0.15 EC per 100 gals. of water in combination with 1.0-4.0% of an NR (narrow range) 415 oil.] Control of these pests requires a thorough coverage of the spray solution on the tree foliage.</p> <p>Time Abama 0.15 EC applications to occur when immature thrips first appear but before 5 or more immature thrips per leaf/fruit are detected. Repeat applications following the directions in the Restrictions column of this table.</p> <p>Apply Abama 0.15 EC at 10-15 fl. oz./A for low (1-2 thrips per leaf/fruit) to moderate (3-4 thrips per leaf/fruit). Use the higher rate of 15-20 fl. oz./A for severe (more than 5 thrips per leaf/fruit) outbreaks. Apply Abama 0.15 EC in combination with a 1.0-4.0% NR 415 oil in combination with a Horticultural Spray Oil (not a dormant oil) which is approved for use on avocados.</p> | <p>Do not apply more than 20 fl. oz Abama 0.15 EC per application, and no more than 40 fl. oz. per growing season.</p> <p>Make only 2 applications per growing season 30 days or more apart.</p> <p>Preharvest Interval: 14 days</p> |
|---|---|--|



**CELERIAC (*Apium graveollens*)**

Abama 0.15 EC will control the following pests in celeriac:

*Twospotted spider mite*

| Rate of Abama 0.15 EC | Directions for Application   | Restrictions   |
|-----------------------|--|--|
| 16.0 fl. oz./A        | <p>Apply Abama 0.15 EC using conventional dilute or concentrate sprays using ground application equipment.</p> <p>Calibrate equipment prior to application to ensure sufficient water is used for thorough coverage of the crop foliage.</p> <p>Apply only in 20 gals. or more of water/A by ground application. Control of this mite requires a thorough coverage of the spray solution on the crop foliage.</p> <p>Time Abama 0.15 EC applications to occur when mites first appear. Repeat applications following the directions in the Restrictions column of this table.</p> <p>Optimum results are obtained if Abama 0.15 EC is used in combination with a non-ionic surfactant.</p> | <p>Refer to the section on Spray Drift Precautions of this label.</p> <p>Do not apply by air.</p> <p>Do not apply more than 16 fl. oz. Abama 0.15 EC per application, and no more than 48 fl. oz. after transplanting.</p> <p>To prevent resistance, make only 2 sequential applications per growing season 7 days or more apart.</p> <p>Preharvest Interval: 7 days</p> |



## CITRUS FRUIT CROP GROUP

Abama 0.15 EC will control the following pests in citrus (which includes but is not limited to citrus citron, citrus hybrids, citrus species (includes chironja, tangelo, tangor), grapefruit, kumquat, lemon, lime, mandarin (tangerine), sour orange, and sweet orange):

Asian citrus psylla  
Broad mite  
Citrus bud mite  
Citrus leafminer  
Citrus rust mite  
Citrus thrips  
Twospotted spider mite

| Rate of Abama 0.15 EC   | Directions for Application   | Restrictions   |
|---|--|--|
| <p>For Dilute Sprays<sup>a</sup>: 1.0 – 2.0 fl. oz./100 gals. for all insects (<b>except</b> Asian citrus psylla, citrus leafminers and citrus thrips—use the concentrate spray rate)</p> <p>For Concentrate Sprays<sup>b, c</sup>: 10 – 20 fl. oz./A for <b>all</b> listed insects/mites</p> <p><b>And add (for best results)</b><br/>a Horticultural Spray Oil that is not a dormant oil - 0.20% or 1 gal./A (see footnotes for additional rates)<sup>c</sup></p>   | <p>Apply Abama 0.15 EC using conventional dilute or concentrate sprays using ground application equipment. Calibrate equipment prior to application to ensure sufficient water is used for thorough coverage (outside coverage for Asian citrus psylla, citrus leafminer or citrus thrips). The size and number of trees per acre as well as foliage density will determine the gallons of spray required.</p> <p><b>Asian citrus psylla:</b> Applications made in the spring, summer or fall should be directed at newly expanding foliage and will only control adults and nymphs present at the time of application.</p> <p><b>Mites:</b> Applications made in the spring, summer or fall should be made when mites first appear.</p> <p><b>Citrus bud mite:</b> Time application to occur at "bud swell".</p> <p><b>Citrus leafminer:</b> Applications in the spring, summer or fall should be directed at newly expanding foliage.</p> <p><b>Citrus thrips:</b> Correct timing is required. Apply after egg hatch has begun (typically, early to mid-hatch is best) but only the current generation will be controlled.</p> | <p>Do not apply by air.</p> <p>Do not apply more than 40 fl. oz. Abama 0.15 EC per growing season.</p> <p>Do not apply more than 3 applications per growing season 30 days or more apart.</p> <p>To prevent pest resistance to Abama 0.15 EC, do not apply in citrus nurseries.</p> <p>Do not allow livestock to graze in treated orchards.</p> <p>Preharvest Interval: 7 days</p> |
| <p><sup>a</sup> Dilute Spray Rate is based on a volume of 1,000 gals./A dilute spray.</p> <p><sup>b</sup> Concentrate Spray Rate: determine the amount of Abama 0.15 EC that would be required in a full cover dilute spray.</p> <p><sup>c</sup> For optimum control of <b>Asian citrus psylla, broad mites, citrus rust mites and citrus leafminers</b>, apply 150-300 gals spray mix per acre plus a minimum of 3 gal./A of a horticultural oil (not a dormant oil) and apply using ground equipment at 1 to 1.5 miles per hour. For optimum control of <b>citrus bud mite</b>, apply Abama 0.15 EC in a minimum of 500 gals. per acre plus a minimum of 2 qts. (0.5%) per acre of a horticultural oil (not a dormant oil). For optimum control of <b>citrus thrips</b>, use 100-250 gals. per acre spray mix for best coverage of outside foliage.</p> |  |  |



**Spray Drift Precautions:** Observe the following precautions when spraying in the vicinity of aquatic areas such as lakes, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farms:

- Spray last 3 rows upwind of aquatic areas using nozzles on one side only, with spray directed away from aquatic areas
- Avoid spray going over tops of trees by adjusting or turning off top nozzles. Shut off nozzles on the side away from the grove/orchard when spraying the outside row. Shut off nozzles when turning at ends of row and passing tree gaps in rows.
- Do not apply Abama 0.15 EC when weather conditions favor drift to aquatic areas.
- Do not apply within 110 feet upwind of aquatic areas or when wind speed is above 8 miles per hour.
- Do not apply during a temperature inversion.

### COTTON – WEST OF THE MISSISSIPPI ONLY

Abama 0.15 EC will control the following pests in cotton (**West of the Mississippi Only**):

*Carmine spider mites*  
*Pacific spider mites*  
*Strawberry spider mites*  
*Twospotted spider mites*

| Rate of Abama 0.15 EC   | Directions for Application  | Restrictions  |
|---|---|---|
| <p>Early season:<br/>4 – 6 fl. oz./A</p> <p>Mid-season/Lay-by:<br/>8 – 16 fl. oz./A</p> | <p>Calibrate equipment prior to application to ensure sufficient water is used for thorough coverage. Control of mites requires a thorough coverage of the spray solution on the crop foliage.</p> <p><b>Early season:</b> Apply Abama 0.15 EC when the cotton is no taller than 10 inches. Apply only using ground application equipment. Do not apply less than 4 fl. oz. Abama 0.15 EC per acre.</p> <p><b>Mid-season and lay-by:</b> Use Abama 0.15 EC at the specified rates 8 - 16 fl. oz./A depending on the size of the plants and foliage density. Apply using ground application or by air in fixed-wing aircraft or by helicopter. Apply by air in a minimum of 5 gals. of water /A.</p> <p>Time Abama 0.15 EC applications to occur when mites first appear. Repeat applications following the directions in the Restrictions column of this table.</p> | <p>Refer to the section on Spray Drift Precautions of this label.</p> <p>Do not apply through any type of irrigation system.</p> <p>Do not apply Abama 0.15 EC east of the Mississippi River.</p> <p>Do not apply more than 32 fl. oz. Abama 0.15 EC per growing season.</p> <p>Make only 2 applications per growing season 21 days or more apart.</p> <p>Do not feed foliage to livestock; do not allow livestock to graze treated cotton.</p> <p>Preharvest Interval: 20 days</p> |



# CUCURBITS CROP GROUP

Abama 0.15 EC will control the following pests in the Cucurbit Crop Group (which includes but is not limited to citron melon, cucumbers, gherkin, edible gourds (includes hyotan, cucuzza, hechima, Chinese okra); *Momordica* spp. (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); muskmelon, cantaloupe, pumpkin, summer squash, winter squash (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); and watermelon):

Spider mites

Leafminers

| Rate of Abama 0.15 EC | Directions for Application  | Restrictions   |
|-----------------------|---|--|
| 8 – 16 fl. oz./A      | <p>Apply Abama 0.15 EC using ground or air application equipment. Although aerial application is permitted, best control of insect pests is achieved with ground applications which proved better spray coverage. The user accepts all liability for mite level and duration of control if Abama 0.15 EC is applied by air.</p> <p>Calibrate equipment prior to application to ensure sufficient water is used for thorough coverage. Control of these mites/insects requires a thorough coverage of the spray solution on the crop foliage.</p> <p>Do not apply in less than 20 gals. of water/A by ground and in less than 5 gals. of water by air application. To ensure thorough spray coverage, use a greater spray volume for high pest pressure, dense crop canopies, and adverse application conditions (high temperatures).</p> <p>Time Abama 0.15 EC applications to occur when insects first appear. Use 8 – 12 fl. oz./A for low to moderate insect pressure use 16 fl. oz./A for heavy insect infestations. Repeat applications following the directions in the Restrictions column of this table.</p> | <p>Refer to the section on Spray Drift Precautions of this label.</p> <p>Do not apply Abama 0.15 EC by air in the State of New York.</p> <p>Do not apply more than 48 fl. oz Abama 0.15 EC per growing season.</p> <p>Make only 2 sequential applications 7 days or more apart.</p> <p>Preharvest Interval: 7 days</p> |



**FRUITING VEGETABLE CROP GROUP**

Abama 0.15 EC will control the following pests in the Fruiting Vegetable Crop Group (which includes but is not limited to tomato; eggplant; peppers (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper); and tomatillo):

*Broad mite*  
*Colorado potato beetle*  
*Liriomyza leafminers*  
*Spider mites*  
*Thrips palmi*  
*Tomato pinworm*  
*Tomato russet mite*  
*Potato psyllid (peppers only; provides suppression only)*

| Rate of Abama 0.15<br>EC | Directions for Application | Restrictions |
|--------------------------|----------------------------|--------------|
|--------------------------|----------------------------|--------------|



|  |  |   |
|--|--|---|
| <p>8 – 16 fl. oz./A (use the 16 fl. oz./A rate for tomato pinworm)</p> <p><b>Note:</b> Although Abama 0.15 EC can be used without a wetting agent, improved spreading and penetration for better insect control is achieved using a combination of Abama 0.15 EC and a surfactant. Nonionic type surfactants are recommended (not binder or sticker-type surfactants).</p> | <p>Apply Abama 0.15 EC using ground or air application equipment. Although aerial application is permitted, best control of mites is achieved with ground applications which proved better spray coverage. The user accepts all liability for mite level and duration of control if Abama 0.15 EC is applied by air.</p> <p>Calibrate equipment prior to application to ensure sufficient water is used for thorough coverage. Control of these mites/insects requires a thorough coverage of the spray solution on the crop foliage.</p> <p>Do not apply in less than 20 gals. of water/A by ground and in less than 5 gals. of water by air application. To ensure thorough spray coverage, use a greater spray volume for high pest pressure, dense crop canopies, and adverse application conditions (high temperatures).</p> <p>Repeat applications following the directions in the Restrictions column of this table.</p> <p><b>Mites and thrips :</b> Apply when insects first appear using 8 fl. oz. for low to moderate insect populations and 16 fl. oz./A for heavy infestations.</p> <p><b>Tomato pinworm:</b> Make application when moth activity is first observed and not later than when larvae emerge. Apply using the 16 fl. oz./A rate.</p> <p><b>Colorado potato beetle:</b> Apply 8 fl. oz. for low to moderate insect populations and 16 fl. oz./A for heavy infestations.</p> <p><b>Potato psyllid (Peppers only):</b> Abama 0.15 EC provides suppression only. Apply when insects first appear. Use 8 – 12 fl. oz. for low to moderate insect populations and 16 fl. oz./A for heavy infestations. Make sequential applications at 10-14 day intervals when heavy egg and nymph populations are found. Use of a spreading or penetration adjuvant or horticultural oil is recommended.</p> | <p>Refer to the section on Spray Drift Precautions of this label.</p> <p>Do not apply Abama 0.15 EC by air in the State of New York.</p> <p>Do not apply more than 48 fl. oz Abama 0.15 EC per growing season.</p> <p>Make only 2 sequential applications 7 days or more apart.</p> <p>To prevent insect resistance to Abama 0.15 EC, do not apply to fruiting vegetables grown for transplants.</p> <p>Preharvest Interval: 7 days</p> |
|--|--|---|



## GRAPES

Abama 0.15 EC will control the following pests in grapes:

*Pacific spider mite*  
*Twospotted spider mite*  
*Western grapeleaf skeletonizer*  
*Willamette spider mite.*  
*Western grape leafhopper\**  
*Varigated leafhopper\**

\*Abama 0.15 EC provides knock-down control only of these pests.

| Rate of Abama 0.15 EC   | Directions for Application  | Restrictions   |
|---|---|--|
| <p>8 – 16 fl. oz./A</p> <p><b>PLUS</b><br/> a nonionic type surfactant is recommended (not binder or sticker-type surfactants).</p> | <p>Apply Abama 0.15 EC using ground application equipment. Calibrate equipment prior to application to ensure sufficient water is used for thorough coverage. Control of these mites/insects requires a thorough coverage of the spray solution on the crop foliage. Do not spray alternate rows: apply Abama 0.15 EC on both sides of the row to ensure maximum coverage of the crop.</p> <p>Do not apply in less than 50 gals. of water/A by ground. If electro-static sprayers are used, the volume may be less than 50 gals./A but do not use less than 5 gals. of water/A.</p> <p>Always use Abama 0.15 EC with a nonionic surfactant. This combination improves the wetting of leaves and provides an even coverage of spray. Not all combinations of nonionic surfactants and Abama 0.15 EC have been tested on every grapes variety or all types of growing conditions. Before using a nonionic surfactant, carefully read and follow the surfactant product's label.</p> <p>Apply when insects first appear using 8 - 12 fl. oz. for low to moderate insect populations and 16 fl. oz./A for heavy infestations. Repeat applications following the directions in the Restrictions column of this table.</p> <p><b>Mites :</b> time application to occur when mites are first detected but before motiles exceed 5 per leaf.<br/> <b>Western grapeleaf skeletonizer:</b> Make application when larvae appear. Best control is achieved if application is made just after egg hatch.<br/> <b>Western grape leafhopper, Varigated leafhopper:</b> For knock-down control only, apply when pests first appear.</p> | <p>Refer to the section on Spray Drift Precautions of this label.</p> <p>Do not apply by air.</p> <p>Do not apply more than 16 fl. oz. per application or more than 32 fl. oz Abama 0.15 EC per growing season.</p> <p>Make only 2 applications per growing season. One repeat application may be applied 21 day or more after the first application if needed to maintain control.</p> <p>Do not allow livestock to graze in treated vineyards.</p> <p>Preharvest Interval: 28 days</p> |



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**HERB CROP SUBGROUP (EXCEPT CHIVES)**


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Abama 0.15 EC will control the following pests in the Herb Crop Subgroup (except chives) (which includes but is not limited to basil; chamomile; catnip; coriander (leaf); dill weed; lavender; marigold; marjoram (*Oiganum* species); nasturtium; parsley (dried); rosemary; sage; summer and winter savory; tarragon; thyme; and wintergreen):

*Liriomyza* leafminers

| Rate of Abama 0.15 EC   | Directions for Application   | Restrictions   |
|---|--|--|
| <p>8 – 16 fl. oz./A.</p> <p><b>Note:</b> To improve the wetting of leaves and provide an even coverage of spray of the foliage, use Abama 0.15 EC in combination with a wetting agent, such as a nonionic surfactant.</p> | <p>Apply Abama 0.15 EC using conventional dilute or concentrate ground application equipment. Calibrate equipment prior to application to ensure sufficient water is used for thorough coverage. Control of leafminers requires a thorough coverage of the spray solution on the upper and lower leaves.</p> <p>Do not apply in less than 30 gals. of water/A by ground.</p> <p>Use the low rate for low to moderate insect pressure and the higher rate for heavy insect pressure. Time application to occur when adult flies are first detected. Repeat applications following the directions in the Restrictions column of this table.</p> <p>Not all combinations of nonionic surfactants and Abama 0.15 EC have been tested on every herb types and variety or under all types of growing conditions. Before using a nonionic surfactant, carefully read and follow the surfactant product's label.</p> | <p>Do not apply by air.</p> <p>Make only 2 applications per single cutting.</p> <p>Do not apply more than 6 applications per cropping season at the 8 fl. oz./A rate or more than 3 applications at the 16 fl. oz./A rate.</p> <p>Repeat applications may be made 7 days or more after the last application.</p> <p>Preharvest Interval: 14 days</p> |



20/28

## HOPS (EXCEPT IN CALIFORNIA)

Abama 0.15 EC will control the following pests in hops (not approved for use in California):

*Twospotted spider mite*

| Rate of Abama 0.15 EC   | Directions for Application   | Restrictions   |
|---|--|--|
| <p>8 – 16 fl. oz./A</p> <p><b>Note:</b> Although Abama 0.15 EC can be used without a wetting agent, improved spreading and penetration for better insect control is achieved using a combination of Abama 0.15 EC and a surfactant. Nonionic type surfactants are recommended (not binder or sticker-type surfactants):</p> | <p>Apply Abama 0.15 EC using ground application equipment. Calibrate equipment prior to application to ensure sufficient water is used for thorough coverage. Control of mites requires a thorough coverage of the spray solution on the upper and lower leaves of the crop.</p> <p>The size and foliage density of plants will determine the gallons of spray required for thorough coverage. Use the same amount of Abama 0.15 EC for concentrate or dilute sprays. For plants 6 – 8 feet in height (1/2 trellis growth), apply 8 – 16 fl. oz./A of Abama 0.15 EC in a minimum of 40 gals. of water per acre. For plants taller than 6-8 feet, do not use less than 16 fl. oz./A in a minimum of 100 gals. of water/A.</p> <p>Time application to occur when mites are first detected. One repeat application may be made following the directions in the Restrictions column of this table.</p> | <p>Refer to the section on Spray Drift Precautions of this label.</p> <p>Do not apply by air.</p> <p>Make only 2 applications per season.</p> <p>Do not apply more than 32 fl. oz./A per growing season.</p> <p>Repeat applications may be made 21 days or more after the last application. To prevent insect resistance, use other miticides with different modes of action before making a repeat application of Abama 0.15 EC.</p> <p>Do not allow livestock to graze in treated hop yards.</p> <p>Preharvest Interval: 28 days</p> |



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**LEAFY VEGETABLE CROP GROUP**


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Abama 0.15 EC will control the following pests in the Leafy Vegetable Crop Group (which includes but is not limited to celery, lettuce (head and leaf), amaranth (Chinese spinach), garden cress, upland cress, dandelion, endive, fennel, parsley, radicchio, rhubarb, spinach, and Swiss chard):

*Carmine spider mite*  
*Liriomyza leafminers*  
*Twospotted spider mite*

| Rate of Abama 0.15 EC   | Directions for Application   | Restrictions  |
|---|--|---|
| <p>8 – 16 fl. oz./A</p> <p><b>Note:</b> Although Abama 0.15 EC can be used without a wetting agent, improved spreading and penetration for better insect control is achieved using a combination of Abama 0.15 EC and a surfactant. Nonionic type surfactants are recommended (not binder or sticker-type surfactants).</p> | <p>Apply Abama 0.15 EC using ground or air application equipment. Although aerial application is permitted, best control of mites is achieved with ground applications which proved better spray coverage. The user accepts all liability for mite level and duration of control if Abama 0.15 EC is applied by air.</p> <p>Calibrate equipment prior to application to ensure sufficient water is used for thorough coverage. Control of these mites/insects requires a thorough coverage of the spray solution on the crop foliage.</p> <p>Do not apply in less than 20 gals. of water/A by ground and in less than 5 gals. of water by air application. To ensure thorough spray coverage, use a greater spray volume for high pest pressure, dense crop canopies, and adverse application conditions (high temperatures).</p> <p>Apply Abama 0.15 EC at 8 – 12 fl. oz./A for low to moderate insect populations and at 16 fl. oz./A for heavy infestations. Make repeat applications if needed to maintain control according to the Restrictions column of this table.</p> <p><b>Mites :</b> Apply when insects first appear.<br/> <b>Leafminers:</b> Time application to occur when adult flies are first detected.</p> | <p>Refer to the section on Spray Drift Precautions of this label.</p> <p>Do not apply Abama 0.15 EC by air in the State of New York.</p> <p>Do not apply more than 48 fl. oz. Abama 0.15 EC per growing season.</p> <p>Make only 2 sequential applications 7 days or more apart.</p> <p>To prevent insect resistance to Abama 0.15 EC, do not apply to leafy vegetables grown for transplants.</p> <p>Preharvest Interval: 7 days</p> |



**MINT (PEPPERMINT AND SPEARMINT)**

Abama 0.15 EC will control the following pests in peppermint and spearmint:

*Twospotted spider mite*

| Rate of Abama 0.15 EC  | Directions for Application  | Restrictions  |
|--|---|---|
| <p>8 – 12 fl. oz./A</p> <p><b>Note:</b> Although Abama 0.15 EC can be used without a wetting agent, improved spreading and penetration for better insect control is achieved using a combination of Abama 0.15 EC and either a nonionic surfactant or organosilicone-based surfactant at the manufacturer's recommended use rates.</p> | <p>Apply Abama 0.15 EC using ground or air application equipment. Calibrate equipment prior to application to ensure sufficient water is used for thorough coverage. Control of these mites/insects requires a thorough coverage of the spray solution on the crop foliage.</p> <p>Do not apply in less than 20 gals. of water/A by ground and in less than 5 gals. of water by air application. To ensure thorough spray coverage, use a greater spray volume for high pest pressure, dense crop canopies, and adverse application conditions (high temperatures).</p> <p>Time applications to occur when insects first appear. Make repeat applications if needed to maintain control according to the Restrictions column of this table.</p> | <p>Do not apply Abama 0.15 EC by air in the State of New York.</p> <p>Do not apply more than 12 fl. oz. Abama 0.15 EC per application or more than 36 fl. oz. per growing season.</p> <p>Make only 2 sequential applications 7 days or more apart. Do not apply more than 3 applications per season.</p> <p>Do not allow livestock to graze or feed treated foliage to livestock.</p> <p>Preharvest Interval: 28 days</p> |



# PEARS (INCLUDING ORIENTAL PEARS)

Abama 0.15 EC will control the following pests in pears and Oriental pears:

European red mite  
McDaniel spider mite  
Pear psylla  
Pear rust mite  
Twospotted spider mite  
Yellow mite

| Rate of Abama 0.15 EC  | Directions for Application  | Restrictions  |
|--|---|---|
| <p>For Dilute Sprays<sup>a</sup>: 2.5 – 5.0 fl. oz./100 gals</p> <p>For Concentrate Sprays<sup>b</sup>: 10 – 20 fl. oz./A</p> <p><b>And add (for best results)</b></p> <p>A Horticultural Spray Oil that is not a dormant oil</p> <p>For Dilute Sprays: 0.25% or 1 gal./A</p> <p>For Concentrate Sprays: Minimum of 1 gal./A</p> | <p>Apply Abama 0.15 EC using conventional dilute or concentrate sprays using ground application equipment. Calibrate equipment prior to application to ensure sufficient water is used for thorough coverage. The size and number of trees per acre as well as foliage density will determine the gallons of spray required. Apply only in 40 gals. or more of water/A. Control of these mites/insects requires a thorough coverage of the spray solution on the tree foliage.</p> <p>Time Abama 0.15 EC applications to occur when spider mites first appear or when insect thresholds are reached. Repeat applications following the directions in the Restrictions column of this table.</p> | <p>Do not apply by air.</p> <p>Reduced efficacy and/or residual control may occur if Abama 0.15 EC is not applied with a horticultural spray oil (not a dormant oil). Follow all directions on the spray oil label or spray guides. In some cases, phytotoxicity and crop loss has been observed when Abama 0.15 EC plus a horticultural spray oil was applied in less than 14 days before or after a captan application.</p> <p>Do not apply more than 20 fl. oz. Abama 0.15 EC per application, and no more than 40 fl. oz. per growing season.</p> <p>Make only 2 applications per growing season 21 days or more apart.</p> <p>Do not allow livestock to graze in treated orchards.</p> <p>Preharvest Interval: 28 days</p> |

<sup>a</sup> Dilute Spray Rate is based on a volume of 400 gals./A dilute spray.

<sup>b</sup> Concentrate Spray Rate: determine the amount of Abama 0.15 EC required in a full cover dilute spray. Then use the same amount of product per acre in concentrate sprays that would be required for the dilute sprays to the same orchard/grove. Note that for small trees, the amount may be less than 10 fl. oz./A.

**Spray Drift Precautions:** Observe the following precautions when spraying in the vicinity of aquatic areas such as lakes, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farms:

- Spray last 3 rows upwind of aquatic areas using nozzles on one side only, with spray directed away from aquatic areas
- Avoid spray going over tops of trees by adjusting or turning off top nozzles. Shut off nozzles on the side away from the grove/orchard when spraying the outside row. Shut off nozzles when turning at ends of row and passing tree gaps in rows.
- Do not apply Abama 0.15 EC when weather conditions favor drift to aquatic areas.
- Do not apply within 110 feet upwind of aquatic areas or when wind speed is above 8 miles per hour.
- Do not apply during a temperature inversion.



## PLUMS AND PRUNES

Abama 0.15 EC will control the following pests in plums and prunes:

*European red mite*  
*Pacific spider mite*  
*Twospotted spider mite*

| Rate of Abama 0.15 EC  | Directions for Application  | Restrictions  |
|--|---|---|
| <p>For Dilute Sprays<sup>a</sup>: 2.5 – 5.0 fl. oz./100 gals</p> <p>For Concentrate Sprays<sup>b</sup>: 10 – 20 fl. oz./A</p> <p><b>PLUS</b></p> <p>A Horticultural Spray Oil that is not a dormant oil</p> <p>For Dilute Sprays: 0.25% or 1 gal./A</p> <p>For Concentrate Sprays: Minimum of 1 gal./A</p> <p><b>OR</b></p> <p>Nonionic surfactant (at the manufacturer's recommended label rate).</p> | <p>Apply Abama 0.15 EC using conventional dilute or concentrate sprays using ground application equipment. Calibrate equipment prior to application to ensure sufficient water is used for thorough coverage. The size and number of trees per acre as well as foliage density will determine the gallons of spray required. Apply only in 40 gals. or more of water/A. Control of these mites/insects requires a thorough coverage of the spray solution on the tree foliage.</p> <p>Always use Abama 0.15 EC with either a nonionic surfactant or a horticultural spray oil (not a dormant oil). The combination of Abama 0.15 EC and the nonionic surfactant helps to provide an even coverage of spray on the foliage and to improve the wetting and penetration of leaves for better insect control. Not all combinations of nonionic surfactants and Abama 0.15 EC have been tested on every plum/prune variety or under all types of growing conditions. Before using a nonionic surfactant, carefully read and follow the surfactant product's label.</p> <p>Efficacy may be improved with a combination of Abama 0.15 EC and a horticultural spray oil (not a dormant oil). However, the chances of phytotoxicity to fruit and foliage increase with this combination. Apply at the recommended rates in this table.</p> <p>Time Abama 0.15 EC applications to occur when mites first appear. Repeat applications following the directions in the Restrictions column of this table.</p> | <p>Do not apply by air.</p> <p>Do not apply more than 20 fl. oz. Abama 0.15 EC per application, and no more than 40 fl. oz. per growing season.</p> <p>Make only 2 applications per growing season 21 days or more apart.</p> <p>Do not allow livestock to graze in treated orchards.</p> <p>Preharvest Interval: 21 days</p> |

<sup>a</sup> Dilute Spray Rate is based on a volume of 400 gals./A dilute spray.

<sup>b</sup> Concentrate Spray Rate: determine the amount of Abama 0.15 EC required in a full cover dilute spray. Then use the same amount of product per acre in concentrate sprays that would be required for the dilute sprays to the same orchard/grove. Note that for small trees, the amount may be less than 10 fl. oz./A.



**Spray Drift Precautions:** Observe the following precautions when spraying in the vicinity of aquatic areas such as lakes, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farms:

- Spray last 3 rows upwind of aquatic areas using nozzles on one side only, with spray directed away from aquatic areas
- Avoid spray going over tops of trees by adjusting or turning off top nozzles. Shut off nozzles on the side away from the grove/orchard when spraying the outside row. Shut off nozzles when turning at ends of row and passing tree gaps in rows.
- Do not apply Abama 0.15 EC when weather conditions favor drift to aquatic areas.
- Do not apply within 100 feet upwind of aquatic areas or when wind speed is above 8 miles per hour.
- Do not apply during a temperature inversion.



## POTATOES

Abama 0.15 EC will control the following pests in potatoes:

*Colorado potato beetle*  
*Liriomyza leafminers*  
*Spider mites*

| Rate of Abama 0.15 EC  | Directions for Application  | Restrictions   |
|--|---|--|
| <p>8 – 16 fl. oz./A</p> <p><b>Note:</b> Although Abama 0.15 EC can be used without a wetting agent, improved spreading and penetration for better insect control is achieved using a combination of Abama 0.15 EC and either a nonionic surfactant or organosilicone-based surfactant at the manufacturer's recommended use rates.</p> | <p>Apply Abama 0.15 EC using ground or air application equipment. Although aerial application is permitted, best control of mites is achieved with ground applications which proved better spray coverage. The user accepts all liability for mite level and duration of control if Abama 0.15 EC is applied by air.</p> <p>Calibrate equipment prior to application to ensure sufficient water is used for thorough coverage. Control of these mites/insects requires a thorough coverage of the spray solution on the crop foliage.</p> <p>Do not apply in less than 20 gals. of water/A by ground and in less than 5 gals. of water by air application. To ensure thorough spray coverage, use a greater spray volume for high pest pressure, dense crop canopies, and adverse application conditions (high temperatures).</p> <p>Use of Abama 0.15 EC in combination with a sticker or binder type product such as Bravo® Weather Stik® may reduce control of insects and spider mites.</p> <p>Apply Abama 0.15 EC at 8 – 12 fl. oz./A for low to moderate insect populations and at 16 fl. oz./A for heavy infestations. Make repeat applications if needed to maintain control according to the Restrictions column of this table.</p> <p><b>Spider mites:</b> Time applications to occur when insects are first detected.</p> <p><b>Colorado potato beetle:</b> Apply Abama 0.15 EC when about 50% of the egg masses have hatched and the larvae are present. When 2 applications are required, do not make the second application to the same Colorado potato beetle generation.</p> <p><b>Liriomyza leafminers:</b> Time application to occur when adult flies are first detected.</p> | <p>Refer to the section on Spray Drift Precautions of this label.</p> <p>Do not apply Abama 0.15 EC by air in the State of New York.</p> <p>Do not apply more than 32 fl. oz./A Abama 0.15 EC to control spider mites and Colorado potato beetle, or more than 48 fl. oz. to control leafminers.</p> <p>Make only 2 sequential applications 7 days or more apart.</p> <p>Do not allow livestock to graze or feed treated foliage to livestock.</p> <p>Preharvest Interval: 14 days</p> |



## STRAWBERRIES

Abama 0.15 EC will control the following pests in strawberries:

*Strawberry spider mite*  
*Twospotted spider mite.*

| Rate of Abama 0.15 EC  | Directions for Application  | Restrictions   |
|--|---|--|
| 16 fl. oz./A<br><br><b>Note:</b> Although Abama 0.15 EC can be used without a wetting agent, improved spreading and penetration for better insect control is achieved using a combination of Abama 0.15 EC and a nonionic surfactant at the manufacturer's recommended use rate. | <p>Apply Abama 0.15 EC using ground application equipment. Calibrate equipment prior to application to ensure sufficient water is used for thorough coverage. Control of these mites requires a thorough coverage of the spray solution on the crop foliage. Apply Abama 0.15 EC to the tops and undersides of the leaves.</p> <p>Do not apply in less than 50 gals. of water/A by ground. If electro-static sprayers are used, the volume may be less than 50 gals./A but do not use less than 10 gals. of water/A.</p> <p>Apply Abama 0.15 EC when mites are first detected. A second repeat application may be made 7 – 10 days later. This sequence of two applications may be repeated if needed but follow the directions in the Restrictions column of this table.</p> | <p>Refer to the section on Spray Drift Precautions of this label.</p> <p>Do not apply by air.</p> <p>Do not apply more than 16 fl. oz. per application or more than 64 fl. oz Abama 0.15 EC per growing season.</p> <p>After the first 2 applications, wait 21 day or more before making additional applications if needed to maintain control.</p> <p>To prevent insect resistance to Abama 0.15 EC, do not apply in strawberry nurseries.</p> <p>Preharvest Interval: 3 days</p> |

### 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. Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. 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 Disposal

Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple 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 ¼ 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.

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### **LIMITED WARRANTY AND DISCLAIMER**

Tide International USA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below.

Our directions for use of this product are based upon tests believed to be reliable. The use of this product being beyond control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such use or the results to be obtained if not used in accordance with printed directions and established safe practice. To the extent consistent with applicable law, buyer's exclusive remedy and manufacturer's or seller's exclusive liability for any and all claims, losses, damages or injuries resulting from the use or handling of this product, whether or not based in contract, negligence, strict liability in tort or otherwise shall be limited, at the manufacturer's option to replacement of, or the repayment of the purchase price for, the quantity of product with respect to which damages are claimed.

#### **Inherent Risks of Use**

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Tide International USA or the seller. All such risks shall be assumed by buyer.

#### **Terms and Conditions of Use**

If terms of the Limited Warranty & Disclaimer and Inherent Risks of Use are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer and Inherent Risks of Use.

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