

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Washington, D.C. 20460

August 6, 2009

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Ann Beaulieu, Ph.D., Director Regulatory Affairs AgroFresh, Inc. 727 Norristown Rd. P.O. Box 904 Spring House, PA 19477-0904

RE:

Product Name: AF-600

EPA Reg. No: 71297-7

Application for Label Notification Dated June 22, 2009 to Correct Typographical Errors

#### Dear Dr. Beaulieu:

The Biopesticides and Pollution Prevention Division is in receipt of your application for Notification under Pesticide Registration (PR) Notice 98-10 dated above. A preliminary screen of this request has been conducted for its applicability under PR Notice 98-10 and it has been determined that the action(s) requested falls within the scope of PR Notice 98-10. Our records have been duly noted, and the label submitted with this application has been stamped "Notification, received and reviewed" and will be placed accordingly in our records.

If you have any questions concerning this action, please feel free to contact Ms. Diana Hudson at (703) 308-8713 or email at <a href="mailto:hudson.diana@epa.gov">hudson.diana@epa.gov</a>.

Sincerely,

## Linda Hollis

Linda Hollis, Chief Biochemical Pesticides Branch Biopesticides and Pollution Prevention Division (7511P)

# Agrofesh

June 22, 2009

Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504P)
US Environmental Protection Agency
Biopesticides and Pollution Prevention Division
One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202

Attention: Linda Hollis, Chief, Biochemical Pesticides Branch, BPPD

Subject: Response to EPA Letter Dated June 16, 2009

Changes Marked in Red for Notification to Correct

Typographical Errors per Notice 98-10 EPA Registration Number 71297-7

Product: AF-600

Active Ingredient = 1-methylcyclopropene

This letter is in response to the US EPA letter dated June 16, 2009 requesting a copy of the label for 71297-7 showing the changes clearly marked. Included is the label with the changes highlighted in red on page 4. This change is being made by notification and is consistent with the notifications allowed under PR Notice 98-10.

If you have any questions, please contact me at <u>abeaulieu@agrofresh.com</u> or at 215-619-5534. Thank you.

Sincerely,

Ann Beaulieu, Ph.D.

Director, Regulatory Affairs

ecc: D. Hudson

### NOTIFICATION

**AF-600** 

Date Reviewed: 8-6-09

Reviewed By: D. Hudson

Protects fruit from the various effects of ethylene.

EPA Reg. No. (File Symbol 71297-7)

EPA Est. No. 707-WA-001

Produced by: AgroFresh Inc.

A wholly owned subsidiary of Rohm and Haas Company

Philadelphia, PA Tel: 215-592-3000

**NOTICE**: Before using this product, read the entire Precautionary Statements, Conditions of Sale and Warranty, Directions for Use, Use Restrictions and Storage and Disposal Instructions. If the Conditions of Sale and Warranty are not acceptable, return the product unused within thirty days of purchase to the place of purchase.

## KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID				
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>			
In on skin	■ Take off contaminated clothing.			
	<ul> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>			
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>			
If inhaled	Move person to fresh air.			
	• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.			
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>			
If swallowed	Call a poison control center or doctor immediately for treatment advice.			
	<ul> <li>Have person sip a glass of water for 15-20 minutes.</li> </ul>			
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>			
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> <li>container or label with you when calling a poison control center or doctor, or going for any also contact 215-592-3000 for emergency medical treatment information.</li> </ul>			

Net Contents: Plastic Jug or Mini-Bulk Sizes

1 Gallon	(3.78 Liters)		
2.5 Gallons	(9.45 Liters)		
5 Gallons	(18.9 Liters)		
60 Gallons	(227 Liters)		
110 Gallons	(416 Liters)		
220 Gallons	(832 Liters)		

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. Refer to Supplemental Labeling entitled AGRICULTURAL USE REQUIREMENTS in the DIRECTIONS FOR USE section of the labeling for information about this standard.

#### PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION Causes slight eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin or clothing. Harmful if swallowed. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Avoid breathing vapor.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- · Chemical-resistant gloves made of any waterproof material
- Protective eyewear

Follow manufacturer's instructions for cleaning / maintaining PPE. If no such instructions exist 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. Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

For terrestrial use: Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation. Do not apply this product in a way that will contact workers or other persons, either directly or thorough drift. Only protected handlers may be in the area during application.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Workers 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 4 hours unless wearing the appropriate 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:

- Long -sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks
- Protective eyewear

Read the entire label before using this product.

#### APPLICATION INSTRUCTIONS

Rate, time and mode of application: Refer to instructions in crop tables.

**Plant Safety:** This product has been tested on numerous plant varieties with no phytotoxic effects. However, since this product has not been tested on all plant varieties or in combination with all available adjuvants or tank mixes, the manufacturer recommends testing on a small number of plants to check for adverse plant effects before applying on a larger number of plants. Under certain environmental conditions, the use of spray adjuvants can result in transient crop response.

Incompatibility: Do not use with products containing copper.

#### For treatment of APPLE, PEAR, KIWIFRUIT, WALNUT

- Do NOT exceed FIVE (5) minutes of AGITATION after product is added to spray tank.
- Do NOT allow product to contact any COPPER.

CROP	Application Timing	RATE fluid oz/acre	Restrictions
Apple	3-7 Days Before Anticipated Harvest (Fruit Ripening)	142-428 (1.43 to 4.28 oz ai/acre)	Do not apply more than 428 fluid oz /acre per crop. Allow a minimum of 3 days between treatment and harvest
Pear	7 Days Before Anticipated Harvest (Fruit Ripening)	107-428 (1.07 to 4.28 oz ai/acre)	
Kiwifruit	3-7 Days Before Anticipated Harvest (Fruit Ripening)	36-142 (0.36 to 1.43 oz ai/acre)	Do not apply more than 142 fluid oz /acre per crop. Allow a minimum of 3 days between treatment and harvest
Walnut	At flowering, when 10-30% Flowers are receptive to pollen	71-142 (0.71 to 1.43 oz ai/acre)	Do not apply more than 142 fluid oz /acre per crop.

**APPLE:** AF-600 delays fruit maturation, which allows for a delayed harvest period of 7 to 14 days. Depending on the cultivar, orchard conditions, and grower objectives, one or more of the following benefits may be provided by this delay: improved harvest management, reduction of preharvest fruit drop, additional time for color and size development, maintenance of fruit firmness, delayed starch hydrolysis, delayed onset and incidence of watercore, and enhanced storage potential.

**PEAR:** AF-600 provides one or more of the following benefits depending on the cultivar and growing conditions: improved harvest management, reduction of preharvest fruit drop, increased fruit size and maintenance of fruit firmness.

**KIWIFRUIT:** Depending on the cultivar, or chard conditions, and grower objectives, one or more of the following benefits may be provided by AF-600: improved harvest management, increased fruit size, maintenance of fruit firmness before harvest, reduction of preharvest fruit drop, maintenance of fruit quality, and enhanced storage potential.

**WALNUT:** Depending on cultivar, or chard conditions, and grower objectives, the following benefit may be provided by AF-600: reduction in pistillate flower abortion during pollination resulting in improved harvest.

#### **Mixing Instructions:**

- 1. Fill the tank of application equipment with approximately 2/3 of required water volume.
- 2. Add the amount of AF-600 required as directed in the Use Rate table above
- 3. Fill the spray tank to final required water volume and continue running the agitation system for 5 minutes after adding the AF-600, DO NOT EXCEED 5 MINUTES OF AGITATION.
- 4. Do not use agitator during spraying.
- 5. Initiate spray application as soon as possible after step 4 and no later than 30 minutes after preparation of tank mixture.
- 6. Do not allow sources of ignition such as eigarettes near the tank lid when opening it, for example for inspection or filling. When exposed to water, the formulation will begin to release 1-MCP gas in the spray tank head space. In poorly vented tanks this gas may temporarily reach flammable levels in the headspace. The headspace must not come in contact with an ignition source.

#### Spray Volume

Apply AF-600 in a sufficient amount of water or oil carrier to ensure good coverage of the tree canopy. Product efficacy requires that fruits and foliage receive uniform spray coverage. Use calibrated spray equipment to ensure uniform coverage of leaves and fruit. Adjust water volumes based on tree size and spacing. In most cases, use a minimum of 200 gallons per acre or the equivalent of a dilute spray. Use larger droplets of 300 microns for better spray coverage.

#### **Spray Nozzle Requirements**

Use flat-fan nozzles. Select nozzles and pressure combinations which deliver coarse (250-375 um) spray droplets.

#### **Sprayers Equipped with Injectors**

AF-600 may be used with sprayer equipment that utilizes in line injectors for liquid formulations. This equipment can improve spray efficiency, reduce chemical waste, and facilitate easier clean out. Be sure injector tank is drained and free of all water. Add AF-600 directly to the injector tank. Do not add or mix water with the AF-600 in the injector tank. Set injector to deliver the recommended amount of AF-600 per acre. Follow the manufacturer's recommendation for proper setting and calibration of the injector.

#### **Aerial Application**

AF-600 can be applied via airplane or helicopter. DO NOT apply when conditions favor drift from the target area. See special requirements for aerial application.

#### **Options for Aerial Application**

- 1. For aerial applications use AF-600 as a straight product without dilution at a volume of 1.6-4 gallons per acre. Clean and drain spray tank completely of all water before adding AF-600 to the tank of the aircraft. Add paraffin or mineral based crop oil, such as Ultrafine spray oil, to the tank as a diluent if needed. DO NOT ADD ANY WATER TO THE SPRAY TANK. Spray calibration must be conducted to confirm medium to fine spray droplets that penetrate throughout the canopy.
- 2. If water is used in the aerial application, AF-600 must be used with equipment that utilizes in line injectors. Be sure injector tank is drained and free of all water. Add AF-600 directly to the injector tank. Do not add or mix water with the AF-600 in the injector tank. Set injector to deliver the recommended amount of AF-600 per acre. Follow the manufacturers' recommendation for proper setting and calibration of the injector. Apply AF-600 using 20-60 gallons of water/acre. Spray calibration must be conducted to confirm medium to fine spray droplets that penetrate throughout the canopy.

#### Additional Aerial Application Recommendations

- Spray at a height of 10 feet or less above the tree canopy unless a greater height is required for safety
- Nozzles must always point backwards and parallel with the airstream

#### **Important Considerations**

- Apply AF-600 under slow drying conditions, e.g. early in the morning or at night, in order to maximize absorption.
- Do not make applications during the day or early evening when fruit is still hot.
- Do not apply when temperatures exceed 90 degrees.
- Do not use overhead cooling or irrigation equipment for at least 2 hours following application.
- Do not apply if rain is expected within 1 hour of application.
- Combination effects and potential interactions between AF-600 and products containing
  napthaleneacetic acid (NAA) or ethephon have not been thoroughly evaluated. Use of these
  products on crops previously treated with AF-600 may reduce the benefits provided by AF-600 at
  harvest or after storage.
- Do not apply when wind speeds are excessive.
- AF-600 has a 3 day preharvest interval (PHI) for apples, pears, kiwifruit and walnuts.

#### STORAGE AND DISPOSAL

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

Pesticide Storage: Store in original packaging 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 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. For containers greater than 50 pounds, triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Fill the container ¼ full with water and recap. Replace and tighten enclosures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Dispose of container in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. 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 manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, all of which are beyond the control of AGROFRESH INC. or its direct or indirect distributors. To the extent permitted by applicable law, Buyer and User agree to hold AGROFRESH and its distributors harmless from any claims relating to such factors.

AGROFRESH warrants that this product conforms to the chemical description on the label. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of AGROFRESH or its distributors, and, (2) Buyer and User assume the risk of any such use. To the extent permitted by applicable law, AGROFRESH MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED IN THIS LABEL.

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