



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

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

January 8, 2016

Dr. Ann Beaulieu  
Director, Regulatory Affairs  
AgroFresh, Inc.  
400 Arcola Road, PO Box 7000  
Collegeville, PA 19426

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment – amended phone numbers and instructions in first aid box  
Product Name: AF-2005  
EPA Registration Number: 71297-11  
Application Date: 18 September 2015  
OPP Decision Number: 509529

Dear Dr. Beaulieu:

The amended labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

This approval does not affect any terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the U.S. Environmental Protection Agency (EPA). If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains false

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or misleading statements or claims substantially differing from the EPA-approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Cody Kendrick of my team by phone at (703) 347-0468 or via email at [kendrick.cody@epa.gov](mailto:kendrick.cody@epa.gov).

Sincerely,

A handwritten signature in blue ink that reads "Andrew C. Bryceland". The signature is written in a cursive style with a large, stylized initial 'A'.

Andrew Bryceland, Team Leader  
Biochemical Pesticides Branch  
Biopesticides and Pollution  
Prevention Division (7511P)  
Office of Pesticide Programs

Enclosure

# AF-2005

Protects fruit from the various effects of ethylene.

## ACTIVE INGREDIENT:

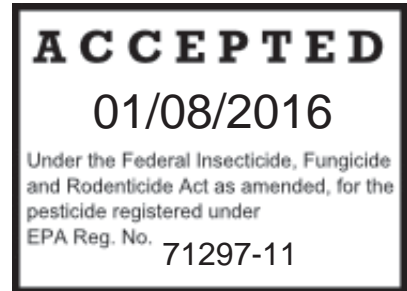
1-Methylcyclopropene.....0.8%

OTHER INGREDIENTS\*.....99.2%

\*Contains petroleum distillates

TOTAL:.....100.0%

Produced by: AgroFresh Inc.  
400 Arcola Road, PO Box 7000  
Collegeville, PA  
Tel: 866-206-1001



**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	
<b>If in eyes</b>	<ul style="list-style-type: none"><li>▪ Hold eye open and rinse slowly and gently with water for 15-20 minutes. 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>
<b>In on skin or clothing</b>	<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>
<b>If inhaled</b>	<ul style="list-style-type: none"><li>▪ Move person to fresh air.</li><li>▪ If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li><li>▪ Call a poison control center or doctor for further treatment advice.</li></ul>
<b>If swallowed</b>	<ul style="list-style-type: none"><li>▪ Immediately call a poison control center or doctor.</li><li>▪ Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>▪ Do not give any liquid to the person.</li><li>▪ Do not give anything by mouth to an unconscious person.</li></ul>
Note to physician: Contains petroleum distillate. Vomiting may cause aspiration pneumonia.	
<b>POISON CONTROL CENTER 1-800-222-1222</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For general information on product use, etc., call the National Pesticides Information Center at 1-800-858-7378. For emergencies, call the poison control center 1-800-222-1222.	

EPA Reg. No. 71297-11  
EPA Est. No. 707-WA-001

110024/20150038

**Net Contents: Plastic Jug Sizes**

1	Gallon	( 3.8 Liters)
1.5	Gallon	( 5.7 Liters)
2	Gallons	( 7.6 Liters)
2.5	Gallons	( 9.5 Liters)
5	Gallons	(19 Liters)

<Lot No.>

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** Avoid breathing vapor. 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 and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse." Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### 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 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. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

### 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 12 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

- Do NOT allow product to contact any COPPER.

CROP	Application Timing	RATE fluid oz/acre	Restrictions
Apple	3-10 Days Before Anticipated Harvest (Fruit Ripening)	90 to 470 (60 - 300 g a.i./ha)	Do not apply more than 470 fluid oz /acre per crop. Allow a minimum of 3 days between treatment and harvest
Pear	3-10 Days Before Anticipated Harvest (Fruit Ripening)	90 to 470 (60 - 300 g a.i./ha)	

**APPLE:** AF-2005 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-2005 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.

### Mixing Instructions:

1. Shake well.
2. **Open container with your body upwind**
3. Dilute 400 ml of AF2005 with 600 ml of spray oil, such as Consol 260. Mix/shake each container well to get all of the AF2005 dispersed.
4. Do not allow sources of ignition such as cigarettes, nor any open flame near the container when opening it, such as for inspection or filling.
5. **DO NOT MIX WITH WATER IN A SPRAY TANK.**

If exposed to water, the formulation will begin to release 1-MCP gas in the spray tank head space. **In poorly vented containers, this gas may temporarily reach flammable levels in the headspace. The headspace must not come in contact with an ignition source.**

### Spray Volume

Apply low volume of AF-2005 with small droplet size 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. Use a maximum of 470 fluid ounces (undiluted) per acre. Use smaller droplets for better spray coverage.

### Spray Nozzle Requirements

The use of external mix air atomizing spray nozzles is recommended. Select nozzles and pressure combinations which deliver small (50-150 micrometer) spray droplets.

### Sprayers Not Equipped with Injectors

Spray the diluted AF-2005 without further dilution or addition of water.

### Sprayers Equipped with Injectors

Diluted AF-2005 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 diluted AF-2005 directly to the injector tank. Do not add or mix water with the diluted AF-2005 in the injector tank. Set injector to deliver the recommended amount of AF-2005 per acre. Follow the manufacturer's recommendation for proper setting and calibration of the injector. Co-inject and mix with an inline static mixer up to 2.5% water (by weight of the diluted AF-2005) just before the spray nozzles.

### **Aerial Application**

Diluted AF-2005 can be applied aerially. DO NOT apply when conditions favor drift from the target area.

Spray at a height of 10 feet or less above the tree canopy unless a greater height is required for safety.

### **Important Considerations**

- Apply AF-2005 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-2005 and products containing naphthaleneacetic acid (NAA) or ethephon have not been thoroughly evaluated. Use of these products on crops previously treated with AF-2005 may reduce the benefits provided by AF-2005 at harvest or after storage.
- Do not apply when wind speeds are excessive.
- AF-2005 has a 3 day preharvest interval (PHI) for apples and pears.

## **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 Handling:** 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.

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 consistent with 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 consistent with 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 consistent with 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.

To the extent consistent with applicable law, in no event shall AGROFRESH or its distributors be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF AGROFRESH AND ITS DISTRIBUTORS, FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF AGROFRESH OR ITS DISTRIBUTORS, THE REPLACEMENT OF THE PRODUCT.**

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**U.S. Patents 5,518,988 and 6,017,849**