

11297-6

AFxRD-038

Protects fruit, vegetable and agronomic crops from the various effects of ethylene.

ACTIVE INGREDIENT:

1-Methylcyclopropene.....3.8%

OTHER INGREDIENTS:.....96.2%

TOTAL:.....100.0%

ACCEPTED
MAR 12 2010

Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended, for
the pesticide registered under
EPA Reg. No. 11297-6

EPA Reg. No. 71297-6
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 style="list-style-type: none"> 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. Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> 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. Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 215-592-3000 for emergency medical treatment information.	

Net Contents:

Water Soluble Pouch Sizes	
3.8 oz	(108 grams)
9.4 oz	(266 grams)
18.8 oz	(533 grams)
37.6 oz	(1066 grams)
56.4 oz	(1599 grams)
112.7oz	(3194 grams)

Plastic Container Sizes	
17.6 oz	(0.5 kg)
35 oz	(1 kg)
70 oz	(2 kg)
175 oz	(5 kg)

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 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
- **WHEN HANDLING PLASTIC CONTAINERS:** Respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N,R,P, or HE prefilter.

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 through 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

AFxRD-038 is packaged in a water soluble pouch inside a foil package. Once the foil package is opened, the entire contents of the water soluble pouch must be used. AFxRD-038 is also packaged in a plastic container.

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

Adjuvants: This product must be used with adjuvants. See Use of Adjuvants section for the adjuvants and rates.

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 APPLES, PEARS, KIWIFRUIT, WALNUTS

- Do NOT exceed TEN (10) minutes of AGITATION after product is added to spray tank.
- This product MUST be used with an ADJUVANT. See Use of Adjuvants Section below.
- Do NOT allow product to contact any COPPER.

CROP	Application Timing	RATE oz/acre	Restrictions
Apple	3-7 Days Before Anticipated Harvest (Fruit Ripening)	37.6 to 112.7 (1.43 to 4.28 oz ai/acre)	Do not apply more than 112.7 oz /acre per crop. Allow a minimum of 3 days between treatment and harvest
Pear	7 Days Before Anticipated Harvest (Fruit Ripening)		
Kiwifruit	3-7 Days Before Anticipated Harvest (Fruit Ripening)	9.4 to 37.6 (0.36 to 1.43 oz ai/acre)	Do not apply more than 37.6 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	18.8 to 37.6 (0.71 to 1.43 oz ai/acre)	Do not apply more than 37.6 oz/acre per crop.

APPLES: AFxRD-038 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.

PEARS: AFxRD-038 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, orchard conditions, and grower objectives, one or more of the following benefits may be provided by AFxRD-038: 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.

WALNUTS: Depending on cultivar, orchard conditions, and grower objectives, the following benefit may be provided by AFxRD-038: reduction in pistillate flower abortion (PFA) during pollination resulting in improved harvest.

Mixing Instructions

1. Fill the tank with approximately 2/3 of required water volume.
2. Measure the proper (See Use of Adjuvants below) volume of spray oil and surfactant for the total spraying volume. See Use of Adjuvants section below.
3. Add spray oil ONLY to the tank with agitator running. Do not add surfactant at this time to avoid foaming. The spray oil must emulsify and spray solution for application must look milky white before adding AFxRD-038.
4. The enclosed inner pouches containing AFxRD-038 are water-soluble. Do not allow water soluble pouch to become wet prior to adding to the spray tank. Do not handle with wet hands. After opening the outer foil package, drop the unopened inner water soluble pouch into the spray tank. Multiple water soluble pouches may be required as directed in Use Rate Table above. The entire water soluble pouch will dissolve in the water. Alternatively, measure the required amount of powder as directed in the Use Rate Table above.
5. Fill the spray tank to final required water volume and continue running the agitation system for 10 minutes after adding AFxRD-038 water soluble pouches (or powder), DO NOT EXCEED 10 MINUTES OF AGITATION. Add the surfactant in the last few minutes of agitation.
6. Do not use agitator during spraying.
7. Initiate spray application as soon as possible after step 5.

Use of Adjuvants

AFxRD-038 must be used with a spray oil adjuvant. Use a summer spray oil at a concentration of 1.0% (v/v) based on the volume of the spray solution plus an organosilicone surfactant at 0.05% v/v. To reduce foaming, minimize agitation and if necessary add a defoamer.

Spray Volume

Apply AFxRD-038 in a sufficient amount of water 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.

Important Considerations

- Apply AFxRD-038 under slow drying conditions, e.g. early in the morning or at night, in order to ensure adequate 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 AFxRD-038 and products containing naphthaleneacetic acid (NAA) or ethephon have not been thoroughly evaluated. Use of these products on crops previously treated with AFxRD-038 may reduce the benefits provided by AFxRD-038 at harvest or after storage.
- Do not apply in winds exceeding 10mph
- AFxRD-038 has a 3 day preharvest interval (PHI) for apples, pears, kiwifruit and walnuts.

For treatment of TOMATOES and PEPPERS

- Do NOT exceed TEN (10) minutes of AGITATION after product is added to spray tank.
- Do NOT allow product to contact any COPPER.

CROP	Application Timing	RATE oz/acre	Restrictions
Tomato, Fresh Market and Processed	At Bloom Timing Apply at the initiation of the 1 st bloom period followed by a second application 4-7 days after 1 st application or a second application at the initiation of the 2 nd bloom period.	3.8 to 9.4 (0.14 to 0.36 oz ai/acre)	Do not apply more than 18.8 oz/acre per crop.
Tomato, Fresh Market and Market	Before Harvest Timing Apply 28 days before harvest or as fruit begins to color and apply 4 to 7 days after the first application.		Allow a minimum of one day between treatment and harvest.
Peppers	At Bloom Timing Apply at the initiation of the 1 st bloom period followed by a second application 4-7 days after 1 st application or a second application at the initiation of the 2 nd bloom period.		

PROCESSING TOMATOES: When applied during bloom period, AFxRD-038 helps decrease stress induced flower abortion caused by excessive heat, cold, or other environmental stress. Before harvest applications may delay fruit maturation which can allow harvest delay from 4-8 days. Depending on the cultivar, field conditions, production management, and grower objectives, one or more of the following benefits may be associated with this delay: improved harvest management, reduction of preharvest fruit drop, increased fruit size, additional time for color development, improved fruit quality (e.g., reduced incidence and/or severity of over mature fruit), and higher brix yield.

FRESH MARKET TOMATOES: When applied during bloom periods, AFxRD-038 helps decrease stress induced flower abortion caused by excessive heat, cold, or other environmental stress. Before harvest applications may delay fruit maturation which can allow harvest delay from 4-8 days. Depending on the cultivar, field conditions, production management, and grower objectives, one or more of the following benefits may be associated with this delay: improved harvest management, reduction of preharvest fruit drop, increased fruit size, and more fruit in the mature green stage.

PEPPERS: AFxRD-038 helps decrease stress induced flower abortion caused by excessive heat, cold, or other environmental stress when applied during bloom periods.

Mixing Instructions:

1. Fill the tank of application equipment with approximately 2/3 of required water volume.
2. Measure volume of surfactant for the total spraying volume. See Use of Adjuvant Section below.
3. Add surfactant to the tank with agitator running. Use a defoamer if necessary to reduce foaming.
4. The enclosed inner pouches containing AFxRD-038 are water-soluble. Do not allow water soluble pouch to become wet prior to adding to the spray tank. Do not handle with wet hands. After opening the outer foil package, drop the unopened inner water soluble pouch into the spray tank. Multiple water soluble pouches may be required as directed in Use Rate Table above. Entire water soluble pouch will dissolve in water. Alternatively, measure the required amount of powder as directed in the Use Rate Table above.
5. Fill the spray tank to final required water volume and continue running the agitation system for 10 minutes after adding the AFxRD-038 inner pouches (or powder). **DO NOT EXCEED 10 MINUTES OF AGITATION.**
6. Do not use agitator during spraying.
7. Initiate spray application as soon as possible after step 5 and no later than 60 minutes after preparation of tank mixture.

Use of Adjuvants

AFx-RD038 must be used with a surfactant. Use a non-ionic surfactant at 0.1% (v/v) or an organo-silicone surfactant at the recommended label rate.

Spray Volume

Apply AFxRD-038 in a sufficient amount of water to ensure good coverage in the crop canopy. Product efficacy requires that the foliage and flower trusses receive uniform spray coverage. Use calibrated spray equipment to ensure uniform coverage of leaves and flower trusses. In most cases, use a minimum of 40 gallons per acre.

Spray Nozzle Requirements

Apply using flat-fan nozzles **ONLY**. Required droplet size is 250-400µm. For best results, do not use droplets smaller than 250µm.

Important Considerations

- For best results, apply under slow drying conditions, e.g. early in the morning or at night, in order to ensure adequate absorption.
- Do not make applications during the day when relative humidity is lower and temperatures higher.
- Do not apply when temperatures exceed 90 degrees.
- Do not apply if rain or overhead irrigation is expected within 1 hour of application.
- Do not apply in winds exceeding 10mph.

- AFxRD-038 has a 1 day preharvest interval (PHI) for all tomatoes and peppers.

For treatment of CORN, SOYBEAN, COTTON, SUNFLOWER, WHEAT, RICE

- Do NOT exceed TEN (10) minutes of AGITATION after product is added to spray tank.
- This product MUST be used with an ADJUVANT. See Use of Adjuvants section below.

CROP	Application Timing	RATE oz/acre	Restrictions
Corn - Field, pop, sweet (includes seed production and forage or silage production)	Apply to an actively growing corn crop between V5 and R2.	3.8 to 9.4 (0.14 to 0.36 oz ai/acre)	Do not apply more than 18.8 oz/acre per crop Allow a minimum of 14 days between treatment and harvest.
Cotton	Apply to an actively growing cotton crop between Pin-head Square (PHS) stage and 14 days after first bloom (Mid Bloom stage). A 2 nd application may be required 14 days following the 1 st application.		
Rice	Apply to an actively growing rice crop between panicle differentiation and grain-fill milk stage.		
Soybean	Apply to an actively growing soybean crop between early flower (V6/R1 stage) and R5 stage.		
Sunflower	Apply to an actively growing sunflower crop between 7-leaf (V7 stage) and flowering (R6 stage).		
Wheat	Apply to an actively growing wheat crop between flag-leaf (Feekes 9) and beginning grain fill (Feekes 10.55).		

CORN: Under conditions of environmental stress, AFxRD-038 provides enhanced, heat and drought tolerance and extends leaf life which may produce one or more of the following benefits: increased kernel weight, increased kernel number and increased yield.

SOYBEAN: Under conditions of environmental stress, AFxRD-038 provides enhanced heat and drought tolerance and extends leaf life which may produce one or more of the following benefits including: reduced flower abortion, reduced pod abortion, increased seed count and increased yield.

COTTON: Under conditions of environmental stress, AFxRD-038 provides enhanced heat and drought tolerance and extends leaf life which may produce one or more of the following benefits including: reduced flower abortion, reduced small boll abortion, and increased yield.

SUNFLOWER: Under conditions of environmental stress, AFxRD-038 provides enhanced heat and drought tolerance which may produce one or more of the following benefits including: increased seed number and increased yield.

WHEAT, RICE: Under conditions of environmental stress, AFxRD-038 provides enhanced heat and drought tolerance which may produce one or more of the following benefits including increased seed number and increased yield.

Mixing Instructions:

1. Fill the tank of application equipment with approximately 2/3 of required water volume.
2. Measure the volume of spray adjuvant for the total spraying volume. See Use of Adjuvants section below.
3. Add spray adjuvant to the tank with agitator running. Minimize agitation and add a defoamer if necessary to reduce foaming.
4. The enclosed inner pouches containing AFxRD-038 are water-soluble. Do not allow water soluble pouch to become wet prior to adding to the spray tank. Do not handle with wet hands. After opening the outer foil package, drop the unopened inner water soluble pouch into the spray tank, multiple water soluble pouches may be required as directed in the Use Rate table above. Entire water soluble pouch will dissolve

in water. Alternatively, measure the required amount of powder as directed in the Use Rate Table above.

5. Fill the spray tank to final required water volume and continue running the agitation system for 10 minutes after adding the AFxRD-038 water soluble pouches (or powder), DO NOT EXCEED 10 MINUTES OF AGITATION.

6. Do not use agitator during spraying.

7. Initiate spray application as soon as possible after step 5 and no later than 60 minutes after preparation of tank mixture.

Use of Adjuvants

AFxRD-038 must be used with an adjuvant such as spray oil and/or an organo-silicone surfactant at the recommended label rate. To reduce foaming, minimize agitation and add a defoamer.

Spray Volume

Apply AFxRD-038 in a sufficient amount of water to ensure good coverage in the crop canopy. Product efficacy requires that the foliage receive uniform spray coverage. Use calibrated spray equipment to ensure uniform coverage of leaves.

Spray Nozzle Requirements

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

Important Considerations

- Use sufficient spray volume to achieve thorough coverage of foliage, and blooms without unnecessary run-off.
- For best results, apply under slow drying conditions, e.g. early in the morning, in order to ensure adequate absorption.
- Do not apply if rain or overhead irrigation is expected within 1 hour of application
- Do not apply in winds exceeding 10mph.
- Avoid applications during the day when relative humidity is lower and temperatures are higher.
- Avoid application when temperatures exceed 90°F.
- Combination effects and potential interactions with other products have not been thoroughly evaluated.
- AFxRD-038 has a preharvest interval (PHI) of 14 days for corn, cotton, rice, soybean, sunflower, and wheat.

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. Dispose of empty outer foil package in trash

For plastic container, 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. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by the State and local ordinances.

**CONDITIONS OF SALE AND
LIMITATION OF WARRANTY AND LIABILITY**

BEFORE BUYING OR USING THIS PRODUCT, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of AGROFRESH INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of AGROFRESH INC. and the seller. The buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, AGROFRESH INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL, THIS PRODUCT IS SOLD "AS IS" TO THE EXTENT CONSISTENT WITH APPLICABLE LAW. AGROFRESH INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE USAGE.

IN THE UNLIKELY EVENT THAT BUYER OR USER BELIEVES THAT AGROFRESH INC. HAS BREACHED A WARRANTY CONTAINED IN THIS LABEL, BUYER OR USER MUST SEND WRITTEN NOTICE OF SUCH CLAIM TO THE FOLLOWING ADDRESS, TO THE EXTENT REQUIRED BY APPLICABLE LAW:

AGROFRESH INC.
ATTENTION: LAW DEPARTMENT
100 INDEPENDENCE MALL WEST
PHILADELPHIA, PA 19106-2399

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE BUYER'S OR USER'S EXCLUSIVE REMEDY FOR ANY INJURY, LOSS, OR DAMAGE RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT, INCLUDING BUT NOT LIMITED TO CLAIMS OF BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, OR STRICT LIABILITY.