U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs

Biopesticides and Pollution Prevention Division

(7511C) 1200 Pennsylvania Avenue NW Washington, DC 20460

-NCY

EPA Reg. Number:

Date of Issuance:

71297-8

MAR 1 1 2010

Term of

UNCONDITIONAL

NOTICE OF PESTICIDE:

UNITED STATES

Issuance:

X Registration

Re-registration

(under FIFRA, as amended)

A17492F

Name of Pesticide Product:

Name and Address of Registrant (include ZIP Code):

AgroFresh Inc., a Rohm and Haas Company

A Dow Chemical Company

100 Independence Mall

Philadelphia, PA 19106-2399

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA Sec. 3(c)(5) provided you:

- 1. Submit and/or cite all data required for registration/ reregistration of your product under FIFRA section 3(c)(5) and section 4 when the Agency requires all registrants of similar products to submit such data.
- 2. Make the following label change before you release the product for shipment: Revise the EPA Registration Number to read, "EPA Reg. No. 71297-8."
- 3. Submit three (3) copies of the revised final printed labeling before you release the product for shipment.
- 4. Submit within 1 year after the Date of Registration acceptable data packages for Guideline Studies: Storage Stability study (OPTS GLN: 830.6317) and Corrosion Characteristics study (OPTS GLN: 830.6320) for this product.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

	Sig	gnature of Approving Off	ficial: Chaef M	ch ant	<u></u>				Date:	MAR 1	1 2010	•	·	
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**PA Form 1320-1A (1/90)** 

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# A17492F

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

# **ACTIVE INGREDIENT:**

1-Methylcyclopropene	1.0%
OTHER INGREDIENTS:	
TOTAL:	100.0%

AgroFresh Inc., Philadelphia, PA
A wholly owned subsidiary of Rohm and Haas Company,
A wholly owned subsidiary of The Dow Chemical Company
Tel: 215-592-3000

# **ACCEPTED**

MAR 1 1 2010

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

# Keep Out Of Reach Of Children

# **CAUTION**

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.

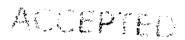
	FIRST AID				
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration,</li> </ul>				
* •	preferably mouth-to-mouth if possible.				
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>				
In on skin or	Take off contaminated clothing.				
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 in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>				
	• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.				
•	<ul> <li>Call a poison control center or doctor for 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 if able to swallow.</li> </ul>				
	<ul> <li>Do not induce vomiting unless told to by a poison control center or doctor.</li> </ul>				
	<ul> <li>Do not give anything to an unconscious person.</li> </ul>				

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact Rohm and Haas at 215-592-3000 for emergency medical treatment information twenty-four (24) hours a day, seven (7) days a week.

1-215-592-3000

EPA Reg. No. (71297- ) EPA Est. No. 707-WA-001 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)		



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: Harmful if inhaled. Avoid breathing vapor. Causes moderate eye irritation. Do not get in eyes, skin or clothing. Wear protective eyewear, such as goggles, face shield or safety glasses with side shields. 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 (PPE)

Applicators and handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves made of any waterproof material
- Goggles, face shield, or safety glasses with side shields

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/PPE 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.

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# **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 TOMATO and PEPPER

- 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	Restrictions
		fluid oz/acre	
Tomato, Fresh	At Bloom Timing		
Market and	Apply at the initiation of the 1 <sup>st</sup> bloom		
Processed	period. A second application may be		Do not apply more
	made 4-7 days after 1 <sup>st</sup> application or at		than 11.4 oz/acre per
	the initiation of the 2 <sup>nd</sup> bloom period.	5.7 to 11.4	crop.
Tomato, Fresh	Before Harvest Timing		,- <b>-</b> F
Market and	Apply 28 days before harvest or as fruit		
Processed	begins to color. A second application may	(0.07 to	Preharvest Interval:
	be made at 4 to 7 days after the first	0.14 oz	Allow a minimum of
	application.	ai/acre)	
	At Bloom Timing	ai/acie)	one day between
Pepper	Apply at the initiation of the 1st bloom		treatment and
	period. A second application may be		harvest.
	made 4-7 days after 1 <sup>st</sup> application or at		
	the initiation of the 2 <sup>nd</sup> bloom period.		
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**TOMATO:** When applied during bloom period, A17492F helps decrease stress induced flower abortion caused by excessive heat, cold, or other environmental stresses. Before harvest applications may delay fruit maturation which can result in 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:

**Processing Tomato:** 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 Tomato: Improved harvest management, reduction of preharvest fruit drop, increased fruit size, and more fruit in the mature green stage.

**PEPPER:** A17492F 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 and turn on agitation system.
- 2. If an adjuvant is desired to assist in foliar wetting, measure the volume of adjuvant for the total spraying volume and add it to the tank. See Use of Adjuvants Section below.
- 3. Open container with your body upwind and add the amount of A17492F required as directed in the Use Rate table above.
- 4. Fill the spray tank to final required water volume and continue running the agitation

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system for 5 minutes after adding the A17492F, DO NOT EXCEED 5 MINUTES OF AGITATION

- 5. Do not use agitator during spraying.
- 6. Initiate spray application as soon as possible after step 4 and no later than 30 minutes after preparation of spray mixture.
- 7. Do not allow sources of ignition such as cigarettes, nor any open flame near the tank lid when opening it, such as 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.

# Use of Adjuvants

If an adjuvant is desired for assistance with foliar wetting, use an organo-silicone based adjuvant at its lowest recommended label rate.

# **Spray Volume**

Apply A17492F in a sufficient amount of water carrier to ensure good coverage in the crop canopy. Product efficacy requires that the foliage, flower trusses, and fruit receive uniform spray coverage. Use calibrated spray equipment to ensure uniform coverage of plant parts; fruit, leaves and flower trusses. It is recommended to use a minimum of 40 gallons per acre.

# **Spray Nozzle Requirements**

Apply using coarse flat-fan nozzles ONLY. Required droplet size is 250-375 µm. For best results, do not use medium, fine, or very fine nozzles (droplets smaller than 250 µm).

#### **Important Considerations**

- For best results, apply 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 when relative humidity is lower and temperatures higher.
- Do not apply when temperatures exceed 90°F degrees.
- Do not apply if rain or overhead irrigation is expected within 1 hour of application.
- Do not apply when wind speeds are excessive.
- A17492F has a 1 day preharvest interval (PHI) for all tomato and pepper.

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

- 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	
Corn - Field, pop, sweet (includes seed production and forage or silage production)	Apply to actively growing corn between stages V5 and R2.		Do not apply more than 11.4 fluid oz/acre per crop	
Cotton	Apply to actively growing cotton between Pinhead Square (PHS) stage and 14 days after first bloom (Mid Bloom stage). A 2 <sup>nd</sup> application may be required 14 days following the 1 <sup>st</sup> application.	5.7 to 11.4		
Rice	Apply to actively growing rice between panicle differentiation and grain-fill milk stage.			
Soybean	Apply to actively growing soybeans between early pod (R1 stage) and beginning seed (R5 stage).	(0.07 to 0.14 oz	Preharvest Interval: Allow a minimum of 14	
Sunflower	Apply to actively growing sunflowers between 7-leaf (V7 stage) and flowering (R6 stage).	ai/acre)		
Wheat	Apply to actively growing wheat between flagleaf (Feekes 9) and beginning of grain fill (Feekes 10.55).		days between treatment and harvest.	

When crops are grown under conditions of environmental or density-induced stress, A17492F provides enhanced tolerance to heat, drought and density induced stress. This results in extended leaf life and may produce one or more of the following benefits:

**CORN:** Increased kernel weight, increased kernel number and increased yield.

**COTTON:** Reduced square/flower abortion, reduced small boll abortion, and increased yield.

**RICE:** Increased seed number and increased yield.

**SOYBEAN:** Reduced flower abortion, reduced pod abortion, increased seed count and increased yield.

**SUNFLOWER:** Increased seed number and increased yield.

WHEAT: Increased seed number and increased yield.

#### **Mixing Instructions:**

- 1. Fill the tank of application equipment with approximately 2/3 of required water volume and turn on agitation system.
- 2. If an adjuvant is desired to assist in foliar wetting, measure the volume of adjuvant for the total spraying volume and add it to the tank. See Use of Adjuvants Section below.

- 3. Open the container with your body upwind and add the amount of A17492F required as directed in the Use Rate table above
- 4. Fill the spray tank to final required water volume and continue running the agitation system for 5 minutes after adding the A17492F, DO NOT EXCEED 5 MINUTES OF AGITATION.
- 5. Do not use agitator during spraying.
- 6. Initiate spray application as soon as possible after step 4 and no later than 30 minutes after preparation of tank mixture.
- 7. Do not allow sources of ignition such as cigarettes nor any open flame 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.

# Use of Adjuvants

If an adjuvant is desired for assistance with foliar wetting, use an organo-silicone based adjuvant at its lowest recommended label rate.

# **Spray Volume**

Apply A17492F 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.

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

A17492F can be used with sprayer equipment that utilizes in-line injectors for liquid formulations. Add A17492F directly to the injector tank. **Do not add or mix water** with the A17492F in the injector tank. Set injector to deliver the recommended amount of A17492F per acre. Follow the manufacturer's recommendation for proper setting and calibration of the injector.

#### **Aerial Application**

A17492F can be applied via airplane or helicopter. This method of delivery is recommended for applications on larger well established crops to avoid damaging the crop with ground equipment. DO NOT apply when conditions favor drift from the target area.

For aerial applications A17492F must be added without water to the spray tank. Clean and drain spray tank completely before adding A17492F to the tank of the airplane. Add paraffin or mineral based crop oil, such as Ultrafine spray oil, to the tank as a diluent, then add the appropriate amount of A17492F to the spray tank. DO NOT ADD WATER. Apply diluted A17492F using 1-5 gallons/acre. Spray calibration must be conducted to confirm medium to fine spray droplets that penetrate throughout the canopy.

# **Aerial Application Recommendations**

**Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.

**Nozzle Orientation** - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

# **Boom Length**

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

# **Application Height**

Making application at the lowest height that is safe reduces exposure of droplets to evaporation and wind. Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety.

# **Swath Adjustment**

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

#### Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential and above 10 mph.

NOTE: Local terrain can influence wind patterns. Every applicator must be familiar with local wind patterns and how they affect spray drift.

#### **Temperature and Humidity**

When making applications in low relative humidity, set-up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry

# **Special Requirements for Aerial Application**

When exposed to water, the formulation will begin to release 1-MCP gas in the spray tank. At concentration used in aerial application tanks, this gas can reach levels in the headspace of the tank that are flammable if there is an ignition source. Therefore, A17492F must not be mixed with water in the spray tank of the aircraft.

#### Tank Mixtures:

A17492F may be applied as a foliar spray in alternating spray programs or in tank mixes with Quilt or Quadris. If tank mixes are desired, observe all directions, precautions, and limitations on labeling of all products used. Consult compatibility charts or your local or State agricultural authorities for compatibility information.

# **Important Considerations**

- For best results, apply under slow drying conditions, e.g. early in the morning, in order to maximize absorption.
- Do not apply if rain or overhead irrigation is expected within 1 hour of application
- Do not apply when wind speeds are excessive.
- 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.
- A17492F 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. 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.

To the extent permitted by 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 PERMITTED BY 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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