

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OCT 1 7 2007

Ann Beaulieu Director of Regulatory Affairs AgroFresh, Inc. 100 Independence Mall West Philadelphia, PA 19105

Subject:

SmartFresh<sup>TM</sup> SmartTabs

EPA Registration No. 71297-3

Label Amendment to add Non Agricultural Use Statement

Application Date: August 24, 2007

Dear Ms. Beaulieu:

The amendment referred to above, submitted in connection with registration under FIFRA section 3(c)(5), is acceptable provided that you:

- 1. Submit and/or cite all data required for registration/re-registration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
- 2. Submit five (5) copies of your final printed labeling before you release the product for shipment. Final printed labeling means the label or labeling of the product when distributed or sold. Clearly legible reproductions or photo reductions will be accepted for unusual labels, such as those silk-screened directly onto glass or metal containers or large bags or drum labels.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

If you have any questions contact Driss Benmhend at 703-308-9525 or by e-mail at: Benmhend.driss@epa.gov.

A stamped copy of the label is enclosed for your records.

Sincerely,

Linda A. Hollis, Chief

Biochemical Pesticides Branch

Biopesticides and Pollution

Prevention Division (7511P)

AgroFresh Inc.

Agrofresh Inc.

A subsidiary of Rohm and Haas Company Philadelphia, PA. 19106

Tel: (215) 592-3000

**Active Ingredient:** 

SmartFresh<sup>TM</sup>

**SmartTabs** 

**Total:** 100.0%

EPA REGISTRATION NO. 71297-3 EPA EST. NO. 707-WA-001

**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 and its generating system unopened and unused within thirty days of purchase to the place of purchase.

# Keep Out Of Reach Of Children

# **CAUTION**

#### FIRST AID

**IF IN EYES:** 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 eye. Call a poison control center or doctor for treatment advice.

**IF ON SKIN OR CLOTHING:** 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:** 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: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

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: 10 tablets, 0.44 ounces (12.5 g)

SmartFresh™ SmartTab Last label revision October 10, 2007 Page 1 of 10

#### PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# **CAUTION**

Causes slight eye irritation. Harmful if absorbed through skin. Harmful if inhaled. Harmful if swallowed. Avoid contact with skin, eyes or clothing. Avoid breathing vapor. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators of this product must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Safety glasses or goggles

## User Safety Recommendations

- Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- 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.

Applicators and handlers must 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.

### Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170).

Do not enter enclosed areas until the enclosed area has been vented unless wearing the appropriate PPE. Ventilation shall continue until after thirty (30) minutes of ventilation using fans or other mechanical ventilating systems.

PPE required for early entry into enclosed areas prior to venting is:

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

### **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 State or Tribal Agency responsible for pesticide regulation. All applicable directions, restrictions, precautions and conditions of sale and warranty are to be followed. This labeling must be in the user's possession during application.

#### **GENERAL INFORMATION**

SmartFresh<sup>TM</sup> is a unique postharvest tool for counteracting many of the undesirable effects of both internal (produced within the fruit or vegetable) and external sources of ethylene on harvested fruit and vegetables. By counteracting ethylene, SmartFresh<sup>TM</sup> provides many benefits to the fruit and vegetables during transport and storage including:

- Maintaining firmness
- Maintaining titratable acidity
- Preventing superficial scald and soft scald on apples
- Reducing internal ethylene production

- Protection from external sources of ethylene
- Reducing respiration
- Delaying ripening and senescence
- Reducing incidence of peel greasiness in apples
- Reducing incidence of core flush and mealiness in apples
- Reducing chilling injury

SmartFresh<sup>TM</sup> can be used immediately after harvest, prior to storage, prior to shipment or just prior to sale. SmartFresh<sup>TM</sup> is effective under both cool (below 55 °F, 13 °C) and warm (above 55°F, 13°C) temperature conditions. To realize maximum benefit in controlling senescence, treat fruits and vegetables as soon as possible after harvest.

Harvested fruit and vegetables must be exposed to the volatile active ingredient of SmartFresh<sup>TM</sup> in enclosed areas, such as storage rooms, greenhouses, coolers, shipping containers, enclosed truck trailers, or ambient temperature, refrigerated, or controlled atmosphere food storage facilities. This product is not intended for use outdoors or in other non-enclosed areas. These enclosed treatment areas must be gas tight as leakage will reduce SmartFresh<sup>TM</sup>'s effectiveness.

### Fruit And Vegetable Storage Conditions

SmartFresh<sup>TM</sup> is compatible with and complementary to both controlled atmosphere and regular air fruit and vegetable storage conditions. SmartFresh<sup>TM</sup> must be used in air tight storage areas.

## **Timing of Application**

SmartFresh<sup>TM</sup> can be added to the storage area containing fruit or vegetables immediately after harvest, upon entering storage, during distribution or in transit. After application, fruit or vegetables not for immediate sale must be stored according to good standard commercial practices. It must be emphasized that maintaining the cold chain (keeping the fruit and vegetables cool at all times) and strict adherence to phytosanitary practices remain essential in maintaining safe and high quality fruit and vegetables.

Apples: Apply SmartFresh™ soon after harvest. Best results are obtained when fruit is at the optimum maturity level for long term storage. For optimum quality, store apples that are to be held longer than six months in a controlled atmosphere.

Avocados: Apply SmartFresh<sup>TM</sup> to the fruit soon after harvest at the physiological maturity stage or just prior to the "turning black" stage.

Bananas: Apply SmartFresh™ after the bananas have been exposed to ethylene and prior to reaching color stage 4.

Broccoli: Apply SmartFresh™ as soon after harvest as possible.

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Kiwifruit: Apply SmartFresh<sup>TM</sup> either as soon after harvest as possible or after long term storage and before the fruit are transported and distributed. Do not make more than one application to the same fruit.

Melons: Apply SmartFresh™ as soon after harvest as possible.

Persimmons: Apply SmartFresh<sup>TM</sup> as soon after harvest as possible.

Tomatoes: Apply SmartFresh™ between color stage mature green (Color Stage 1) and light red (Color Stage 5).

# **Application Method**

Prior to application, ensure that the treatment area can be properly and promptly sealed following application. SmartFresh<sup>TM</sup> SmartTabs are used in conjunction with the SmartFresh<sup>TM</sup> Activator Kit. SmartFresh<sup>TM</sup> SmartTabs are **Green** tablets that, when mixed with **Blue** Activator Tablets in a proprietary Activator Solution, release the volatile active ingredient 1-methylcyclopropene (1-MCP). Make sure that you have a sufficient supply of both SmartFresh<sup>TM</sup> SmartTabs and SmartFresh<sup>TM</sup> Activator Kits available to treat your selected treatment area.

Step 1: Selection of the appropriate number of SmartTabs and SmartTab Activator Kits for use

- a.) Accurately determine the volume of your EMPTY treatment area in cubic feet. Multiply inside dimensions: volume = length X width X height.
- b.) Choose the correct number of **Green** SmartFresh<sup>TM</sup> SmartTabs from Table 1 below according to the size of the area and the crop to be treated.

Table 1. Number of Green SmartTabs Required

olume of Treatment Area ft <sup>3</sup>	Banana	Melon Tomato Kiwi Persimmon	Apple Avocado Broccoli
706 to 882	2	3	6
883 to 1058	3	4	8
1059 to 1235	3	5	9
1236 to 1412	4	6	11
1413 to 1588	4	6	12
1589 to 1765	5	7	14
1766 to 1941	5	8	15
1942 to 2118	5	9	17
2119 to 2294	6	9	19
2295 to 2471	6	10	20
2472 to 2648	7	11	22
2649 to 2824	7	12	23
2825 to 3001	8	12	25
3002 to 3177	. 8	13	26
3178 to 3354	9	14	28
3355 to 3530	. 9	15	29
3531 to 3707	9	15	31
3708 to 3884	10	16	32
3885 to 4060	10	17	34
4061 to 4237	11	18	36
4238 to 4413	11	18	37
4414 to 4590	12	19	39
4591 to 4766	12	20	40
4767 to 4943	13	. 21	42
4944 to 5120	13	21	43
5121 to 5296	14	22	45

Never use more than ten (10) **Green** SmartFresh™ SmartTabs per activator kit. If more than ten (10) **Green** SmartFresh™ SmartTabs are needed, you must divide them among two (2) or more SmartFresh™ Activator Kits. Each Kit activates up to 10 SmartFresh™ SmartTabs only.

Always use two (2) Blue tablets for EACH Release Kit.

Table 1. Number of **Green** SmartTabs Required Continued

Volume of Treatment Area ft <sup>3</sup>	Banana	Melon Tomato Kiwi Persimmon	Apple Avocado Broccoli
5297 to 5473	14	23	46
5474 to 5649	14	24	48
5650 to 5826	15	24	49
5827 to 6002	15	25	51
6003 to 6179	16	26	53
6180 to 6356	16	27	54
6357 to 6532	17	27	56
6533 to 6709	17	28	57
6710 to 6885	. 18	29	59
6886 to 7062	18	30	60
7063 to 7239	18	30	62
7240 to 7415	19	31	63
7416 to 7592	19	32	65
7593 to 7768	20	33	67
7769 to 7945	20	33	68
7946 to 8121	21	34	70
8122 to 8298	21	35	71
8299 to 8475	22	36	73
8476 to 8651	22	37	74
8652 to 8828	23	37	76
8829 to 9004	23	38	77
9005 to 9181	23	39	79
9182 to 9357	24	39	80
9358 to 9534	24	40	82
9535 to 9711	25	41	84
9712 to 9887	25	42	85
9888 to 10064	26	42 .	87 ·
10065 to 10240	26	43	88
10241 to 10417	27	44	90
10418 to 10593	27	45	91
10594 to 10770	27	45	93
10771 to 10947	28	46	94

Never use more than ten (10) **Green** SmartFresh™ SmartTabs per activator kit. If more than ten (10) **Green** SmartFresh™ SmartTabs are needed, you must divide them among two (2) or more SmartFresh™ Activator Kits. Each Kit activates up to 10 SmartFresh™ SmartTabs only.

Always use two (2) Blue tablets for EACH Release Kit.

## Step 2. Evaluation Of The Quality Of The Treatment Room / Trailer / Container

To be used with SmartFresh<sup>TM</sup>, rooms/containers/trailers must be gas tight and have an internal fan for mixing the atmosphere.

#### Check that:

- All Room/Trailer/Container drain holes are plugged
- There are no holes in the walls, ceiling, or floor
- All vents to outside air are closed
- When viewed from a dark interior, no outside light is visible
- Door seals are in EXCELLENT condition

No missing rubber

No large cracks

No plastic slat doors

No roller top doors

No side doors

Scrubbers and/or ozone generators are off

Step 3: Fill the treatment room with the fruit or vegetables to be treated

Step 4: Release of 1-MCP

- a) Remove the pack of two (2) Blue SmartFresh<sup>TM</sup> Activator Tablets from the foam block. Always use both Blue tablets.
- b) Remove the appropriate number of **Green** SmartTabs from the SmartFresh™ SmartTabs Package.
- c) Peel off the foil seal from the SmartFresh™ Activator Solution taking care not to spill the solution.
- d) Add both the Blue and Green Tablets to the Activator Solution.
- e) Replace the cap.
- f) Place the small container on a level surface e.g. in the bottom gap of the pallet. Keep the container upright.
- g) Exit the treatment room immediately and promptly close the doors and ensure they are tightly sealed in order to contain the SmartFresh<sup>TM</sup> and ensure its maximum efficacy. The release of SmartFresh<sup>TM</sup> to the area will start several minutes after addition of the SmartTabs to the Activator Solution.
- h) Circulate air in the room by means of the internal air circulation system for AT LEAST one (1) hour.
- i) Do not open the doors for AT LEAST twelve (12) hours.
- j) For controlled atmosphere storage containers or storage rooms, do not change the room atmosphere to controlled atmosphere conditions for AT LEAST twelve (12) hours.

### Step 5: Reentry To The Storage Area

At the end of the SmartFresh<sup>TM</sup> treatment period, vent the treated room by opening the doors for a minimum of thirty minutes with continued full internal ventilation before allowing workers to enter. At the end of the room venting, remove the SmartFresh<sup>TM</sup> Activator Solution and dispose

of it as non-hazardous waste on-site or at an approved waste disposal facility. Store treated fruit and vegetables not intended for immediate sale according to standard commercial practices, in either refrigerated air or controlled atmosphere conditions.

#### Restrictions

Maximum season use rate: One application with appropriate number of tablets

Do not smoke during the SmartFresh<sup>TM</sup> application.

Do not treat fruit or vegetables stressed from poor fertility, heat, drought or sunscald.

Do not treat fruit that have had a pre-harvest application of ethephon.

### 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 must be disposed of on site

or at an approved waste disposal facility.

Container Disposal: Triple rinse or equivalent. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### CONDITIONS OF SALE AND WARRANTY

AgroFresh Inc. warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. AgroFresh Inc. MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES EITHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. Handling, storage and use of the product by Buyer or User are beyond the control of AgroFresh Inc. and Seller. Risks such as crop injury, ineffectiveness or other unintended consequences resulting from, but not limited to, weather or soil conditions, presence of other materials, disease, pests, drift to other crops or property, or failure to follow label directions will be assumed by the Buyer or User. TO THE FULLEST EXTENT PERMITTED BY LAW, AgroFresh Inc. OR SELLER SHALL NOT BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT

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