

Easy Preparation • Simple Instructions

OPEN

# SmartFresh™ ProTabs

Protects harvested fruit and vegetables  
from the various effects of ethylene.



**ACTIVE INGREDIENT:**

1-Methylcyclopropene .....2.0%

OTHER INGREDIENTS.....98.0%

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Total:.....100.0%

**Keep Out Of Reach Of Children**

## CAUTION

See Inside for First Aid Statement

**EPA REGISTRATION NO. 71297-10**

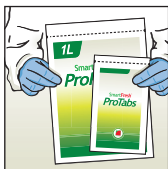
**EPA EST. NO. 66397-OK-001**

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## Quick Guide

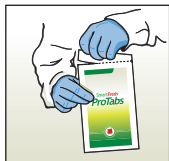
1. Make sure the room/trailer/container can be properly sealed and has an internal fan. Prepare to close and seal doors.
2. Check labels to confirm that the number of SmartFresh ProTabs in the tablet package and the size of the SmartFresh ProPack correspond to the size of the room. Match the color code of the tablet package with that of the ProPack.



or



3. Wear long-sleeved shirt and long pants, shoes plus socks, chemical-resistant gloves, safety glasses or goggles.
4. Set the ProPack on a stable surface. Tear off the closure strips at the top of the pouch, and at the top of the ProTabs package. Drop ALL the tablets from the package directly into the solution. Leave the area immediately. Be sure to complete all additions within 5 minutes.



OPEN.



ADD.



GO.

5. Close and seal doors. Do not allow anyone to re-enter the storage room until the application is complete.
6. After the application period, open doors and vent the room for at least 15 minutes before allowing re-entry.
7. Remove the used ProPack and dispose of it and its contents either on site or at an approved waste-disposal facility.
8. Store treated fruit according to industry best practices.

**See inside for additional precautionary statements.**

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 components unopened and unused within thirty (30) days of purchase to the place of purchase.

### FIRST AID

<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 by mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If 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 in eyes</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If swallowed</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>

### POISON CONTROL CENTER 1-800-222-1222

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.

## 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 and before eating, drinking, chewing gum, using tobacco, or using the toilet. 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
- Chemical-resistant gloves
- Safety glasses or goggles

Applicators and other handlers must follow manufacturer's instructions for cleaning and 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).

REI: Fifteen (15) minutes

Do not enter enclosed spaces until the enclosed space has been vented unless wearing the appropriate PPE. Ventilation shall continue until after fifteen (15) minutes of ventilation using fans or other mechanical ventilating systems.

PPE required for early entry into enclosed spaces 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.

## PRODUCT INFORMATION

SmartFresh™ is a unique postharvest tool for counteracting many of the undesirable effects of both internal (produced within the plant) and external sources of ethylene on fruit and vegetables. By counteracting ethylene, SmartFresh provides many benefits to 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 is used immediately after harvest, prior to storage, prior to shipment or just prior to sale. SmartFresh is effective under 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. For chilling sensitive commodities, treatment should be at warm temperature conditions.

Harvested fruit and vegetables must be exposed to the volatile active ingredient of SmartFresh in enclosed spaces, such as storage rooms, 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 spaces. These enclosed treatment spaces must be air tight as leakage will reduce SmartFresh effectiveness.

## 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.

## **Fruit and Vegetable Storage Conditions**

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

### **Timing of Application**

SmartFresh is added to the storage area containing fruit or vegetables immediately after harvest, upon entering storage, during distribution or in transit. For best results on apple and pear, do not use with fruit previously treated with ethephon. After application, fruit or vegetables not for immediate sale must be stored according to good standard commercial practices. Fruit and vegetables may benefit from repeat application, such as when the crop has been exposed to ethylene. It must be emphasized that keeping the fruit and vegetables at the correct storage temperature for that fruit 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 to the fruit soon after harvest at the physiological maturity stage or just prior to the “turning black” stage. Make only one application to the same fruit.

Bananas: Apply SmartFresh after exposure to ethylene and prior to reaching Color Stage 4.

Broccoli: Apply SmartFresh as soon after harvest as possible.

Kiwifruit: Apply SmartFresh either as soon after harvest as possible or after long term storage and before the fruit are transported and distributed.

Melons: Apply SmartFresh as soon after harvest as possible.

Persimmons: Apply SmartFresh as soon after harvest as possible.

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

Pears, Asian pears: Apply SmartFresh as soon after harvest as possible.

Peaches, Nectarines, Plums, Plumcots, and Apricots: Apply SmartFresh as soon after harvest as possible or after long term storage and before the fruit are transported and distributed.

## Application Method and Rate

Prior to application, ensure that the treatment area can be properly and promptly sealed following the start of application. SmartFresh ProTabs are packaged with the required SmartFresh ProActivators in a single tablet package. All of the included activators must be used in a single application. The proprietary solution is ready to use in the SmartFresh ProPack. There are two sizes of the release vessel, called SmartFresh ProPack. The medium size contains one (1) liter of solution; the large size contains four (4) liters of solution. When the entire contents of a tablet package are added to the solution in the appropriate SmartFresh ProPack, the volatile active ingredient 1-methylcyclopropene (1-MCP) is released. Make sure that you have a sufficient supply of both SmartFresh ProTabs and SmartFresh ProPacks available to treat the designated space.

Step 1: Select the appropriate number of SmartFresh ProTabs and size of ProPacks

- a.) Accurately determine the volume of the EMPTY treatment space in cubic feet. Multiply inside dimensions: volume = length x width x height. For example, if the treatment space is 20 feet high x 40 feet long x 30 feet wide, the treatment volume would be  $20 \times 40 \times 30 = 24,000$  cubic feet.
- b.) Using the table below, choose the correct number of SmartFresh ProTabs according to the size of the space and the commodity to be treated. Example:
  - To treat 24,000 ft<sup>3</sup> space for apples, divide 24,000 by 1350 and use seventeen (17) yellow ProTabs.

It is preferred to use the higher dosage in the crop range for longer lasting results, and in some cases broader spectrum control. Consult with your AgroFresh representative for recommendations specific to your conditions.

<b>Crop</b>	<b>Rate One YELLOW ProTab treats</b>
Apples, Asian Pear, Avocado, Broccoli	1350 ft <sup>3</sup> - 1800 ft <sup>3</sup>
Pear	2100 ft <sup>3</sup> - 4400 ft <sup>3</sup>
Apricot, Kiwifruit, Melon, Nectarine, Plum, Plumcot, Peach, Persimmon, Tomato	2650 ft <sup>3</sup> - 3000 ft <sup>3</sup>
Banana	1350 ft <sup>3</sup> - 5300 ft <sup>3</sup>

- c.) Select the appropriate size and number of SmartFresh ProPacks. For best results, for medium size spaces, use the yellow ProTabs and the medium (1 liter) ProPack. No more than 20 yellow ProTabs per medium ProPack. For larger spaces that require more than 60 yellow SmartFresh ProTabs use the large (4 liter) SmartFresh ProPack. No more than 80 yellow ProTabs per large ProPack.

MEDIUM (1 liter) ProPacks		LARGE (4 liter) ProPacks	
Number <b>YELLOW</b> ProTabs	Number ProPacks	Number <b>YELLOW</b> ProTabs	Number ProPacks
1-20	1	61-80	1

Do not split the contents of a tablet package. Use the entire contents of one tablet package in one correspondingly sized SmartFresh ProPack.

Step 2: Evaluate of the Quality of the Treatment Room / Trailer / Container To be used with SmartFresh, rooms/containers/trailers must be air 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 side doors
- Scrubbers and/or ozone generators are off

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

Step 4: Start the application to release SmartFresh active ingredient

- a.) In the treatment space, find a solid surface to place the required SmartFresh ProPacks.
- b.) Remove the tear strip from the SmartFresh ProPack taking care not to spill the solution.
- c.) To achieve the desired dosage, open the selected tablet package and add the entire contents of the selected tablet package to the solution in the corresponding ProPack.
- d.) Repeat with additional ProPacks and tablet packages as needed according to the room volume. Be sure to complete all additions within 5 minutes.



- e.) Exit the treatment space immediately and promptly close the doors and ensure they are tightly sealed in order to contain the SmartFresh active ingredient and ensure its maximum efficacy. The release to the space will start several minutes after addition of the SmartFresh ProTabs to the solution.
- f.) Circulate the air in the space by means of the internal air circulation system for AT LEAST one (1) hour.
- g.) For best results, do not open the doors for AT LEAST twelve (12) hours for avocado, banana, broccoli, kiwifruit, melon, persimmon and tomato, fifteen (15) hours for Asian pear, twenty four (24) hours for apple, nectarine, peach, pear, plum, plumcot and apricot.
- h.) For best results, for controlled atmosphere storage containers or storage rooms, do not actively change the room atmosphere to controlled atmosphere conditions for AT LEAST twenty four (24) hours.

#### Step 5: Allow reentry into the storage space

Before allowing workers to reenter the storage space, vent the treated space by opening the doors for a minimum of fifteen (15) minutes with continued full internal ventilation. After venting, the used solution may be removed and disposed of on-site or at an approved waste disposal facility. Store treated commodities not intended for immediate sale according to standard commercial practices, in either refrigerated air or controlled atmosphere conditions.

### Restrictions

Do not split tablets. Use whole tablets only.  
Do not smoke during the SmartFresh application.

### 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:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available.

## 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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*SmartFresh™ is a registered trademark of AgroFresh, Inc.*  
U.S. Patents 6,017,849 and 6,762,153

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