

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

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

April 8, 2022

**Robert Jones** Agent for MirTech Inc. c/o Delta Analytical Corporation 12510 Prosperity Dr. Silver Spring, MD 20904

Subject:

Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment – Add crops; Adjust application rates; Change EPA establishment number; Edit and add claims; Minor edits; Add new device directions Product Name: FirmConfirm® EPA Registration Number: 92261-1 Application Date: 11/30/2021 OPP Case Number: 00337139

Dear Mr. Jones:

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 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 or misleading statements or

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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 Susannah Powell via email at powell.susannah@epa.gov.

Sincerely,

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James Parker Team Leader Biochemical Pesticides Branch Biopesticides and Pollution Prevention Division (7511P) Office of Pesticide Programs

Enclosure

Apr 08, 2022 Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 92261-1

ACCEPTED

# FirmConfirm<sup>®</sup>

# Ethylene management tool for maintaining freshness for plant and plant parts in enclosed areas

# ACTIVE INGREDIENT: 1-Methylcyclopropene 3.3% OTHER INGREDIENTS 96.7% TOTAL 100.0%

# KEEP OUT OF REACH OF CHILDREN CAUTION

## First Aid

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. Call a poison control center or doctor for further 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 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, ten continue rinsing eye. 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 glass of water if ab le 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. For medical emergencies, call the poison control center at 1-800-222-1222. For general information on product use, etc., call the National Pesticides Information Center at 1-800-858-7378 Monday through Friday, 8 AM to 12 PM PST, or at http://npic.orst.edu.

# READ THE ENTIRE LABEL FIRST. OBSERVE ALL PRECAUTIONS AND FOLLOW DIRECTIONS CAREFULLY.

Manufactured for: MirTech, Inc.

30 Valley Wood Drive Somerset, NJ 08873 Tel: 1-732-322-0258

EPA Reg. No. 92261-1

EPA Est. No. 90519-CHN-1

Lot No.

# Net Contents: [0.004oz (.1g) - 35.274oz (1000g)]

([1-10] individually wrapped [0.004oz (.1g) - 35.274oz (1000g)] pouch[es])

# PRECAUTIONARY STATEMENTS

#### Hazards to Humans and Domestic Animals

**CAUTION:** Harmful if inhaled, avoid breathing vapor. Harmful if absorbed through skin. Causes slight eye irritation. Harmful by swallowing. Avoid contact with eyes skin or clothing. Wash thoroughly with soap and water after handling and before eating and drinking, chewing gum, using tobacco, or using toilet. Remove contaminated clothing immediately and wash thoroughly in warm water before reuse.

#### **Environmental Hazards**

#### Do not contaminate water when disposing of equipment washwater or rinsate.

#### **Personal Protective Equipment (PPE)**

Applicators of this product must wear:

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

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.

## **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 agency responsible for pesticide regulation. All applicable directions, restrictions, and precautions must be followed. This labeling must be in the user's possession during application.

#### 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 fifty (50) 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
- A NIOSH approved respirator with an organic vapor cartridge with a combination N, R or P filter NIOSH approval prefix TC-84A; or a NIOSH approved gas mask with organic vapor canister NIOSH approval prefix TC-14G.

## **User Safety Recommendations**

Wash hands before eating, drinking, and chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Wash thoroughly and put on clean clothing.

# **GENERAL PRODUCT INFORMATION**

#### FirmConfirm<sup>®</sup> is an end use product. Do not reformulate or repackage.

FirmConfirm<sup>®</sup> is an encapsulated form of 1-MCP, which is a gas. During application, 1-MCP is released from FirmConfirm<sup>®</sup> and comes in contact with the surface of the plant and plant parts to render it insensitive to ethylene.

FirmConfirm<sup>®</sup> is an effective ethylene management tool, and delivers the following benefits to growers, packers, shippers, retailers and consumers:

- Reduces fruit respiration and ethylene responses
- Slows down rate of ripening and senescence to extend postharvest storage life.
- Improves fruit quality by maintaining firmness, color and titratable acidity, reducing scald, and slowing loss of chlorophyll and starch
- Reduces loss of quality during transportation, thereby enabling produce to reach more distant markets

#### Timing of Application

FirmConfirm<sup>®</sup> is applied to *Apples, Pears, Asian Pears, Melons, Persimmons, Papayas, Mangoes, Grapes, Cherries, Berries, Apricots, Kiwifruit, Nectarines, Peaches, Plums, Plumcots, avocados, banana, tomato, mushrooms and Broccoli*—prior to storage, prior to shipment, and/or prior to sale. Best results with FirmConfirm<sup>®</sup> are obtained at the optimum maturity level for long term storage. Plant and plant parts may benefit from repeat application. FirmConfirm<sup>®</sup> may be used in both controlled atmosphere and regular air conditions.

*Apples, Pears, Asian Pears:* FirmConfirm<sup>®</sup> can be applied soon after harvest. For optimum quality, store apples that are to be held longer than six months in a controlled atmosphere.

*Melons, Persimmons, Papayas, Mangoes, Grapes, Cherries, Berries, Mushrooms, and Broccoli:* FirmConfirm<sup>®</sup> can be applied at early maturity stage to yield better results.

*Apricots, Kiwifruit, Nectarines, Peaches, Plums, and Plumcots*: FirmConfirm<sup>®</sup> can be applied to the fruits after long-term storage and before they are transported for distribution.

*Avocados*: FirmConfirm<sup>®</sup> can be applied at the physiological maturity stage or just prior to the turning black stage.

Bananas: FirmConfirm<sup>®</sup> can be applied prior to color stage 3 or 4.

*Tomatoes*: FirmConfirm<sup>®</sup> can be applied between color stage 1 and 5.

## Application condition

FirmConfirm<sup>®</sup> is effective under temperature conditions considered both cool (below 55°F, 13°C) and warm (above 55°F, 13°C). FirmConfirm<sup>®</sup> must be applied in enclosed areas, such as sealable storage rooms, growth chamber, greenhouses, coolers, shipping containers, enclosed truck trailers, or ambient temperature, refrigerated, or controlled atmosphere food storage facilities.

# NOTE:

- Maintain cold chain and phytosanitary practices during and after application ensure best results.

# Application of FirmConfirm<sup>®</sup> must be followed as below:

Prior to application, ensure that the package is intact, and the treatment area can be sealed properly and promptly after application, and all the ventilation systems connecting to outside are turned off. Apply FirmConfirm<sup>®</sup> using one of the below 2 FirmConfirm<sup>®</sup> Proprietary Release Devices. Both the Release Devices are powered by electricity (AC or DC) to mix FirmConfirm<sup>®</sup> powder in water and release 1-MCP gas.

FirmConfirm<sup>®</sup> Proprietary Release Device 1:

- Open the lid of the device and add water (10-60°C or 50-140°F) to the marked line in the device.
- Place the device close to the door of the enclosed areas.
- Place FirmConfirm<sup>®</sup> powder into the device. The amount of FirmConfirm<sup>®</sup> is customized for each application to achieve the target 1-MCP concentration. The "Rate of Application" table below shows difference pouch sizes of FirmConfirm<sup>®</sup> and the volume they treat.
- Switch on the device. Immediately leave and seal the enclosed areas. Ensure internal air circulation is on. Turn off any scrubbing devices or ozone-generating equipment. Keep the treatment area closed and air tight for up to 25 hours to ensure maximum effectiveness of FirmConfirm<sup>®</sup>.
- Make sure the CO<sub>2</sub> concentration in the enclosed area during FirmConfirm<sup>®</sup> application is at or below 1.0%.
- After application, switch the device off and disconnect from the power source. Thoroughly rinse the FirmConfirm<sup>®</sup> release device with water after each use.

FirmConfirm<sup>®</sup> Proprietary Release Device 2:

- Seal the enclosed area in preparation for the treatment. Ensure internal air circulation of the enclosed area is on. Turn off nitrogen, defrost, scrubbing devices, and ozone-generating equipment.
- Open the lid of the FirmConfirm<sup>®</sup> Proprietary Release Device 2 and add water (10-60°C or 50-140°F) to the marked line in the device.
- Place the Proprietary Release Device 2 outside the enclosed area close to the door of the room
- Place FirmConfirm<sup>®</sup> powder into the Proprietary Release Device 2. The amount of FirmConfirm<sup>®</sup> is customized for each application to achieve the target 1-MCP concentration. The "Rate of Application" table below shows difference pouch sizes of FirmConfirm<sup>®</sup> and the volume they treat.
- Connect the tubes from FirmConfirm<sup>®</sup> Proprietary Release Device 2 to the enclosed area
- Switch on the device.
- Turn off any scrubbing devices or ozone-generating equipment. Keep the treatment area closed and air tight for up to 25 hours to ensure maximum effectiveness of FirmConfirm<sup>®</sup>.
- Make sure the CO<sub>2</sub> concentration in the enclosed area during FirmConfirm<sup>®</sup> application is at or below 1.0%.
- After application, switch the device off and disconnect from the power source and the enclosed area. Thoroughly rinse the FirmConfirm<sup>®</sup> release device with water after each use.

# **Rate of application**

Apples (Full Room), Asian Pears, Avocados, Grapes, Cherries, Berries, Mushrooms, Broccoli, and

	Weight of FirmConfirm <sup>®</sup> (oz / g) <sup>*</sup>	Volume treated (ft <sup>3</sup> )
1	0.004 / 0.1	49—70
2	0.007 / 0.2	98—140
3	0.018 / 0.5	246—351
4	0.037 / 1.0	492—702
5	0.071 / 2.0	983—1405
6	0.176 / 5.0	2459—3512
7	0.353 / 10.0	4917—7025
8	0.705 / 20.0	9834—14049
9	1.764 / 50.0	24586—35123
10	3.527 / 100.0	49172—70246
11	7.055 / 200.0	98345—140493
12	17.637 / 500.0	245862—351232
13	35.274 / 1000.0	491725—702464

\* Weight of FirmConfirm<sup>®</sup> is calculated based on target concentration of 700—1,000 parts per billion of 1-MCP in enclosed areas.

Apples (Partial Room), Apricots, Kiwifruit, Melons, Nectarines, Peaches, Persimmons, Plums, Plumcots, Papayas, Mangoes, Pears, Bananas, and Tomatoes

	Weight of FirmConfirm <sup>®</sup> (oz / g) <sup>*</sup>	Volume treated (ft <sup>3</sup> )
1	0.004 / 0.1	49—246
2	0.007 / 0.2	98—492
3	0.018 / 0.5	246—1229
4	0.037 / 1.0	492—2459
5	0.071 / 2.0	983—4917
6	0.176 / 5.0	2459—12293
7	0.353 / 10.0	4917—24586
8	0.705 / 20.0	9834—49172
9	1.764 / 50.0	24586—122931
10	3.527 / 100.0	49172—245862
11	7.055 / 200.0	98345—491725
12	17.637 / 500.0	245862—1229312
13	35.274 / 1000.0	491725—2458624

<sup>\*</sup> Weight of FirmConfirm<sup>®</sup> is calculated based on target concentration of 200—1,000 parts per billion of 1-MCP in enclosed areas.

**Re-Entry** 

After the treatment area is sealed, post a sign on all entrances to the treatment area. The sign should read:

#### DO NOT ENTER AREA. FirmConfirm<sup>®</sup> TREATMENT IN PROGRESS.

The doors to the storage area should remain sealed for the following periods of time to ensure effective FirmConfirm<sup>®</sup> treatment.

Crops	Treatment durations (hours)
Apples, Apricots, Nectarines, Peaches, Plums, Pears, Asian	15-25
Pears, Grapes, Cherries, Berries, Mushrooms, and Plumcots	
Avocados, Bananas, Broccoli, Kiwifruit, Melons, Persimmon,	10-25
Papayas, Mangoes, and Tomatoes	

#### Restrictions

- **Restricted Entry Period (REI):** 50 minutes after room has been vented
- Do not smoke during the FirmConfirm<sup>®</sup> application.

# STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**Pesticide Storage:** Ensure the original package is intact and store it in original package in a cool and dry place. Do not store at temperatures above 25°C (77°F).

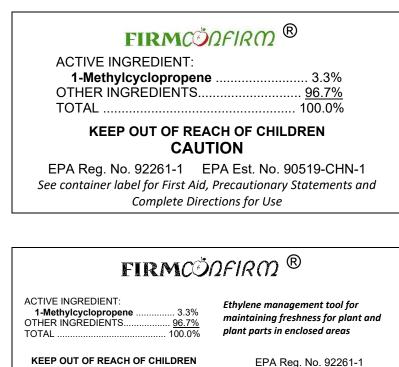
**Pesticide Disposal:** Wastes resulting from the use of this product should be disposed of on site or at an approved waste disposal facility. Wastes cannot be chemically reprocessed or re-used.

**Container Handling:** Do not refill or reuse the container. Dispose of empty foil package in trash.

#### NOTICE OF WARRANTY

MirTech Inc. warrants that the chemical composition of this product conforms to its chemical description and is reasonably suited for the labeled use when applied according to the Directions for Use.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MirTech MAKES NOR INTENDS ANY OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE, WHICH ARE EXPRESSLY DISCLAIMED. It is impossible to eliminate all risks inherently associated with the use of this product. Handling, storage and use of the product by Buyer or User are beyond the control of MirTech and Seller. Ineffectiveness or other unintended consequences resulting from, but not limited to factors such as weather 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. Any damage arising from a breach of MirTech's warranty shall be limited to direct damages, and shall not include indirect damages resulting from handling, storage or use of this product, or consequential damages such as loss of profits or values, expect as otherwise provided by law. [Small container label for Foil pouch]



 CAUTION
 EPA Est. No. 90519-CHN-1

 See container label for First Aid, Precautionary
 [Net Contents:]

 Statements and Complete Directions for Use
 [Lot No.]

FirmConfirm<sup>®</sup> is a registered trademark of MirTech Inc.

MirTech Inc. 30 Valley Wood Drive Somerset, NJ 08873 Tel: 1-732-322-0258