



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs  
Registration Division (7505P)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg. Number:

34704-1141

Date of Issuance:

5/8/20

NOTICE OF PESTICIDE:

Registration  
 Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

LIP Thio-M 70 WSB

Name and Address of Registrant (include ZIP Code):

Solito Sumulong  
Loveland Products Inc.  
P.O. Box 1286  
Greeley, CO 80632-1286

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration 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 conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:

Shaja B. Joyner, Product Manager 20  
Fungicide-Herbicide Branch  
Registration Division 7505P

Date:

5/8/20

2. You are required to comply with the data requirements described in the DCI identified below:
  - a. Thiophanate-methyl GDCI-102001-1439

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: <http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1>

3. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, “EPA Reg. No. 34704-1141.”
4. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements 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 Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 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. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 12/20/2019

If you have any questions, please contact Nathan Mellor by phone at 703-347-8562, or via email at [mellor.nathan@epa.gov](mailto:mellor.nathan@epa.gov).

Enclosure

[Editor's Note for Reviewers: [Brackets] indicate optional passages or passages that depend on packaging. {Braces} indicate location of text.]

{BEGIN Booklet Front Panel and Attached Panel Language}

THIOPHANATE-METHYL GROUP **1** FUNGICIDE



# LPI Thio-M 70 WSB

[ABN: LPI Thio-M Ag 70 WSP]

## ACTIVE INGREDIENT:

Thiophanate-methyl (dimethyl[1,2-phenylene]-bis(iminocarbonothioyl))bis(carbamate))*.....	By Wt. 70.0%
OTHER INGREDIENTS**:	30.0%
100.0%	

\* Also known as dimethyl 4,4'-o-phenylenebis(3-thioallophanate)

## KEEP OUT OF REACH OF CHILDREN CAUTION

[For Additional Precautionary Statements, Directions for Use, Storage and Disposal and Other Use Information, See Inside the Label Booklet.]

### FIRST AID

<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>• <b>DO NOT</b> induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• <b>DO NOT</b> give anything by mouth to an unconscious person.</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 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 further treatment advice.</li> </ul>

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

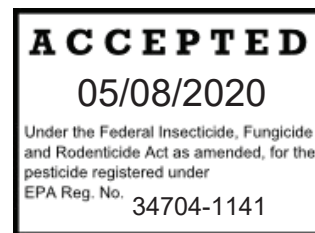
### HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency medical assistance, call 1-866-944-8565. For chemical emergency: spill, leak, fire, exposure or accident, call CHEMTREC: 1-800-424-9300.

EPA Reg. No.: 34704-xxxx  
EPA Est. No.: [nnnn-xx-nnn]  
Net Weight: [5 x y LB (5 x z kg)]  
[Print code]

[EPA MASTER LABEL—Label ID 12/19]

Formulated for  
Loveland Products Inc.,  
P.O. Box 1286, Greeley, CO 80632-1286



{END Booklet Front Panel and Attached Panel Language}

{BEGIN Language inside booklet}

## **PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

### **CAUTION**

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

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

Some materials that are chemical-resistant to this product are Barrier Laminate, Nitrile Rubber  $\geq$  14 mils, or viton  $\geq$  14 mils gloves.

Mixers, loaders, applicators and handlers supporting dip treatment must wear:

1. Coveralls over long-sleeved shirt and long pants
2. Chemical-resistant gloves
3. Chemical-resistant footwear plus socks
4. Chemical-resistant apron

All other mixers, loaders, applicators and handlers must wear:

1. Long-sleeved shirt and long pants
2. Shoes plus socks
3. Chemical-resistant gloves for all mixers and loaders and for applicators using hand held equipment
4. See Engineering Controls for additional requirements.

### **USER SAFETY REQUIREMENTS**

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **Engineering Controls Statement:**

Water soluble packets, when used correctly, qualify as a closed mixing/loading system under the Worker Protection Standard [40 CFR 170.607(d)]. Mixers and loaders handling this product while it is enclosed in intact water-soluble packets may elect to wear reduced PPE of long-sleeved shirt, long pants, shoes, socks. When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, including a spill or equipment break-down.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

### **USER SAFETY RECOMMENDATIONS**

#### **Users should:**

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 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**

**DO NOT** apply directly to water, or areas where surface water is present or to intertidal areas below the mean high-water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. **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.

**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.

This labeling must be in the possession of the user at the time of application.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker 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 12 hours except for the following:

- Almonds, beans (dry), onions (in Furrow), pecans, and pistachio: The REI is 3 days.
- Apples, apricots, cherries, grapes, nectarines, peaches, pears, plums/prunes, and potato: The REI is 2 days.
- Strawberries, wheat, cucurbits, soybeans, sugar beets, peanuts and green beans: The REI is 1 day.

For early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, including plants, soil, or water, wear:

1. Coveralls over long-sleeved shirt and long pants
2. Chemical-resistant gloves made of any waterproof material
3. Chemical-resistant footwear plus socks
4. Chemical-resistant headgear for overhead exposures

FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR PEST CONTROL, AND/OR ILLEGAL RESIDUES.

### PRODUCT INFORMATION

This product may be applied by ground or aerial application equipment. Normal fungicide usage indicates this product will be applied over the top of the intended crop. It is critical to ensure that the tank and spray equipment has been cleaned of all other pesticides prior to mixing this product. As with all agricultural chemicals, continuous agitation is required to keep the ingredients in suspension. Specified application gallonage and directions are given for each crop.

This product may be tank mixed with other fungicides, insecticides and plant growth regulators that have been approved for use by the EPA on the intended crop. Loveland Products does not make any claims of compatibility with other pesticides; always perform a Mixing Jar Test prior to tank mixing. See **Compatibility Test** section on this label. **DO NOT** tank mix this product with highly alkaline pesticides like Bordeaux or lime sulfur.

Most effective disease control is obtained by preventative spray timing as climatic conditions indicate fungal infection or growth is imminent. Always use the higher rates under conditions of severe disease pressure.

**High volume dilute applications:** Use the **PRODUCT per ACRE** rate for concentrate spray applications for tree crops (example: no more than 400 gallons on apples). Use the **PRODUCT per 100 GALLONS** rate for dilute ground applications. Only use this product on 'non-bearing' apples, cherries, peaches and pecans, when needed for control of labeled leaf diseases during 'non-bearing' years of new plantings or nursery stock. Follow all crop specific language on this label for application. Dilute sprays must not exceed maximum a.i. per year.

**Aerial applications to tree crops:** Use a minimum of 10.0 gallons per acre for aerial application to fruit tree crops. Increased fungicidal activity is related to coverage and timing, increased volumes are required as crop canopy density increases. NOTE: Conifer applications require higher spray volumes, use lower volumes with mist type applicators and highest volumes with conventional types.

**Row Crop applications:** Use a minimum of 5.0 gallons per acre for ground application, however most ground applications require 10 to 20 gallons per acre as cropping situations dictate. Increased fungicidal activity is related to coverage and timing, increased volumes are required as crop canopy density increases.

**Chemigation:** See specific directions in this label.

## RESISTANCE-MANAGEMENT

For resistance management, this product is a tubulin inhibitor fungicide and contains a Group 1 insecticide. Its Mode of Action is the inhibition of microtubule assembly. Any fungal population may contain individuals naturally resistant to this product and other Group 1 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance, take the following steps:

- Rotate the use of this product or other Group 1 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicides from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or IPM directions for specific crops and pathogens.
- For further information or to report suspected resistance contact Loveland Products at 888-574-2878 or at [www.lovelandproducts.com](http://www.lovelandproducts.com). You can also contact your pesticide distributor or university extension specialist to report resistance.

## INSTRUCTIONS FOR USING WATER SOLUBLE PACKAGES DIRECTLY INTO SPRAY TANKS

Water Soluble Packages (WSPs) are designed to dissolve in water. Agitation may be used, if necessary, to help dissolve the WSP. Failure to follow handling and mixing instructions can increase your exposure to the pesticide products in WSPs. WSPs, when used properly, qualify as a closed mixing/loading system under the Agricultural Worker Protection Standard [40 CFR 170.607(d)].

### Handling Instructions

Follow these steps when handling pesticide products in WSPs.

1. Mix in spray tank only.
2. Handle WSP(s) in a manner that protects package from breakage and/or unintended release of contents. If package is broken, put on PPE required for clean-up and then continue with mixing instructions.
3. Keep the WSP(s) in outer packaging until just before use.
4. Keep the WSP dry prior to adding to the spray tank.
5. Handle with dry gloves and according to the label instructions for PPE.
6. Keep WSP intact. **DO NOT** cut or puncture WSP.
7. Reseal the WSP outer packaging to protect any unused WSP(s).

### Mixing Instructions

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Follow the steps below when mixing this product, including if tank mixed with other pesticide products. If being tank mixed, the mixing directions 1 through 9 below take precedence over the mixing directions of the other tank mix products. WSPs may, in some cases, be mixed with other pesticide products so long as the directions for use of all mixed products **DO NOT** conflict. **DO NOT** tank mix this product with products that prohibit tank mixing or have conflicting mixing directions.

1. If a basket or strainer is present in the tank hatch, remove prior to adding the WSP to the tank.
2. Fill tank with water to approximately one-third to one-half of the desired final volume of spray.
3. Stop adding water and stop any agitation.
4. Place intact/unopened WSP(s) into the tank.
5. **DO NOT** spray water from a hose or fill pipe to break or dissolve the WSP(s).
6. Start mechanical and recirculation agitation from the bottom of tank without using any overhead recirculation, if possible. If overhead recirculation cannot be turned off, close the hatch before starting agitation.

7. Dissolving the WSP(s) may take up to 5 minutes or longer, depending on water temperature, water hardness and intensity of agitation.
8. Stop agitation before tank lid is opened.
9. Open the lid to the tank, exercising caution to avoid contact with dusts or spray mix, to verify that the WSPs have fully dissolved and the contents have been thoroughly mixed into the solution.
10. **DO NOT** add other allowed products or complete filling the tank until the bags have fully dissolved and pesticide is thoroughly mixed.
11. Once the WSP have fully dissolved and any other products have been added to the tank, resume filling the tank with water to the desired level, close the tank lid, and resume agitation.
12. Use the spray solution when mixing is complete.
13. Maintain agitation of the diluted pesticide mix during transport and application.
14. It is unlawful to use any registered pesticide, including WSPs, in a manner inconsistent with its label.

## **Mandatory Spray Drift Directions**

### Aerial Applications

- **DO NOT** release spray at a height greater than 10 ft above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For all applications, applicators are required to use a medium or coarser spray droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

### Ground Applications

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy.
- For all applications, applicators are required to use a medium or coarser spray droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

### Boom-less Ground Applications

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1) for all applications.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

## **Spray Drift Advisories**

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.

BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

## **IMPORTANCE OF DROPLET SIZE**

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

## **Controlling Droplet Size - Ground Boom**

- **Volume** - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- **Pressure** - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- **Spray Nozzle** - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

### Controlling Droplet Size - Aircraft

- Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

### BOOM HEIGHT - Ground Boom

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

### RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift. When applying aerially to crops, **DO NOT** release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.

### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

### TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

### TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

### WIND

Drift potential generally increases with wind speed. **AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.** Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

### Boom-less Ground Applications:

Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

### Handheld Technology Applications:

Take precautions to minimize spray drift.

CONVERSION TABLE		
ACRES TREATED PER 1 LB WATER SOLUBLE BAG		
LABEL USE RATE		ACRES TREATED WITH 1 WATER SOLUBLE BAG
LBS PRODUCT/A	LBS A.I./A	
0.25	0.175	4.0
0.5	0.350	2.0
1.0	0.700	1.0

CONVERSION TABLE		
ACRES TREATED PER 2.5 LB WATER SOLUBLE BAG		
LABEL USE RATE		ACRES TREATED WITH 1 WATER SOLUBLE BAG
LBS PRODUCT/A	LBS A.I./A	
0.25	0.175	10.0
0.5	0.350	5.0
1.0	0.700	2.5



CONVERSION TABLE		
ACRES TREATED PER 5 LB WATER SOLUBLE BAG		
LABEL USE RATE		ACRES TREATED WITH 1 WATER SOLUBLE BAG
LBS PRODUCT/A	LBS A.I./A	
0.25	0.175	20.0
0.5	0.350	10.0
1.0	0.700	5.0

### Compatibility Test For Mix Components

Before mixing components, always perform a compatibility jar test. For 20.0 gallons per acre spray volume, use 3.3 cups (800 mL) of water. For other spray volumes, adjust rates accordingly. Only use water from the intended source at the source temperature. Add components in the sequence indicated in the Mixing Order using 2 teaspoons for each pound or 1 teaspoon for each pint of directed label rate per acre. Always cap the jar and invert 10 cycles between component additions.

When the components have all been added to the jar, let the solution stand for 15 minutes. Evaluate the solution for uniformity and stability. The spray solution must not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, **DO NOT** mix the ingredients in the same tank.

### Mixing Order

(As each product is added to the tank, be sure it is completely dispersed before adding any other product to the mix. Maintain agitation throughout mixing and application processes.)

1. **Water.** Begin by agitating a thoroughly clean sprayer tank three-quarters full of clean water.
2. **Agitation.** Maintain constant agitation throughout mixing and application.
3. **Inductor.** If an inductor is used, rinse it thoroughly after each component has been added.
4. **Products in PVA bags.** Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
5. **Water-dispersible products** (including, dry flowables - DF, wettable powders - WP, wettable dry granules – WDG, suspension concentrates - SC, or suspo-emulsions - SE).
6. **Water-soluble products.**
7. **Emulsifiable concentrates** (including oil concentrate when applicable).
8. **Water-soluble additives** (including AMS or UAN when applicable).
9. **Remaining quantity of water.**

Maintain constant agitation during application.

## CHEMIGATION USE INSTRUCTIONS

**CALIFORNIA ALLOWS USE BY CHEMIGATION ONLY FOR CROPS OF BEANS, CUCURBITS (CUCUMBERS, MELONS, PUMPKINS, SQUASH), PEANUTS, SOYBEANS, AND STRAWBERRIES.**

### CHEMIGATION INFORMATION

Only apply this product through the following types of irrigation systems:

- Sprinkler irrigation systems: center pivot, lateral move, end tow, side roll
- Traveler Type: big gun, solid set, or hand move
- Drip Type: mini-micro sprinklers, strip tubing, trickle

**DO NOT** apply this product through any other type of irrigation system.

Note: any type of irrigation distribution of fungicide allowing untreated lapses or uneven distribution will result in poor control. Continually monitor calibration.

Irrigation equipment must be properly calibrated prior to addition of fungicide into water. Contact your equipment manufacturer, State Extension Service specialists or other experts in the event you need expertise. Effectiveness of this fungicide product depends on application uniformity and calibration. Crop injury and possible over application and illegal residues are possible from poor and non-uniform distribution.

Use of a chemigation system requires supervision by a person knowledgeable of the particular chemigation system and will be responsible for its operation. This supervisor is responsible for the system shutdown to make any necessary adjustments if the need arises.

Never connect a chemigation system to any public water system. Public water system means a system for the provision of piped water for human consumption if the system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

## **IRRIGATION/CHEMIGATION SYSTEM REQUIREMENTS**

Pressurized irrigation and pesticide injection system must meet the following requirements:

Must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located to prevent backflow contamination into the water source. The system must contain a functional, automatic, quick-closing check valve to prevent the backflow of any treated fluid. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump. This valve must be connected to the system interlock and prevent fluid from being withdrawn from the supply tank in the event that the irrigation system is either automatically or manually shut down.

The system must be fitted with an automatic shut off for the pesticide injection pump when the water pump motor stops. This must be connected to the interlocking controls. The irrigation line and water pump must also be fitted with a low pressure shut off switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

A metering pump or positive displacement injection pump (e.g., diaphragm pump) designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock must be fitted to the system.

## **FUNGICIDE DILUTION MIX PREPARATION**

Chemical mix tank, induction lines, mixing and induction motors and pumps must all be cleaned of any prior use pesticide residues, scale or other foreign matter that may interfere with mixing or transfer of the pesticide dilution into the irrigation system. Flush with clean water.

Start by filling the mix tank at least ½ full. Begin agitation. Carefully add the required amount of this product and then the rest of the water. Allow time to mix completely.

## **APPLICATION INSTRUCTIONS**

Observe ALL requirements in the System Requirements section above.

In order to ensure a uniform pesticide suspension and application, be sure to continuously agitate the fungicide tank-mixture during mixing and application.

Inject a greater volume of a more dilute suspension per unit time in order to achieve greater accuracy in distribution and calibration.

**DO NOT** apply more irrigation water per acre than directed, decreased product performance may occur from the over diluted application.

**DO NOT** attempt chemigation when wind speed favors drift. When system connections or fittings are seen to leak, stop chemigation and repair the component prior to restart. When nozzles are not providing uniform distribution, recalibrate immediately. System must always remain in good repair.

When chemigation is completed, allow sufficient flush time for pesticide to be cleared from all nozzles and lines prior to shutting off the flow of irrigation water.

## **Fertilizer co-mix Instructions:**

You may mix and apply this product with other chemically-neutral liquid fertilizers. However, the applicator must be aware that mixing this product with highly alkaline fertilizers (including aqueous ammonia) may cause problematic degradation of this product. This mix may prevent optimum control.

### Sprinkler Irrigation Instructions:

Observe all System Requirements and Application Instructions above.

Always observe local irrigation restrictions or ordinances.

Overhead irrigation systems must be repaired to block the spray jets or nozzles nearest the operations control panels as to not allow treated water to contact the operator or operation station.

Sprinkler system must be calibrated to deliver no more than 0.4 inches of water per acre. Larger volumes of water may reduce product efficacy. Start sprinkler water flow, then begin injection of the mixed suspension of THIOPHANATE METHYL 70W WSB into the irrigation water line. Continually monitor calibration to ensure proper application rate per acre. To ensure proper mixing of the suspension of this product and the irrigation water, inject with a positive displacement pump into the main line just ahead of a right-angle pipe turn (violent water pressure shear).

After overhead chemigation treatment with this product has been completed, **DO NOT** irrigate the treated area for at least 24 hours to prevent washing the fungicide off the crop leaves and canopy.

### Drip Irrigation Instructions: (Mini-Micro Sprinklers, Strip Tubing, Trickle)

Observe all System Requirements and Application Instructions above.

## SPECIFIC USE DIRECTIONS

### ROW CROP AND FIELD CROP USES

#### CANOLA, CRAMBE

#### FOR USE IN NORTH DAKOTA, MINNESOTA AND MONTANA (EAST OF INTERSTATE 15) ONLY

Target Pests	Rate		Application Instructions
	lb product/A	lb a.i./A	
Sclerotinia Stem Rot ( <i>Sclerotinia sclerotiorum</i> )	1.0 to 2.0	0.7 to 1.4	IN A SINGLE APPLICATION: Apply once at 20 to 50% flowering. Thorough coverage of flowers is essential for control of White Mold.
White Mold	1.0	0.7	IN TWO APPLICATIONS: Apply twice with the first application at 20 to 30% flowering and the second application at 40 to 50% flowering. Thorough coverage of flowers is essential for control of White Mold.

#### Restrictions for Canola and Crambe:

- **DO NOT** apply more than 2 lb product (2.8 lb a.i.)/A/application.
- **DO NOT** apply more than 2.0 lb product (1.4 lb a.i.)/A/year.
- Maximum number of applications: 2 per year.
- REI = 12 hours
- Minimum re-treatment interval: 7 days.
- PHI = 40 days

## CUCURBITS: CROP GROUP 9 (NOT FOR USE IN CA)

Target Pests	Rate		Application Instructions
	lb product/A	lb a.i./A	
Acremonium/ Cephalosporium Hypocotyl Rot	0.5	0.35	Spray product in-furrow, on top of the seeds at planting using at least 10.0 gal water/A. See <b>Resistance-Management</b> above.
Anthrachnose* ( <i>Colletotrichum</i> spp.) Gummy Stem Blight* ( <i>Didymella</i> spp.) Powdery Mildew ( <i>Erysiphe</i> spp.) Target Spot* ( <i>Corynespora</i> spp.)			Scout fields as weather and conditions indicate infection could be present. Start treatments as plants begin to run or when disease is found. Repeat treatments at 7-to 14-day intervals. Make Target Spot treatments at 7-day intervals as needed. See <b>Resistance-Management</b> above.
Belly Rots* ( <i>Rhizoctonia</i> spp. and <i>Fusarium</i> spp.)			Application volume must be enough to allow complete coverage to run or drip off plant into soil. This product is not effective in controlling <i>Phytophthora</i> spp. or <i>Pythium</i> spp. See <b>Resistance-Management</b> above.
Charcoal Rot ( <i>Macrophomina</i> spp.) Vine Decline (suppression only) ( <i>Monosporascus cannonballus</i> )			Make applications for suppression of these diseases through buried drip irrigation lines (see chemigation section of this label) so to apply directly to the root zone. Start applications at emergence and continue at 14-day intervals until harvest. Weekly or biweekly applications, beginning 4 to 6 wks prior to harvest will offer some suppression, but will not be as effective as a year-long program. See <b>Resistance-Management</b> above.

### Restrictions for Cucurbits:

- **DO NOT** apply more than 0.5 lb product (0.35 lb a.i.)/A/application.
- **DO NOT** apply more than 3.0 lb product (2.1 lb a.i.)/A/year.
- Maximum number of applications: 6 per year.
- REI = 1 day
- Minimum re-treatment interval: 7 days.
- PHI = 1 day

## EDIBLE-PODDED LEGUME VEGETABLES: CROP SUBGROUP 6A, SUCCULENT AND DRIED SHELLLED PEA AND BEAN (EXCEPT SOYBEAN): CROP SUBGROUPS 6B AND 6C

Target Pests	Rate		Application Instructions
	lb product/A	lb a.i./A	
Anthrachnose ( <i>Colletotrichum</i> spp.) Gray Mold ( <i>Botrytis</i> spp.) White Mold ( <i>Sclerotinia</i> spp.)	1.0 to 2.0	0.7 to 1.4	Initiate applications when one open bloom is found on 10 to 30% of plants OR as conditions develop for disease infection. Reapply as required, after at least 7 days, as disease conditions dictate.  Note: As crop canopy increases and with heavier infestation of insects, use higher rates.

### Restrictions for Beans:

- **DO NOT** apply more than 2 lb product (1.4 lb a.i.)/A/application.
- **DO NOT** apply more than 4 lb product (2.8 lb a.i.)/A/year.
- Maximum number of applications: 3 per year.
- REI = 3 days (dry beans); 1 day (green beans)
- Minimum re-treatment interval: 7 days.
- PHI = **CA only**, 14 days for succulent beans, 28 days for dry beans and lima beans.
- PHI = **All other States**, 14 days for succulent beans and lima beans, 28 days for dry beans.

## GARLIC

### Treatment for garlic cloves prior to planting

Target Pests	Rate		Application Instructions
	lb product/100 gal water	lb a.i./100 gal water	
Penicillium Clove Rot	1.0	0.7	Continuously agitate solution tank mixture to ensure proper treatment suspension ratio. <b>Treatment:</b> Immerse garlic cloves in this suspension for no less than 5 min. Remove cloves from solution and allow to drain and dry. Once dry, cloves are ready for planting.

#### Restrictions for Garlic:

- **DO NOT** apply more than 1.0 lb product (0.7 lb a.i.)/A/application.
- **DO NOT** apply more than 1.0 lb product (0.7 lb a.i.)/A/year.
- Maximum number of applications: 1 per year.

## GRAPES

Target Pests	Rate		Application Instructions
	lb product/A	lb a.i./A	
Botrytis Bunch Rot ( <i>Botrytis cinerea</i> ) Powdery Mildew ( <i>Uncinula necator</i> )	1.0 to 1.5	0.70 to 1.05	Monitor disease climate conditions. Start treatments at first bloom; repeat at 14 days if needed. Make another application as sugar starts to increase, around 21 to 28 days prior to harvest. If disease conditions remain favorable, make a final application 14 days after.  Use sulfur and/or triazole/DMI fungicides in a rotation for Powdery Mildew in a yearlong approach for control. See <b>Resistance-Management</b> Section.
Bitter Rot ( <i>Melanconium</i> ) Black Rot ( <i>Guignardia</i> ) Powdery Mildew ( <i>Uncinula</i> spp.)	0.75 to 1.50	0.525 to 1.050	East of the Rocky Mountains only. Start applications as leaves unfold. Continue at 14- to 21-day intervals. Rotate fungicide modes of action in a yearlong program.

#### Restrictions for Grapes:

- **DO NOT** apply more than 1.5 lb product (1.05 lb a.i.)/A/application.
- **DO NOT** apply more than 6.0 lb product (4.2 lb a.i.)/A/year.
- Maximum number of applications: 8 per year.
- REI = 2 days
- Minimum re-treatment interval: 7 days.
- PHI = 7 days

## ONIONS in furrow (NOT FOR USE IN CA)

Target Pests	Rate		Application Instructions
	oz product/A	lb a.i./A/application	
White Rot ( <i>Sclerotinia</i> spp.)	32  OR  0.7 oz/1,000 row ft	1.4	Spray product solution directly into the open planting furrow at the time of planting seed, sets or bulbs.

**Restrictions for Onions:**

- **DO NOT** apply more than 2 lb product (1.4 lb a.i.)/A/application.
- **DO NOT** apply more than 2 lb product (1.4 lb a.i.)/A/year.
- Maximum number of applications: 1 per year.
- REI = 3 days
- **DO NOT** apply through any type of irrigation system.

**PEANUTS**

Target Pests	Rate		Application Instructions
	lb product/A	lb a.i./A	
Early Leaf Spot, Late Leaf Spot, Leaf Spot ( <i>Cercospora</i> spp.) Limb Rot ( <i>Rhizoctonia</i> spp.) Rust ( <i>Puccinia</i> spp.) Web Blotch ( <i>Ascochyta</i> spp.)	0.5	0.35	Scout field as conditions indicate infection could occur. Start treatments when disease is verified or 35 days after planting. Retreatment interval for peanuts is 14 days. Always use this product in conjunction with another non- benzimidazole fungicide. See <b>Resistance-Management</b> above

**Restrictions for Peanuts:**

- **DO NOT** apply more than 0.5 lb product (0.35 lb a.i.)/A/application.
- **DO NOT** apply more than 2 lb product (1.4 lb a.i.)/A/yr from all combinations and timings.
- Maximum number of applications: 4 per year.
- REI = 1 day
- Minimum re-treatment interval: 14 days.
- PHI = 14 days

**POTATOES (NOT FOR USE IN CA)**

Target Pests	Rate		Application Instructions
	lb product/A	lb a.i./A	
Sclerotinia Stem Rot ( <i>Sclerotinia</i> spp.) White Mold	1.0 to 1.5	0.70 to 1.05	Treatments are most efficacious when made prior to disease development. Start treatments just around time of row closure. Spray must cover all susceptible plant parts, branches, flowers and stems for adequate control. Scout and reapply at 7- to 14-day intervals or as conditions occur for disease development.  <b>Early/Late Blight Control:</b> You may tank-mix this product with other blight-control fungicides.  <b>DO NOT</b> make aerial application for control of this disease on this crop.

**Restrictions for Potatoes:**

- **DO NOT** apply more than 1.5 lb product (1.05 lb a.i.)/A/application.
- **DO NOT** apply more than 4 lb product (2.8 lb a.i.)/A/year.
- Maximum number of applications: 4 per year.
- REI = 2 days
- Minimum re-treatment interval: 7 days.
- PHI = 21 days

## SOYBEANS

Target Pests	Rate		Application Instructions
	lb product/A	lb a.i./A	
Anthracnose ( <i>Colletotrichum</i> spp.) Brown Spot ( <i>Septoria</i> spp.) Frogeye Leaf Spot ( <i>Cercospora</i> spp.) Pod and Stem Blight ( <i>Diaporthe</i> spp. and the imperfect stage, <i>Phomopsis</i> spp.) Purple Seed Stain ( <i>Cercospora</i> spp.)	0.5 to 1.0	0.35 to 0.70	Make first application at full bloom up until the pods are between 1/8" and 1/4" in length, followed by a second application 14 to 21 days thereafter. The second application must be made less than 14 days following bean formation or before average pod length is 1/4". When beans are under severe disease pressure, utilize the higher application rates. Use higher rate as higher density canopy develops.  FOR SEED BEANS ONLY: A single high-rate application may be made at the time of bean formation to improve seed quality.
White Mold ( <i>Sclerotinia</i> spp.)	0.75 to 1.00	0.525 to 0.700	Make first application at early bloom (R-1 to R-2 stage). A second application may be made 7 to 14 days later as conditions dictate. Spray must cover all susceptible plant parts, branches, flowers and stems for adequate control. Aerial Application: Use at least 5 gallons water.
Aerial Blight (Suppression) Soybean Rust ( <i>Phakopsora pachyrhiza</i> )	1.0	0.7	First application must be made prior to infection, monitor climatic conditions and sentinel plots in your area. Reapply 14 to 21 days later if needed. Tank mix this product with a DMI/Triazole fungicide, including tebuconazole for Soybean Rust. First application must be made at R-1 with the tank mix for control. Reapply as conditions warrant.

### Restrictions for Soybeans:

- **DO NOT** apply more than 1 lb product (0.7 lb a.i.)/A/application.
- **DO NOT** apply more than 2 lb product (1.4 lb a.i.)/A/year.
- Maximum number of applications: 4 per year.
- REI = 1 day
- Minimum re-treatment interval: 7 days.
- PHI = 21 days
- **DO NOT** graze treated areas.

## STRAWBERRIES

Target Pests	Rate		Application Instructions
	lb product/A	lb a.i./A	
Fruit Rot ( <i>Botrytis</i> spp.) Leaf Blight ( <i>Dendrophoma</i> spp.) Leaf Scorch ( <i>Diplocarpon</i> spp.) Powdery Mildew ( <i>Sphaerotheca</i> spp.)	0.75 to 1.00	0.525 to 0.700	Start treatments as blooming begins, repeat at 7- to 10-day intervals. Use highest rate under severe conditions. See <b>Resistance-Management</b> above.

### Restrictions for Strawberries:

- **DO NOT** apply more than 1 lb product (0.7 lb a.i.)/A/application.
- **DO NOT** apply more than 4 lbs. of product (2.8 lbs. a.i.)/A/year.
- Maximum number of applications: 5 per year.
- REI = 1 day
- Minimum re-treatment interval: 7 days.
- PHI = 1 day

## SUGARBEETS

Target Pests	Rate		Application Instructions
	lb product/A	lb a.i./A	
Cercospora Leaf Spot ( <i>Cercospora</i> spp.)	0.5 in CA	0.35 in CA	Make first application prior to disease emergence, when environmental conditions are favorable for disease development. As required, a second application may be made with a NON-benzimidazole fungicide within 14 days. If tolerant or resistant strains are known to be in the area, tank mix with a protectant type fungicide. <b>DO NOT</b> apply this product more than once per year for <i>Cercospora</i> spp. See <b>Resistance-Management</b> above.
	0.75 to 1.00 except in CA	0.525 to 0.700 except in CA	
<b>Not for this use in CA:</b> Powdery Mildew ( <i>Erysiphe</i> spp.)	0.75 to 1.00	0.525 to 0.700	Start treatments immediately, as disease is verified, follow with a NON-Benzimidazole fungicide as needed or within 14 days after. Use as a tank mix for this disease. See <b>Resistance-Management</b> above.

### Restrictions for Sugarbeets:

- **DO NOT** apply more than 1 lb product (0.7 lb a.i.)/A/application.
- **DO NOT** apply more than 3 lb product (2.1 lb a.i.)/A/year.
- Maximum number of applications: 6 per year.
- REI = 1 day
- Minimum re-treatment interval: 7 days.
- PHI = 21 days

## TRITICALE WHEAT (FALL-SEEDED IN ID, OR AND WA ONLY) (NOT FOR USE IN CA)

Target Pests	Rate		Application Instructions
	lb product/A	lb a.i./A	
Eye Spot Foot Rot Strawbreaker ( <i>Pseudocercospora</i> spp.)	1.0	0.7	Make applications after tillering, but before stem elongation begins. Application can be by ground or aerial means.

### Restrictions for Triticale Wheat:

- **DO NOT** apply more than 1 lb product (0.7 lb a.i.)/A/application.
- **DO NOT** apply more than 1 lb product (0.7 lb a.i.)/A/yr.
- REI = 1 day
- PHI = 90 days **DO NOT** cut for 90 days after application.
- **DO NOT** graze treated areas until after harvest.
- **DO NOT** make more than one application per year.

## TREE CROP USES

### ALMONDS

Target Pests	Rate		Application Instructions
	lb product/A	lb a.i./A	
Brown Rot Blossom Blight ( <i>Monilinia</i> spp.) Jacket Rot ( <i>Botrytis</i> , <i>Monilinia</i> , <i>Sclerotinia</i> ) Leaf Blight ( <i>Seimatosporium</i> ) Scab ( <i>Cladosporium</i> spp.)	1.0 to 1.5	0.70 to 1.05	Initiate applications at pink bud and continued through petal fall.  Pink Bud applications can be made alone, however tank mix later applications with labeled contact type, multi-site fungicides.  See <b>Resistance-Management</b> above.

### Restrictions for Almonds:

- **DO NOT** apply more than 1.5 lb product (1.05 lb a.i.)/A/application.
- **DO NOT** apply more than 3 lb product (2.1 lb a.i.)/A/year.
- Maximum number of applications: 3 per year.
- REI = 3 days



- Minimum re-treatment interval: 7 days.
- PHI = 1 day

## APPLES

Target Pests	Rate			Application Instructions
	lb product/A	lb a.i./A	lb product/100 gal	
Apple Scab ( <i>Venturia</i> spp.) Black Rot ( <i>Botryosphaeria</i> spp.) Brooks Fruit Spot ( <i>Mycosphaerella</i> spp.) Flayspeck ( <i>Zygophiala</i> spp.) Powdery Mildew ( <i>Podosphaera</i> spp.) Sooty Blotch ( <i>Gloeodes</i> spp.)	1.0 except in CA	0.7 except in CA	0.25 except in CA	Initiate applications at green tip and continue at 5-to 10-day intervals, continuing through petal fall. Cover sprays can continue at 7- to 14-day intervals as needed. See <b>Resistance-Management</b> above.
	1.42 in CA	1.0 in CA	0.375 in CA	
<b>Not for these uses in CA:</b> Black Pox ( <i>Helminthosporium papulosum</i> ) White Rot ( <i>Botryosphaeria</i> spp.)	1.0	0.7	0.25	
<b>For pre-harvest use to control post-harvest diseases on apples:</b> Bulls-Eye Rot ( <i>Neofabraea</i> spp.) Gray Mold ( <i>Botrytis cinerea</i> ) Storage Rot Blue Mold ( <i>Penicillium expansum</i> )	1.0	0.7	0.25	Apply as a pre-harvest spray within 2 weeks to 3 days of harvest. Thorough coverage of the fruit is required. Application closer to harvest may provide better efficacy. For resistance management, <b>DO NOT</b> use benzimidazole fungicide post-harvest following pre-harvest application of this product. Application of a non-benzimidazole post-harvest fungicide including Penbotec™ (EPA Reg. No. 43813-32) or Dyna-Shield® Fludioxonil (EPA Reg. No. 34704-1074) will provide additional protection from post-harvest diseases.

### Restrictions for Apples:

- **DO NOT** apply more than 1.42 lb product (1.0 lb a.i.)/A/application.
- **DO NOT** apply more than 4 lb product (2.8 lb a.i.)/A/yr.
- Maximum number of applications: 4 per year.
- REI = 2 days
- Minimum re-treatment interval: 5 days at green tip, 7 days for cover spray.
- PHI = 1 day

## APRICOTS

Target Pests	Rate			Application Instructions
	lb product/A	lb a.i./A	lb product/100 gal	
Brown Rot, Brown Rot Blossom Blight, Fruit Brown Rot ( <i>Monilinia</i> spp.)	1.0 to 1.5 except in CA	0.70 to 1.05 except in CA	0.5	Make first application at early bloom (red bud), followed by a second application at full bloom. Under severe disease pressure, make additional applications at 10- to 14-day intervals beginning at full bloom, through final pre-harvest sprays. If conditions develop for Fruit Brown Rot, apply 1 to 2 sprays starting 21 days prior to harvest. See <b>Resistance-Management</b> above.
	1.5 in CA	1.05 in CA		

### Restrictions for Apricot:

- **DO NOT** apply more than 1.5 lb product (1.05 lb a.i.)/A/application.

- **DO NOT** apply more than 4 lb product (2.8 lb a.i.)/A/yr.
- Maximum number of applications: 4 per year.
- REI = 2 days
- Minimum re-treatment interval: 10 days.
- PHI = 1 day

## CHERRIES

Target Pests	Rate			Application Instructions
	lb product/A	lb a.i./A	lb product/100 gal	
Brown Rot, Brown Rot Blossom Blight, Fruit Brown Rot ( <i>Monilinia</i> spp.)	1.0 to 1.5 except in CA	0.70 to 1.05 except in CA	0.5	<p>Make first application at early bloom (red bud), followed by a second application at full bloom.</p> <p>Under severe disease pressure, make additional applications at 10- to 14-day intervals beginning at full bloom, through final pre-harvest sprays.</p> <p>If conditions develop for Fruit Brown Rot, apply 1 to 2 sprays starting 21 days prior to harvest.</p> <p>See <b>Resistance-Management</b> above.</p>
	1.5 in CA	1.05 in CA		
Cherry Leaf Spot ( <i>Coccomyces</i> spp.)	1.125 to 1.500	0.79 to 1.05	0.375 to 0.5	
Powdery Mildew ( <i>Podosphaera</i> and <i>Sphaerotheca</i> spp.)	1 <sup>st</sup> application: 1.0 to 1.5 except in CA	1 <sup>st</sup> application: 0.70 to 1.05 except in CA	1 <sup>st</sup> application: 0.5	<p>Make first application at early bloom (popcorn stage), followed by a second application at full bloom.</p> <p>See <b>Resistance-Management</b> above.</p>
	1 <sup>st</sup> application: 1.5 in CA	1 <sup>st</sup> application: 1.05 in CA	1 <sup>st</sup> application: 0.5 in CA	
	Subsequent applications: 1.125 to 1.500	Subsequent applications: 0.79 to 1.05	Subsequent applications: 0.375 to 0.500	<p>Also make applications of this product at shuck fall and first cover.</p> <p>See <b>Resistance-Management</b> above.</p>

### Restrictions for Cherries:

- **DO NOT** apply more than 1.5 lb product (1.05 lb a.i.)/A/application.
- **DO NOT** apply more than 4 lb product (2.8 lb a.i.)/A/yr.
- Maximum number of applications: 4 per year.
- REI = 2 days
- Minimum re-treatment interval: 10 days.
- PHI = 1 day

## NECTARINES

Target Pests	Rate			Application Instructions
	lb product/A	lb a.i./A	lb product/100 gal	
Brown Rot, Brown Rot Blossom Blight, Fruit Brown Rot ( <i>Monilinia</i> spp.)	1.0 to 1.5 except in CA	0.70 to 1.05 except in CA	0.5	<p>Make first application at early bloom (pink bud), followed by a second application at full bloom.</p> <p>Under severe disease pressure, make additional applications at 10- to 14-day intervals beginning at full bloom, through final pre-harvest sprays.</p> <p>See <b>Resistance-Management</b> above.</p>
	1.5 in CA	1.05 in CA		

### Restrictions for Nectarines:

- **DO NOT** apply more than 1.5 lb product (1.05 lb a.i.)/A/application.
- **DO NOT** apply more than 4 lb product (2.8 lb a.i.)/A/yr.

- Maximum number of applications: 4 per year.
- REI = 2 days
- Minimum re-treatment interval: 10 days.
- PHI = 1 day

## PEACHES

Target Pests	Rate			Application Instructions
	lb product/A	lb a.i./A	lb product/100 gal	
Brown Rot, Brown Rot Blossom Blight, Fruit Brown Rot ( <i>Monilinia</i> spp.)	1.0 to 1.5 except in CA	0.70 to 1.05 except in CA	0.5	Make first application at early bloom (pink bud), followed by a second application at full bloom. Under severe disease pressure, make additional applications at 10- to 14-day intervals beginning at full bloom, through final pre-harvest sprays. See <b>Resistance-Management</b> above.
	1.5 in CA	1.05 in CA		
Peach Scab ( <i>Cladosporium</i> spp.)	1.0 to 1.5 additional	0.70 to 1.05 additional	0.375 to 0.500 additional	When treating Peach Scab, make additional applications at Shuck Split and first cover spray. See <b>Resistance-Management</b> above.

### Restrictions for Peaches:

- **DO NOT** apply more than 1.5 lb product (1.05 lb a.i.)/A/application.
- **DO NOT** apply more than 4 lb product (2.8 lb a.i.)/A/yr.
- Maximum number of applications: 4 per year.
- REI = 2 days
- Minimum re-treatment interval: 10 days.
- PHI = 1 day

## PEARS

Target Pests	Rate			Application Instructions
	lb product/A	lb a.i./A	lb product/100 gal	
Fabraea Leaf Spot Flyspeck ( <i>Zygophiala</i> spp.) Pear Scab ( <i>Venturia</i> spp.) Powdery Mildew ( <i>Podosphaera</i> spp.) Sooty Blotch ( <i>Gloeodes</i> spp.)	1.0	0.7	0.25	Make initial application at green tip; continue on a 5- to 10-day schedule through petal fall. As conditions warrant, continue applications at 7- to 10-day intervals through the cover sprays. <b>DO NOT</b> use Thio-M 70 WSB alone in a spray program. Use only in combination or in an alternating application program with a labeled non-benzimidazole fungicide.
<b>For pre-harvest use to control post-harvest diseases on pears:</b> Bulls-Eye Rot ( <i>Neofabraea</i> spp.) Gray Mold ( <i>Botrytis cinerea</i> ) Storage Rot Blue Mold ( <i>Penicillium expansum</i> )	1.0	0.7	0.25	Apply as a pre-harvest spray within 2 weeks to 3 days of harvest. Thorough coverage of the fruit is required. Application closer to harvest may provide better efficacy. For resistance management, <b>DO NOT</b> use benzimidazole fungicide post-harvest following pre-harvest application of this product. Application of a non-benzimidazole post-harvest fungicide including Penbotec™ (EPA Reg. No. 43813-32) or Dyna-Shield® Fludioxonil (EPA Reg. No. 34704-1074) will provide additional protection from post-harvest diseases.

### Restrictions:

- **DO NOT** apply more than 1.0 lb product (0.7 lb a.i.)/A/application.
- **DO NOT** apply more than 4 lb product (2.8 lb a.i.)/A/yr.
- Maximum number of applications: 4 per year.
- REI = 2 days
- Minimum re-treatment interval: 5 days at green tip, 7 days for cover spray.
- PHI = 1 day
- Apply in a minimum spray volume of 10 gal/A for aerial applications and **DO NOT** apply through irrigation equipment.

## PECANS

Target Pests	Rate		Application Instructions
	lb product/A	lb a.i./A	
Brown Spot ( <i>Cercospora</i> spp.) Downy Spot ( <i>Mycosphaerella</i> spp.) Liver Spot ( <i>Gnomonia</i> spp.) Powdery Mildew ( <i>Microsphaerella</i> spp.) Scab ( <i>Fusicladium</i> spp.) Stem End Blight ( <i>Botryosphaeria</i> spp.) Zonate Leaf Spot ( <i>Cristulariella</i> spp.)	0.5 to 1.0	0.35 to 0.70	Make first application as leaves begin to show, followed by repeat applications every three to four weeks until shuck split. Use highest rates for aerial applications in AR, GA, LA, MS, OK, TX. See <b>Resistance-Management</b> above.

### Restrictions for Pecans:

- **DO NOT** apply more than 1.0 lb product (0.7 lb a.i.)/A/application.
- **DO NOT** apply more than 3 lb product (2.1 lb a.i.)/A/yr.
- Maximum number of applications: 3 per year.
- REI = 3 days
- Minimum re-treatment interval: 21 days.
- PHI = 1 day
- **DO NOT** apply after shuck split.

## PISTACHIOS

Target Pests	Rate			Application Instructions
	lb product/A	lb a.i./A	lb product/100 gal	
Shoot Blight ( <i>Botrytis</i> and <i>Botryosphaeria</i> spp.)	1.5 to 2.0	1.05 to 1.40	0.500 to 0.625	Make application at bloom. Ground application: apply at least 100 gal/A Aerial application: apply at least 20.0 gal/A and ensure applicator flies directly over every row of trees. See <b>Resistance-Management</b> above.

### Restrictions for Pistachios:

- **DO NOT** apply more than 2.0 lb product (1.4 lb a.i.)/A/application.
- **DO NOT** apply more than 2 lb product (1.4 lb a.i.)/A/yr.
- Maximum number of applications: 1 per year.
- REI = 3 days

## PLUMS, PRUNES

Target Pests	Rate			Application Instructions
	lb product/A	lb a.i./A	lb product/100 gal	
Brown Rot, Brown Rot Blossom Blight, Fruit Brown Rot ( <i>Monilinia</i> spp.)	1.0 to 1.5 except in CA	0.70 to 1.05 except in CA	0.5	Initiate application at early bloom (green tip), followed by a second application at full bloom. Under severe disease pressure, make additional applications at 10- to 14-day intervals beginning at full bloom, through final pre-harvest sprays.
	1.5 in CA	1.05 in CA		
Black Knot ( <i>Dibotryon</i> spp.)	1.0 to 1.5 except in CA	0.70 to 1.05 except in CA	0.5	Initiate applications before bloom, then at petal fall and first 3 cover sprays at 10- to 14-day intervals See <b>Resistance-Management</b> above.
	1.5 in CA	1.05 in CA		
Leaf Spot ( <i>Coccomyces</i> spp.)	1.0 to 1.5 except in CA	0.70 to 1.05 except in CA	0.5	Initiate applications as leaves begin to unfold, near petal fall or before. Continue at first, second and third cover sprays at 10- to 14-day intervals. See <b>Resistance-Management</b> above.
	1.5 in CA	1.05 in CA		

### Restrictions for Plums, Prunes:

- **DO NOT** apply more than 1.5 lb product (1.05 lb a.i.)/A/application.
- **DO NOT** apply more than 4 lb product (2.8 lb a.i.)/A/yr.
- Maximum number of applications: 4 per year.
- REI = 2 days
- Minimum re-treatment interval: 10 days.
- PHI = 1 day

## CONIFER USES \*(NOT FOR USE IN CA)

### \*DOUGLAS FIR

Target Pests	Rate			Application Instructions
	lb product/A	lb a.i./A	Minimum gal/A	
Rhabdocline Needle Cast Swiss Needle Cast ( <i>Phaenocarpa</i> spp.)	1.0	0.7	50.0	Make first application near the beginning of May, followed by applications every 4 wks. Coverage may improve by adding a spreader/sticker.

### Restrictions for Douglas Fir:

- **DO NOT** apply more than 1.0 lb product (0.7 lb a.i.)/A/application.
- **DO NOT** apply more than 3.5 lb product (2.45 lb a.i.)/A/yr.
- Maximum number of applications: 4 per year.
- Minimum re-treatment interval: 28 days.
- **DO NOT** graze treated area.

### \*PINE

#### Austrian Pine, Christmas Trees, Red Pine, Scots Pine

Target Pests	Rate			Application Instructions
	lb product/A	lb a.i./A	Minimum gal/A	
Tip Blight ( <i>Diplodia</i> spp.)	1.0	0.7	100	Make first application at bud break, followed by a second application shortly prior to needle emergence, usually 10 to 14 days after bud break. A third application may be made approximately two weeks following needle emergence.  Coverage may improve by adding a spreader/sticker.

### Restrictions for Austrian Pine, Christmas Trees, Red Pine, Scots Pine:

- **DO NOT** apply more than 1.0 lb product (0.7 lb a.i.)/A/application.
- **DO NOT** apply more than 3.0 lb product (2.1 lb a.i.)/A/yr.

- Maximum number of applications: 4 per year.
- Minimum re-treatment interval: 10 days.
- **DO NOT** graze treated area.

**\*Seedling Treatment**

Species	Target Pests	Mix Ratio		Application Instructions
		oz product	oz dry Kaolinite clay	
Longleaf Pine	Brown Needle Blight ( <i>Scirrhia</i> spp.)	1.0	9.5	<p><b>DO NOT</b> apply to seedling foliage. Prior to application, immerse the roots of the seedlings in clean water. The roots may then be treated with a mixture of Kaolinite and this product. While treating seedlings, <b>DO NOT ALLOW EXCESSIVE DRYING OF ROOTS</b> or exposure to freezing temperatures or temperatures greater than 90°F. This product is not effective in controlling <i>Phytophthora</i> or <i>Pythium</i> spp.</p>
Loblolly Pine	<i>Fusarium</i> spp.	2.0	50 plus enough water to make a slurry	
Longleaf Pine Slash Pine	Rhizoctonia Root Rot			

**ATTENTION: DO NOT** exceed the maximum rate of AI per acre in dilute sprays.

**STORAGE AND DISPOSAL**

**DO NOT** contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Keep pesticide in original container. Store in a cool, dry place away from excessive heat. **DO NOT** put concentrate or dilute into food or drink containers.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. **DO NOT** store near heat or open flame. Protect from temperatures below 0 °F. Not for use or storage in or around the home.

**CONTAINER HANDLING: Nonrefillable container. DO NOT** reuse or refill this container. *Completely empty bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles.* Offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration. **DO NOT** burn, unless allowed by state and local ordinances.

**For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC – 1-800-424-9300.**

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