

# Nufarm

# T-Methyl 4.5 F

## Fungicide

**ACTIVE INGREDIENT:**

Thiophanate-methyl (Dimethyl [(1,2-phenylene)bis(iminocarbonothioyl)]bis[Carbamate])\* ..... 46.2%

**OTHER INGREDIENTS:**..... 53.8%

**TOTAL:** ..... 100.0%

\*Also known as Dimethyl 4,4'-o-phenylenebis[3-thioallophanate]

Contains 4.5 pounds thiophanate-methyl per gallon

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION/PRECAUCIÓN**

See Inside Label Booklet for FIRST AID, PRECAUTIONARY STATEMENTS, and Complete DIRECTIONS FOR USE

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300  
For Medical Emergencies Only, Call (877) 325-1840

EPA REG. NO. 228-652

Manufactured for  
Nufarm Americas Inc.  
11901 S. Austin Avenue  
Alsip, IL 60803



**Nufarm**

**Grow a better tomorrow.**

<b>FIRST AID</b>	
<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 a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</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>
<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>HOTLINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.	

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**  
**CAUTION / PRECAUCIÓN**

Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing vapor or spray mist.

**Personal Protective Equipment (PPE)**

Some materials that are chemical-resistant to this product are barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, and viton ≥ 14 mils. If you want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

**Handlers mixing, loading and applying the product as a dip (including application of product in Kaolinite clay to conifer seedling roots) must wear:**

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant gloves,
- Chemical-resistant footwear plus socks,
- Chemical-resistant apron

**All other mixers and loaders and applicators must wear:**

- Long-sleeved shirt and long pants,
- Shoes plus socks,
- Chemical-resistant gloves for all mixers and loaders and for applicators using hand held equipment, and
- Chemical-resistant apron for mixers, loaders and other handlers exposed to the concentrate.

## 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. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

## Engineering Controls

When handlers use enclosed cabs 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:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- 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 to 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 by disposing of equipment washwater.

### 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.

### 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), notification to workers, and restricted-entry interval. The requirements in this box 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 following restricted entry intervals (REI):

Check the Application Directions table for the correct REI for each crop. If the table does not list an REI for a particular crop, the REI is 12 hours.

PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water), is:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure

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## PRODUCT INFORMATION

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Apply this product with ground or aerial equipment, using sufficient volume of spray to provide thorough coverage. Continuous agitation is required to keep the material in suspension. Do not tank mix this product with highly alkaline pesticides, such as Bordeaux mixture or lime sulfur. No claim of compatibility with other pesticides is implied. Use the higher rates under conditions of severe disease pressure. Also, see local State Extension Service instructions for application schedules.

Optimum disease control occurs when fungicides are applied in a preventative spray program prior to fungal infection. Some diseases are better controlled when several different MOA (Modes of Action) fungicides are tank-mixed for the application. Check your area University or Extension Recommendations Guide for specifics.

Use the fluid oz./acre rate for concentrate sprays (less than 400 gallons on apples, less than 300 gallons on stonefruit). Use the fluid oz./100 gal rate for dilute ground applications. For aerial applications, use a minimum of 3 gallons/A (5 gallons/A in California) for row crops, and a minimum of 10 gallons/A for tree crops. Higher spray volume will generally result in better coverage and better disease control.

**Use on non-bearing apples, pecans, cherries, and peaches:** Use this product for control of the leaf diseases listed on the label for these crops during the non-bearing years of new plantings, and on nursery stock. All use directions and limitations must be followed, except for the PHI, which is not applicable. Begin applications as disease is first observed. Tank mix with a protectant fungicide for resistance management. Chemigation instructions follow. Do not apply through any irrigation system unless these instructions are followed.

**Resistance Management:** To avoid the development of tolerant or resistant strains of fungi, tank mix this product with a fungicide of different chemistry, and/or alternated with a fungicide of different chemistry at each application. If after using this product as specified in this label, the treatment is not effective, a tolerant or resistant strain of fungi is likely present. Discontinue the use of this product for at least one season. Do not use products containing thiabendazole or other products containing thiophanate-methyl as substitutes for this product, as they are of similar chemistry and will contribute to the development of resistance. As long as these precautions are followed, this product can be useful for disease control, even if resistant strains are present.

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## MIXING INSTRUCTIONS

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Always start with a thoroughly clean spray tank and spray system before using this product.

Fill spray tank to half full, start agitation. Be sure to shake product container well before pouring to measure. Slowly pour required amount into spray tank, then finish filling tank with water, all the while maintaining agitation.

Tank mix this product with other pesticides to broaden spectrum of control. Using instructions above, add products in order of formulation type: dry flowables (DF), wettable powders (WP), and wettable dry granules (WDG) should be added first; then flowables (F and SC); then emulsifiable concentrates (EC) last. 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.

If there is any question as to the compatibility of the components, always perform a jar test with proportional amount of each product, using water from the actual use source.

Always read and follow label direction of all products. The most restrictive label language will apply. Do not mix more spray solution than you plan to apply that day.

**APPLICATION DIRECTIONS TABLE**

Note: Dilute sprays are not to exceed maximum rate per acre.

CROP	DISEASES	SCIENTIFIC NAME	FLUID OZ./ ACRE (LB AI/ACRE)	FLUID OZ./100 GAL	USE INFORMATION					
<b>Almonds</b>	Brown rot Blossom blight Scab Jacket Rot  Leaf Blight	<i>Monilinia</i> sp. <i>Monilinia</i> sp. <i>Cladosporium</i> sp. <i>Monilinia</i> , <i>Sclerotinia</i> , <i>Botrytis</i> <i>Seimatosporium</i>	20 - 30 (0.7 - 1.05 lb ai/A)		Apply at pink bud and petal fall.					
<p><b>NOTES:</b> Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days. Do not apply more than 60 fl. oz. of product (2.1 lb ai) per acre per year Pre-harvest Interval: 1 day</p>										
<b>Apples</b>	Apple scab Black pox *  Flyspeck Powdery mildew Sooty blotch Black rot Brooks fruit spot White rot *	<i>Venturia</i> sp. <i>Helminthosporium papulosum</i> <i>Zygophiala</i> sp. <i>Podosphaera</i> sp. <i>Gloeodes</i> sp. <i>Botryosphaeria</i> sp. <i>Mycosphaerella</i> sp. <i>Botryosphaeria</i> sp.	15 - 20 (0.53 - 0.7 lb ai/A) (except CA)  CA only: 30 (1.0 lb ai/A)	3.75 - 5   CA only: 7.5	Apply at 5- to 10-day intervals from green tip through petal fall; continue at 7- to 14-day intervals in cover sprays. Follow resistance management guidelines under Directions For Use.					
<p align="center"><b>PRE-HARVEST USE TO CONTROL POST-HARVEST DISEASES ON APPLES</b></p>										
<table border="1"> <tr> <td data-bbox="302 947 516 1325">Storage rot blue mold Gray mold Bull's eye rot</td> <td data-bbox="516 947 740 1325"><i>Penicillium expansum</i>  <i>Botrytis cinerea</i> <i>Neofabraea</i> spp.</td> <td data-bbox="740 947 932 1325">1 (0.035 lb ai/A)</td> <td data-bbox="932 947 1045 1325">3.75 - 5</td> <td data-bbox="1045 947 1521 1325">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, do not use a benzimidazole fungicide (i.e. Mertect®) post-harvest following a pre-harvest application of a product containing thiophanate-methyl. Application of a non-benzimidazole post-harvest fungicide will provide additional protection from post-harvest diseases.</td> </tr> </table>						Storage rot blue mold Gray mold Bull's eye rot	<i>Penicillium expansum</i>  <i>Botrytis cinerea</i> <i>Neofabraea</i> spp.	1 (0.035 lb ai/A)	3.75 - 5	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, do not use a benzimidazole fungicide (i.e. Mertect®) post-harvest following a pre-harvest application of a product containing thiophanate-methyl. Application of a non-benzimidazole post-harvest fungicide will provide additional protection from post-harvest diseases.
Storage rot blue mold Gray mold Bull's eye rot	<i>Penicillium expansum</i>  <i>Botrytis cinerea</i> <i>Neofabraea</i> spp.	1 (0.035 lb ai/A)	3.75 - 5	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, do not use a benzimidazole fungicide (i.e. Mertect®) post-harvest following a pre-harvest application of a product containing thiophanate-methyl. Application of a non-benzimidazole post-harvest fungicide will provide additional protection from post-harvest diseases.						
<p><b>NOTES:</b> Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days. Do not apply more than 80 fl. oz. of product (2.8 lb ai) per acre per season. Pre-harvest Interval: 24 hours * <b>Not registered for use in California</b></p>										

Continued

**APPLICATION DIRECTIONS TABLE**

Note: Dilute sprays are not to exceed maximum rate per acre.

CROP	DISEASES	SCIENTIFIC NAME	FLUID OZ./ ACRE (LB AI/ACRE)	FLUID OZ./100 GAL	USE INFORMATION
<b>Beans, Dry and Succulent</b> Including: Lima bean Snap bean Kidney bean Mung bean Navy bean Pinto bean Wax bean Broad bean Fava bean Asparagus bean Blackeyed pea Cowpea Sweet lupine White lupine White Sweet lupine Grain lupine Chick pea Garbanzo bean	Gray mold White mold Anthracnose	<i>Botrytis</i> sp. <i>Sclerotinia</i> sp. <i>Colletotrichum</i>	30 - 40 (1.0 - 1.4 lb ai/A)		<b>For one application:</b> Apply when 100% of plants have at least one open bloom or when conditions are favorable for disease development.
			20 - 30 (0.7 - 1.0 lbs ai/A)		<b>For multiple applications:</b> Make first application when 10%-30% of plants have at least one open bloom. Follow with additional applications at 4- to 7-day intervals. Apply prior to the development of disease for best results.
<p><b>NOTES:</b></p> <p>For succulent beans, do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.</p> <p>For dry beans, do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days.</p> <p>Do not apply more than 80 fl. oz. of product (2.8 lb ai) per acre per crop cycle.</p> <p>Pre-harvest Interval –</p> <p>All States Except California: 14 days for succulent beans and lima beans 28 days for dry beans</p> <p>California only: 14 days for succulent beans 28 days for lima beans and dry beans</p>					

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**APPLICATION DIRECTIONS TABLE**

Note: Dilute sprays are not to exceed maximum rate per acre.

CROP	DISEASES	SCIENTIFIC NAME	FLUID OZ./ ACRE (LB AI/ACRE)	FLUID OZ./100 GAL	USE INFORMATION
<b>Cucurbits</b> Cantaloupe, Casaba, Cucumbers, Melons, Pumpkins, Summer and winter squash, Watermelons	Acrermonium/ Cephalosporium Hypocotyl rot		10 (0.35 lb ai/A)		Apply in-furrow, on top of the seeds at planting. Do not use less than 10 gallons of water per acre.
	Anthracnose * Gummy stem blight* Powdery mildew Target spot *	<i>Colletotrichum</i> sp. <i>Didymella</i> sp.  <i>Erysiphe</i> sp., <i>Sphaerotheca</i> sp. <i>Corynespora</i> sp.	10 (0.35 lb ai/A) for ground or aerial applications		Begin applications when plants begin to run or when disease first appears, and repeat at 7-14 day intervals or as needed.  For Target spot, use at 7-day intervals as needed.
	Belly rots *	<i>Rhizoctonia</i> / <i>Fusarium</i> sp.	10 (0.35 lb ai/A)		Apply in sufficient volume to allow runoff to the soil. Will not control <i>Pythium</i> or <i>Phytophthora</i> .
	Suppression of Vine decline Charcoal rot	<i>Monosporascus</i> <i>cannonballus</i> <i>Macrophomina</i> sp.	10 (0.35 lb ai/A)		Apply through buried drip irrigation (chemigation) to the root zone. For disease suppression, apply at 14-day intervals, beginning at emergence and continuing to harvest.  Applications weekly or biweekly, beginning 4-6 weeks prior to harvest will also offer suppression, but may not be as effective as a season-long program.
	<b>NOTES:</b> Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours. Do not apply more than 60 fl. oz. product (2.1 lb ai) per acre per season from any combination of application timings. Pre-harvest Interval: 1 day. Follow resistance management guidelines under Directions for Use. * Not registered for use in California				
<b>Garlic</b> (Treatment for garlic cloves prior to planting)	Penicillium clove rot			20	Completely immerse garlic cloves in suspension for at least 5 minutes.  Continuously agitate the solution tank by hydraulic or mechanical means.  After treatment, remove cloves from solution and drain over sand.  Dry cloves after treatment and prior to planting.

Continued

**APPLICATION DIRECTIONS TABLE**

Note: Dilute sprays are not to exceed maximum rate per acre.

CROP	DISEASES	SCIENTIFIC NAME	FLUID OZ./ ACRE (LB AI/ACRE)	FLUID OZ./100 GAL	USE INFORMATION
Onions * Garlic (in-furrow)	White rot	<i>Sclerotium cepivorum</i>	1 fl. oz./1000 ft. of row (with 12 inch row spacing)  OR  40 fl. oz. (1.4 lb ai) per acre broadcast		Apply this product by spraying directly into the open furrow at the time of planting seed, sets or bulbs. Not for this use through any type of irrigation system.
	<p><b>NOTES:</b> Do not apply more than 40 fl. oz. of product (1.4 lb ai) per acre per year. <b>*Not registered for use in California</b></p>				
Peanuts	Early Leaf spot Late Leaf Spot Rust Limb rot Web blotch	<i>Cercospora</i> spp. <i>Cercosporidium</i> spp. <i>Puccinia</i> <i>Rhizoctonia</i> <i>Ascochyta</i>	10 (0.35 lb ai/A)		Begin applications 35 days after planting or when disease first appears and repeat at 14 day intervals as needed.  Do not use this product alone. Use only in combination with another non-benzimidazole fungicide.  Follow resistance management guidelines under Directions for Use.
	<p><b>NOTES:</b> Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 1 day. Do not apply more than 40 fl. oz of product (1.4 lb ai) per acre per year. Pre-harvest interval: 14 days</p>				
Pecans	Scab Brown spot Downy spot Powdery mildew Liver spot Stem End blight Zonate leaf spot	<i>Fusicladium</i> sp. <i>Cercospora</i> sp. <i>Mycosphaerella</i> sp. <i>Microsphaera</i> sp. <i>Gnomonia</i> sp. <i>Botryosphaeria</i> sp. <i>Cristulariella</i> sp.	20 (0.7 lb ai/A)		Begin applications when first leaves are showing and repeat at 3 to 4 week intervals until shuck split.  Do not apply after shuck split.
	<p><b>NOTES:</b> Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days. Do not apply more than 60 fl. oz. of product (2.1 lb ai) per acre per year. Pre-harvest Interval: 24 hours</p>				

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**APPLICATION DIRECTIONS TABLE**

Note: Dilute sprays are not to exceed maximum rate per acre.

CROP	DISEASES	SCIENTIFIC NAME	FLUID OZ./ ACRE (LB AI/ACRE)	FLUID OZ./100 GAL	USE INFORMATION
Pistachios	Shoot blight	<i>Botrytis</i> sp., <i>Botryosphaeria</i> sp.	30 - 40 (1.0 - 1.4 lb ai/A)		Apply at bloom.  Apply in a minimum of 100 gallons per acre by ground or 20 gallons per acre by air.  For aerial application, fly over every row or center.
	<p><b>NOTES:</b> Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days. Do not apply more than 40 fl. oz. of product (1.4 lb ai) per acre per season.</p>				
Potatoes	White mold	<i>Sclerotinia sclerotiorum</i>	20 - 30 (0.7 - 1.0 lb ai/A)		<p>Make first application just prior to row closure to full bloom of the primary flower clusters (prior to petal drop). Repeat the application within 7-14 days and at 7-14 day intervals if conditions for disease development are favorable. <u>Thorough coverage</u> of the lower stems and branches is essential for disease control.</p> <p>Use a minimum of 6 gallons/Acre for aerial application.</p> <p>Apply prior to disease development for best results.</p> <p>May be tank mixed with other fungicides labeled for early and late blight control.</p>
	<p><b>NOTES:</b> Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days. Do not apply more than 80 fl. oz. of product (2.8 lb ai)/A/ season. Pre-harvest interval: 21 days.</p>				

Continued

**APPLICATION DIRECTIONS TABLE**

Note: Dilute sprays are not to exceed maximum rate per acre.

CROP	DISEASES	SCIENTIFIC NAME	FLUID OZ./ ACRE (LB AI/ACRE)	FLUID OZ./100 GAL	USE INFORMATION
Soybeans	Anthracnose Brown spot Frogeye leaf spot Pod and stem blight  Purple seed stain	<i>Colletotrichum</i> sp. <i>Septoria</i> sp. <i>Cercospora sojina</i> <i>Diaporthe</i> sp. and the imperfect stage, <i>Phomopsis</i> sp. <i>Cercospora kikuchii</i>	10 - 20 (0.35 - 0.7 lb ai/A)		Apply from full bloom to when pods are 1/8" to 1/4" in length. Make a second application 14 to 21 days later. Do not make the second application later than 14 days after pods average 1/4" in length or when beans form in the pod. Use the high rate under severe disease pressure.  For Seed Beans Only - For seed quality, make a single application at the high rate when beans form in the pod.
	White mold	<i>Sclerotinia</i> sp.	15 - 20 (0.53 - 0.7 lb ai/A)		Make one application at early bloom (R-1 to R-2 stage) followed by a second application 7-14 days later if conditions are favorable for continued disease pressure. Use a minimum of 5 gallons by air.
	Aerial blight (suppression) Soybean rust	<i>Rhizoctonia solani</i>  <i>Phakopsora pachyrhiza</i>	20 (0.7 lb ai/A)		Make initial application when disease threatens (before visual symptoms appear) and repeat 14-21 days later if needed. Tank mix with a DMI fungicide for soybean rust.
<p><b>NOTES:</b> Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours. Do not apply more than 40 fl. oz. (1.4 lb ai/A) per acre per season Do not make more than 2 applications per year. Do not graze or feed treated vines to livestock. Pre-harvest interval: 21 days</p>					
<b>Stone Fruit</b>					
Apricots	Brown rot Blossom blight Fruit brown rot	<i>Monilinia</i> sp. <i>Monilinia</i> sp. <i>Monilinia</i> sp.	20 - 30 (0.7 - 1.0 lb ai/A)  (In CA - use 30 fl. oz. or 1.0 lb ai/A)	6.7 - 10	Apply at early bloom (red bud). Make a second application at full bloom.  If needed under severe disease pressure, apply additional sprays at 10- to 14-day intervals between full bloom and final pre-harvest sprays.
<p><b>NOTES:</b> Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days. Do not apply more than 80 fl. oz. of product (2.8 lb ai) per acre per season Pre-harvest interval: 1 day Follow resistance management guidelines under Directions for Use.</p>					

Continued

**APPLICATION DIRECTIONS TABLE**

Note: Dilute sprays are not to exceed maximum rate per acre.

CROP	DISEASES	SCIENTIFIC NAME	FLUID OZ./ ACRE (LB AI/ACRE)	FLUID OZ./100 GAL	USE INFORMATION
<b>Cherries Sweet and Sour</b>	Brown rot Blossom blight Fruit brown rot	<i>Monilinia</i> sp. <i>Monilinia</i> sp. <i>Monilinia</i> sp.	20 - 30 (0.7 - 1.0 lb ai/A)  (In CA - use 30 fl. oz. or 1.0 lb ai/A)	6.7 - 10	Apply at early bloom (early popcorn). Make a second application at full bloom.  If needed under severe disease pressure, apply additional sprays at 10- to 14- day intervals between full bloom and final pre-harvest sprays.
	Cherry leaf spot	<i>Coccomyces</i> sp.	22.5 - 30 (0.79 - 1.0 lb ai/A)	7.5 - 10	Apply at petal fall or before when leaves first unfold, and at first, second and third cover sprays at 10- to 14-day intervals and one spray 14 to 21 days after harvest.
	Powdery mildew	<i>Podosphaera</i> sp., <i>Sphaerotheca</i> sp.	20-30 (0.7-1.0 lb ai/A)  (In CA - use 30 fl. oz. or 1.0 lb ai/A)  <b>PLUS</b>  22.5 - 30 fl. oz. (0.79 -1.0 lb ai/A)	6.7 - 10     <b>PLUS</b>  7.5 - 10	Apply at early bloom (early popcorn). Make a second application at full bloom.     <b>PLUS</b>  Apply at shuck fall and first cover.
<p><b>NOTES:</b> Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days. Do not apply more than 80 fl. oz. of product (2.8 lb ai) per acre per season. Pre-harvest interval: 1 day Follow resistance management guidelines under Directions for Use.</p>					
<b>Nectarines</b>	Brown rot Blossom blight Fruit brown rot	<i>Monilinia</i> sp. <i>Monilinia</i> sp. <i>Monilinia</i> sp.	20 - 30 (0.7 - 1.0 lb ai/A)  (In CA - use 30 fl. oz. or 1.0 lb ai/A)	6.7 - 10	Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development.  If needed under severe disease pressure apply additional sprays at 10 to 14-day intervals between full bloom and final pre-harvest sprays.
	<p><b>NOTES:</b> Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days. Do not apply more than 80 fl. oz. of product (2.8 lb ai) per acre per season Pre-harvest interval: 1 day Follow resistance management guidelines under Directions for Use.</p>				

Continued

**APPLICATION DIRECTIONS TABLE**

Note: Dilute sprays are not to exceed maximum rate per acre.

CROP	DISEASES	SCIENTIFIC NAME	FLUID OZ./ ACRE (LB AI/ACRE)	FLUID OZ./100 GAL	USE INFORMATION
Peaches	Brown rot Brown blight Fruit brown rot	<i>Monilinia</i> sp. <i>Monilinia</i> sp. <i>Monilinia</i> sp.	20 - 30 (0.7 - 1.0 lb ai/A)  (In CA - use 30 fl. oz. or 1.0 lb ai/A)	6.7 - 10	Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development.  If needed under severe disease pressure, apply additional sprays at 10- to 14-day intervals between full bloom and final pre-harvest sprays.
	Peach scab	<i>Cladosporium</i> sp.	20 - 30 (0.7 - 1.0 lb ai/A)  (In CA - use 30 fl. oz. or 1.0 lb ai/A)  <b>PLUS</b> 22.5 - 30 (0.79 - 1.0 lb ai/A)	6.7 - 10     <b>PLUS</b> 7.5 - 10	Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development.     <b>PLUS</b> Apply at shuck split and at first cover sprays.
<p><b>NOTES:</b> Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days. Do not apply more than 80 fl. oz. of product (2.8 lb ai) per acre per season Pre-harvest interval: 1 day Follow resistance management guidelines under Directions for Use.</p>					

Continued

SPEECH

**APPLICATION DIRECTIONS TABLE**

Note: Dilute sprays are not to exceed maximum rate per acre.

CROP	DISEASES	SCIENTIFIC NAME	FLUID OZ./ ACRE (LB AI/ACRE)	FLUID OZ./100 GAL	USE INFORMATION
Plums and Prunes	Brown rot Blossom blight Fruit brown rot	<i>Monilinia</i> sp. <i>Monilinia</i> sp. <i>Monilinia</i> sp.	20 - 30 (0.7 - 1.0 lb ai/A)  (In CA - use 30 fl. oz. or 1.0 lb ai/A)	6.7 - 10	Apply at early bloom (green tip). Make a second application at full bloom. If needed under severe disease pressure, apply additional sprays at 10 to 14 day intervals after full bloom. Do not apply after shuck split.
	Black knot	<i>Dibotryon</i> sp.	20 - 30 (0.7 - 1.0 lb ai/A)  (In CA - use 30 fl. oz. or 1.0 lb ai/A)	6.7 - 10	Apply at pre-bloom and petal fall. Do not apply after shuck split.
	Leaf spot	<i>Coccomyces</i> sp.	20 - 30 (0.7 - 1.0 lb ai/A)  (In CA - use 30 fl. oz. or 1.0 lb ai/A)	6.7 - 10	Apply at petal fall and shuck split. Do not apply after shuck split.  Nonbearing application: 1 spray 14 to 21 days after harvest.
	<p><b>NOTES:</b> Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days. Do not apply more than 80 fl. oz. of product (2.8 lb ai) per acre per season Pre-harvest interval: 1 day Follow resistance management guidelines under Directions for Use.</p>				
Strawberries	Fruit rot Leaf blight Leaf scorch Powdery mildew	<i>Botrytis</i> sp. <i>Dendrophoma</i> sp. <i>Diplocarpon</i> sp. <i>Sphaerotheca</i> sp.	15 - 20 (0.53 - 0.7 lb ai/A)		Begin application at early bloom and continue at 7 to 10 day intervals. Use the higher rate East of the Rocky Mountains and under conditions of severe disease pressure.
	Crown rot * (Suppression only)	<i>Colletotrichum</i> spp.	15 - 20 (0.53 - 0.7 lb ai/A)		Begin applications after establishment of the transplants and continue through bloom at 10 to 14 day intervals. Use the high rate if the fields have a history of <i>Colletotrichum</i> crown rot and/or conditions are favorable for disease development. Will not control <i>Phytophthora</i> species.
<p><b>NOTES:</b> Do not apply more than 80 fl. oz. product (2.8 lb ai) per acre per year. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours. Pre-harvest Interval: 1 day * Not registered for use in California</p>					

Continued



**APPLICATION DIRECTIONS TABLE**

Note: Dilute sprays are not to exceed maximum rate per acre.

<b>CROP</b>	<b>DISEASES</b>	<b>SCIENTIFIC NAME</b>	<b>FLUID OZ./ ACRE (LB AI/ACRE)</b>	<b>FLUID OZ./100 GAL</b>	<b>USE INFORMATION</b>
<b>Sugarbeets</b>	Cercospora leaf spot	<i>Cercospora</i> sp.	10 - 20 (0.35 - 0.7 lb ai/A)  (In CA - use 10 fl. oz. or 0.35 lb ai/A)		Apply when conditions become favorable for disease development before the disease appears and follow with a non-benzimidazole fungicide within 14 days of application or as needed.  This product should be tank mixed with a protectant fungicide such as Agri Tin® when resistant strains of <i>Cercospora</i> are present in the field.  For areas east of the Rocky Mountains: Do not make more than one application of this product per season for Cercospora leaf spot.
	Powdery mildew	<i>Erysiphe</i> sp.	10 - 20 (0.35 - 0.7 lb ai/A)		Apply as soon as disease symptoms appear and follow with a non-benzimidazole fungicide at 14-day intervals or as needed.
	<b>NOTES:</b> Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 1 day. Do not apply more than 60 fl. oz. product (2.1 lb ai) per acre per season. Pre-harvest interval: 21 days				
<b>Triticale and Fall-Seeded Wheat</b>  Idaho, Oregon and Washington Only	Strawbreaker (Foot rot or Eye spot)	<i>Pseudocercospora</i> sp.	20 (0.7 lb ai/A)		Apply this product at the rate indicated in a single application by air or ground after tillering but before stem elongation has begun.  Use sufficient water to obtain thorough coverage.
	<b>NOTES:</b> Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours. Do not apply more than 20 fl. oz. of product (0.7 lb ai) per acre per season Do not make more than one application per season. Do not cut for hay within 90 days of application. Do not allow livestock to graze in treated areas before harvest.				

**Note: Dilute sprays are not to exceed maximum rate per acre.**

**FOR USE ON CONIFERS  
(Not for use in California)**

<b>CROP</b>	<b>DISEASES</b>	<b>RATE of PRODUCT &amp; MINIMUM GALLONAGE</b>	<b>REMARKS</b>
<b>Conifers (Pine) Austrian Red Scots Christmas Trees</b>	Tip blight (Diplodia)	20 fl. oz. /A per 100 gal./A Spray Volume	Apply at bud break. Repeat 10 to 14 days later, just before needles emerge from sheath; repeat again 10 to 14 days after needle emergence.  Do not apply more than 60 fl. oz. of product (2.1 lb ai) / Acre / year.
<b>(Fir) Douglas</b>	Swiss needle cast ( <i>Phaeocryptopus</i> )  Rhabdocline Needle cast	20 fl. oz./A per 50 gal./A Spray Volume	Apply initially in early May. Repeat at 4-week intervals.  Do not apply more than 100 fl. oz. of product (3.5 lb ai) / Acre / year.
<ul style="list-style-type: none"> <li>• Add a spreader/sticker to improve coverage.</li> <li>• Use minimum gallonage with mist-blower types of sprayers and higher gallonage with conventional sprayers.</li> <li>• Do not graze livestock in treated areas.</li> <li>• Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.</li> </ul>			
<b>CONIFERS (Seedling treatment) Longleaf</b>	Brown needle blight ( <i>Scirrhia</i> )	1.25 fl. oz. per 9.5 oz. of dry Kaolinite clay for seedling roots	Wet seedling roots in clean water, then apply the product / kaolinite mixture to wet roots.
<b>Loblolly Longleaf Slash</b>	Fusarium and Rhizoctonia root rot	2.5 fl. oz. per 50 oz. Kaolinite clay plus enough water to make a slurry	Thoroughly cover seedlings roots with the product /kaolinite slurry.
<ul style="list-style-type: none"> <li>• Do not apply mixture to seedling foliage.</li> <li>• During treatment, avoid excessive drying of roots or exposure to temperatures greater than 90° F or less than 32°F.</li> <li>• This product does not control Pythium or Phytophthora.</li> <li>• Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.</li> </ul>			

**DIRECTIONS FOR USE THROUGH CHEMIGATION SYSTEMS**

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

**Chemigation Information**

Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move, or drip (mini-micro sprinklers, strip tubing, trickle) irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.



Do not connect chemigation system to any public water system. Public water system means a system for the provision of piped water for human consumption if such 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.

### **System Requirements**

System utilizing a pressurized water and pesticide injection system must meet the following requirements:

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

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

System must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

### **Application Instructions**

Observe the requirements in the System Requirements section above.

Apply this product only through systems containing anti-siphon and check valves designed to prevent water source contamination or overflow of the mix tank and containing interlocking controls between the metering device and the water pump to ensure simultaneous shut-off.

Maintain a gentle continuous agitation in mix tank during mixing and application to assure a uniform suspension.

Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute suspension per unit time.

Application of more than specified quantities of irrigation water per acre will decrease product performance.

Do not apply when wind speed favors drift, when system connections or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product cannot be flushed and must be dismantled and drained. In a center pivot system, block the nozzle set nearest the well/pivot/injection unit to prevent spray being applied to this area.

Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water.

Apply this product in conjunction with chemically neutral liquid fertilizers. Application in conjunction with highly alkaline fertilizers, such as aqueous ammonia, causes a degradation of the pesticide, resulting in reduced performance and should be avoided.

### **Spray Preparation**

Remove scale, pesticide residues, and other foreign matter from the chemical tank and entire injector system. Flush with clean water.

Prepare a suspension of this product in a mix tank. Fill the tank with  $\frac{1}{2}$  or  $\frac{3}{4}$  the desired amount of water. Start mechanical or hydraulic agitation. Slowly add the required amount of this product and then the remaining volume of water.

### **Sprinkler Irrigation – Notes:**

Observe all System Requirements and application instructions above.

Set sprinkler system to deliver 0.1 to 0.25 inches of water per acre. Volume of water higher than this reduces efficacy. Start sprinkler and then uniformly inject the suspension of this product into the irrigation water line so as to deliver the desired rate per acre. Inject the suspension of this product with a positive displacement pump into the main line ahead of a right angle turn to ensure adequate mixing. When treatment with this product has been completed, do not irrigate the treated area for 24 to 48 hours to prevent washing the chemical off the crop.

Do not apply when wind speed favors drift beyond the area intended for treatment. Where sprinkler distribution patterns do not overlap sufficiently, unacceptable disease control is a result.

Check local restrictions and requirements regarding sprinkler irrigation application, as they vary from state to state.

### **Drip (mini-micro Sprinklers, Strip Tubing, Trickle) Irrigation-Notes:**

Observe all system requirements and application instructions above. Use a pesticide supply tank.



## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in original container in a dry, temperature controlled, secure place.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

### CONTAINER HANDLING:

**NOTE:** This product is available in multiple containers. Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable" or "Refillable" designation. Follow the container handling instructions below that apply to your container type / size."

#### Nonrefillable Containers 5 Gallons or Less

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

#### Nonrefillable Containers Larger than 5 Gallons

Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure-rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

#### Refillable containers

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

#### **WARRANTY DISCLAIMER**

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

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**If you do not agree with or do not accept any of the directions for use, the warranty disclaimers, or limitations of liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.**

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