

228-652

12/18/2009

lot 23



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Liz Rea
Registration Manager
Nufarm Americas Inc.
150 Harvester Drive, Suite 200
Burr Ridge, IL 60527

DEC 18 2009

Dear Ms. Rea:

SUBJECT: Nufarm T-Methyl 4.5 F Fungicide
EPA Registration Number 228-652
OPPIN Decision Number 415358
Your Submission of June 8, 2009

The amendment referred to above, submitted in connection with registration under section (3) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) is acceptable provided you make the following change:

Throughout the Application Directions Table:

Add the application rates in pounds AI per acre in addition to the fl oz product per acre to the fluid oz/acre as follows:

- Almonds - 1.05 lbs active ingredient per acre per single application
2.1 lbs active ingredient per acre per year
Apples - 0.7 lbs active ingredient per acre per single application except in California
1.0 lbs active ingredient per acre per single application in California
2.8 lbs active ingredient per acre per year
Canola - 1.4 lbs active ingredient per acre per application when one application is applied per year
0.7 lbs active ingredient per acre per application when two applications are applied per year
1.4 lbs active ingredient per acre per year
Onions - 1.4 lbs active ingredient per acre per single application
1.4 lbs active ingredient per acre per year

Peanuts – 1.4 lbs active ingredient per acre per single application
0.35 lbs active ingredient per acre per year

Pecans – 0.7 lbs active ingredient per acre per single application
2.1 lbs active ingredient per acre per year

Soybeans – 0.7 lbs active ingredient per acre per single application
1.4 lbs active ingredient per acre per year

Wheat and – 0.7 lbs active ingredient per acre per single application
Triticale 0.7 lbs active ingredient per acre per year

Conifers – 3.0 lbs active ingredient per acre per single application
300 lbs active ingredient per acre per year

Other changes:

Pages 1 and 2 – First Aid

Move the First Aid section so that it immediately precedes “Precautionary Statements – Hazards to Humans and Animals.”

Page 2 – Precautionary Statements

You may delete “Remove and wash contaminated clothing before reuse.”

Page 3 – Agricultural Use Requirements box

You may delete “Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.”

Page 5 – Almonds

Add the following sentence to the “Remarks” box: Pre-harvest Interval: 7 days

Page 6 – Canola

Add the following sentence to the “Remarks” box: Pre-harvest Interval: 40 days

Page 6 – Cucurbits

In the row extending across the columns on the right, change “(2 lbs. A.I. per acre)” to “(2.1 lbs. A.I. per acre)”

Page 8 – Peanuts

In the Remarks column, change the end of the first block of text from “. . .repeat at 7- to 14-day intervals as needed.” to “. . .repeat at 14-day intervals as needed.”

In the Remarks column, delete “Use the 7-day interval under severe disease pressure.”

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Page 8 – Pecans

Add the following sentence to the "Remarks" box: Pre-harvest Interval: 24 hours

Page 16 – Sugarbeets

In the Remarks column for the powdery mildew row, add "Do not enter or allow worker re-entry into treated areas during the restricted entry interval of 1 day."

You must submit one (1) copy of the final printed label before you release the product for shipment. Products shipped after 12 months from the date of this letter or the next printing of the label whichever occurs first, must bear the new revised label.

A stamped copy of the label is enclosed for your records. If you have any questions, please contact Lisa Jones of my staff by phone at (703) 308-9424 or by e-mail at jones.lisa@epa.gov.

Sincerely,



Shaja B. Joyner
Product Manager (20)
Fungicide Branch
Registration Division (7505P)

Enclosure: Stamped label

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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-phenylebis-[3-thioallophanate]
Contains 4.5 pounds thiophanate-methyl per gallon.

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

See inside label booklet for additional FIRST AID and PRECAUTIONARY STATEMENTS

**ACCEPTED
with COMMENTS
In EPA Letter Dated:
DEC 18 2009**

EPA Reg. No. 228-652

EPA Est. No.

**Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.**

228-652

Manufactured for:
Nufarm Americas Inc.
150 Harvester Drive
Burr Ridge, IL 60527

Nufarm T-Methyl 4.5 F Fungicide contains thiophanate-methyl, the active ingredient used in Topsin® 4.5FL.

Net Contents:

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

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. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

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.

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.

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.

FIRST AID	
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air.

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	<ul style="list-style-type: none"> • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
If on skin or clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
	•

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

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

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

GENERAL INFORMATION

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.

MIXING INSTRUCTIONS

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	FLUID OZ./100 GAL	REMARKS
Almonds	Brown rot Blossom blight Scab	<i>Monilinia</i> sp. <i>Cladosporium</i> sp.	30 fl. oz. Maximum annual application rate - 60 fl. oz. per acre.		Apply at pink bud and petal fall. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days.
Apples	Apply scab Black pox – Not for this use in California Flyspeck Powdery mildew Sooty blotch Black rot Brooks fruit spot White rot – Not for this use in California	<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.	20 fl. oz. (except CA) 30 fl. oz. (CA Only) Maximum annual application rate – 80 fl. oz. per acre.	5 fl. oz. 7.5 fl. oz.	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. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days. Pre-harvest Interval: 24 hours
Beans Not for this use in California; see below for CA directions for use	Gray mold White mold Anthracnose	<i>Botrytis</i> sp. <i>Sclerotinia</i> sp. <i>Colletotrichum</i>	30-40 fl. oz. Use a maximum of 80 oz. of product per acre (2.8 lbs. A.I.) per crop cycle with a minimum 7-day spray interval.		Make first application when 10%-30% of plants have at least one open bloom, and/or conditions are favorable for disease development. For green beans, do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours. For dry beans, do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days. Pre-harvest Interval: 14 days for snap beans, 28 days for lima beans and dry beans.

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Note: Dilute sprays are not to exceed maximum rate per acre.					
CROP	DISEASES	SCIENTIFIC NAME	FLUID OZ./ACRE	FLUID OZ./100 GAL	REMARKS
Beans For use in CA only	Gray mold White mold Anthracnose	<i>Botrytis</i> sp. <i>Sclerotinia</i> sp. <i>Colletotrichum</i>	30-40 fl. oz. OR 20-30 fl. oz.		Apply once at 50% to 70% of full bloom. OR Apply twice with the first application at 10%- 30% of full bloom and a second application at 4 to 7 days later or at peak bloom. For green beans, do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours. For dry beans, do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days. Pre-harvest interval: 14 days for snap beans, 28 days for lima beans and dry beans.
Canola (ND, MN, MT- East of Interstate 15 only)	White mold Sclerotinia stem rot	<i>Sclerotinia</i> sp. <i>Sclerotinia sclerotiorum</i>	20-40 fl. oz. OR 20 fl. oz.		20-40 fl. oz. can be used in a single application applied once at 20%-50% flowering. OR Applications of 20 fl. oz. can be used twice with the first application being made at 20%-30% flowering and the second application being made at 40%-50% flowering. Thorough coverage of the flowers is very important to control White mold. Do not apply more than 40 fl. oz. of this product (1.4 lbs. thiophanate- methyl active ingredient) per acre per season.
Cucurbits (Cucumbers, melons, summer and winter squash, pumpkins and watermelons)	Do not apply more than 60 fl. oz. product (2 lbs. A.I.) per acre per season from any combination of application timings. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours. Preharvest Interval: 1 day.				
	Acermonium/ Cephalosporium Hypocotyl rot		10 fl. oz.		Apply in-furrow, on top of the seeds at planting. Do not use less than 10 gallons of water per acre.

APPLICATION DIRECTIONS TABLE					
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CROP	DISEASES	SCIENTIFIC NAME	FLUID OZ./ACRE	FLUID OZ./100 GAL	REMARKS
General Information: Follow resistance management guidelines under Directions for Use.	Anthracnose – Not for this use in California	<i>Colletotrichum</i> sp.	10 fl. oz. 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.
	Gummy stem blight – Not for this use in California	<i>Didymella</i> sp.			
	Powdery mildew Target spot – Not for this use in California	<i>Erysiphe</i> sp. <i>Corynespora</i> sp.			
	Belly rots – Not for this use in California	<i>Rhizoctonia</i> / <i>Fusarium</i> sp.	10 fl. oz.		Apply in sufficient volume to allow runoff to the soil. Will not control <i>Pythium</i> sp.
	Suppression of Vine decline Charcoal rot	<i>Monosporascus cannonballus</i> <i>Macrophomina</i> sp.	10 fl. oz.		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 not as effective as a season-long program.
Garlic	Penicillium clove rot			20 fl. oz.	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.

APPLICATION DIRECTIONS TABLE					
Note: Dilute sprays are not to exceed maximum rate per acre.					
CROP	DISEASES	SCIENTIFIC NAME	FLUID OZ./ACRE	FLUID OZ./100 GAL	REMARKS
Onions (in-Furrow) Not for this use in California	White rot	<i>Sclerotinia</i> sp.	1 fl. oz./1000 ft. of row (with 12 inch row spacing) OR 40 fl. oz. per acre broadcast Do not apply more than 40 fl. oz. this product /A/year.		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.
Peanuts	Leaf spot Rust Limb rot Web blotch	<i>Cercospora</i> spp. <i>Puccinia</i> <i>Rhizoctonia</i> <i>Ascochyta</i>	10 fl. oz./acre-single application 40 fl. oz./acre seasonal maximum		Begin applications 35 days after planting or when disease first appears and repeat at 7- to 14 day intervals as needed. Use the 7-day interval under severe disease pressure. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 1 day. Pre-harvest interval: 14 days Do not use this product alone. Use only in combination with another non-benzimidazole fungicide. Follow resistance management guidelines under Directions for Use.
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>Microsphaerella</i> sp. <i>Gnomonia</i> sp. <i>Botryosphaeria</i> sp. <i>Cristulariella</i> sp.	20 fl. oz./acre-single application 60 fl. oz./acre seasonal maximum		Begin applications when first leaves are showing and repeat at 3-4 week intervals until shuck split. Use the higher rates for trees over 30 feet tall and for aerial applications in Arkansas, Georgia, Louisiana, Mississippi, Oklahoma, and Texas. Do not apply after shuck split. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days.

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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	FLUID OZ./100 GAL	REMARKS
Pistachios	Shoot blight	<i>Botrytis, Botryosphaeria</i>	30-40 fl. oz. Do not apply more than 40 fl. oz. product (1.4 lbs. A.I.)/A/season.		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. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days.
Potatoes Not for this use in California	White mold	<i>Sclerotinia</i> sp.	20- 30 fl. oz. Do not apply more than 80 fl. oz. product (2.8 lbs. A.I.)/A/season.		Make first application just prior to row closure. 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. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days. Pre-harvest interval: 21 days. Tank mix with other fungicides labeled for early and late blight control. Do not apply by air for control of this disease on this crop.

APPLICATION DIRECTIONS TABLE					
Note: Dilute sprays are not to exceed maximum rate per acre.					
CROP	DISEASES	SCIENTIFIC NAME	FLUID OZ./ACRE	FLUID OZ./100 GAL	REMARKS
Soybeans	Anthracnose	<i>Colletotrichum</i> sp.	10-20 fl. oz.		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.
	Brown spot	<i>Septoria</i> sp.			
	Frogeye leaf spot	<i>Cercospora</i> sp.			
	Pod and stem blight	<i>Diaporthe</i> sp. and the imperfect stage, <i>Phomopsis</i> sp.			For Seed Beans Only- for seed quality, make a single application at the high rate when beans form in the pod.
	Purple seed stain	<i>Cercospora</i> sp.			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.
	White mold	<i>Sclerotinia</i> sp.	15-20 fl. oz.		Do not make more than 2 applications per year. Do not graze or feed treated vines to livestock.
	Aerial blight (suppression)				Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.
	Soybean rust	<i>Phakopsora pachyrhiza</i>	20 fl. oz.		Pre-harvest interval: 21 days
					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. Do not make more than 2 applications per year. Do not graze or feed treated vines to livestock.
					Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.
					Pre-harvest interval: 21 days

APPLICATION DIRECTIONS TABLE					
Note: Dilute sprays are not to exceed maximum rate per acre.					
CROP	DISEASES	SCIENTIFIC NAME	FLUID OZ./ACRE	FLUID OZ./100 GAL	REMARKS
Stone Fruits	General Info		Do not apply more than 80 fl. oz. of product (2.8 lbs. A.I.)/A/season.		Follow resistance management guidelines under Directions for Use.
Apricots	Brown rot blossom blight	<i>Monilinia</i> sp.	20-30 fl. oz.	10 fl. oz.	Apply at early bloom (red bud). Make a second application at full bloom.
	Fruit brown rot	<i>Monilinia</i> sp.	(In CA use 30 fl. oz.)		In addition, for fruit brown rot, apply 1 or 2 sprays starting 3 weeks before harvest. If needed under severe disease pressure, apply additional sprays at 10- to 14-day intervals between full bloom and final pre-harvest sprays. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days. Pre-harvest interval: 1 day

APPLICATION DIRECTIONS TABLE					
Note: Dilute sprays are not to exceed maximum rate per acre.					
CROP	DISEASES	SCIENTIFIC NAME	FLUID OZ./ACRE	FLUID OZ./100 GAL	REMARKS
Cherries	Brown rot blossom blight	<i>Monilinia</i> sp.	20-30 fl. oz.	10 fl. oz.	Apply at early bloom (early popcorn). Make a second application at full bloom.
	Fruit brown rot	<i>Monilinia</i> sp.	(In CA use 30 fl. oz)		In addition, for fruit brown rot, apply 1 or 2 sprays starting 3 weeks before harvest. If needed under severe disease pressure, apply additional sprays at 10- to 14- day intervals between full bloom and final pre-harvest sprays. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days. Pre-harvest interval: 1 day
	Cherry leaf spot	<i>Coccomyces</i> sp.	22.5-30 fl. oz.	10 fl. oz.	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. Pre-harvest interval: 1 day Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days.
	Powdery mildew	<i>Podosphaera</i> sp. <i>Sphaerotheca</i> sp.	20-30 fl. oz. (in CA use 30 fl. oz.) PLUS 24-30 fl. oz.	10 fl. oz. PLUS 8-10 fl. oz.	Apply at early bloom (early popcorn). Make a second application at full bloom. PLUS Apply at shuck fall and first cover. Pre-harvest interval: 1 day Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days.

APPLICATION DIRECTIONS TABLE					
Note: Dilute sprays are not to exceed maximum rate per acre.					
CROP	DISEASES	SCIENTIFIC NAME	FLUID OZ./ACRE	FLUID OZ./100 GAL	REMARKS
Nectarines	Brown rot blossom blight	<i>Monilinia</i> sp.	20-30 fl. oz. (In CA use 30 fl. oz.)	10 fl. oz.	Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development.
	Fruit brown rot	<i>Monilinia</i> sp.			In addition, for fruit brown rot, apply 1 to 2 sprays starting 3 weeks before harvest. If needed under severe disease pressure apply additional sprays at 10 to 14-day intervals between full bloom and final pre-harvest sprays. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days. Pre-harvest interval: 1 day

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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	FLUID OZ./100 GAL	REMARKS
Peaches	Brown rot Brown blight	<i>Monilinia</i> sp.	20-30 fl. oz.	10-15 fl. oz.	<p>Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development.</p> <p>In addition, for fruit brown rot, apply 1 to 2 weeks before harvest. If needed under severe disease pressure, apply additional sprays at 10- to 14-day intervals between full bloom and final pre-harvest sprays.</p> <p>Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days.</p> <p>Pre-harvest interval: 1 day</p>
	Fruit brown rot	<i>Monilinia</i> sp.	(In CA use 30 fl. oz.)		
	Peach scab	<i>Cladosporium</i> sp.	20-30 fl. oz. (In CA use 30 fl. oz.) PLUS 22.5-30 fl. oz.	10-15 fl. oz. PLUS 7-10 fl. oz.	<p>Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development.</p> <p>PLUS</p> <p>Apply at shuck split and at first cover sprays.</p> <p>Pre-harvest interval: 1 day</p> <p>Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days.</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	FLUID OZ./100 GAL	REMARKS
Plums and Prunes	Brown rot Blossom blight Fruit brown rot	<i>Monilinia</i> sp. <i>Monilinia</i> sp.	20-30 fl. oz. (In CA use 30 fl. oz.)	10 fl. oz.	Apply at early bloom (green tip). Make a second application at full bloom. In addition, for fruit brown rot, apply 1 or 2 sprays starting 3 weeks before harvest. If needed under severe disease pressure, apply additional sprays at 10 to 14 day intervals between full bloom and final pre-harvest sprays. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days. Pre-harvest interval: 1 day
	Black knot	<i>Dibotryon</i> sp.	20-30 fl. oz. (In CA use 30 fl. oz.)	10 fl. oz.	Apply at pre-bloom, petal fall, and at first, second and third cover sprays at 10- to 14-day intervals. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days. Pre-harvest interval: 1 day
	Leaf spot	<i>Coccomyces</i> sp.	20-30 fl. oz. (In CA use 30 fl. oz.)	10 fl. oz.	Apply at petal fall, shuck, and at first, second and third cover sprays at 10- to 14-day intervals and 1 spray 14 to 21 days after harvest. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days. Pre-harvest interval: 1 day

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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	FLUID OZ./100 GAL	REMARKS
Strawberries	Fruit rot	<i>Botrytis</i> sp.	15-20 fl. oz.		<p>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.</p> <p>Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.</p> <p>Preharvest Interval: 1 day</p>
	Leaf blight	<i>Dendrophoma</i> sp.			
Sugarbeets	Leaf scorch	<i>Diplocarpon</i> sp.	Do not apply more than 80 fl. oz. product (2.8 lbs. A.I.) per acre per year.		<p>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.</p> <p>Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 1 day.</p> <p>Pre-harvest interval: 21 days</p>
	Powdery mildew				
	Cercospora leaf spot	<i>Cercospora</i> sp.	10-20 fl. oz. (In CA use 10 fl. oz.) Do not apply more than 60 fl. oz. product (2.1 lbs. A.I.)/A/season.		<p>Apply as soon as disease symptoms appear and repeat at 14-day intervals or as needed.</p> <p>Pre-harvest interval: 21 days</p>
	Powdery mildew	<i>Erysiphe</i> sp.	10-20 fl. oz. Do not apply more than 60 fl. oz. product (2.1 lbs. A.I.)/A/season.		<p>Not for this use in California.</p> <p>Apply as soon as disease symptoms appear and repeat at 14-day intervals or as needed.</p> <p>Pre-harvest interval: 21 days</p>

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FOR USE ON TRITICALE AND FALL-SEEDED WHEAT IN IDAHO, OREGON AND WASHINGTON ONLY
(Not for use in California)

DISEASES	OZ./ACRE	OZ./100 GAL	REMARKS
<i>Pseudocercospora</i> sp. (Foot rot, Strawbreaker, Eye spot)	20 fl. oz.		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. 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. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

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

FOR USE ON CONIFERS
(Not for use in California)

CROP	DISEASES	LIMIT ACRE	RATE, MINIMUM GALLONAGE	REMARKS
Conifers (Pine) Austrian Red Scots Christmas Trees	Tip blight (Diplodia)	60 fl. oz.	20 fl. oz./A 100 gal./A	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
(Fir) Douglas	Swiss needle cast <i>Phaenocarpa</i> Rhabdocline needle cast	100 fl. oz.	20 fl. oz./A 50 gal./A	Apply initially in early May. Repeat at 4-week intervals.
<ul style="list-style-type: none"> • Add a spreader/sticker to improve coverage. • Use minimum gallonage with mist-blower types of sprayers and higher gallonage with conventional sprayers. • Do not graze livestock in treated areas. 				
CONIFERS (Seeding treatment) Longleaf	Brown needle blight <i>Scirrhia</i>	N/A	1 fl. oz./9.5 oz of dry Kaolinite clay for seedling roots	Wet seedling roots in clean water, then apply this product /kaolinite mixture to wet roots.
Loblolly Longleaf Slash	<i>Fusarium</i> and <i>Rhizoctonia</i> root rot	N/A	2 fl. oz./50 oz Kaolinite clay, plus enough water to make a slurry	Thoroughly cover seedlings roots with this product /kaolinite slurry.
<ul style="list-style-type: none"> • Do not apply mixture to seedling foliage. • During treatment, avoid excessive drying of roots or exposure to temperatures greater than 90° F or less than 32°F. • This product does not control pythium or phytophthora. 				

DIRECTIONS FOR USE THROUGH CHEMIGATION SYSTEMS

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

General Instructions

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 decreased 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 1/2 or 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 DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. 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.

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.