	U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7505C) 1200 Pennsylvania AVE, NW Washington, D.C. 20460	EPA Reg. Number: 51036-432	Date of Issuance: AUG 5 2004
		Term of Issuance: Conditional	
		Name of Pesticide Product: Thiophanate Methyl 4.5F AG	
NOTICE OF PESTICIDE: <u>X</u> Registration Reregistration (under FIFRA, as amended)			
Name and Address of Registrant (include ZIP Code): Micro-Flo Company P.O. Box 772099 Memphis, TN, 38117			
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.			
<p>On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.</p> <p>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.</p> <p>This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(B) provided that you:</p> <ol style="list-style-type: none">1. Submit/cite all data required for the registration/reregistration of your product when the Agency requires all registrants of similar products to submit data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.2. Make the following label changes:<ol style="list-style-type: none">a. Add the phrase "EPA registration number 51036-432" to the label.b. Agricultural Use Requirements Box: Change "Chemical-resistant gloves" to "Chemical-resistant gloves made of any waterproof material". <p>(Continued)</p>			
Signature of Approving Official: <i>Mary L. Waller</i> Mary L. Waller, Product Manager 21 Fungicide Branch, Registration Division		Date: 8/5/04	


51036-432

Submit one copy of the final printed label before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

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,

A handwritten signature in cursive script that reads "Mary L. Waller".

Mary L. Waller
Product Manager (21)
Fungicide Branch
Registration Division (7505C)

Enclosure: Stamped copy of label

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THIOPHANATE METHYL 4.5F AG

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 Lbs. Thiophanate Methyl per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
If Inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably 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.
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 the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
Have the product container label with you when calling a poison control center or doctor or going for treatment. EMERGENCY NUMBERS: <ul style="list-style-type: none"> • Transportation or spill, call CHEMTREC 800-424-9300. • Human health, call 800-832-HELP (4357). • Animal health, call ASPCA at 800-345-4735. 	

EPA REG. NO. 51036-GIR

EPA EST. NO. 51036-GA-001

NET CONTENTS: 2.5 Gallons

**ACCEPTED
with COMMENTS
In EPA Letter Dated:**

AUG 5 2004

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

Manufactured By:
MICRO FLO COMPANY LLC
P.O. BOX 772099
MEMPHIS, TN 38117

51036-432

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS (AND DOMESTIC ANIMALS)
CAUTION**

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

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

1. Long-sleeved shirt and long pants.
 2. Shoes plus socks.
 3. Chemical-resistant gloves made of any waterproof material.
- Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

1. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
2. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
3. 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

This pesticide is toxic to fish. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply where runoff is likely to occur. Do not contaminate water when disposing of equipment washwaters.

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) 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.

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:

1. Coveralls
2. Chemical-resistant gloves
3. Shoes plus socks

GENERAL INFORMATION

Apply THIOPHANATE METHYL 4.5F AG with ground or aerial equipment, using sufficient volume of spray to provide thorough coverage. Continuous agitation is required to keep the material in suspension. Micro Flo does not recommend tank mixes 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 recommendations 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 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: THIOPHANATE METHYL 4.5F AG may be used 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 mixing with a protectant fungicide is strongly recommended for resistance management.

For crops without labeled uses of Thiophanate Methyl, observe a 30-day plantback restriction.

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, THIOPHANATE METHYL 4.5F AG should always be tank-mixed with a fungicide of different chemistry, and/or a fungicide of different chemistry should be alternated with THIOPHANATE METHYL 4.5F AG at each application. THIABENDAZOLE OR OTHER

PRODUCTS CONTAINING THIOPHANATE-METHYL IN COMBINATION OR IN ROTATION WITH THIOPHANATE METHYL 4.5F AG. If after using THIOPHANATE METHYL 4.5F AG as recommended, the treatment is not effective, a tolerant or resistant strain of fungi may be present. Discontinue the use of THIOPHANATE METHYL 4.5F AG for at least one season. Do not use products containing thiabendazole or other products containing thiophanate-methyl as substitutes for THIOPHANATE METHYL 4.5F AG, as they are of similar chemistry and will contribute to the development of resistance. As long as these precautions are followed, THIOPHANATE METHYL 4.5F AG 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 product into spray tank, then finish filling tank with water, all the while maintaining agitation.

THIOPHANATE METHYL 4.5F may also be tank mixed 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 amounts of each product, using water from the actual use source.

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

CROP	DISEASES	FLUID OZ./ ACRE	FLUID OZ./ 100 GAL	REMARKS
Almonds	Brown Rot Blossom Blight (<i>Monilinia</i> sp.) Scab (<i>Cladosporium</i> sp.)	30-40 fl oz		Apply at pink bud and petal fall. Maximum annual application rate – 60 fl oz per acre.
Apples	Apple Scab (<i>Venturia</i> sp.) Black Pox (<i>Helminthosporium papulosum</i>) Flyspeck (<i>Zygophiala</i> sp.) Powdery Mildew (<i>Podosphaera</i> sp.) Sooty Blotch (<i>Gloeodes</i> sp.) Black Rot	20-30 fl oz	5-7.5 oz	Apply at 5- to 10-day intervals from green tip through petal fall; continue at 7- to 14-day intervals in cover sprays. Maximum annual application rate – 80 fl oz per acre. Follow resistance management guidelines under Directions for Use.

	(<i>Botryosphaeria</i> sp.) Brooks Fruit Spot (<i>Mycosphaerella</i> sp.) White Rot* (<i>Botryosphaeria</i> sp.)			
Beans Not for this use in California; see below for CA directions for use	Gray Mold (<i>Botrytis</i> sp.) White Mold (<i>Sclerotinia</i> sp.) Anthracnose (<i>Colletotrichum</i>)	30-40 fl oz		Make first application when 10%-30% of plants have at least one open bloom, and/or conditions are favorable for disease development. A maximum of 80 oz of product per acre (2.8 lbs. A.I.) per crop cycle may be used, with a minimum 7 day spray interval. Preharvest Interval: 14 days for snap beans and lima beans, 28 days for dry beans.
Beans <u>California use only</u>	Gray Mold (<i>Botrytis</i> sp.) White Mold (<i>Sclerotinia</i> sp.) Anthracnose (<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. Pre-harvest interval: 14 days for snap beans and dry beans, 28 days for lima beans.
Cucurbits (Cucumbers, melons, summer and winter squash, pumpkins and watermelons) General Information: Do not apply more than 60 oz. Product (2 lbs. A.I.) per acre per season from any combination of application timings.	Acremonium/ Cephalosporium Hypocotyl Rot Anthracnose* (<i>Colletotrichum</i> sp.) Gummy Stem Blight* (<i>Didymella</i> sp.) Powdery Mildew (<i>Erysiphe</i> sp.) Target Spot* (<i>Corynespora</i> sp.)	10 fl oz 10 fl oz For ground applications OR 10 fl oz For aerial applications		Apply in-furrow, on top of the seeds at planting. Do not use less than 10 gallons of water per acre. 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 fl oz		Apply in sufficient volume to allow runoff to the soil. Will not control <i>Pythium</i> sp.
Follow resistance management guidelines under	<u>Suppression</u> of Vine Decline (<i>Monosporascus cannonballus</i>) Charcoal Rot	10 fl oz		Apply through buried drip irrigation (chemigation) to the root zone. For disease suppression, apply at 14-day intervals, beginning at

Directions for Use.	(<i>Macrophomina</i> sp.)		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.
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Garlic	Penicillium Clove Rot		20 oz	<p>Completely immerse garlic cloves in suspension for at least 5 minutes.</p> <p>Continuously agitate the solution tank by hydraulic or mechanical means.</p> <p>After treatment, remove cloves from solution and drain over sand.</p> <p>Dry cloves after treatment and prior to planting.</p>
Onions (In Furrow)	White Rot (<i>Sclerotinia</i> sp.)	<p>1 fl oz/1000 ft. of row (with 12 inch row spacing) OR 40 fl oz per acre Broadcast</p>		<p>Apply THIOPHANATE METHYL 4.5F AG 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>
Peanuts	<p>Leaf Spot (<i>Cercospora</i> spp.)</p> <p>Rust (<i>Puccinia</i>)</p> <p>Limb Rot (<i>Rhizoctonia</i>)</p> <p>Web Blotch (<i>Ascochyta</i>)</p>	<p>10 fl oz/acre – single application. 40 fl oz/acre seasonal maximum.</p>		<p>Begin applications 35 days after planting or when disease first appears and repeat at 7- to 14-day intervals as needed.</p> <p>Use the 7-day interval under severe disease pressure.</p> <p>Pre-harvest interval: 14 days.</p> <p>THIOPHANATE METHYL 4.5F AG should not be used alone. Use only in combination with another non-benzimidazole fungicide.</p> <p>Follow resistance management guidelines under Directions for Use.</p>
Pecans	<p>Scab (<i>Fusicladium</i> sp.)</p> <p>Brown Spot (<i>Cercospora</i> sp.)</p> <p>Downy Spot (<i>Mycosphaerella</i> sp.)</p> <p>Powdery Mildew (<i>Microsphaerella</i> sp.)</p> <p>Liver Spot (<i>Gnomonia</i> sp.)</p>	<p>20 fl oz/acre – single application. 60 fl oz/acre seasonal maximum.</p>		<p>Begin applications when first leaves are showing and repeat at 3-4 week intervals until shuck split.</p> <p>Use the higher rates for trees over 30 feet tall and for aerial applications in Arkansas, Georgia, Louisiana, Mississippi,</p>

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	Stem End Blight (<i>Botryosphaeria</i> sp.) Zonate Leaf Spot (<i>Cristulariella</i> sp.)			Oklahoma, and Texas. Do not apply after shuck split.
Pistachios	Shoot Blight (<i>Botrytis</i> , <i>Botryosphaeria</i>)	30-40 fl oz		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 apply more than 40 oz. Product (1.4 lbs. A.I.)/A/ season. For pistachios only: do enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days unless appropriate PPE for early entry is worn.
Potatoes*	White Mold (<i>Sclerotinia</i> sp.)	20-30 fl oz		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 apply more than 80 oz. product (2.8 lbs. A.I.)/A/ season. Pre-harvest interval: 21 days. May be tank mixed with other fungicides labeled for early and late blight control. Micro Flo does not recommend aerial application for control of this disease on this crop.
Soybeans	Anthrachnose (<i>Colletotrichum</i> sp.) Brown Spot (<i>Septoria</i> sp.) Frogeye Leaf Spot (<i>Cercospora</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

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	Pod and Stem Blight (<i>Diaporthe</i> sp. and the imperfect stage, <i>Phomopsis</i> sp.) Purple Seed Stain (<i>Cercospora</i> sp.)			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.
	White Mold (<i>Sclerotinia</i> sp.)	15-20 fl oz		FOR SEED BEANS ONLY- For seed quality make a single application at the high rate when beans form in the pod. Do not make more than 2 applications per year. Do not graze or feed treated vines or hay to livestock. 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. Do not make more than 2 applications per year. Do not graze or feed treated vines to livestock.
	Aerial Blight (Suppression) Soybean Rust (<i>Phakopsora pachyrhiza</i>)	20 fl oz		Make initial application when disease threatens (before visual symptoms appear) and repeat 14-21 days later if needed. It is highly recommended that a DMI fungicide be tank mixed for Soybean Rust. Do not make more than 2 applications per year. Do not graze or feed treated vines to livestock.
Stone Fruits	General Info			Follow resistance management guidelines under Directions for Use. Do not apply more than 80 oz. of product (2.8 lbs. A.I.)/Acre/season.
- Apricots	Brown Rot Blossom Blight (<i>Monilinia</i> sp.)	20-30 fl oz	10 oz	Apply at early bloom (red bud). Make a second

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	Fruit Brown Rot (<i>Monillnia</i> sp.)	(in CA use 30 oz)		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. Pre-harvest interval: 1 day.
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- Cherries	Brown Rot Blossom Blight (<i>Monilinia</i> sp.) Fruit Brown Rot (<i>Monilinia</i> sp.)	20-30 fl oz (in CA use 30 oz)	10 oz	Apply at early bloom (early popcorn). 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. Pre-harvest interval: 1 day.
	Cherry Leaf Spot (<i>Coccomyces</i> sp.)	22.5-30 fl oz	10 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.
	Powdery Mildew (<i>Podosphaera</i> sp.) and (<i>Sphaerotheca</i> sp.)	20-30 fl oz (in CA use 30 oz Rate) PLUS 24-30 fl oz	10 oz PLUS 8-10 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.
- Nectarines	Brown Rot Blossom Blight (<i>Monilinia</i> sp.) Fruit Brown Rot (<i>Monilinia</i> sp.)	20-30 fl oz (in CA use 30 oz rate)	10 oz	Apply at early bloom (pint bud). Make a second application at full bloom if conditions favor disease development. 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. Pre-harvest interval: 1 day.
- Peaches	Brown Rot Blossom Blight	20-30 fl oz	10-15 oz	Apply at early bloom (pint

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	<p>(<i>Monilinia</i> sp.) Fruit Brown Rot (<i>Monilinia</i> sp.)</p>	<p>(in CA use 30 oz rate)</p>		<p>bud). Make a second application at full bloom if conditions favor disease development.</p> <p>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.</p> <p>Pre-harvest interval: 1 day.</p>
	<p>Peach Scab (<i>Cladosporium</i> sp.)</p>	<p>20-30 fl oz (in CA use 30 oz rate)</p> <p>PLUS 22.5-30 oz</p>	<p>10-15 oz</p> <p>PLUS 7-10 oz</p>	<p>Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development.</p> <p>PLUS Apply at shuck split and at first cover sprays.</p> <p>Pre-harvest interval: 1 day.</p>

- Plums and Prunes	Brown Rot Blossom Blight (<i>Monilinia</i> sp.) Fruit Brown Rot (<i>Monilinia</i> sp.)	20-30 fl oz (in CA use 30 oz rate)	10 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. Pre-harvest interval: 1 day.
	Black Knot (<i>Dibotryon</i> sp.)	20-30 fl oz (in CA use 30 oz rate)	10 oz	Apply at pre-bloom, petal fall, and at first, second, and third cover sprays at 10- to 14-day intervals. Pre-harvest interval: 1 day.
	Leaf Spot (<i>Coccomyces</i> sp.)	20-30 fl oz (in CA use 30 oz rate)	10 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. Pre-harvest interval: 1 day.
Strawberries	Fruit Rot (<i>Botrytis</i> sp.) Leaf Blight (<i>Dendrophoma</i> sp.) Leaf Scorch (<i>Diplocarpon</i> sp.) Powdery Mildew	15-20 fl oz		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. Do not apply more than 80 oz. Product (2.8 lbs. A.I.) per acre per year.
Sugarbeets	Cercospora Leaf Spot (<i>Cercospora</i> sp.)	10-20 fl oz (in CA use 10 oz Rate)		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. Do not apply more than 60 oz. Product (2.1 lbs. A.I.)/A/season. Pre-harvest interval: 21 days.

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	Powdery Mildew* (<i>Erysiphe</i> sp.)	10-20 oz		Apply as soon as disease symptoms appear and repeat at 14-day intervals or as needed. Do not apply more than 60 oz. Product (2.1 lbs. A.I.)/A/season. Pre-harvest interval: 21 days.

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

*Not for this use in California.

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
Pseudocercospora sp. (Foot Rot, Strawbreaker, Eye Spot)	20 fl oz		Apply THIOPHANATE METHYL 4.5F AG 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.

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

FOR USE ON CONIFERS
(Not for use in California)

CROP	DISEASES	LIMIT ACRE/CROP	RATE, MINIMUM GALLONAGE	REMARKS
CONIFERS (Pine) Austrian Red Scots Christmas Trees	Tip Blight (<i>Diplodia</i>)	60 fl oz	20 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>) Rhabdochloa Needle Cast	100 fl oz	20 oz/A 50 gal./A	Apply initially in early May. Repeat at 4 week intervals.
• Add a spreader/sticker to improve coverage.				

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<ul style="list-style-type: none"> • Use minimum gallonage with mist-blower types of sprayers and higher gallonage with conventional sprayers. • Do not graze livestock in treated areas. 				
CONIFERS (seedling treatment) Longleaf	Brown Needle Blight (Scirrhia)	N/A	1oz/9.5oz dry Kaolinite clay for seedling roots	Wet seedling roots in clean water, then apply THIOPHANATE METHYL 4.5F AG/Kaolinite mixture to wet roots.
Loblolly Longleaf Slash	Fusarium and Rhizoctonia Root Rot	N/A	2oz/50oz Kaolinite clay, plus enough water to make a slurry	Thoroughly cover seedlings roots with THIOPHANATE METHYL 4.5F AG/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. • THIOPHANATE METHYL 4.5F AG 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 nonuniform 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

Systems 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.

Systems 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 THIOPHANATE METHYL 4.5F AG only through systems containing anti-syphon 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 insure 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 recommended quantities of irrigation water per acre may result in 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.

THIOPHANATE METHYL 4.5F AG may be applied in conjunction with chemically neutral liquid fertilizers. Application in conjunction with highly alkaline fertilizers, such as aqueous ammonia, may cause 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 THIOPHANATE METHYL 4.5F AG 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 THIOPHANATE METHYL 4.5F AG 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. Volumes of water higher than this may reduce efficacy. Start sprinkler and then uniformly inject the suspension of THIOPHANATE METHYL 4.5F AG into the irrigation water line so as to deliver the desired rate per acre. The suspension of THIOPHANATE METHYL 4.5F AG should be injected with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing. When treatment with THIOPHANATE METHYL 4.5F AG 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 may result.

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

Drip (Mini-Micro Sprinklers, Strip Tubing, Trickle) Irrigation-Notes

Observe all System Requirements and Application Instructions above. A pesticide supply tank is recommended.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in the original container in a dry area. Do not store in a manner where cross-contamination with other pesticides, fertilizers, food or feed could occur. If spilled during storage or handling, sweep up spillage and dispose of in accordance with the Pesticide Disposal Instructions listed below.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: After container has been emptied, dispose of empty container in a sanitary landfill or by incineration or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

CONDITIONS OF SALE AND WARRANTY

The Directions For Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other

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unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of MICRO FLO COMPANY LLC ("Micro Flo") or the Seller. All such risks shall be assumed by the Buyer. Micro Flo warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use, subject to the inherent risks, referred to above. MICRO FLO MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. IN NO CASE SHALL MICRO FLO OR THE SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. Micro Flo and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing Conditions of Sale and Warranty which may be varied only by agreement in writing signed by a duly authorized representative of Micro Flo.

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