



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

EPA Reg. Number:

42750-295

Date of Issuance:

8/24/15

NOTICE OF PESTICIDE:

Registration  
 Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

T-Methyl 4.5L

Name and Address of Registrant (include ZIP Code):

Morris Gaskins  
Registrations Manager  
Albaugh, LLC  
P.O. Box 2127  
Valdosta, GA 31604-2127

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

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

Signature of Approving Official:

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

Date:

8/24/15

2. Be aware that proposed data requirements have been identified in a Work Plan. For more information on these proposed data requirements, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: [http://www.epa.gov/oppsrrd1/contacts\\_prd.htm](http://www.epa.gov/oppsrrd1/contacts_prd.htm)
3. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one year study is required to satisfy these data requirements. You have 18 months from the date of registration to provide these data.
4. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, “EPA Reg. No. 42750-295.”
5. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 07/06/2015

If you have any questions, please contact Tamue L. Gibson by phone at (703) 305-9096 or via email at [Gibson.tamue@epa.gov](mailto:Gibson.tamue@epa.gov).

Enclosure

# T-METHYL 4.5L

## 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 Lbs. Thiophanate Methyl per gallon.

KEEP OUT OF REACH OF CHILDREN

### CAUTION

FIRST AID	
IF SWALLOWED	<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 by a poison control center or doctor</li> <li>• Do not give anything to an unconscious person</li> </ul>
IF ON SKIN	<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>
IF INHALED	<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 mouth-to-mouth, if possible</li> <li>• Call a poison control center or doctor for further treatment advice</li> </ul>
IF IN EYES	<ul style="list-style-type: none"> <li>• 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</li> <li>• Call a poison control center or doctor for treatment advice</li> </ul>
<p>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 1-844-685-9172 for emergency medical treatment information.</p>	

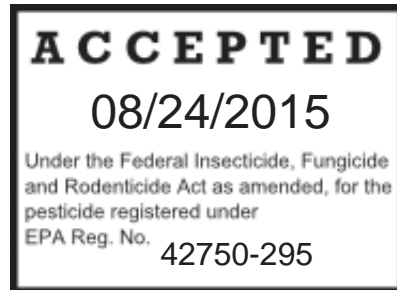
For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident Call  
 CHEMTREC Day or Night at 1-800-424-9300

EPA Reg. No. 42750-EOL

EPA Est. No. 42750-MO-001

NET CONTENTS:

MANUFACTURED FOR:  
 Albaugh, LLC  
 Ankeny, IA 50021



## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS (AND DOMESTIC ANIMALS)

CAUTION. Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

Handlers mixing, loading and apply the product as a dip must wear:

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

All other mixers, loaders and applicators must wear:

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

### USER SAFETY REQUIREMENTS

Follow the 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 absorbant 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 WPS.

### USER SAFETY RECOMMENDATIONS

Users should:

1. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
2. Remove clothing/PPE 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

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 when disposing of equipment washwater or rinsate.

## DIRECTIONS FOR USE

### **IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.**

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the 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 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).

The REI is 12 hours except as listed in the application rate tables below.

Exemption: If the product is applied by drenching, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated

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

#### PRODUCT INFORMATION

Methyl 4.5L may be applied by ground or aerial application equipment and with a standard slurry or mist-type seed treatment equipment. Refer to the section on "Seed Treatment" for application instructions. Normal fungicide usage indicates this product will be applied over the top of the intended crop; it is critical to ensure that the tank and spray equipment has been cleaned of all other pesticides prior to mixing this product. As with all agricultural chemicals, continuous agitation is required to keep the ingredients in suspension. Recommended application gallonage and directions are given for each crop.

T-METHYL 4.5L may be tank mixed with other fungicides, insecticides and plant growth regulators that have been approved for use by the EPA on the intended crop. Albaugh, LLC does not make any claims of compatibility with other pesticides; always perform a Mixing Jar Test prior to tank mixing. See Compatibility Test section on this label. Tank mixes of this product with highly alkaline pesticides like Bordeaux or lime sulfur is not recommended.

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

Use on non-bearing apples, pecans, cherries, and peaches: T-METHYL 4.5L 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.

**High volume dilute applications:**

Applicator should use the PRODUCT per ACRE rate for concentrate spray applications for tree crops (example: no more than 400 gallons on apples). When making dilute ground applications, use the PRODUCT per 100 GALLONS rate. Follow all crop specific language on this label for application. Dilute sprays must not exceed maximum a.i. per year.

**Aerial applications to tree crops:**

Use a minimum of 10 gal/acre for aerial application to fruit tree crops. Increased fungicidal activity is related to coverage and timing, increased volumes are required as crop canopy density increases. NOTE: Conifer applications require higher spray volumes, use lower volumes with mist type applicators and highest volumes with conventional types.

**Row Crop applications:**

Use a minimum of 5 gal/acre for ground application, however most ground applications should be made with 10 to 20 gal/acre as cropping situations dictate. Increased fungicidal activity is related to coverage and timing, increased volumes are required as crop canopy density increases.

**Plantback Restriction:**

Do not plant any crop not labeled for T-METHYL 4.5L use within 30 days of the last application.

**Chemigation:**

See specific directions in this label.

**Mode of Action:**

T-METHYL 4.5L is a tubulin inhibitor fungicide falling into the FRAC Group 1 for Benzimidazoles. Its Mode of Action is the inhibition of microtubule assembly. It has protectant, systemic and curative actions, each of these specific to certain crops, fungi and climatic conditions.

**Fungicide Resistance:**

Fungal pathogens have proven to develop a resistance to certain fungicide families and modes of action. These are called tolerant and resistant strains of fungi. Industry and university research have developed effective programs that continue to provide excellent control of these strains, however, precautions and specific steps should be taken to ensure effective fungicide rotation, tank mixing of different modes of action and disease monitoring are the keys of your fungicide program.

It is recommended that T-METHYL 4.5L be rotated or tank mixed with different modes of action fungicide chemistry. All products containing thiabendazole, thiophanate ethyl or carbendazim fungicides (benzimidazole fungicides) should NOT be considered rotation or tank mix partners.

Should T-METHYL 4.5L be applied as directed and the treatment is considered not to be effective, you may have encountered a resistant or tolerant fungi strain. Do not apply this mode of action chemistry again during this growing season, as this may enhance the resistance at this site. Consult with your local Cooperative Extension Service, University Research or Certified Crop Consultant for more information concerning fungicides effective on the tolerant or resistant strains encountered.

## MIXING INSTRUCTIONS

Fill spray tank to half full, start agitation. See Mixing Order chart below when any other products are tank

mixed with this product. 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. 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.

#### Compatibility Test for Mix Components

Before mixing components, always perform a compatibility jar test. For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust rates accordingly. Only use water from the intended source at the source temperature. Add components in the sequence indicated in the Mixing Order using 2 teaspoons for each pound or 1 teaspoon for each pint of recommended label rate per acre. Always cap the jar and invert 10 cycles between component additions.

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

#### Mixing Order

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

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

Maintain constant agitation during application.

#### CHEMIGATION USE INSTRUCTION

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

#### GENERAL INFORMATION

Application of T-METHYL 4.5L should only be applied through the following types of irrigation systems:

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

Do not apply this product through any other type of irrigation system.

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

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

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

No chemigation system should be connected to any public water system. A public water system is defined as 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.

### IRRIGATION / CHEMIGATION SYSTEM REQUIREMENTS

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

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

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

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

### FUNGICIDE DILUTION & MIX PREPARATION

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

Start by filling the mix tank at least ½ full. Begin agitation. Carefully add the required amount of T-METHYL 4.5L and then the rest of the water. Allow time to mix completely.

### APPLICATION INSTRUCTIONS

Observe ALL requirements in the System Requirements section above.

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

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



distribution and calibration.

Do not apply more irrigation water per acre than recommended, decreased product performance may occur from the over diluted application.

Chemigation should not be attempted when wind speed favors drift. When system connections or fittings are seen to leak, chemigation should be stopped and the component repaired prior to restart. When nozzles are not providing uniform distribution, operator should recalibrate immediately. System should always remain in good repair.

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

Fertilizer co-mix Instructions:

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

Sprinkler Irrigation Instructions:

Observe all System Requirements and Application Instructions above.

Always observe local irrigation restrictions or ordinances.

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

Sprinkler system should be calibrated to deliver 0.1 to 0.25 inches of water per acre. Larger volumes of water may reduce product efficacy. Start sprinkler water flow, then begin injection of the mixed suspension of T-METHYL 4.5L into the irrigation water line. Continually monitor calibration to ensure proper application rate per acre. To ensure proper mixing of the suspension of T-METHYL 4.5L and the irrigation water, it should be injected with a positive displacement pump into the main line just ahead of a right angle pipe turn (violent water pressure shear).

After overhead chemigation treatment with T-METHYL 4.5L has been completed, treated area should not be irrigated again for at least 24 hours to prevent washing the fungicide off the crop leaves and canopy.

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

Observe all System Requirements and Application Instructions above.

CROP SPECIFIC DIRECTIONS

CROP	DISEASES	PRODUCT per ACRE	AI per ACRE	INSTRUCTIONS
Beans , dry & succulent	Anthracnose ( <i>Colletotrichum</i> spp.)	30-40 fl. oz.	1.0 - 1.4 lb.AI per acre	For one application: Apply when 100% of plants have at least one open bloom or when conditions are favorable for disease development.
Including: Asparagus bean Broad bean Fava bean Garbanzo bean Kidney bean Lima bean Mung bean Navy bean Pinto bean Snap bean Wax bean	Gray Mold ( <i>Botrytis</i> spp.)  White Mold ( <i>Sclerotinia</i> spp.)	OR  20-30 fl. oz.	OR  0.7-1.0 lb.  Max. AI per year 2.8 lb. per acre	OR  For multiple applications: Make first application when 10%-30% of plants have at least one open bloom, and follow with sequential applications on a 4-to 7-day interval.
Blackeyed pea Chick pea Cowpea Grain lupine Sweet lupine White lupine White Sweet Lupine	Per crop year, apply no more than 80 fl. oz. of this product per acre.			
	The REI is 1 day for all succulent beans and 3 days for dry beans.			
	PHI (California) = 14 days succulent beans, 28 days for lima beans & dry beans			
	PHI (all other states) = 14 days for succulent and lima beans, 28 days for dry beans			

CROP	DISEASES	PRODUCT per ACRE	AI per ACRE	INSTRUCTIONS
Cucurbits (Including: Cantaloupes, Casaba, Cucumbers, Melons, Pumpkins, Summer Squash and Winter Squash, and Watermelons)	Acremonium/ Cephalosporium Hypocotyl Rot	10 fl. oz.	0.35 lb. AI per acre  Max. AI per year 2.1 lb. per acre from all combinations and timings	Apply in-furrow, on top of the seeds at planting using at least 10 gallons of water per acre.
	Anthracnose* ( <i>Colletotrichum</i> spp.) Gummy Stem Blight* ( <i>Didymella</i> spp.) Powdery Mildew ( <i>Erysiphe</i> spp.) Target Spot* ( <i>Corynespora</i> spp.)			Scout fields as weather and conditions indicate infection could be present. Start treatments as plants begin to run or when disease is found. Repeat treatments at 7-14 day intervals.  Target Spot treatments should be made at 7- day intervals as needed.
	* Not for this use in California Belly Rots * ( <i>Rhizoctonia</i> spp. and <i>Fusarium</i> spp.)			Ensure application volume is sufficient to allow complete coverage to run or drip off plant into soil.  This product is not effective in controlling <i>Phytophthora</i> spp. or <i>Pythium</i> spp.
	Suppression of Vine Decline ( <i>Monosporascus</i> <i>cannonballus</i> )  Charcoal Rot ( <i>Macrophomina</i> spp.)			Make applications for suppression of these diseases through buried drip irrigation lines (see chemigation section of this label) so to apply directly to the root zone. Start applications at emergence and continue at 14 day intervals until harvest.  Weekly or biweekly applications, beginning 4-6 weeks prior to harvest will offer some suppression, but will not be as effective as a season-long program.
Do not apply more than 60 fl. oz. of this product per acre per crop year.				
This product can be tank mixed with mancozeb or chlorothalonil for additional disease control and resistance management.				
The REI is 1 day for all cucurbits. PHI = 1 day for all Cucurbits				
See Fungicide Resistance above				

CROP	DISEASES	PRODUCT per ACRE	AI per ACRE	INSTRUCTIONS
Garlic  (treatment for garlic cloves prior to planting)	Penicillium Clove Rot	Make a Suspension of 20 fl. oz. per 100 gallons of water		Continuously agitate solution tank mixture to ensure proper treatment suspension ratio.  Treatment: Immerse garlic cloves in this suspension for no less than five minutes.  Remove cloves from solution and allow to drain and dry. Once dry, cloves are ready for planting.  The PHI is 0 days

CROP	DISEASES	PRODUCT per ACRE	AI per ACRE	INSTRUCTIONS
Onions * Garlic (In Furrow)  * Not for this use in California	White Rot * ( <i>Sclerotinia</i> spp.)	1 fl. oz. per 1000 row feet (with 12 inch row spacing)  OR  40 fl. oz. per acre Broadcast Max AI per year 1.4 lbs. per acre.		Spray product solution directly into the open planting furrow at the time of planting seed, sets or bulbs.  REI of 3 days for garlic in furrow  PHI = 0 days  Do not apply through any type of irrigation system.

CROP	DISEASES	PRODUCT per ACRE	AI per ACRE	INSTRUCTIONS
Peanuts	Early Leaf Spot ( <i>Cercospora</i> spp.)	10 fl. oz. per acre – single application	0.35 lb. AI per acre	Scout field as conditions indicate infection could occur. Start treatments when disease is verified or 35 days after planting. Repeat as needed at 14 day intervals.
	Late Leaf Spot ( <i>Cercospora</i> spp.)			
	Leaf Spot ( <i>Cercospora</i> spp.)	Max AI per year 1.4 lbs. per acre		Use this product in conjunction with another non-benzimidazole fungicide.
	Limb Rot ( <i>Rhizoctonia</i> spp.)			Per crop year, apply no more than 40 fl. oz. of this product per acre.
	Rust ( <i>Puccinia</i> spp.)			REI is 1 day PHI = 14 days
	Web Blotch ( <i>Ascochyta</i> spp.)			See Fungicide Resistance above

CROP	DISEASES	PRODUCT per ACRE	AI per ACRE	INSTRUCTIONS
Potatoes	White Mold ( <i>Sclerotinia sclerotiorum</i> sp.)	20-30 fl. oz.	<p>Max single application rate of 1.05 lb AI per acre</p> <p>Max. AI per year 2.8 lb. per acre</p>	<p>Treatments are most efficacious when made prior to disease development.</p> <p>Start treatments just around time of row closure to full bloom of the primary flower clusters (prior to petal drop). Spray must cover all susceptible plant parts, branches, flowers and stems for adequate control. Scout and reapply at 7 to 14 day intervals or as conditions occur for disease development.</p> <p>Maximum annual application rate of 80 fl oz per acre.</p> <p>PHI = 21 days</p> <p>REI is 2 days</p> <p>Early/Late Blight Control: You may tank-mix this product with other blight-control fungicides.</p> <p>Albaugh, LLC does not recommend aerial application for control of this disease on this crop.</p>

CROP	DISEASES	PRODUCT per ACRE	AI per ACRE	INSTRUCTIONS
Soybeans	Anthracnose ( <i>Colletotrichum</i> spp.)	10-20 fl. oz.		Make first application at full bloom up until the pods are between 1/8" and 1/4" in length, followed by a second application 14-21 days thereafter. The second application must be made less than 14 days following bean formation or before average pod length is 1/4". When beans are under severe disease pressure, utilize the higher application rates.
	Brown Spot ( <i>Septoria</i> spp.)	Use higher rate for higher density canopy develops		
	Frogeye Leaf Spot ( <i>Cercospora</i> spp.)			
	Pod and Stem Blight ( <i>Diaporthe</i> spp. and the imperfect stage, <i>Phomopsis</i> spp.)			FOR SEED BEANS ONLY- A single high-rate application may be made at the time of bean formation to improve seed quality.
	Purple Seed Stain ( <i>Cercospora</i> spp.)			
	White Mold ( <i>Sclerotinia</i> spp.)	15-20 fl. oz.		Make first application at early bloom (R-1 to R- 2 stage). A second application may be made 14 days later as conditions dictate. Spray must cover all susceptible plant parts, branches, flowers and stems for adequate control.  Aerial Application: Use at least 5 gallons water.
	Aerial Blight (Suppression)	20 fl. oz.	Max single application rate of 0.7 lb AI per acre	First application must be made prior to infection, monitor climatic conditions and sentinel plots in your area. Reapply 14-21 days later if needed.
	Soybean Rust ( <i>Phakopsora pachyrhiza</i> )		Max. AI per year 1.4 lb. per acre for Soybeans	It is highly recommended that a DMI/Triazole fungicide, such as tebuconazole be tank mixed for Soybean Rust. First application must be made at R-1 with the tank mix for control.  Reapply as conditions warrant. Do not make more than 2 applications per year.
Notes for use in soybeans: Per crop year, apply no more than 40 fl. oz. of this product per acre. Do not graze or feed treated vines or hay to livestock. Applications later than 14 days after pods average ¼ inch in length are prohibited. The REI is 1 day. PHI = 21 days				

CROP	DISEASES	PRODUCT per ACRE	AI per ACRE	INSTRUCTIONS
Strawberries	Fruit Rot ( <i>Botrytis</i> spp.) Leaf Blight ( <i>Dendrophoma</i> spp.) Leaf Scorch ( <i>Diplocarpon</i> spp.) Powdery Mildew ( <i>Sphaerotheca</i> spp.)	15-20 fl. oz.  Use highest rate under severe conditions	Max single application rate of 0.7 lb AI per acre  Max. AI per year 2.8 lb. per acre	Start treatments as blooming begins, repeat at 7 to 10 day intervals. Use higher rates when severe disease pressure appears. Per crop year, apply no more than 80 oz. of this product per acre.
	Suppression only:  Crown Rot* ( <i>Colletotrichum</i> spp.)	15-20 fl. oz.		Begin applications after establishment of the transplants and continue through first bloom at 10-to 14-day intervals. Use the higher rate if the fields have a history of <i>Colletotrichum</i> crown rot and/or conditions are favorable for development of the disease. Will not control <i>Phytophthora</i> species.
<p>*Not registered for use in California. Do not apply more than 80 fl. oz. of this product per acre per year. The REI is 1 day. PHI = 1 day See Fungicide Resistance above</p>				

CROP	DISEASES	PRODUCT per ACRE	AI per ACRE	INSTRUCTIONS
Sugarbeets	Cercospora Leaf Spot ( <i>Cercospora</i> spp.)	10-20 fl. oz.  (in CA use 10 fl. oz. rate)	Max single application rate of 0.7 lb AI per acre (0.35 in CA)  Max. AI per year 2.1 lb. per acre	Make first application prior to disease emergence, when environmental conditions are favorable for disease development. As required, a second application may be made with a NON-benzimidazole fungicide within 14 days.  If tolerant or resistant strains are known to be in the area, a tank mix with a protectant type fungicide is recommended.  For areas east of the Rocky Mountains: Do not apply this product more than once per season for <i>Cercospora</i> spp.
	Powdery Mildew ( <i>Erysiphe</i> spp.)	10-20 fl. oz.  (in CA use 10 fl. oz. rate)		Start treatments immediately, as disease is verified, follow with a NON-Benzimidazole fungicide as needed or within 14 days after. Tank mixes are recommended for this disease.
Notes for use in Sugarbeets: Per crop year, apply no more than 60 fl. oz. of this product per acre. PHI = 21 days REI is 1 day See Fungicide Resistance above				



CROPS	DISEASES	PRODUCT per ACRE	OZ./100 GAL	INSTRUCTIONS
Triticale and Fall Seeded Wheat  (Idaho, Oregon and Washington Only)	Eye Spot  Foot Rot Strawbreaker ( <i>Pseudocercospora</i> spp.)	20 fl. oz.  Max single rate of 0.7 lb AI per acre  Max yearly application rate of 0.7 lb AI per acre		Make applications after tillering but before stem elongation begins. Apply by ground or aerial means.  Make only one application per season.  Do not apply more than 20 fl oz per acre per crop season.  The REI is 24 hours.  PHI = 90 days (Do not cut hay within 90 days of application or allow livestock to graze in treated area prior to harvest)

TREE CROPS	DISEASES	PRODUCT per ACRE	AI per ACRE	PRODUCT per 100 GAL	INSTRUCTIONS
Almonds	Brown Rot Blossom Blight ( <i>Monilinia</i> spp.)  Jacket Rot ( <i>Monilinia</i> , <i>Sclerotinia</i> , <i>Botrytis</i> )  Leaf Blight ( <i>Seimatosporium</i> )  Scab ( <i>Cladosporium</i> spp.)	20-30 fl. oz.	0.7 –1.05 lb. AI per acre per application  Max. AI per year 2.1 lb. per acre		Initiate applications at pink bud and continue through petal fall.  Pink Bud applications can be made alone for Brown Rot. However tank mix with labeled contact type, multi- site fungicides for later applications for broad spectrum control and resistance management.  Per crop year, apply no more than 60 fl. oz. of this product per acre.  The REI is 3 days. PHI is 1 day  See Fungicide Resistance above

TREE CROPS	DISEASES	PRODUCT per ACRE	AI per ACRE	PRODUCT per 100 GAL	INSTRUCTIONS	
Apples  * Not for this use in California	Apple Scab (Venturia spp.)	15-20 fl. oz.	0.525 - .7 lb. AI per acre per application	3.75 - 5 fl. oz.	Initiate applications at green tip and continue at 5 to 10 day intervals continuing through petal fall.  Continue cover sprays at 7 to 14 day intervals as needed.  Per crop year, apply no more than 80 fl. oz. of this product per acre.  The REI is 2 days. PHI = 1 day  See Fungicide Resistance above	
	Black Pox * (Helminthosporium papulosum)	(except CA)				
	Black Rot (Botryosphaeria spp.)	30 fl. oz.	1.0 lb. (CA only)	7.5 fl. oz. (CA only)		
	Brooks Fruit Spot (Mycosphaerella spp.)	(CA only)				
	Flyspeck (Zygophiala spp.)		Max. AI per year 2.8 lb. per acre			
	Powdery Mildew (Podosphaera spp.)					
	Sooty Blotch (Gloeodes spp.)					
	White Rot* (Botryosphaeria spp.)					
	Preharvest use to control Post-Harvest Diseases on Apples					
	Storage Rot	1.0 fl. oz.	0.035 lb.	3.75 - 5 fl. oz.		Apply as a pre-harvest spray within 2 weeks to 3 days of harvest.
Blue Mold (Pencillium expansum)				Application closer to harvest provides better efficacy.		
Gray Mold (Botrytis cinerea)				Application of a non-benzimidazole post-harvest fungicide such as Pentobec <sup>®</sup> or Schlor <sup>®</sup> will provide additional protection from post-harvest diseases.		
Bulls-Eye Rot (Neofabraea spp.)						
Do not apply more than 80 fl. oz. of product per acre per year total including both applications beginning at petal fall and pre-harvest applications to control post-harvest diseases. Do not use benzimidazole fungicide as Mertect <sup>®</sup> post-harvest following a pre-harvest application of this product. The PHI is 1 day. The REI is 2 days.						

TREE CROPS	DISEASES	PRODUCT per ACRE	AI per ACRE	PRODUCT per 100 GAL	INSTRUCTIONS
Apricots	Brown Rot ( <i>Monilinia</i> spp.)  Blossom Blight ( <i>Monilinia</i> spp.)  Fruit Brown Rot ( <i>Monilinia</i> spp.)	20-30 fl. oz.  (in CA use 30 fl. oz.)	0.7 - 1.05 lb. AI per acre  Max. AI per year 2.8 lb. per acre	6.7 - 10 fl. oz.	<p>Make first application at early bloom (red bud), followed by a second application at full bloom.</p> <p>Under severe disease pressure, make additional applications at 10 to 14 day intervals beginning at full bloom, through final pre-harvest sprays.</p> <p>If conditions develop for Fruit Brown Rot, apply 1 to 2 sprays starting 21 days prior to harvest.</p> <p>Per crop year, apply no more than 80 fl. oz. of this product per acre.</p> <p>The REI is 2 days. PHI = 1 day</p> <p>See Fungicide Resistance above</p>

TREE CROPS	DISEASES	PRODUCT per ACRE	AI per ACRE	PRODUCT per 100 GAL	INSTRUCTIONS
Cherries Sweet and Sour	Brown Rot ( <i>Monilinia</i> spp.)	20-30 fl. oz.	0.7 - 1.05 lb. AI per acre	6.7- 10 fl. oz.	Make first application at early bloom (popcorn stage), followed by a second application at full bloom.
	Blossom Blight ( <i>Monilinia</i> spp.)	(in CA use 30 fl. oz.)	Max AI per year 2.8 Lb per acre		Under severe disease pressure, make additional applications at 10 to 14 day intervals beginning at full bloom, through final pre-harvest sprays.
	Fruit Brown Rot ( <i>Monilinia</i> spp.)			If conditions develop for Fruit Brown Rot, apply 1 to 2 sprays starting <u>21 days prior to harvest.</u>	
	Cherry Leaf Spot ( <i>Coccomyces</i> spp.)	22.5-30 fl. oz.	0.7 - 1.05 lb. AI per acre  Max AI per year 2.8 Lb per acre	7.5-10 fl. oz.	Initiate applications as leaves begin to unfold, near petal fall or before. Continue at first, second and third cover sprays at 10 to 14 day intervals.
	Powdery Mildew ( <i>Podosphaera</i> spp. and <i>Sphaerotheca</i> spp.)	20-30 fl. oz.  (in CA use 30 fl. oz. Rate)	0.7 - 1.05 lb. AI per acre  Max AI per year 2.8 Lb per acre	6.7-10 fl. oz.	Make first application at early bloom (popcorn stage), followed by a second application at full bloom.
		PLUS	PLUS	PLUS	PLUS
		22.5-30 fl. oz.	0.84 – 1.05 lb.	7.5-10 fl. oz.	Also make applications of this product at shuck fall and first cover.
<p>Per crop year, apply no more than 80 fl. oz. of this product per acre.  The REI is 2 days.  PHI = 1 day  See Fungicide Resistance above</p>					

TREE CROPS	DISEASES	PRODUCT per ACRE	AI per ACRE	PRODUCT per 100 GAL	INSTRUCTIONS
Nectarines	Brown Rot ( <i>Monilinia</i> spp.)  Blossom Blight ( <i>Monilinia</i> spp.)  Fruit Brown Rot ( <i>Monilinia</i> spp.)	20-30 fl. oz.  (in CA use 30 fl. oz.)	0.7 - 1.05 lb. AI per acre  Max. AI per year 2.8 lb. per acre	6.7 - 10 fl. oz.	Make first application at early bloom (pink bud), followed by a second application at full bloom.  Under severe disease pressure, make additional applications at 10 to 14 day intervals beginning at full bloom, through final pre-harvest sprays.  Per crop year, apply no more than 80 fl. oz. of this product per acre.  The REI is 2 days. PHI = 1 day  See Fungicide Resistance above

TREE CROPS	DISEASES	PRODUCT per ACRE	AI per ACRE	PRODUCT per 100 GAL	INSTRUCTIONS
Peaches	Brown Rot ( <i>Monilinia</i> spp.)  Blossom Blight ( <i>Monilinia</i> spp.)  Fruit Brown Rot ( <i>Monilinia</i> spp.)  Peach Scab ( <i>Cladosporium</i> spp.)	20-30 fl. oz. (in CA use 30 fl. oz.)  20-30 fl.oz. (in CA use 30 fl. oz plus 22.5-30 fl. oz.)	0.7 - 1.05 lb. AI per acre  Max. AI per year 2.8 lb. per acre	6.7 - 10 fl. oz.  6.7-10 fl. oz. plus 7.5-10 fl. oz.	Make first application at early bloom (pink bud), followed by a second application at full bloom.  Under severe disease pressure, make additional applications at 10 to 14 day intervals beginning at full bloom, through final pre-harvest sprays.  Per crop year, apply no more than 80 fl. oz. of this product per acre. The REI is 2 days. PHI = 1 day See Fungicide Resistance above

TREE CROPS	DISEASES	PRODUCT per ACRE	AI per ACRE	PRODUCT per 100 GAL	INSTRUCTIONS
Pecans	Brown Spot ( <i>Cercospora</i> spp.)  Downy Spot ( <i>Mycosphaerella</i> spp.)  Liver Spot ( <i>Gnomonia</i> spp.)  Powdery Mildew ( <i>Microsphaerella</i> spp.)  Scab ( <i>Fusicladium</i> spp.)  Stem End Blight ( <i>Botryosphaeria</i> spp.)  Zonate Leaf Spot ( <i>Cristulariella</i> spp.)	20 fl. oz.	0.7 lb. AI per acre       Max. AI per year 2.1 lb. per acre		Make first application as leaves begin to show. Minimum retreatment interval of 21 days until shuck split. Do not apply after shuck split.  Use highest rates for aerial applications in AR, GA, LA, MS, OK, TX.  Per crop year, apply no more than 60 fl. oz. of this product per acre.  The REI is 3 days PHI = 1 day  See Fungicide Resistance above

TREE CROPS	DISEASES	PRODUCT per ACRE	AI Per ACRE	PRODUCT per 100 GAL	INSTRUCTIONS
Pistachios	Shoot Blight ( <i>Botrytis</i> spp. and <i>Botryosphaeria</i> spp.)	30-40 fl. oz.	1.05 – 1.4 lb. AI per acre    Max. AI per year 1.4 lb. Per acre		Make application at bloom.  Ground application: apply at least 100 gallons per acre Aerial application: apply at least 20 gallons per acre and applicator should fly directly over every row of trees.  Per crop year, apply no more than 40 fl. oz. of this product per acre.  REI is 3 days See Fungicide Resistance above

TREE CROPS	DISEASES	PRODUCT per ACRE	AI Per ACRE	PRODUCT per 100 GAL	INSTRUCTIONS
Plums / Prunes	Brown Rot ( <i>Monilinia</i> spp.)	20-30 fl. oz.	0.7 - 1.05 lb. AI per acre	6.7 - 10 fl. oz.	Initiate application at early bloom (green tip), followed by a second application at full bloom.
	Blossom Blight ( <i>Monilinia</i> spp.)	(in CA use 30 fl. oz.)			Do not apply after shuck split
	Fruit Brown Rot ( <i>Monilinia</i> spp.)				Under severe disease pressure, make additional applications at 10 to 14 day intervals beginning at full bloom, through final <u>pre-harvest sprays</u> .
	Black Knot ( <i>Dibotryon</i> spp.)	20-30 fl. oz. (in CA, use 30 fl. oz.)	0.7 - 1.05 lb. AI per acre	6.7 - 10 fl. oz.	Initiate applications before bloom, then at petal fall and first 3 cover sprays at 10 to 14 day intervals.
	Leaf Spot ( <i>Coccomyces</i> spp.)	20-30 fl. oz. (in CA use 30 fl. oz.)	----- 0.7 - 1.05 lb. AI per acre  Max. AI per year 2.8 lb. per acre	----- 6.7 - 10 fl. oz.	Initiate applications as leaves begin to unfold, near petal fall or before. Continue at first, second and third cover sprays at 10 to 14 day intervals.
Per crop year, apply no more than 80 fl. oz. of this product per acre. Do not apply after shuck split. The REI is 2 days. PHI = 1 day See Fungicide Resistance above					

TREE CROPS CONIFER spp. (Not for use in California)	DISEASES	MINIMUM PRODUCT/Acre & GALLONAGE per APPLICATION	INSTRUCTIONS
(Pines) Austrian Pine Christmas Trees Red Pine Scots Pine	Tip Blight ( <i>Diplodia</i> spp.)	20 fl. oz.  product/acre applied in at least 100 gal/acre	<p>Make first application at bud break, followed by a second application shortly prior to needle emergence, usually 10-14 days after bud break. A third application may be made approximately two weeks following needle emergence.</p> <p>Coverage may improve by adding a spreader/sticker.</p> <p>Do not apply more than 60 fl. oz. of product per year.</p> <p>Do not allow livestock to graze treated area.</p> <p>REI OF 12 HOURS FOR CONIFERS</p>
(Fir) Douglas	Rhabdocline Needle Cast  Swiss Needle Cast ( <i>Phaenocarpa</i> spp.)	20 fl. oz.  product/acre applied in at least 50 gal/acre	<p>Make first application near the beginning of May, followed by applications every four (4) weeks.</p> <p>Coverage may improve by adding a spreader/sticker.</p> <p>When using mist-blower types of sprayers, use minimum gallonage while using higher gallonage with conventional sprayers.</p> <p>Do not apply more than 100 fl. oz. of product per year.</p> <p>Do not graze treated area.</p> <p>REI OF 12 HOURS FOR CONIFERS</p>



SEEDLING TREATMENT	DISEASES	MIX RATIO	INSTRUCTIONS
Longleaf Pine	Brown Needle Blight ( <i>Scirrhia</i> spp.)	1.25 fl. oz. product to 9.5 ounces dry Kaolinite clay for seedling roots	Do not apply this product to seedling foliage.  Prior to application, immerse the roots of the seedlings in clean water. The roots may then be treated with a mixture of Kaolinite and this product.
Loblolly Pine Longleaf Pine Slash Pine	<i>Fusarium</i> spp. and Rhizoctonia Root Rot	2.5 fl. oz. product to 50 ounces Kaolinite clay, add enough water to make a slurry	While treating seedlings, DO NOT ALLOW EXCESSIVE DRYING OF ROOTS or exposure to freezing temperatures or temperatures greater than 90°F.  This product is not effective in controlling <i>Phytophthora</i> spp. or <i>Pythium</i> spp.

#### SEED TREATMENT

#### USE DIRECTIONS

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 applications. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

T-METHYL 4.5L Fungicide is for commercial seed treatment use on listed crops. It is to be used only with slurry or misting (liquid) seed treatment equipment. It is not to be used by agricultural companies in hopper-box, planter-box, slurry box or other seed treatment applications before (or immediately at) planting.

Make sure that T-METHYL 4.5L Fungicide container is well shaken or otherwise mixed before use, particularly if entire contents are not used at one time. If tank mixing this seed treatment product with other products, carry out a compatibility test before mixing and applying. When tank mixing, read and follow the label of each tank mix product used for precautionary statements, directions for use, rates, and timings, and other restrictions. Observe the most restrictive label instructions.

**Note:** The purchaser of this product is responsible for ensuring that all seed treated with this product is adequately dyed with a suitable colorant to prevent its accidental use as food for man or feed for animals. Refer to 21 CFR, Part 2.25. Any dye or colorant added to treated seed must be cleared for use under 40 CFR, Part 180.900. Federal regulations have established official tolerances for certain pesticide residues. In order that residues on food and forage crops will not exceed established tolerances, use only at specified rates.

Treated seed must not be used for or mixed with food or animal feed or processed for oil. Seed commercially treated with this product must be labeled in accordance with all applicable requirements of the Federal seed Act.

## SEED LABELING

THE FEDERAL SEED ACT REQUIRES THAT BAGS CONTAINING TREATED SEED BE LABELED WITH THE FOLLOWING INFORMATION:

*“This seed has been treated with T-METHYL 4.5L (thiophanate-methyl) seed treatment. Do not use for food, feed, or oil processing. Store away from feeds and other foodstuffs.”*

LABELS FOR COMMERCIALY TREATED SEED MUST INCLUDE THE FOLLOWING ADDITION TO THE ENVIRONMENTAL HAZARDS STATEMENTS:

*“Exposed treated seed may be hazardous to birds and wildlife. Dispose of all excess treated seed and seed packaging or containers by burial away from bodies of water in accordance with any local requirements. Cover, incorporate, or collect treated seeds spilled during loading and planting. Do not contaminate bodies of water when disposing of planting equipment wash water.*

THE U.S. ENVIRONMENTAL PROTECTION AGENCY REQUIRES THE FOLLOWING STATEMENTS ON CONTAINERS CONTAINING TREATED SEED:

*“Do not allow children, pets or livestock to have access to treated seeds. “Do not graze or feed livestock on treated areas for 45 days after planting.”*

*“Wear long pants, long-sleeved shirt, shoes, socks, and chemical-resistant gloves when opening this bag or loading/pouring the treated seed.”*

*“After the seeds have been planted, do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. Exception: If the treated seed is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. 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, chemical-resistant gloves made of any waterproof material, and chemical-resistant footwear.”*

## PRODUCT INFORMATION

T-METHYL 4.5L can be applied to the following well cured, healthy seeds, to provide protection to the seed or seedlings from listed diseases. Use of this product in combination with other fungicides having efficacy against listed diseases can enhance performance if disease pressure is elevated, and will augment general protection of the seed. Dilute product in enough water for application to seeds via seed treatment equipment for misting or slurry. For application questions regarding a particular seed type, consult a seed treatment specialist.

### PEANUTS

For use on PEANUT seeds for suppression of seedling blight (*Fusarium* spp. and *Rhizoctonia* spp.) and seed decay (such as *Aspergillus* spp.), use 0.14 to 0.28 fl. oz. product (0.005 - 0.01 lb a.i.) per 100 lbs of seed. For control against seed borne *Sclerotinia* spp, use 0.94 to 1.12 fl. oz. product (0.033 – 0.04 lb ai/A) per 100 lbs of seed.

## SOYBEANS

For use on SOYBEAN seeds for suppression of seedling blight (soilborne *Fusarium* spp. and *Rhizoctonia* spp.), use 0.14 to 0.28 fl. oz. product (0.005-0.01 lb a.i.) per 100 lbs of seed, based on typical seed weight of 3000 seeds per pound, or 150,000 seeds per 50 pound bushel. If seed rate per pound is different, adjust amount of product used accordingly. For other weights/concentrations:

1 seed	0.008 to 0.015 mg. a.i.*
1000 seeds	0.0005 to 0.0010 fl. oz. product
140,000 seeds	0.065 to 0.0130 fl. oz. product

\* This product contains 15,970 mg. a.i. per 1 fluid ounce

NOTE: To maintain mg ai / seed, adjust fluid ounces /100 lb in proportion to the actual seeds / lb compared to the standard number of seeds / lb for that crop; fluid ounces per number of seeds (i.e., 1000, 140,000) does not need to be adjusted. For example if there are 2800 soybean seeds / lb and the targeted rate is 0.0075 mg ai / seed at a non adjusted rate of 0.14 fl. oz/100lb. of seed, use:  $(2800 \div 3000) \times 0.14 = 0.13$  fl. oz/100 lb of seed.

## DRY BEANS, SNAP BEANS

For use on DRY BEAN and SNAP BEAN seeds against seedling blight (soilborne *Fusarium* spp. and *Rhizoctonia* spp.) and seed decay (such as *Phomopsis* spp. and *Fusarium* spp.), use 0.14 to 0.28 fl. oz. product (0.005 to 0.01 lb. a.i.) per 100 lbs. of seed.

## WHEAT

For use on WHEAT seeds against seedling blight (soilborne *Fusarium* spp. and *Rhizoctonia* spp.) and seed decay (such as *Fusarium* spp.), use 0.14 to 0.28 fl. oz. product (0.005 to 0.010 lb. a.i.) per 100 lbs. of seed.

## POTATO SEED PIECE TREATMENT

For use on cut POTATO SEED PIECES for suppression of diseases caused by Silver Scurf (*helminthosporium solani*), Black Scurf and Stem Canker (*Rhizoctonia solani*) and dry rot (*Fusarium* spp.), use 0.5 to 0.7 fl. oz. product (0.018 – 0.025 lb. a.i.) per 100 lbs. of seed pieces. For adequate control, cut seed pieces must be completely covered with solution. Before cutting and planting seed pieces, make certain that all equipment is completely cleaned and sanitized (including tables, trays, knives, cutting machines, barrels, planters, trucks and any other equipment).

This product will not protect against systemic seed piece diseases, or airborne inoculum, and if used alone (not in combination with another fungicide), will not deliver consistent efficacy. Use of this product in combination with another fungicide having efficacy against listed diseases that arise from exterior infestations of seed pieces can enhance and provide more consistent performance. Additionally, follow application with a treatment that absorbs liquids from the seed pieces. For application questions regarding control of Silver Scurf in your area, consult a seed treatment or local extension specialist.

## HORTICULTURAL APPLICATIONS GREENHOUSE, NURSERY, AND LANDSCAPE REI – 12 hours

T-METHYL 4.5L provides broad-spectrum control of many foliar, stem, and below-ground diseases on a wide range of horticultural plants grown or maintained under a variety of conditions. Apply T-METHYL 4.5L 14 to 21 days prior to when a particular disease usually appears and at the very latest, upon first sign of disease. Use 7- to 14-day spray intervals with 14 days being for preventive treatments and the 7-

day interval for times when conditions are conducive to disease development. Add an acceptable wetting agent to the spray tank to increase product efficacy for hard-to-wet foliage. Use a spreader-sticker when excessive and repeated foliar wetting occurs. Use T-METHYL 4.5L to control listed diseases on non-commercial fruit and nut trees. Do not use fruit or nuts from trees treated with this product as food. Do not apply this product to home orchards or backyard fruit trees after fruit set.

NOTE: T-METHYL 4.5L has been determined to be safe for use on the plant types listed in these directions for use based on cumulative data derived from research trials and historical field use. As all species and cultivars have not been tested, perform trial applications if a user wishes to make an application to a plant type not listed on the label but found on a similar use site and for disease that is listed on the label. To conduct a trial application, apply at least two applications to at least 25 trial plants at the highest concentration, 7 days apart. Evaluate 7 days after the last application before initiating full-scale application. Do not use this product on the following plants: Swedish Ivy (*Neprolepsis exaltata*), Boston Fern (*Plectranthus australis*), and Easter Cactus (*Hatiora gaertneri*).

PLANT TYPE	SUCH AS BUT NOT LIMITED TO:
Herbaceous Bedding	Ageratum, Begonia, Canna, Coleus, Dahlia, Dusty Miller, Foxglove, Fuchsia, Geranium, Impatiens, Lavender, Marigold, Pansy, Petunia, Pinks, Primrose, Salvia, Statice, Strawflower, Tickseed, Verbena
Flowering	Chrysanthemum, Hydrangea, Hollyhock, Iris, Lily, Poinsettia
Tropical Foliage	Dieffenbachia, Dracaena, English Ivy, Philodendron, Pothos
Woody Ornamentals	Azalea, Hibiscus, Holly, Ligustrum, Rhododendron, Rose, Pyracantha
Evergreen Trees	Douglas Fir, Fir, Larch, Pine, Spruce
Deciduous Trees*	Ash, London Plane, Maple, Oak, Sycamore, Walnut
Flowering Trees*	Cherry, Crabapple, Hawthorn, Mountain Ash, Pear

\*Do not use fruit or nuts from treated trees as food or feed.

#### FOLIAR SPRAY PLANT TYPES AND DISEASES CONTROLLED

DISEASE(S)	PLANT TYPES
Anthraxnose	Woody ornamentals, shade trees <sup>1</sup>
Ascochyta Blight	Herbaceous ornamentals
Black spot	Roses
Botrytris (Gray Mold)	Woody and herbaceous ornamentals
Brown Rot	Woody and herbaceous ornamentals
Colletotrichum	Woody and herbaceous ornamentals
Cercospora Leaf Spot	Woody and herbaceous ornamentals
Corynespora Leaf Spot	Ligustrum
Didymellina Leaf Spot	Iris
Diplodia Tip Blight ( <i>Diplodia pinea</i> )	Shade and ornamental trees
Ovulinia	Azalea, rhododendron <sup>2</sup>
Entomosporium Leaf Spot	Woody and herbaceous ornamentals
Fuscaladium Leaf Scab	Woody and herbaceous ornamentals
Phomopsis Blight	Woody and herbaceous ornamentals
Pine Tip Blights	Woody ornamentals
Powdery Mildew	Woody and herbaceous ornamentals, ornamental nut and fruit trees
Rust Diseases	Ornamental nut and fruit trees
Ramularia Leaf Spot	Herbaceous ornamentals
Scab	Pyracantha, flowering crab, ornamental fruit and nut trees

Septoria Leaf Spot	Woody and herbaceous ornamentals
Venturia Leaf Scab	Woody and herbaceous ornamentals

<sup>1</sup>Begin at bud and make 2 or 3 additional applications at 10- to 14-day intervals.

<sup>2</sup>Begin treatment as flowers open. Addition of a spray surfactant to the spray mixture improves distribution of the spray on hard-to-wet plants such as roses.

## FOLIAR SPRAY APPLICATIONS

### APPLICATION RESTRICTIONS

Maximum Single Application Rates:

Ornamentals:

Do not exceed the maximum single application rate of 85.3 oz. T-METHYL 4.5L per acre (3.0 lbs. thiophanate-methyl active ingredient per acre).

Cut Flowers:

Do not exceed the maximum single application rate of 14.2 oz. T-METHYL 4.5L per acre (0.5 lb. thiophanate-methyl active ingredient per acre).

Seasonal Maximum Application:

All Ornamentals: Do not apply more than 66.6 gallons Thiophanate Methyl 4.5F AG (300 lbs. thiophanate-methyl active ingredient per acre per season).

Hydraulic Application Mixing Instructions

Add the required amount of T-METHYL 4.5L to a partially filled spray tank agitated by mechanical or hydraulic means and then add the remaining volume of water. Maintain continuous agitation to keep the material in suspension and apply with properly calibrated spray equipment.

Application Concentrations (Mechanical or Hand-Held):

Use the labeled amount of T-METHYL 4.5L per 100 gallons of water for the prevention and control of the diseases shown below.

## ORNAMENTAL FOLIAR DISEASES

DISEASE(S) CONTROLLED	CONCENTRATION OF T-METHYL 4.5L FL OZ/100 GALS	REMARKS
Anthracnose ( <i>Colletotrichum</i> )	10.75-20	Apply as buds break or at first sign of disease. Repeat application at 7- to 14-day intervals as needed during disease period.
Black Spot of Rose ( <i>Diplocarpon rosae</i> )	10.75-20	Apply early summer or at first sign of disease. Repeat application every 7 to 14 days as needed during disease period.
Brown Rot and Blight ( <i>Monlinia, Sclerotina, Whetzellinia</i> )	10.75-20	Apply late spring or at first sign of disease. Repeat application every 7 to 14 days as needed during the disease period.
Fusicladium and Venturia Leaf Scabs on: Crabapple, Hawthorn, Pear, Mountain Ash, Pyracantha, etc.	10.75-20	Apply as buds break. Repeat application every 7 to 14 days during disease period. Effective control requires coverage during expansion. Rotations with chlorothalonil or propiconazole can be utilized.

DISEASE(S) CONTROLLED	CONCENTRATION OF T-METHYL 4.5L FL OZ/100 GALS	REMARKS
Leaf Spots and Blights caused by: <i>Ascochyta</i> , <i>Blumeriella</i> , <i>Botrytis</i> , <i>Cercospora</i> , <i>Coccomyces</i> , <i>Corynespora</i> , <i>Curvularia</i> , <i>Didymellina</i> , <i>Entomosporium</i> , <i>Fabraea</i> , <i>Fusarium</i> , <i>Ramularia</i> , <i>Rhizoctonia</i> , <i>Marssoninia</i> , <i>Mycosphaerella</i> , <i>Myrothecium</i> , <i>Phoma</i> , <i>Physalasporea</i> , <i>Schizothyrium</i> , <i>Septoria</i> , <i>Sphaceloma</i>	10.75-20 (10-14.5; California Only)	Make applications when disease symptoms first appear. Repeat every 7 to 14 days during disease period. Rotations with chlorothalonil can be used.
Ovulinia Blight	7.25-20	Apply as flowers open. Repeat every 7 to 14 days during disease period.
Powdery Mildews <i>Erysiphe</i> , <i>Microsphaera</i> , <i>Phyllactinia</i> , <i>Podosphaera</i> , <i>Oidium</i> , <i>Sphaerotheca</i>	10-20	Apply when disease first appears and repeat application every 7 to 14 days. Rotations with other effective products can be used.
Rust Diseases caused by: <i>Puccinia</i> , <i>Gymnosporangium</i> , <i>Uromyces</i>	10.75-20	Apply late spring or when symptoms first appear. Repeat applications every 7 to 14 days during disease period. Rotations with other effective products can be used.
Tip Blight of Pine <i>Sphaeropsis sapinae</i> , <i>Diplodia pinea</i>	14.5-20	Begin applications in the spring when new growth starts. Make a second application just prior to needle emergence from the sheath and a third application 7 days later. Ensure thorough coverage.
Twig Blights, Cankers, and Diebacks <i>Diaporthe</i> , <i>Kabatina</i> , <i>Phoma</i> , <i>Phomopsis</i>	14.5-20	Apply when symptoms first appear. Repeat applications every 7 to 14 days during disease period.

#### Adjuvants:

Where rainfall and/or overhead irrigation is the norm, use of a compatible spreader/sticker is suggested. Where wetting of foliage is difficult, use a compatible wetting agent. Follow the phytotoxicity precautions described in the HORTICULTURAL APPLICATIONS section of this label.

### SOIL DRENCH APPLICATIONS

#### Mixing Instructions:

Add required amount of T-METHYL 4.5L to a partially filled tank agitated by mechanical or hydraulic means. Add the remaining required amount of water. Maintain continuous agitation throughout application to keep the material in suspension.

#### Application Concentrations/Rates and Timing for Disease Control:

Create a drench solution by mixing 7.5 to 20 fl. oz. of T-METHYL 4.5L per 100 gallons of water. Apply as a drench or heavy spray at the rate of 0.5 to 2 pints per square foot (100 gallons per 400 to 1600 square feet). For small pots and shallow flats up to 4 inches in size, apply at 1 pint per square foot. For containers and pots 4 inches or larger, refer to the following table for the volume to apply. Make repeat applications at 4- to 8- week intervals depending on disease presence and conditions for disease development.

Container Type	Drench Solution Volume to Apply/Container	
	1 pt/sq ft Rate	2 pt/sq ft Rate
4 inch	2 fl oz	---
5 inch	2.5 fl oz	---
6 inch	---	6.5 fl oz
7 inch	---	3.5 fl oz
8 inch	---	11 fl oz
9 inch	---	14 fl oz
10 inch	---	17.5 fl oz

For containers larger than 10 inches, a drench volume of 2 ½ to 3 pints per square foot of surface area is required.

**Plant Types:**

Containerized woody shrubs, trees, herbaceous/bedding, flowering, and tropical foliage plants and flowers and bedding plants in the landscape.

Note: Do not apply this product to plug trays or seedling flats at time of seeding.

**Soil Diseases Controlled:**

*Botrytis, Cyindrocladium, Fusarium, Gliocladium, Myrothecium, Penicillium, Ramularia, Rhizoctonia, Sclerotinia, and Thielaviopsis.*

Note: *Pythium, Phytophthora* and *Cylindrocladium spathiphylli* are not controlled by T-METHYL 4.5L.

### PLANT DIP TREATMENT

**Mixing Instructions:**

Mix as described in the FOLIAR DISEASES and SOIL DRENCH APPLICATIONS sections of this label. Maintain continuous agitation during application.

#### Application Concentration and Dipping Time

**Plants or Cuttings:**

Use 14.5 to 20 fl. oz. of T-METHYL 4.5L per 100 gallons of water. Immerse plants or cuttings for 10 to 15 minutes, remove, and allow to drain and dry. Note that the PERSONAL PROTECTIVE EQUIPMENT section of this label included protective clothing for dip treatment.

**Bulbs, Corms, Tubers, and Rhizomes:**

Use 14.5 to 20 fl. oz. of T-METHYL 4.5L per 100 gallons of water or two teaspoons of T-METHYL 4.5L per gallon of water. Soak cleaned bulbs for 15 to 30 minutes in warm dip (80-85°F) within 48 hours of digging. Dry bulbs after treatment. If bulbs are for forcing, treat bulbs that have been cured.

**Plant Types:**

Plants, cuttings, cane sections of woody herbaceous, flowering and tropical foliage plants. Bulbs, corms, tubers, and rhizomes of plants such as but not limited to Caladium, Easter Lily, Tulip, Gladiolus, Daffodil, Iris.

**Diseases Controlled:**

*Botrytis, Cyindrocladium, Fusarium, Gliocladium, Myrothecium, Penicillium, Ramularia, Rhizoctonia, Sclerotinia, and Thielaviopsis.*

## TURF APPLICATIONS

Use T-METHYL 4.5L against certain foliar and soil diseases for use on all turf types such as golf course greens, tees and fairways, athletic fields, cemeteries, parks, and commercial and home lawns. Use T-METHYL 4.5L both preventatively and curatively; it is not phytotoxic on turfgrass. Do not use T-METHYL 4.5L on turf being grown for sale or other commercial uses such as sod.

For use only by certified applicators and those under their direct supervision. Do not apply with fixed wing or rotary aircraft.

### Mixing Instructions:

Add the required amount of T-METHYL 4.5L to a partially filled tank agitated by mechanical or hydraulic means. Add the remaining required amount of water. Maintain continuous agitation to keep the material in suspension. For best results, use spray mixture the same day it is prepared.

### Turf Types:

All cool season and warm season grasses (such as but not limited to Bentgrasses, Bermudagrasses, Bluegrasses, Fescues, Ryegrasses, St. Augustinegrasses and Zoysiagrasses) or their mixtures.

DISEASE(S) CONTROLLED	RATE OF T-METHYL 4.5L FL OZ/1000 SQ FT*	REMARKS
Anthrachnose ( <i>Colletotrichum graminicola</i> )	2-3.5 (3.5-5.3)**	Apply when disease first appears. Make additional applications at 14-day intervals as needed. Allow spray to dry on leaves with no watering in.
Dollar Spot ( <i>Sclerotinia homeocarpa</i> ) Copper Spot ( <i>Gloeocercospora sorghi</i> ) Brown Patch and Zoysia Patch ( <i>Rhizoctonia solani</i> ) Red Thread ( <i>Laetisaria fuciformis</i> )	2-3.5	Apply when disease first appears. Make additional applications at 14-day intervals as needed. Allow spray to dry on leaves with no watering in.
Pink Snow Mold ( <i>Microdochium nivale</i> )  (Only for those areas where snow cover is not present the entire winter)	2-3.5	Apply T-METHYL 4.5L in middle to late November before turf has stopped all growth activity. Lightly water application into the root zone for best results. For best results, use a spreader-sticker. Let second spray dry on leaf surfaces with no watering in. Minimum spray interval is 14 days.
Gray Leaf Spot ( <i>Pyricularia grisea</i> )	3.5-5.3	Apply when conditions are favorable for disease development. Continue at 14-day intervals. Let spray dry on leaves with no watering in.
Summer Patch ( <i>Magnaporthe poae</i> )	3.5-5.3	For preventative treatment, make 3 applications at 21-day intervals beginning in early May. Water product into the root zone thoroughly after application. For suppression, apply two applications at 14- day intervals, beginning applications when the disease first appears.
Fusarium Blight ( <i>Fusarium roseum</i> ) Necrotic Ring Spot and	3.5-5.3	Make two applications at 14-day intervals beginning applications when the disease first appears.



DISEASE(S) CONTROLLED	RATE OF T-METHYL 4.5L FL OZ/1000 SQ FT*	REMARKS
Spring Dead Spot ( <i>Leptosphaeria korrae</i> )		
Stripe Smut ( <i>Ustilago striiformis</i> )	3.5-5.3	Make two applications at 14-day intervals when disease first appears. Water into root zone after application.  For prevention, apply in the spring (just before grass begins growth) and in the fall.

\*Refer to the use sites and maximum application rates table to determine allowable rates for each application.

\*\*Use the 3.5-5.3 fl. oz. rate for curative response to Basal Stem Anthracnose.

### TURF APPLICATION DIRECTIONS

Apply T-METHYL 4.5L uniformly over the area to be treated with a properly calibrated power sprayer. Apply after mowing or avoid mowing for 12 hours after application. Apply sufficient water to obtain thorough coverage; usually 1 ½ to 2 ½ gallons per 1000 sq. ft. of turf area. When treating golf course greens, always treat aprons and approaches to golf greens.

SITE	MAXIMUM SINGLE APPLICATION RATE FL OZ/1000 SQ FT	MAXIMUM SEASONAL APPLICATION RATE FL OZ/1000 SQ FT
Golf course green/tees/aprons	5.3	14.25
Golf Course Fairways (Except Florida)	3.5	3.5
Golf Course Fairways (Florida Only)	1.75	1.75
Residential and Public areas (home lawns, parks, athletic fields, schools, day care centers)	1.75	7

Note to User: Do not graze animals on treated turf. Do not feed clippings to livestock or poultry.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store this product in a cool, dry place in its original container only. Do not store this product near fertilizers, seeds, or other pesticides. If this product is spilled, you should sweep up the spillage and dispose pursuant to the below Pesticide Disposal instructions.

**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:

Nonrefillable containers less than or equal to 5 gallons:

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  $\frac{1}{4}$  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.

Nonrefillable containers greater than 5 gallons:

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. Fill the container  $\frac{1}{4}$  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.

Offer for recycling, if available, or dispose of empty containers in a sanitary landfill or 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 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or a rinsate collection system. Repeat this procedure two more times.

## WARRANTY AND DISCLAIMER STATEMENT

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Albaugh, LLC, LLC ("Albaugh, LLC"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

Albaugh, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions. This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Albaugh, LLC, and is subject to the inherent risks described above.

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