

TALARISTM

70 WSB

TalarisTM 70 WSB contains thiophanate-methyl, the active ingredient used in Topsin[®].

ACTIVE INGREDIENT:

Thiophanate-methyl

(dimethyl[1,2-phenylene)-bis(iminocarbonothioyl)]bis[carbamate])* 70%

OTHER INGREDIENTS:..... 30%

TOTAL:..... 100%

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

EPA Reg. No. 87373-6-91234

KEEP OUT OF REACH OF CHILDREN CAUTION

See inside label booklet for First Aid, Precautionary Statements and Directions for Use.

FIRST AID	
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 to an unconscious person
IF ON SKIN:	<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 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
HOTLINE 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 CHEMTREC at 1-800-424-9300 for emergency medical treatment information.	

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

Talaris 70 WSB is not manufactured or distributed by United Phosphorus, Inc. seller of Topsin[®].

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

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

PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

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

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

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

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

USER SAFETY REQUIREMENTS

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

Engineering Controls: Water soluble packets when used correctly qualify as a closed mixing/loading system under the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(4)]. Mixers and loaders using water soluble packets must:

- wear the personal protective equipment required above for mixers/loaders, and
- be provided and must have immediately available for use in an emergency, such as a broken package, spill, or equipment breakdown coveralls, and chemical-resistant footwear.

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

USER SAFETY RECOMMENDATIONS

Users should:

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 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), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours except for the following:

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

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 over head exposures

PRODUCT INFORMATION

TALARIS 70 WSB may be applied by ground or aerial application equipment. Normal fungicide usage indicates this product will be applied over the top of the intended crop. It is critical to ensure that the tank and spray equipment has been cleaned of all other pesticides prior to mixing this product. As with all agricultural chemicals, continuous agitation is required to keep the ingredients in suspension. Recommended application gallonage and directions are given for each crop.

TALARIS 70 WSB 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. Atticus, 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.

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). Use the **PRODUCT per 100 GALLONS** rate for dilute ground applications. This product should only be used on 'non-bearing' apples, cherries, peaches and pecans, when needed for control of labeled leaf diseases during 'non-bearing' years of new plantings or nursery stock. Follow all crop specific language on this label for application. Dilute sprays must not exceed maximum a.i. per year.

Aerial applications to tree crops: Use a minimum of 10 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.

Chemigation: See specific directions in this label.

Mode of Action: TALARIS 70 WSB 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 TALARIS 70 WSB 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 TALARIS 70 WSB 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

TALARIS 70 WSB is packaged in a protective outer, resealable package containing water soluble bags. Do not allow bags (WSB) to become wet prior to adding to the tank. Do not handle WSB with wet hands or wet gloves.

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

Remove the appropriate number of unopened water soluble bags from the outer package, adding them to the tank. Reseal the outer bag immediately to protect the unopened bags from moisture. Do not add water soluble bags near the suction area of the tank as plugging may occur prior to the bags fully dissolving. The dissolve time for the bags will depend on the water temperature and degree/type of agitation. Most bags should be dissolved in 5 minutes. If planning to tankmix high pH products or fertilizers high in nitrogen or boron, wait until the TALARIS 70 WSB is fully dissolved before adding them to the tank.

Should other products or pesticides be tank mixed with this product, use the Mixing Order chart and add all products, 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.

CONVERSION TABLE ACRES TREATED PER 1 LB WATER SOLUBLE BAG	
LABEL USE RATE LBS/A TALARIS 70 WSB	ACRES TREATED WITH ONE WATER SOLUBLE BAG
1/4 LB	4.0
1/2 LB	2.0
1 LB	1.0

CONVERSION TABLE ACRES TREATED PER 2.5 LB WATER SOLUBLE BAG	
LABEL USE RATE LBS/A TALARIS 70 WSB	ACRES TREATED WITH ONE WATER SOLUBLE BAG
1/4 LB	10
1/2 LB	5
1 LB	2.5

CONVERSION TABLE ACRES TREATED PER 5 LB WATER SOLUBLE BAG	
LABEL USE RATE LBS/A TALARIS 70 WSB	ACRES TREATED WITH ONE WATER SOLUBLE BAG
1/4 LB	20.0
1/2 LB	10.0
1 LB	5.0

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 INSTRUCTIONS

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

CHEMIGATION INFORMATION

Application of TALARIS 70 WSB 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. 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.

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 1/2 full. Begin agitation. Carefully add the required amount of TALARIS 70 WSB 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 no more than 0.4 inches of water per acre. Larger volumes of water may reduce product efficacy. Start sprinkler water flow, then begin injection of the mixed suspension of TALARIS 70 WSB into the irrigation water line. Continually monitor calibration to ensure proper application rate per acre. To ensure proper mixing of the suspension of TALARIS 70 WSB 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 TALARIS 70 WSB 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.



TREE CROP SPECIFIC APPLICATION DIRECTIONS

TREE CROPS	PEST	LBS. PRODUCT per ACRE	AI per ACRE	LBS. PRODUCT per 100 GAL	INSTRUCTIONS
Almonds	Brown Rot Blossom Blight (Monilinia spp.) Jacket Rot (Monilinia, Sclerotinia, Botrytis) Leaf Blight (Seimatosporium) Scab (Cladosporium spp.)	1.0 to 1.5	0.7 – 1.05 lb. AI per acre		Applications should be initiated at pink bud and continued through petal fall. Pink Bud applications can be made alone, however later applications should be tank mixed with labeled contact type, multi-site fungicides. See Fungicide Resistance above
	Restrictions: Do not apply more than 3 lbs. of product (2.1 lbs. a.i.)/A/year. REI = 3 days PHI = 1 day				
Apples *Not for this use in California	Apple Scab (Venturia spp.) Black Pox * (Helminthosporium papulosum) Black Rot (Botryosphaeria spp.) Brooks Fruit Spot (Mycosphaerella spp.) Flyspeck (Zygophiala spp.) Powdery Mildew (Podosphaera spp.) Sooty Blotch (Gloeodes spp.) White Rot * (Botryosphaeria spp.)	1.0 lb. (except CA) 1.42 lbs. (in CA)	0.7 lb. AI per acre (except CA) 1.0 lb. AI per acre (in CA)	0.25 lb. (except CA) 0.375 lb. (in CA)	Applications should be initiated at green tip and continue at 5 to 10 day intervals, continuing through petal fall. Cover sprays can continue at 7 to 14 day intervals as needed. See Fungicide Resistance above
	Restrictions: Do not apply more than 4 lbs. of product (2.8 lbs. a.i.)/A/year. REI = 2 days PHI = 1 day				
	Pre-Harvest use to control Post-Harvest Diseases on Apples				
	Storage Rot Blue Mold (Penicillium expansum) Gray Mold (Botrytis cinerea) Bulls-Eye Rot (Neofabraea spp.)	1			Apply as a pre-harvest spray within 2 weeks to 3 days of harvest. Thorough coverage of the fruit is required. Application closer to harvest may provide better efficacy. For resistance management, do not use benzimidazole fungicide (i.e., Mertect®) post-harvest following pre-harvest application of this product. Application of a non-benzimidazole post-harvest fungicide such as Penbotec™ or Scholar® will provide additional protection from post-harvest diseases.
Restrictions: Do not apply more than 4 lbs. of product (2.8 lbs. a.i.)/A/year. REI = 2 days PHI = 1 day					

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TREE CROPS	PEST	LBS. PRODUCT per ACRE	AI per ACRE	LBS. PRODUCT per 100 GAL	INSTRUCTIONS
Apricots	Brown Rot (Monilinia spp.) Brown Rot Blossom Blight (Monilinia spp.) Fruit Brown Rot (Monilinia spp.)	1.0 to 1.5 lbs. (in CA use 1.5 lbs.)	0.7 - 1.05 lbs. AI per acre	0.5	First application should be made at early bloom (red bud), followed by a second application at full bloom. Under severe disease pressure, additional applications should be made at 10 to 14 day intervals beginning at full bloom, through final pre-harvest sprays. If conditions develop for Fruit Brown Rot, apply 1 to 2 sprays starting 21 days prior to harvest. See Fungicide Resistance above
	Restrictions: Do not apply more than 4 lbs. of product (2.8 lbs. a.i.)/A/year. REI = 2 days PHI = 1 day				
Cherries	Brown Rot (Monilinia spp.) Brown Rot Blossom Blight (Monilinia spp.) Fruit Brown Rot (Monilinia spp.)	1.0 to 1.5 (in CA use 1.5 lbs.)	0.7 - 1.05 lb. AI per acre	0.5	First application should be made at early bloom (popcorn stage), followed by a second application at full bloom. Under severe disease pressure, additional applications should be made at 10 to 14 day intervals beginning at full bloom, through final pre-harvest sprays. If conditions develop for Fruit Brown Rot, apply 1 to 2 sprays starting 21 days prior to harvest. See Fungicide Resistance above
	Cherry Leaf Spot (Coccomyces spp.)	1.125 to 1.5	0.8 - 1.05 lb. AI per acre	0.375-0.5	Initiate applications as leaves begin to unfold, near petal fall or before. Continue at first, second and third cover sprays at 10 to 14 day intervals. See Fungicide Resistance above
	Powdery Mildew (Podosphaera spp.) and (Sphaerotheca spp.)	1.0 to 1.5 (in CA use 1.5 lbs.) PLUS 1.125 to 1.5	0.7 - 1.05 lb. AI per acre PLUS 0.84 – 1.05 lbs.	0.5 PLUS 0.375 to 0.5	First application should be made at early bloom (popcorn stage), followed by a second application at full bloom. PLUS Also make applications of this product at shuck fall and first cover. See Fungicide Resistance above
Restrictions: Do not apply more than 4 lbs. of product (2.8 lbs. a.i.)/A/year. REI = 2 days PHI = 1 day					
Nectarines	Brown Rot (Monilinia spp.) Brown Rot Blossom Blight (Monilinia spp.) Fruit Brown Rot (Monilinia spp.)	1.0 to 1.5 (in CA use 1.5 lbs.)	0.7 - 1.05 lb. AI per acre	0.5	First application should be made at early bloom (pink bud), followed by a second application at full bloom. Under severe disease pressure, additional applications should be made at 10 to 14 day intervals beginning at full bloom, through final pre-harvest sprays. See Fungicide Resistance above
	Restrictions: Do not apply more than 4 lbs. of product (2.8 lbs. a.i.)/A/year. REI = 2 days PHI = 1 day				

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TREE CROPS	PEST	LBS. PRODUCT per ACRE	AI per ACRE	LBS. PRODUCT per 100 GAL	INSTRUCTIONS
Peaches	Brown Rot (Monilinia spp.) Brown Rot Blossom Blight (Monilinia spp.) Fruit Brown Rot (Monilinia spp.) Peach Scab (Cladosporium spp.)	1.0 to 1.5 (in CA use 1.5 lbs.) Plus for Scab 1.0 to 1.5	0.7 - 1.05 lb. AI per acre Plus for Scab 1.125-1.5	0.5 – 0.75 Plus for Scab 3/8 – 1/2	First application should be made at early bloom (pink bud), followed by a second application at full bloom. Under severe disease pressure, additional applications should be made at 10 to 14 day intervals beginning at full bloom, through final pre-harvest sprays. When treating Peach Scab, make additional applications at Shuck Split and first cover spray. See Fungicide Resistance above
	Restrictions: Do not apply more than 4 lbs. of product (2.8 lbs. a.i.)/A/year. REI = 2 days PHI = 1 day				
Pears	Fabraea Leaf Spot Flyspeck (Zygothia spp.) Pear Scab (Venturia spp.) Powdery Mildew (Podosphaera spp.) Sooty Blotch (Gloeodes spp.)	1.0	0.7 lb. AI per acre	0.25	Application should be initiated at green tip, continue on a 5 to 10 day schedule through petal fall. As conditions warrant, continue applications at 7 to 10 day intervals through the cover sprays. Do not use THIOPHANATE-METHYL 70W WSB alone in a spray program. Use only in combination or in an alternating application program with a labeled non-benzimidazole fungicide.
	Restrictions: Do not apply more than 4 lbs. of product (2.8 lbs. a.i.)/A/year. REI = 2 days PHI = 1 day Apply in a minimum spray volume of 10 gallons/A for aerial applications and do not apply through irrigation equipment.				
	Pre-Harvest use to control Post-Harvest Diseases on Pears				
Pears	Storage Rot Blue Mold (Penicillium expansum) Gray Mold (Botrytis cinerea) Bulls-Eye Rot (Neofabraea spp.)	1			Apply as a pre-harvest spray within 2 weeks to 3 days of harvest. Thorough coverage of the fruit is required. Application closer to harvest may provide better efficacy. For resistance management, do not use benzimidazole fungicide (i.e., Mertect®) post-harvest following pre-harvest application of this product. Application of a non-benzimidazole post-harvest fungicide such as Penbotec™ or Scholar® will provide additional protection from post-harvest diseases.
	Restrictions: Do not apply more than 4 lbs. of product (2.8 lbs. a.i.)/A/year. REI = 2 days PHI = 1 day				

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TREE CROPS	PEST	LBS. PRODUCT per ACRE	AI per ACRE	LBS. PRODUCT per 100 GAL	INSTRUCTIONS
Pecans	Brown Spot (Cercospora spp.) Downy Spot (Mycosphaerella spp.) Liver Spot (Gnomonia spp.) Powdery Mildew (Microsphaera spp.) Scab (Fusicladium spp.) Stem End Blight (Botryosphaeria spp.) Zonate Leaf Spot (Cristulariella spp.)	0.5 to 1.0	0.375 – 0.7 lb. AI per acre		First application should be made as leaves begin to show, followed by repeat applications every three to four weeks until shuck split. Use highest rates for aerial applications in AR, GA, LA, MS, OK, TX. See Fungicide Resistance above
	Restrictions: Do not apply more than 3 lbs. of product (2.1 lbs. a.i.)/A/year. REI = 3 days PHI = 1 day Do not apply after shuck split.				
Pistachios	Shoot Blight (Botrytis spp. and Botryosphaeria spp.)	1.5 to 2.0	1.05 – 1.4 lb. AI per acre	0.5 – 0.625	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. See Fungicide Resistance above
	Restrictions: Do not apply more than 2 lbs. of product (1.4 lbs. a.i.)/A/year. REI = 3 days				
Plums / Prunes	Brown Rot (Monilinia spp.) Brown Rot Blossom Blight (Monilinia spp.) Fruit Brown Rot (Monilinia spp.)	1.0 to 1.5 (in CA use 1.5 lbs.)	0.7 – 1.05 lb. AI per acre	0.5	Application should be initiated at early bloom (green tip), followed by a second application at full bloom. Under severe disease pressure, additional applications should be made at 10 to 14 day intervals beginning at full bloom, through final pre-harvest sprays.
	Black Knot (Dibotryon spp.)	1.0 to 1.5 (in CA use 1.5 lbs.)	0.7 – 1.05 lb. AI per acre	0.5	Initiate applications before bloom, then at petal fall and first 3 cover sprays at 10 to 14 day intervals See Fungicide Resistance above
	Leaf Spot (Coccomyces spp.)	1.0 to 1.5 (in CA use 1.5 lbs.)	0.7 – 1.05 lb. AI per acre	0.5	Initiate applications as leaves begin to unfold, near petal fall or before. Continue at first, second and third cover sprays at 10 to 14 day intervals. See Fungicide Resistance above
	Restrictions: Do not apply more than 4 lbs. of product (2.8 lbs. a.i.)/A/year. REI = 2 days PHI = 1 day				

TREE CROPS CONIFER spp.	PESTS *not for Conifer use in CA	MINIMUM PRODUCT/Acre & GALLONAGE per APPLICATION	INSTRUCTIONS
(Pines) Austrian Pine Christmas Trees Red Pine Scots Pine	Tip Blight (Diplodia spp.)	1 lb. product/A applied in at least 100 gallons/A	First application should be made 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. Coverage may improve by adding a spreader/sticker.
Restrictions: Do not apply more than 3 lbs. of product (2.1 lbs. a.i.)/A/year. Do not graze treated area.			
(Fir) Douglas	Rhabdocline Needle Cast Swiss Needle Cast (Phaenocarpa spp.)	1 lb. product/A applied in at least 50 gallons/A	First application should be made near the beginning of May, followed by applications every four (4) weeks. Coverage may improve by adding a spreader/sticker.
Restrictions: Do not apply more than 3.5 lbs. of product (2.45 lbs. a.i.)/A/year. Do not graze treated area.			

SEEDLING TREATMENT	PESTS	MIX RATIO	INSTRUCTIONS
Longleaf Pine	Brown Needle Blight (Scirrhia spp.)	1 oz. product to 9.5 ounces dry Kaolin clay	This product should not be applied 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 Kaolin and this product.
Loblolly Pine Longleaf Pine Slash Pine	Fusarium spp. and Rhizoctonia Root Rot	2 oz. product to 50 ounces Kaolin 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 Phytophthora spp. or Pythium spp.

ROW CROP AND FIELD CROP SPECIFIC APPLICATION DIRECTIONS

CROP	PESTS	LBS. PRODUCT per ACRE	LBS. AI per ACRE	INSTRUCTIONS
Beans	Gray Mold (Botrytis spp.) White Mold (Sclerotinia spp.) Anthracnose (Colletotrichum spp.)	1.0 to 2.0 lbs. (one application per season)	0.7 – 1.4 lb. AI per acre	Note: The 1.0 and 2.0 lb. product per acre rate is for one application per season. When making multiple applications, the maximum single application rate is 1.5 lbs. product per acre. Initiate applications when one open bloom is found on 10-30% of plants OR as conditions develop for disease infection. Reapply as required, after at least 7 days, as disease conditions dictate. As crop canopy increases and with heavier infestation of insects, use higher rates.
Restrictions: Do not apply more than 4 lbs. of product (2.8 lbs. a.i.)/A/year. REI = 3 days (dry beans); 1 day (green beans) PHI = California only , 14 days for succulent beans, 28 days for dry beans and lima beans. PHI = All other States , 14 days for succulent beans and lima beans, 28 days for dry beans.				

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CROP	PESTS	LBS. PRODUCT per ACRE	LBS. AI per ACRE	INSTRUCTIONS
Canola, Crambe FOR USE IN NORTH DAKOTA, MINNESOTA AND MONTANA (EAST OF INTERSTATE 15) ONLY	White Mold Sclerotinia Stem Rot (Sclerotinia sclerotiorum)	1.0 to 2.0 lbs. in a single application OR 1.0 lb. per application in two applications	0.7 – 1.4 lb. AI per acre	Apply once at 20 to 50% flowering OR Apply twice with the first application at 20 to 30% flowering and the second application at 40 to 50% flowering. Thorough coverage of flowers is essential for control of White Mold.
	Restrictions: Do not apply more than 2 lbs. of product (1.4 lbs. a.i.)/A/year. REI = 12 hours PHI = 40 days			
Cucurbits (including: Cantaloupes, Casaba, Cucumbers, Melons, Pumpkins, Summer Squash And Winter Squash, and Watermelons) *Not for this use in California	Acremonium/ Cephalosporium Hypocotyl Rot	0.5 lb.	0.35 lb. AI per acre	Product should be sprayed in-furrow, on top of the seeds at planting using at least 10 gallons of water per acre. See Fungicide Resistance above
	Anthracnose* (Colletotrichum spp.) Gummy Stem Blight* (Didymella spp.) Powdery Mildew (Erysiphe spp.) Target Spot* (Corynespora 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. See Fungicide Resistance above
	Belly Rots * (Rhizoctonia spp. and Fusarium spp.)			Application volume should be enough to allow complete coverage to run or drip off plant into soil. This product is not effective in controlling Phytophthora spp. or Pythium spp. See Fungicide Resistance above
	Suppression of Vine Decline (Monosporascus cannonballus) Charcoal Rot (Macrophomina spp.)			Applications for suppression of these diseases should be made 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. See Fungicide Resistance above
	Restrictions: Do not apply more than 3 lbs. of product (2.1 lbs. a.i.)/A/year from any combination of application timings. REI = 1 day PHI = 1 day			
Garlic (treatment for garlic cloves prior to planting)	Penicillium Clove Rot	Make a Suspension of 1 lb. Product per 100 gallons of water	NA	Solution tank mixture should be continuously agitated to ensure proper treatment suspension ratio. Treatment: Garlic cloves should be immersed 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.

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CROP	PESTS	LBS. PRODUCT per ACRE	LBS. AI per ACRE	INSTRUCTIONS
Grapes	Botrytis Bunch Rot (Botrytis cinerea) Powdery Mildew (Uncinula necator)	1.0 to 1.5 lbs.	0.7 - 1.05 lb. AI per acre	Monitor disease climate conditions. Start treatments at first bloom, repeat at 14 days if needed. Make another application as sugar starts to increase, around 21-28 days prior to harvest. If disease conditions remain favorable, make a final application 14 days after. Use sulfur and/or triazole/DMI fungicides in a rotation for Powdery Mildew in a season long approach for control. See Resistance Section.
	Restrictions: Do not apply more than 6 lbs. of product (4.2 lbs. a.i.)/A/year. REI = 2 days PHI = 7 days			
	Note: East of the Rocky Mountains: Bitter Rot (Melanconium) Black Rot (Guignardia) Powdery Mildew (Uncinula spp.)	0.75 to 1.5 lbs.	0.525 – 1.05 lb. AI per acre	Start applications as leaves unfold, continue at 14 to 21 day intervals. Rotate fungicide modes of action in a season long program.
	Restrictions: Do not apply more than 6 lbs. of product (4.2 lbs. a.i.)/A/year. REI = 2 days PHI = 7 days			
Onions * (In Furrow) * Not for this use in California	White Rot * (Sclerotinia spp.)	0.7 ounce per 1000 row feet (with 12 inch row spacing) OR 32 ounces per acre Broadcast	NA AI per acre/ application 1.4 lbs.	Product solution should be sprayed directly into the open planting furrow at the time of planting seed, sets or bulbs.
	Restrictions: Do not apply more than 2 lbs. of product (1.4 lbs. a.i.)/A/year. REI = 3 days Do not apply through any type of irrigation system.			
Peanuts	Early Leaf Spot (Cercospora spp.) Late Leaf Spot (Cercospora spp.) Leaf Spot (Cercospora spp.) Rust (Puccinia spp.) Limb Rot (Rhizoctonia spp.) Web Blotch (Ascochyta spp.)	0.5 lb.	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. Retreatment interval for peanuts is 14 days. This product should always be used in conjunction with another non-benzimidazole fungicide. See Fungicide Resistance above
	Restrictions: Do not apply more than 2 lbs. of product (1.4 lbs. a.i.)/A/year from all combinations and timings. REI = 1 day PHI = 14 days			

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CROP	PESTS	LBS. PRODUCT per ACRE	LBS. AI per ACRE	INSTRUCTIONS
Potatoes* * Not for this use in California	White Mold Sclerotinia Stem Rot (Sclerotinia sp.)	1.0 to 1.5 lbs.	0.7 - 1.05 lb. AI per acre	Treatments are most efficacious when made prior to disease development. Start treatments just around time of row closure. Spray must cover all susceptible plant parts, branches, flowers and stems for adequate control. Scout and reapply at 7 to 14 day intervals or as conditions occur for disease development. Early/Late Blight Control: You may tank-mix this product with other blight-control fungicides. Do not make aerial application for control of this disease on this crop.
	Restrictions: Do not apply more than 4 lbs. of product (2.8 lbs. a.i.)/A/year. REI = 2 days PHI = 21 days			
Soybeans	Anthracnose (Colletotrichum spp.) Brown Spot (Septoria spp.) Frogeye Leaf Spot (Cercospora spp.) Pod and Stem Blight (Diaporthe spp. and the imperfect stage, Phomopsis spp.) Purple Seed Stain (Cercospora spp.)	0.5 to 1.0 lb. Use higher rate for higher density canopy develops	0.375 - 0.7 lb. AI per acre	First application can be made 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. FOR SEED BEANS ONLY- A single high-rate application may be made at the time of bean formation to improve seed quality.
	White Mold (Sclerotinia spp.)	0.75 to 1.0 lb.	0.525-0.7 lb. AI per acre	First application should be made at early bloom (R- 1 to R-2 stage). A second application may be made 7-14 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.
	Aerial Blight (Suppression) Soybean Rust (Phakopsora pachyrhiza)	1.0 lb.	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. Tank mix this product with a DMI/Triazole fungicide, such as tebuconazole for Soybean Rust. First application must be made at R-1 with the tankmix for control. Reapply as conditions warrant.
	Restrictions: Do not apply more than 2 lbs. of product (1.4 lbs. a.i.)/A/year. REI = 1 day PHI = 21 days Do not graze treated areas.			
Strawberries	Fruit Rot (Botrytis spp.) Leaf Blight (Dendrophoma spp.) Leaf Scorch (Diplocarpon spp.) Powdery Mildew (Sphaerotheca spp.)	0.75 to 1.0 lb. Use highest rate under severe conditions	0.525-0.7 lb. AI per acre	Start treatments as blooming begins, repeat at 7 to 10 day intervals. See Fungicide Resistance above
	Restrictions: Do not apply more than 4 lbs. of product (2.8 lbs. a.i.)/A/year. REI = 1 day PHI = 1 day			

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CROP	PESTS	LBS. PRODUCT per ACRE	LBS. AI per ACRE	INSTRUCTIONS
Sugarbeets * Not for this use in California	Cercospora Leaf Spot (Cercospora spp.)	0.5 lb. (in CA) 0.75 to 1.0 lb. (except CA)	0.35 lb AI per acre (in CA) 0.7 lb AI per acre (except CA)	First application should be made 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. Do not apply this product more than once per year for Cercospora spp. See Fungicide Resistance above
	Powdery Mildew* (Erysiphe spp.)	0.75 to 1.0 pound		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. See Fungicide Resistance above
	Restrictions: Do not apply more than 3 lbs. of product (2.1 lbs. a.i.)/A/year. REI = 1 day PHI = 21 days			
Triticale Wheat (Fall Seeded in the states of Idaho, Oregon and Washington Only) * Not for this use in CA	Eye Spot Foot Rot Strawbreaker (Pseudocercospora spp.)	1.0 lb.	0.7 lb. AI per acre	Applications should be made after tillering, but before stem elongation begins. Application can be by ground or aerial means.
	Restrictions: Do not apply more than 1 lb. of product (0.7 lb. a.i.)/A/year. REI = 1 day PHI = 90 days (Do not cut for 90 days after application or allow livestock to graze in treated area prior to harvest) Do not graze treated areas until after harvest. Do not make more than one application per season.			

ATTENTION: Do not exceed the maximum rate of AI per acre in dilute sprays.



STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: 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 disposed of 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: Water Soluble Packaging – Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available or dispose of empty outer pouch in the trash as long as WSP is unbroken.

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 Atticus, LLC ("Atticus"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. All such risks shall be assumed by the user or buyer. Atticus 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 Atticus, and is subject to the inherent risks described above.

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