

64167

MAR 9 2016 NEW DATE REVIEWER *SP*

TALARIS 4.5 F AG



FUNGICIDE

Talaris 4.5 F AG contains thiophanate-methyl, the active ingredient used in Topsin®.

ACTIVE INGREDIENT:	By Wt.
Thiophanate-Methyl	
(Dimethyl [(1,2-phenylene)bis(iminocarbonothioyl)]bis[Carbamate])*	46.2%
OTHER INGREDIENTS:	53.8%
TOTAL:	100.0%

*Also known as Dimethyl 4,4'-o-phenylenebis-[3-thioallophanate]
Contains 4.5 Lbs. Thiophanate Methyl per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION

SEE BELOW FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

FIRST AID	
If Inhaled	<ul style="list-style-type: none"> • Move person to fresh air • If person is not breathing, call 911 or an ambulance, then give artificial respiration preferably mouth-to-mouth, if possible • Call a poison control center or doctor for further treatment advice
If on Skin or Clothing	<ul style="list-style-type: none"> • Take off contaminated clothing • Rinse skin immediately with plenty of water for 15-20 minutes • Call a poison control center or doctor for treatment advice
If In Eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye • Call a poison control center or doctor for treatment advice
If Swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice • Have person sip a glass of water if able to swallow • Do not induce vomiting unless told to do so by the poison control center or doctor • Do not give anything by mouth to an unconscious person
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 1-844-685-9173 for emergency medical treatment information.	

EPA Reg. No. 87373-10

EPA Est. No. 19713-GA-002

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)

See Additional Precautions and Use Directions Inside

Net Contents: 2.5 gallon



Manufactured for:
Argite, LLC.
1204 Village Market Pl. #273
Morrisville, NC 27560

DR 87373-10

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

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

PERSONAL PROTECTIVE EQUIPMENT (PPE)

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. If you want more options, follow the instructions for category C on an EPA chemical-resistant selection chart.

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 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) 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 exposures

PRODUCT INFORMATION

Apply Talaris 4.5 F AG 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 4.5 F AG 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. Argite 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: Talaris 4.5 F AG may be used for control of the leaf diseases listed on the label for these crops during the non-bearing years of new plantings, and on nursery stock. All use directions and limitations must be followed, except for the PHI, which is not applicable. Begin applications as disease is first observed. Tank mixing with a protectant fungicide is strongly recommended for resistance management.

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 Talaris 4.5 F AG use within 30 days of the last application.

Chemigation: See specific directions in this label.

Mode of Action: Talaris 4.5 F AG 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 4.5 F AG 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 4.5 F AG 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 Talaris 4.5 F AG 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 Talaris 4.5 F AG 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 Talaris 4.5 F AG into the irrigation water line. Continually monitor calibration to ensure proper application rate per acre. To ensure proper mixing of the suspension of Talaris 4.5 F AG 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 4.5 F AG 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 Including: Asparagus bean Broad bean Fava bean Garbanzo bean Kidney bean Lima bean Mung bean Navy bean Pinto bean Snap bean Wax bean Blackeyed pea Chick pea Cowpea Grain lupine Sweet lupine White lupine White Sweet Lupine	Anthracnose <i>(Colletotrichum spp.)</i> Gray Mold <i>(Botrytis spp.)</i> White Mold <i>(Sclerotinia spp.)</i>	30-40 fl. oz. OR 20-30 fl. oz.	1.0 - 1.4 lb. AI per acre OR 0.7-1.0 lb. ——— Max. AI per year 2.8 lb. per acre	For one application: Apply when 100% of plants have at least one open bloom or when conditions are favorable for disease development. 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.
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				
Cucurbits (Including: Cantaloupes, Casaba, Cucumbers, Melons, Pumpkins, Summer Squash and Winter Squash, and Watermelons) * Not for this use in California	Acremonium / Cephalosporium Hypocotyl Rot Anthracnose* <i>(Colletotrichum spp.)</i> Gummy Stem Blight* <i>(Didymella spp.)</i> Powdery Mildew <i>(Erysiphe spp.)</i> Target Spot* <i>(Corynespora spp.)</i> Belly Rots * <i>(Rhizoctonia spp. and Fusarium spp.)</i> Suppression of Vine Decline <i>(Monosporascus cannonballus)</i> Charcoal Rot <i>(Macrophomina spp.)</i>	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. 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. 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. 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
Onions * Garlic (In Furrow) * Not for this use in California	White Rot * (<i>Sclerotinia spp.</i>)	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.
Peanuts	Early Leaf Spot (<i>Cercospora spp.</i>) Late Leaf Spot (<i>Cercospora spp.</i>) Leaf Spot (<i>Cercospora spp.</i>) Limb Rot (<i>Rhizoctonia spp.</i>) Rust (<i>Puccinia spp.</i>) Web Blotch (<i>Ascochyta spp.</i>)	10 fl. oz. per acre – single application Max AI per year 1.4 lbs. per acre	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. Use this product in conjunction with another non-benzimidazole fungicide. Per crop year, apply no more than 40 fl. oz. of this product per acre. REI is 1 day PHI = 14 days See Fungicide Resistance above
Potatoes	White Mold (<i>Sclerotinia sclerotiorum spp.</i>)	20-30 fl. oz.	Max single application rate of 1.05 lb AI per acre Max. AI per year 2.8 lb. per acre	Treatments are most efficacious when made prior to disease development. 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. Maximum annual application rate of 80 fl oz per acre. PHI = 21 days REI is 2 days Early/Late Blight Control: You may tank-mix this product with other blight-control fungicides. Argite does not recommend aerial application for control of this disease on this crop.

CROP	DISEASES	PRODUCT per ACRE	AI per ACRE	INSTRUCTIONS
Soybeans	Anthracnose <i>(Colletotrichum spp.)</i> Brown Spot <i>(Septoria spp.)</i> Frogeye Leaf Spot <i>(Cercospora spp.)</i> Pod and Stem Blight <i>(Diaporthe spp. and the imperfect stage, Phomopsis spp.)</i> Purple Seed Stain <i>(Cercospora spp.)</i>	10-20 fl. oz. Use higher rate for higher density canopy develops		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. FOR SEED BEANS ONLY- A single high-rate application may be made at the time of bean formation to improve seed quality.
	White Mold <i>(Sclerotinia spp.)</i>	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) Soybean Rust <i>(Phakopsora pachyrhiza)</i>	20 fl. oz.	Max single application rate of 0.7 lb AI per acre Max. AI per year 1.4 lb. per acre for Soybeans	First application must be made prior to infection, monitor climatic conditions and sentinel plots in your area. Reapply 14-21 days later if needed. 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 1/4 inch in length are prohibited. The REI is 1 day. PHI = 21 days			

continued

CROP	DISEASES	PRODUCT per ACRE	AI per ACRE	INSTRUCTIONS
Strawberries	Fruit Rot (<i>Botrytis spp.</i>) Leaf Blight (<i>Dendrophoma spp.</i>) Leaf Scorch (<i>Diplocarpon spp.</i>) Powdery Mildew (<i>Sphaerotheca spp.</i>)	15-20 fl. oz. Use highest rate under severe conditions	Max single application rate of 0.7 lb AI 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 spp.</i>)	15-20 fl. oz.	Max. AI per year 2.8 lb. per acre	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.
*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				
Sugarbeets	Cercospora Leaf Spot (<i>Cercospora spp.</i>)	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 spp.</i>
	Powdery Mildew (<i>Erysiphe spp.</i>)	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 spp.</i>)	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 spp.</i>) Jacket Rot (<i>Monilinia, Sclerotinia, Botrytis</i>) Leaf Blight (<i>Seimatosporium</i>) Scab (<i>Cladosporium spp.</i>)	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
Apples	Apple Scab (<i>Venturia spp.</i>) Black Pox * (<i>Helminthosporium papulosum</i>) Black Rot (<i>Botryosphaeria spp.</i>) Brooks Fruit Spot (<i>Mycosphaerella spp.</i>) Flyspeck (<i>Zygophiala spp.</i>) Powdery Mildew (<i>Podosphaera spp.</i>) Sooty Blotch (<i>Gloeodes spp.</i>) White Rot * (<i>Botryosphaeria spp.</i>)	15-20 fl. oz. (except CA) 30 fl. oz. (CA only)	0.525 -.7 lb. AI per acre per application 1.0 lb. (CA only) Max. AI per year 2.8 lb. per acre	3.75 - 5 fl. oz. 7.5 fl. oz. (CA only)	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
	Preharvest use to control Post-Harvest Diseases on Apples				
	Storage Rot Blue Mold (<i>Penicillium expansum</i>) Gray Mold (<i>Botrytis cinerea</i>) Bulls-Eye Rot (<i>Neofabraea spp.</i>)	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. Application closer to harvest provides better efficacy. Application of a non-benzimidazole post-harvest fungicide such as Pentobec® or Schlor® will provide additional protection from post-harvest diseases.
<p>* Not for this use in California 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® post-harvest following a pre-harvest application of this product. The PHI is 1 day. The REI is 2 days.</p>					

continued

TREE CROPS	DISEASES	PRODUCT per ACRE	AI per ACRE	PRODUCT per 100 GAL	INSTRUCTIONS
Apricots	Brown Rot (<i>Monilinia spp.</i>) Blossom Blight (<i>Monilinia spp.</i>) Fruit Brown Rot (<i>Monilinia spp.</i>)	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 (red 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. If conditions develop for Fruit Brown Rot, apply 1 to 2 sprays starting 21 days prior to harvest. 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
Cherries Sweet and Sour	Brown Rot (<i>Monilinia spp.</i>) Blossom Blight (<i>Monilinia spp.</i>) Fruit Brown Rot (<i>Monilinia spp.</i>)	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 (popcorn stage), 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. If conditions develop for Fruit Brown Rot, apply 1 to 2 sprays starting 21 <u>days prior to harvest.</u>
					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.
	Cherry Leaf Spot (<i>Coccomyces spp.</i>)	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.	
	Powdery Mildew (<i>Podosphaera spp.</i>) and (<i>Sphaerotheca spp.</i>)	20-30 fl. oz. (in CA use 30 fl. oz. Rate) PLUS 22.5-30 fl. oz.	0.7 - 1.05 lb. AI per acre Max AI per year 2.8 Lb per acre PLUS 0.84 - 1.05 lb.	6.7-10 fl. oz. PLUS 7.5-10 fl. oz.	Make first application 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.
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					

continued

TREE CROPS	DISEASES	PRODUCT per ACRE	AI per ACRE	PRODUCT per 100 GAL	INSTRUCTIONS
Nectarines	Brown Rot (<i>Monilinia spp.</i>) Blossom Blight (<i>Monilinia spp.</i>) Fruit Brown Rot (<i>Monilinia spp.</i>)	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				
Peaches	Brown Rot (<i>Monilinia spp.</i>) Blossom Blight (<i>Monilinia spp.</i>) Fruit Brown Rot (<i>Monilinia spp.</i>)	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.
	Peach Scab (<i>Cladosporium spp.</i>)	20-30 fl.oz. (in CA use 30 fl. oz plus 22.5-30 fl. oz.)		6.7-10 fl. oz. plus 7.5-10 fl. oz	
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					
Pecans	Brown Spot (<i>Cercospora spp.</i>) Downy Spot (<i>Mycosphaerella spp.</i>) Liver Spot (<i>Gnomonia spp.</i>) Powdery Mildew (<i>Microsphaerella spp.</i>) Scab (<i>Fusicladium spp.</i>) Stem End Blight (<i>Botryosphaeria spp.</i>) Zonate Leaf Spot (<i>Cristulariella spp.</i>)	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				

continued

TREE CROPS	DISEASES	PRODUCT per ACRE	AI per ACRE	PRODUCT per 100 GAL	INSTRUCTIONS
Pistachios	Shoot Blight (<i>Botrytis spp.</i> and <i>Botryosphaeria spp.</i>)	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				
Plums / Prunes	Brown Rot (<i>Monilinia spp.</i>) Blossom Blight (<i>Monilinia spp.</i>) Fruit Brown Rot (<i>Monilinia spp.</i>)	20-30 fl. oz. (in CA use 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. Do not apply after shuck split 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 spp.</i>)	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 spp.</i>)	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 spp.</i>)	20 fl. oz. product/acre applied in at least 100 gal/acre	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. Coverage may improve by adding a spreader/sticker. Do not apply more than 60 fl. oz. of product per year. Do not allow livestock to graze treated area. REI OF 12 HOURS FOR CONIFERS
(Fir) Douglas	Rhabdocline Needle Cast Swiss Needle Cast (<i>Phaeocryptopus spp.</i>)	20 fl. oz. product/acre applied in at least 50 gal/acre	Make first application near the beginning of May, followed by applications every four (4) weeks. Coverage may improve by adding a spreader/sticker. When using mist-blower types of sprayers, use minimum gallonage while using higher gallonage with conventional sprayers. Do not apply more than 100 fl. oz. of product per year. Do not graze treated area. REI OF 12 HOURS FOR CONIFERS

SEEDLING TREATMENT	DISEASES	MIX RATIO	INSTRUCTIONS
Longleaf Pine	Brown Needle Blight (<i>Scirrhia spp.</i>)	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.

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

Talaris 4.5 F AG 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 Talaris 4.5 F AG 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 Talaris 4.5 F AG 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: Talaris 4.5 F AG 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 (*Nephrrolepis 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
Anthracnose	Woody ornamentals, shade trees ¹
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 ²
Entomosporium Leaf Spot	Woody and herbaceous ornamentals
Fusicladium 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

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

²Begin 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
<p>Maximum Single Application Rates: Ornamentals: Do not exceed the maximum single application rate of 85.3 oz. Talaris 4.5 F AG 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. Talaris 4.5 F AG per acre (0.5 lb. thiophanate-methyl active ingredient per acre). Seasonal Maximum Application: All Ornamentals: Do not apply more than 66.6 gallons Talaris 4.5 F AG (300 lbs. thiophanate-methyl active ingredient per acre per season).</p>

Hydraulic Application Mixing Instructions

Add the required amount of Talaris 4.5 F AG 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 Talaris 4.5 F AG per 100 gallons of water for the prevention and control of the diseases shown below.

FOLIAR DISEASES

DISEASE(S) CONTROLLED	CONCENTRATION OF Talaris 4.5 F AG 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</i> , <i>Sclerotinia</i> , <i>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.
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 Talaris 4.5 F AG 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 Talaris 4.5 F AG 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, Cyndrocladium, Fusarium, Gliocladium, Myrothecium, Penicillium, Ramularia, Rhizoctonia, Sclerotinia, and Thielaviopsis.*

Note: *Pythium, Phytophthora* and *Cylindrocladium spathiphylli* are not controlled by Talaris 4.5 F AG.

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 Talaris 4.5 F AG 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 Talaris 4.5 F AG per 100 gallons of water or two teaspoons of Talaris 4.5 F AG 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, Cyndrocladium, Fusarium, Gliocladium, Myrothecium, Penicillium, Ramularia, Rhizoctonia, Sclerotinia, and Thielaviopsis.*

TURF APPLICATIONS

Use Talaris 4.5 F AG 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 Talaris 4.5 F AG both preventatively and curatively; it is not phytotoxic on turfgrass. Do not use Talaris 4.5 F AG 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 Talaris 4.5 F AG 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 Talaris 4.5 F AG FL OZ/1000 SQ FT*	REMARKS
Anthracnose <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 Talaris 4.5 F AG 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 Spring Dead Spot <i>(Leptosphaeria korrae)</i>	3.5-5.3	Make two applications at 14-day intervals beginning applications when the disease first appears.
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 Talaris 4.5 F AG 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 ¼ 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 ¼ 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 Argite, LLC ("Argite"), 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.

Argite 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 Argite, and is subject to the inherent risks described above.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARGITE DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARGITE, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF ARGITE IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF ARGITE, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT ARGITE'S ELECTION, THE REPLACEMENT OF THE PRODUCT.

Talaris 4.5 F AG is not manufactured or distributed by United Phosphorus, Inc., seller of Topsin®.

Topsin® is a trademark of Nippon Soda Company, Ltd.

EPA 20150225

TALARISTM

4.5 F AG



FUNGICIDE

Talaris 4.5 F Fungicide contains thiophanate-methyl,
the active ingredient used in Topsin[®].

ACTIVE INGREDIENT:

Thiophanate-Methyl

(Dimethyl [(1,2-phenylene)bis(iminocarbonothioyl)]bis(Carbamate))*

OTHER INGREDIENTS:

TOTAL:

By Wt.

46.2%

53.8%

100.0%

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

Contains 4.5 Lbs. Thiophanate Methyl per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION

SEE BELOW FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

FIRST AID	
If Inhaled	<ul style="list-style-type: none"> • Move person to fresh air • If person is not breathing, call 911 or an ambulance, then give artificial respiration preferably mouth-to-mouth, if possible • Call a poison control center or doctor for further treatment advice
If on Skin or Clothing	<ul style="list-style-type: none"> • Take off contaminated clothing • Rinse skin immediately with plenty of water for 15-20 minutes • Call a poison control center or doctor for treatment advice
If In Eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye • Call a poison control center or doctor for treatment advice
If Swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice • Have person sip a glass of water if able to swallow • Do not induce vomiting unless told to do so by the poison control center or doctor • Do not give anything by mouth to an unconscious person
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 1-844-685-9173 for emergency medical treatment information.	

See Attached Booklet for Use Directions and Additional Precautions

EPA Reg. No. 87373-10

EPA Est. No.19713-GA-002

Net Contents: 2.5 gal

Manufactured for:
Argite, LLC.

1204 Village Market Pl. #273
Morrisville, NC 27560