GENERAL INFORMATION

PRODUCT INFORMATION

Apply Talaris 4.5 F by ground or aerial application equipment using sufficient volume of spray to provide thorough coverage. 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. Continuous agitation is required to keep the ingredients in suspension. Recommended application gallonage and directions are given for each crop.

Talaris 4.5 F 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 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. Do not tank mix with highly alkaline pesticides, such as Bordeaux mixture or lime sulfur.

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. Also, see local State Extension Service recommendations for application schedules.

Use on non-bearing apples, pecans, cherries, and peaches: Talaris 4.5 F 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: 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 make most ground applications 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 use within 30 days of the last application.

Chemigation: See specific directions in this label.

Mode of Action: Talaris 4.5 F 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 must 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 be rotated or tank mixed with different modes of action fungicide chemistry. All products containing thiabendazole, thiophanate ethyl or carbendazim fungicides (benzimidazole fungicides) are NOT considered rotation or tank mix partners. These utilize similar chemistry and mode of action and can contribute to development of disease tolerance.

Should Talaris 4.5 F 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.

CHEMIGATION USE INSTRUCTION

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

GENERAL INFORMATION

Apply Talaris 4.5 F only through the following types of irrigation systems: sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move; flood (basin); furrow; border or drip (trickle) irrigation systems. 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.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide labelprescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

SPECIFIC INFORMATION FOR IRRIGATION SYSTEMS CONNECTED TO A PUBLIC WATER SUPPLY

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.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone (RPZ), backflow preventer, or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back towards the injection pump.

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being drawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump or equivalent, effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

SPECIFIC INFORMATION FOR APPLICATIONS THROUGH SPRINKLER IRRIGATION SYSTEMS

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed,
solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

SPECIFIC INFORMATION FOR FLOOD (BASIN), FURROW, AND BORDER CHEMIGATION

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from back flow if water flow stops.”

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut
down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

FUNGICIDE DILUTION MIX PREPARATION

Clean all chemical mix tank, induction lines, mixing and induction motors and pumps 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 and then the rest of the water. Allow time to mix completely.

APPLICATION INSTRUCTIONS

Observe ALL requirements in the System Requirements section above. Remove scale, pesticide residue, and other foreign matter from the chemical tank and entire injector system. Flush with clean water.

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. [An injection ratio of 1:100 is recommended for greenhouse systems.]
Do not apply more irrigation water per acre than recommended, decreased product performance may occur from the over diluted application.

Determine the treatment rate as indicated in the directions for use for crop and pathogen and measure the intended areas of application.

Prepare a suspension of product in the mix tank or stock bucket. Fill the tank with 1/2 or 3/4 of the desired amount of water. Start agitation and add the required amount of product to the solution along with the remaining volume of water. Use sufficient water to ensure full coverage of foliage. Do not use an amount of water that could lead to excessive runoff from target plants. The amount of water will vary according to the amount of foliage requiring coverage and type of equipment but generally 25 to 100 gallons per acre is adequate.

Chemigation must not be attempted when wind speed favors drift. When system connections or fittings are seen to leak, stop chemigation and repair the component prior to restart. When nozzles are not providing uniform distribution, recalibrate immediately. System must 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.

Repair overhead irrigation systems 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.

Calibrate the sprinkler system 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 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 and the irrigation water, inject with a positive displacement pump into the main line just ahead of a right angle pipe turn (violent water pressure sheer).

After overhead chemigation treatment with Talaris 4.5 F has been completed, do not irrigate treated area 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

Limitations, Restrictions, and Exceptions

PLUMS / PRUNES

INSTRUCTIONS

Initiate applications before bloom, then at petal fall and first 3 cover sprays at 10 to 14 day intervals.

Rate
- 20-30 fl. oz. (in CA use 30 fl. oz.)

Restrictions for use on Plums/Prunes:
- Do not apply more than 80 fl. oz. of this product (2.8 lb. Al) per acre per year.
- Do not apply after shuck split.
- See Fungicide Resistance above.

Method

Broadcast/Foliar Air
Broadcast/Foliar Ground

Pre-Harvest Interval

1 day
Rates

field_rates 0
field_rates 1
field_rates 2

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Restricted Entry Interval

2 days

Timings

Before bloom, then at petal fall and first 3 cover sprays at 10 to 14 day intervals.