

U.S. ENVIRONMENTAL PROTECTION AGENCY

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

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_X Registration __ Reregistration (under FIFRA, as amended)

EPA Reg. Number:	Date of Issuance:
86064-9	3/5/20
Term of Issuance:	
Conditional	

Name of Pesticide Product: ArmorTech TM 462 F

Name and Address of Registrant (include ZIP Code):

Maryanne Geisbush United Turf Alliance c/o Pyxis Regulatory Consulting 4110 136th St. Ct. NW Gig Harbor, WA 98332

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

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

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

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

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

Signature of Approving Official:	Date:
Shagai Bogner	3/5/20
Shaja B. Joyner, Product Manager 20	
Fungicide-Herbicide Branch	
Registration Division 7505P	

EPA Form 8570-6

- 2. You are required to comply with the data requirements described in the DCI identified below:
 - a. Thiophanate-methyl GDCI-102001-1439

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1

- 3. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 86064-9."
- 4. Submit one copy of the final printed label for the record before you release the product for shipment.

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

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

• Basic CSF dated 10/24/2019

If you have any questions, please contact Nathan Mellor by phone at 703-347-8562, or via email at mellor.nathan@epa.gov.

Enclosure

[Note to reviewer: [Text] in brackets denotes optional text.]

[Note to reviewer: {Text} in braces denotes where in the final label text will appear.]

{BOOKLET FRONT PANEL LANGUAGE}

THIOPHANATE-METHYL **FUNGICIDE GROUP** 10

ArmorTech TM 462 F

For control of a broad spectrum of diseases [of] [bedding,] [flowering,] [herbaceous and tropical foliage plants,] [shrubs,] [trees and flowers,] [containerized woody shrubs] [and] [trees] [and] [turfgrass].

ACTIVE INGREDIENT:

Thiophanate-Methyl (Dimethyl [(1,2-phenylene)bis (iminocarbonothioyl)]bis[Carbamate])*	46.2%
OTHER INGREDIENTS:	53.8%
TOTAL:	100.0%
*Also known as Directly (4.4) a phonylobia [2 this allophonata]	

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

KEEP OUT OF REACH OF CHILDREN CAUTION

[See] [inside] [attached] [label] [booklet] [for] [First Aid][,] [additional] [Precautionary Statements][,] [and] [Directions for Use] [including] [and] [Storage and Disposal] [instructions].

EPA Reg. No. 86064-XX

EPA Est. No.

Manufactured For:

United Turf Alliance, LLC 8014 Cumming Highway, Suite 403-282 Canton, GA 30115

Net Contents:

ACCEPTED

03/05/2020

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 86064-9

{LANGUAGE INSIDE BOOKLET}

	FIRST AID
If Inhaled	 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	 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	 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	 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. For medical emergency information concerning this product contact the poison control center at 1-800-222-1222. For information on this product call the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8 AM to 12 PM PST, or at http://npic.orst.edu.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if inhaled or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Harmful if swallowed. Avoid breathing vapor or spray mist. Wash hands 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 Gloves, Nitrile Rubber Gloves \geq 14 mils, or Viton Gloves \geq 14 mils.

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

- Coveralls over long-sleeved shirt and long pants
- Chemical–resistant gloves
- Chemical-resistant footwear plus socks
- Chemical resistant apron

All other mixers, loaders and applicators must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves for all mixers and loaders and for application using hand held equipment
- 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 absorbent 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:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 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.

Shake well before using.

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.

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, including plants, soil or water, is:

- Coveralls over long sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposures

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests nurseries, or greenhouses.

DO NOT enter or allow others to enter treated area until sprays have dried. Keep children and pets out of the treated area until sprays have dried.

PRODUCT INFORMATION

ArmorTech TM 462 F is formulated as a flowable liquid. Apply ArmorTech TM 462 F by ground equipment using sufficient volume of spray to provide thorough coverage. Ensure 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.

DO NOT tank mix with highly alkaline pesticides, including Bordeaux mixture or lime sulfur. **DO NOT** tank mix with copper-containing materials or with highly alkaline pesticides, including Bordeaux mixture or lime sulfur.

No claim of compatibility with other pesticides is implied. 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 directions for application schedules.

Mode of Action: ArmorTech TM 462 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.

RESISTANCE-MANAGEMENT

For resistance management, ArmorTech TM 462 F contains a Group 10 fungicide. Any fungal/bacterial population may contain individuals naturally resistant to ArmorTech TM 462 F and other Group 10 fungicides/bactericides. A gradual or total loss of pest control may occur over time if these fungicides/bactericides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay fungicide/bactericide resistance, take the following steps:

- Rotate the use of ArmorTech TM 462 F or other Group 10 fungicides/bactericides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicide/bactericides from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide/bactericide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide/bactericide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal/bacterial populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or IPM directions for specific crops and pathogens.
- For further information or to report suspected resistance contact United Turf Alliance, LLC. You can also contact your pesticide distributor or university extension specialist to report resistance.

It is advised that ArmorTech TM 462 F be rotated or tank mixed with different modes of action fungicide chemistry. All products containing thiabendazole or thiophanate ethyl 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.

Apply ArmorTech TM 462 F as directed and if 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.

Mixing Instructions

SHAKE WELL BEFORE USING. Some settling may occur during prolonged periods of non-use. High pH environments cause a shortened tank life for diluted product. The buffering of tank water to pH 6-7 prior to the addition of ArmorTech TM 462 F specified. Slowly pour required product into partially filled spray tank (1/2 total volume), then finish filling tank with water, all the while maintaining agitation. Maintain continuous agitation in the spray tank to keep the material in proper suspension. For best results, use spray mixture the same day it is prepared.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Tank Mixing Instructions

ArmorTech TM 462 F is compatible with most commonly used pesticides. If tank mixing with other materials, add products in the following order: water soluble bags, wettable powders, dry flowables, liquid flowables, emulsifiable concentrates, and soluble materials including fertilizers. No claim of compatibility with other products is implied. **DO NOT tank mix with copper-containing materials or highly alkaline pesticides, including Bordeaux mixture or lime sulfur.** Consult the intended tank mix partner product label for appropriate application rates and use instructions. ArmorTech TM 462 F may be applied in conjunction with chemically neutral liquid fertilizers. Avoid application in conjunction with highly alkaline fertilizers, including aqueous ammonia, as this may cause a degradation of the pesticide, resulting in reduced performance.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

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 specified 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 must 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.

CHEMIGATION USE INSTRUCTION

APPLICATION INFORMATION

Apply ArmorTech TM 462 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 label-prescribed 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 if the need arises.

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, discharge the water from the public water system 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, including 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, including 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 including 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, including 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 interfer with mixing or transfer of the pesticide dilution into the irrigation system. Flush with clean water.

Start by filling the mix tank at least $\frac{1}{2}$ full. Begin agitation. Carefully add the required amount of ArmorTech TM 462 F and then the rest of the water. Allow time to mix completely.

APPLICATION INSTRUCTIONS

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.

[Note: An injection ratio of 1:100 is directed for greenhouse systems.]

DO NOT apply more irrigation water per acre than directed, 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 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 must be aware that mixing this product with highly alkaline fertilizers (including 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 ArmorTech TM 462 F into the irrigation water line. Continually monitor calibration to ensure proper application rate per acre. To ensure proper mixing of the suspention of ArmorTech TM 462 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 ArmorTech TM 462 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.

HORTICULTURAL APPLICATIONS

GREENHOUSE, NURSERY, LANDSCAPE, AND INTERIORSCAPE ANNUAL AND PERENNIAL FLOWERS, BEDDING PLANTS, FOLIAGE PLANTS, GROUND COVERS, PLUS DECIDUOUS AND EVERGREEN TREES AND SHRUBS

ArmorTech TM 462 F provides broad-spectrum control of many foliar, stem, and below-ground diseases on a wide range of horticultural plants and commercially important plants grown or maintained under a variety of conditions. ArmorTech TM 462 F is also effective as a pre-plant dip on cuttings and bulbs. For foliar applications, begin treatments when disease first appears or during suspected periods of disease incidence. 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. ArmorTech TM 462 F may be applied as a ground application using handheld, mechanical or motorized spray equipment, or as a chemigation spray or through an applicable sprinkler irrigation system; or as an overhead application where applicable. Use ArmorTech TM 462 F to control listed diseases on non-commercial fruit and nut trees.

Note: ArmorTech TM 462 F 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 (Nephrolepsis exaltata), Boston Fern (Plectranthus australis), and Easter Cactus (Hatiora gaertneri).

RESTRICTIONS:

Not for homeowner use. For use only by certified applicators or those under their immediate supervision. The REI is 12 hours.

DO NOT use fruit, nuts or sap from trees treated with this product as food or feed.

DO NOT apply this product to home orchards or backyard fruit trees after fruit set.

APPLICATION INSTRUCTIONS:

Apply material with properly calibrated, hand held, mechanical or motorized spray equipment or by chemigation through appropriate sprinkler irrigation, flood, or drip systems. Begin applications when disease first appears and repeat at 7-14 day intervals or as needed during the growing season. Use the shortest interval when conditions are unusually favorable for the development of disease. For hand held, mechanical, or motorized applications, mix 8-24 fl. oz. (0.3-0.84 lb. Al) of ArmorTech TM 462 F per 100 gal water (0.5-1.5 teaspoons per gal) and apply as a full coverage spray to drip for the prevention and control of the diseases listed below. Spray volume may range up to 400 gallons of finished spray per acre depending upon plant species and plant growth stage. For applications through irrigations systems, refer to use rates indicated in the foliar application chart. For small volume applications less than 100 gallons, divide directed rate by 16 to get the number of teaspoons of ArmorTech TM 462 F per gal.

PLANT TYPE	INCLUDING 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

RESTRICTION: *DO NOT use fruit or nuts from treated trees as food or feed.

FOLIAR SPRAY

RESTRICTIONS:

All Ornamentals: DO NOT apply more than 85.3 fl. oz. of ArmorTech TM 462 F (3.0 lbs. Al) per acre per application

Cut Flowers Only: DO NOT apply more than 14.2 fl. oz. ArmorTech TM 462 F (0.5 lb Al) per acre per application.

DO NOT apply more than 66.6 gallons (8,533 fl. oz.) ArmorTech TM 462 F (300 lbs. AI) per acre per year. **DO NOT** exceed 52 applications per year.

The minimum retreatment interval is 7 days.

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 (Diplodia pinea)	Shade and ornamental trees	
Ovulinia	Azalea, rhododendron ²	
Entomosporium Leaf Spot	Woody and herbaceous ornamentals	
Fusicaladium Leaf Scab	Woody and herbaceous ornamentals	
Phomopsis Blight	Woody and herbaceous ornamentals	
Pine Tip Blights	Woody ornamentals	
Powdery Mildew Woody and herbaceous ornan		
	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.

Hydraulic Application Mixing Instructions

Add the required amount of ArmorTech TM 462 F 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 ArmorTech TM 462 F per 100 gallons of water for the prevention and control of the diseases shown below.

Special Instructions For Proportional Injectors (e.g. Dosatron, Dosmatic, Anderson, and similar equipment):

Determine the treatment rate for crop and pathogen from the foliar application table below. Determine the injection ratio for the individual system to be used for application. For systems using a 1:100 ratio, measure and add the exact amount of directed material per 100 gallons to each gallon of water in a stock bucket or tank. For systems using a 1:200 ratio, multiply the directed amount per 100 gallons by 2. For systems

²Begin treatment as flowers open. Addition of a spray surfactant to the spray mixture improves distribution of the spray on hard-to-wet plants including roses.

using a 1:50 ratio, divide the directed amount per 100 gallons added by 2. For systems using 1:16 ratio, divide the directed amount per 100 gallons by 6. Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute suspension per unit time. An injection ratio of 1:100 is directed for most greenhouse and nursery systems.

FOLIAR DISEASES

FULIAR DISEASES	CONCENTRATION	T
DISEASE(S) CONTROLLED	ONCENTRATION OF ARMORTECH TM 462 F	APPLICATION INSTRUCTIONS
	462 F FL OZ/100 GALS	
Anthracnose (Colletotrichum)	10.75-20 (0.376-0.7 lb. Al)	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 (Diplocarpon rosae)	10.75-20 (0.376-0.7 lb. Al)	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 (Monlinia, Sclerotina, Whetzellinia)	10.75-20 (0.376-0.7 lb. Al)	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 (0.376-0.7 lb. Al)	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. DO NOT use fruit from treated crabapple or pear trees for food purposes.
Leaf Spots and Blights caused by: Ascochyta, Blumeriella, Botrytis, Cercospora, Coccomyces, Corynespora, Curvularia, Didymellina, Entomosporium, Fabraea, Fusarium, Ramularia, Rhizoctonia, Marssoninia, Mycosphaerella, Myrothecium, Phoma, Physalaspora, Schizothyrium, Septoria, Sphaceloma	10.75-20 (0.376-0.7 lb. AI) (10-14.5; California Only) (0.35-0.51 lb. AI)	Make applications when disease symptoms first appear. Repeat every 7 to 14 days during disease period. Rotations and/or tank mix combinations with chlorothalonil or mancozeb can be used.
Ovulinia Blight	7.25-20 (0.25375-0.7 lb. AI)	Apply as flowers open. Repeat every 7 to 14 days during disease period.
Powdery Mildews Erysiphe, Microsphaera, Phyllactinia, Podosphaera, Oidium, Sphaerotheca	10-20 (0.35-0.7 lb. Al)	Apply when disease first appears and repeat application every 7 to 14 days. Rotations with other effective products can be used. Tank mix combinations with mancozeb or triadimefofon can be utilized.
Rust Diseases caused by: Puccinia, Gymnosporangium, Uromyces	10.75-20 (0.376-0.7 lb. Al)	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 Sphaeropsis sapinae, Diplodia pinea	14.5-20 (0.51-0.7 lb. AI)	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 14 days later. Ensure thorough coverage.

DISEASE(S) CONTROLLED	CONCENTRATION OF ARMORTECH TM 462 F FL OZ/100 GALS	APPLICATION INSTRUCTIONS
Twig Blights, Cankers, and Diebacks Diaporthe, Kabatina, Phoma, Phomopsis	14.5-20 (0.51-0.7 lb. AI)	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 ArmorTech TM 462 F 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. (0.26-0.7 lb. Al) of ArmorTech TM 462 F per 100 gallons of water. Apply as a drench or directed spray using hand held, mechanical, or motorized spray equipment, or as a chemigation drench or directed spray using applicable sprinkler irrigation systems, after seeding or sticking of cuttings (8 fl. oz.; 0.28 lb. Al) or after transplanting (12-16 fl. oz.; 0.42-0.56 lb. Al) to propagation beds, containers, pots, trays, or nursery or landscape beds at a rate to thoroughly soak the growing media through the root zone. A guide is 0.25-3.0 pints of finished mixture per sq. ft. depending on the media type and depth (about 4 fl. oz. (0.1 lb. Al) per 4 inch pot or 8 fl. oz. (0.28 lb. Al) per 6 inch pot). Make repeat applications at 21- to 28-day intervals depending on disease presence and conditions for disease development.

RESTRICTIONS:

DO NOT apply more than 20 fl. oz. (0.7 lb. Al) per acre per application.

DO NOT exceed 66.6 gal. (8,533 fl. oz.; 300 lbs. AI) per acre per year from all thiophanate-methyl containing products.

DO NOT exceed 17 applications per year.

The minimum retreatment interval is 21 days.

DO NOT apply this product to plug trays or seedling flats at time of seeding.

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

Soil Diseases Controlled: Stem, Crown, and Root Rots caused by *Botrytis, Cylindrocladium, Fusarium, Gliocladium, Myrothecium, Penicillium, Ramularia, Rhizoctonia, Sclerotinia,* and Black Root Rot *Thielaviopsis*.

Note: Pythium, Phytophthora and Cylindrocladium spathiphylli are not controlled by ArmorTech TM 462 F. Tank mix combinations with metalaxyl, mefenoxam, etridiazole, fosetyl-Al, or mono and dipotassium salts of phosphorous acid or propamocarb are required for the control of Pythium and Phytophthora.

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.

Note: Follow accepted hygiene practices to minimize the introduction and spread of water borne bacterial and water mold fungal diseases.

Application Concentration and Dipping Time

Plants or Cuttings: Use 14.5 to 20 fl. oz. (0.51-0.7 lb. Al) of ArmorTech TM 462 F per 100 gallons of water. Immerse plants or cuttings for 10 to 15 minutes, remove, and allow to drain and dry.

Note: 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. (0.51-0.7 lb. Al) of ArmorTech TM 462 F per 100 gallons of water or two teaspoons of ArmorTech TM 462 F 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 including but not limited to Caladium, Easter Lily, Tulip, Gladiolus, Daffodil, Iris.

Diseases Controlled: Botrytis, Cylindrocladium, Fusarium, Gliocladium, Myrothecium, Penicilium, Ramularia, Rhizoctonia, Sclerotinia, and Thielaviopsis.

BACKYARD FRUIT AND NUT TREES[*]

RESTRICTIONS:

[*Not approved for this use in California]

DO NOT apply more than 19.5 fl. oz. (0.7 lb. Al) per acre per application.

DO NOT apply more than 59 fl. oz. (2.1 lbs. Al) per acre per year, except pistachios.

For pistachios, **DO NOT** apply more than 39 fl. oz. (1.4 lbs. Al) per acre per year.

DO NOT apply more than 3 applications per year, expect pistachios.

For pistachios, **DO NOT** apply more than 2 applications per year.

The minimum retreatment interval is 7 days.

Certified applicators:

If this product is used on a tree producing fruits or nuts which will be used for food or feed:

- **DO NOT** apply to home orchards/backyard fruit or nut trees after fruit or nut set.
- **DO NOT** apply to fruit or nut trees other than almond, apple, pear, pecan, pistachio, apricot, cherry, nectarine, peach, plum or prune.
- For bearing fruit and nut trees, use the following application rates. (For a list of diseases controlled see the table above under Foliar Application).

Crop	Application Rate	Yearly Maximum
	Fluid Ounces product/Acre	Fluid Ounces product/Acre/year
Almond, Apple, Pear, Pecan,	19.5	59
Apricot, Cherry, Nectarine,	(0.7 lb a.i./A)	(2.1 lbs. a.i./A/year)
Peach, Plum or Prune		
Pistachio	19.5	39
	(0.7 lb a.i./A)	(1.4 lbs. a.i./A/year)

VEGETABLE TRANSPLANTS (Greenhouse and Nursery Use Only)[*]:

Vegetable Transplants	Diseases Controlled	Rate of ArmorTech TM 462 F	Application Instructions
Beans, dry and succulent including: Lima bean, Snap	Anthracnose Colletotrichum	29-39 fl. oz./Acre ¹ (1-1.4 lbs. AI)	For one application: Apply when 100% of plants have
bean, Kidney bean, Mung bean, Navy bean, Pinto bean, Wax bean, Broad bean, Fava bean,	Gray Mold <i>Botrytis</i>		at least one open bloom or when conditions are favorable for disease development.

Vegetable Transplants	Diseases	Rate of	Application Instructions
	Controlled	ArmorTech TM	
		462 F	
Asparagus bean, Blackeyed	White Mold		
pea, Cowpea, Sweet lupine,	Sclerotinia		or
White lupine, White sweet		or	Fan manifesta annii antiana
lupine, Grain lupine, Chick pea, Garbanzo bean		19-29 fl. oz./Acre ²	For multiple applications: Make the first application
pea, Garbarizo bearr		(0.67-1 lb. Al)	when 10% to 30% of plants
		(0.07 1 15.711)	have at least one open
			bloom and follow with
			sequential applications on a
			4 to 7 day interval. Apply
			prior to the development of
			disease for best results.
		e on Beans, dry and s	succulent:
	[*Not approved for the		
			. Al) per acre per application.
		than 80 fl. oz. (2.8 lbs	
		lowest rate (19 fl. oz.)	the highest rate (39 fl. oz.) or
			for succulent beans and 28
	days for dry beans a		ior cascaroni scario ana 20
			cculent beans and lima
	beans and 28 days f	or dry beans.	
		l vegetable production.	
CUCURBITS (Cantaloupe,	Anthracnose[*]	10 fl. oz. /Acre ³	Begin applications when
Casaba, Cucumbers,	Colletotrichum	(0.35 lb. AI)	plants begin to run or when
Melons, Pumpkins, Summer and Winter Squash, and	Gummy Stem Blight[*]		disease first appears, and repeat at 7 to 14 day
Watermelons)	Didymella		intervals.
Watermelons)	Powdery		intervals.
	Mildew[*]		For Target Spot use at 7
	Erysiphe,		day intervals.
	Sphaerotheca,		
	Podosphaera		
	Target Spot[*]		
	Corynespora		
1	Belly Rots[*]	10 fl. oz./Acre ³	Apply in sufficient volume to
	Rhizoctonia, Fusarium	(0.35 lb. AI)	allow runoff to the soil. Will
	Rhizoctonia,		
	Rhizoctonia, Fusarium Restrictions for use	(0.35 lb. Al) e on Cucurbits:	allow runoff to the soil. Will not control <i>Pythium</i> or
	Rhizoctonia, Fusarium Restrictions for use [*Not approved for the	(0.35 lb. AI) e on Cucurbits: nis use in California]	allow runoff to the soil. Will not control <i>Pythium</i> or <i>Phytopthora</i> .
	Rhizoctonia, Fusarium Restrictions for use [*Not approved for the pool not apply more	(0.35 lb. AI) e on Cucurbits: his use in California] than 10 fl. oz. (0.35 lb	allow runoff to the soil. Will not control <i>Pythium</i> or <i>Phytopthora</i> . Al) per acre per application.
	Rhizoctonia, Fusarium Restrictions for use [*Not approved for the polymore	(0.35 lb. AI) e on Cucurbits: his use in California] than 10 fl. oz. (0.35 lb) than 60 fl. oz. (2.1 lbs)	allow runoff to the soil. Will not control <i>Pythium</i> or <i>Phytopthora</i> .
	Rhizoctonia, Fusarium Restrictions for use [*Not approved for the polymore of	(0.35 lb. AI) e on Cucurbits: his use in California] than 10 fl. oz. (0.35 lb) than 60 fl. oz. (2.1 lbs) application timings.	allow runoff to the soil. Will not control <i>Pythium</i> or <i>Phytopthora</i> . Al) per acre per application. Al) per acre per year from
	Rhizoctonia, Fusarium Restrictions for use [*Not approved for the policy more policy more any combination of a poly more any combination of a policy more policy	(0.35 lb. Al) e on Cucurbits: his use in California] than 10 fl. oz. (0.35 lb) than 60 fl. oz. (2.1 lbs) application timings. than 6 applications pe	allow runoff to the soil. Will not control <i>Pythium</i> or <i>Phytopthora</i> . Al) per acre per application. Al) per acre per year from
	Rhizoctonia, Fusarium Restrictions for use [*Not approved for the DO NOT apply more any combination of a DO NOT apply more The re-treatment into	(0.35 lb. Al) e on Cucurbits: his use in California] than 10 fl. oz. (0.35 lbethan 60 fl. oz. (2.1 lbstapplication timings. than 6 applications per erval is 7 days.	allow runoff to the soil. Will not control <i>Pythium</i> or <i>Phytopthora</i> . Al) per acre per application. Al) per acre per year from

[*Not for this use in California]

1. Apply, for example, in 50-200 gallons of water per acre. In volumes of water below 50 gallons, use a minimum of 2.1 pounds active ingredient per acre. If more than 200 gallons of water per acre are required for good plant coverage, apply a maximum rate of 2.8 pounds active ingredient per

- acre. For example, if 200 gallons of water are required, use 1.4 pounds active ingredient per 100 gallons.
- 2. Apply, for example, in 50-200 gallons of water per acre. In volumes of water below 50 gallons, use a minimum of 1.4 pounds active ingredient per acre. If more than 200 gallons of water per acre are required for good plant coverage, apply a maximum rate of 2.1 pounds active ingredient per acre. For example, if 200 gallons of water are required, use 1.05 pounds active ingredient per 100 gallons.
- 3. Apply, for example, in 50-200 gallons of water per acre. In volumes of water below 50 gallons, use a minimum of 0.7 pounds active ingredient per acre. If more than 200 gallons of water per acre are required for good plant coverage, apply a maximum rate of 0.7 pounds active ingredient per acre. For example, if 200 gallons of water are required, use 0.35 pounds active ingredient per 100 gallons.

TURF APPLICATIONS

Use ArmorTech TM 462 F against certain foliar and soil diseases for use on all turf types including golf course greens, tees and fairways, athletic fields, cemeteries, parks, and commercial and home lawns. Use ArmorTech TM 462 F both preventatively and curatively; it is not phytotoxic on turfgrass.

For best results use spray mixture the same day it is prepared. Spray uniformly over the area to be treated with a properly calibrated sprayer. Apply after mowing or avoid mowing twelve hours after application. Apply specified amounts in sufficient water to obtain thorough coverage, (2-4 gallons per 1,000 square feet suggested). When treating golf greens, always treat aprons.

Application Instructions: Apply material with properly calibrated hand held, mechanical or motorized spray equipment or by chemigation through appropriate sprinkler irrigation systems. Spray uniformly over the area to be treated. Apply directed amounts in sufficient water to obtain thorough coverage of treatment area (2-4 gal per 1,000 sq. ft. is suggested). When treating golf greens, always treat aprons. Use the highest directed rate under conditions of severe disease pressure. For best results, apply after mowing or avoid mowing twelve hours after application. For root pathogens, lightly water the treatment area to move the fungicide into the active root zone with one to two tenths inch of water. Excessive irrigation may move application below active root zone and reduce application effectiveness. Green design and drainage will influence irrigation practices. When tank mixing with contact action fungicides for foliar diseases, allow applications to dry on leaf surfaces. Normal watering may proceed after sprays have dried.

Mixing Instructions: Add the required amount of ArmorTech TM 462 F 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 (including but not limited to Bentgrasses, Bermudagrasses, Bluegrasses, Fescues, Ryegrasses, St. Augustine grasses and Zoysia grasses) or their mixtures.

RESTRICTIONS:

- DO NOT use ArmorTech TM 462 F on turf being grown for sale or other commercial uses including sod.
- Not for homeowner use.
- For use only by certified applicators and those under their direct supervision.
- DO NOT apply with fixed wing or rotary aircraft.
- DO NOT graze animals on treated turf.
- DO NOT feed clippings to livestock or poultry.
- DO NOT exceed the amounts per acre or reduce the re-treatment interval indicated in the table below.

Maximum Individual Application Rates and Minimum Re-Treatment Intervals DO NOT exceed the amounts per acre or reduce the re-treatment interval indicated below.

Use Site	Maximum Application rate of ARMORTECH TM 462 F	Minimum Re- Treatment Interval	Restrictions/ Limitations
Residential or Public Areas	1 ³ ⁄ ₄ fl. oz. / 1,000 sq. ft. (0.06125 lb. AI)	14 days	
Golf Course Tees, Greens, Aprons	5 ⅓ fl. oz. / 1,000 sq. ft. (0.186 lb. AI)	14 days	
Golf Course Fairways – except Florida	3 ½ fl. oz. / 1,000 sq. ft. (0.122 lb. AI)	14 days	Excludes Florida
Golf Course Fairways – Florida Only	1 ¾ fl. oz. / 1,000 sq. ft. (0.06125 lb. AI)	14 days	Florida Only.

Maximum Yearly Application Rates
DO NOT exceed the following amounts of product per Acre per year.

Use Site	Maximum Gallons	Fluid Ounces	Restrictions/
	ARMORTECH TM 462	ARMORTECH TM 462	Limitations
	F per Acre per Year	F per 1,000 sq. ft.	
Residential or Public	2.42 Gallons	7 fl. oz.	4 Applications per year
Areas	(10.9 lbs. Al/A/Year)	(0.245 lb. AI)	
Golf Course	4.84 Gallons	14 ¼ fl. oz.	
Tees, Greens, Aprons	(21.8 lbs. Al/A/Year)	(0.499 lb. AI)	
Golf Course	1.21 Gallons	3 ½ fl. oz.	Excludes Florida
Fairways – except	(5.4 lbs. Al/A/Year)	(0.122 lb. AI)	
Florida			
Golf Course	0.60 Gallons	1 ¾ fl. oz.	Florida Only
Fairways – Florida	(2.7 lbs. Al/A/Year)	(0.06125 lb. AI)	
Only			

DISEASE(S) CONTROLLED	RATE OF ARMORTECH TM 462 F FL OZ/1000 SQ FT*	APPLICATION INSTRUCTIONS
Anthracnose (Colletotrichum graminicola)	2-3.5 (0.07-0.122 lb. AI) (3.5-5.3)** (0.122-0.186 lb. AI)	For prevention in historic areas of disease pressure, apply twice at 14 day intervals when soil temperature reaches 60°F. For curative control, apply when disease first appears. Make additional applications at 14-day intervals as needed. Rotations and/or tank mix combinations with chlorothalonil or triadimefon can be utilized.
Bermudagrass Decline (Gaeumannomyces graminis var. graminis) Take-All-Patch (Gaeumannomyces graminis var. avenae)	3.5-5.3 (0.122-0.186 lb. AI)	Apply in mid-July or when disease symptoms first appear and repeat at 14 day intervals for suppression. Use higher rates under most severe disease expression. Water treatment into active root zone. Follow proper agronomic directions to maintain plant vigor.
Coprinus Snow Mold (Coprinus psychromorbidus)	3.5-5.3 (0.122-0.186 lb. AI)	Apply 2 treatments at 21 day intervals in late Fall to early Winter, with the last application made just prior to first permanent snow cover.

DISEASE(S) CONTROLLED	RATE OF ARMORTECH TM 462 F FL OZ/1000 SQ FT*	APPLICATION INSTRUCTIONS
		Rotations and/or tank mix combinations with PCNB can be utilized.
Dollar Spot (Moellerodiscus, Lanzia, Sclerotinia homeocarpa) Copper Spot (Gloeocercospora sorghi) Large Brown Patch and Zoysia Patch (Rhizoctonia solani) Ascochyta Leaf Blight (Ascochyta) Fusarium Patch (Fusarium nivale) Red Thread (Laetisaria fuciformis)	2-3.5 (0.07-0.122 lb. AI)	Apply when disease first appears. Make additional applications at 14-day intervals as needed. Rotations and/or tank mix combinations with chlorothalonil, iprodione, or mancozeb can be utilized.
Pink Snow Mold (Microdochium nivale)	2-5.3 (0.07-0.186 lb. AI)	Apply ArmorTech TM 462 F in late Fall to early Winter before turf has stopped all growth activity. A second application may be used in combination with chlorothalonil, PCNB, or thiram at specified rates before snow cover or during Spring thaw.
Rusts (Puccinia, Uromyces)	3.5-5.3 (0.122-0.186 lb. AI)	Apply at 14 day intervals when disease first appears. Rotations and/or tank mix combinations with chlorothalonil or mancozeb are specified.
Gray Leaf Spot (Pyricularia grisea)	3.5-5.3 (0.122-0.186 lb. Al)	Apply preventative application before expected period of disease development. Continue at 14-day intervals.
Summer Patch (Magnaporthe poae)	3.5-5.3 (0.122-0.186 lb. AI)	For preventative treatment, make 3 applications at 21-day intervals beginning in late April or early May. Rotations and/or tank mix combinations may be used as part of the three application program. Water product into the root zone thoroughly after application. For suppression, apply at 14-day intervals, beginning applications when the disease first appears.
Bentgrass Dead Spot (Ophiosphaerella agrostis)	3.5-5.3 (0.122-0.186 lb. AI)	For prevention, apply in early June or based upon local Extension Service directions. Apply at 14 day intervals. Rotations and/or tank mix combinations may be used for season long disease prevention.
Fusarium Blight (Fusarium roseum, F. triticum)	3.5-5.3 (0.122-0.186 lb. AI)	Apply when disease first appears at 14 day intervals.

DISEASE(S) CONTROLLED	RATE OF ARMORTECH TM 462 F FL OZ/1000 SQ FT*	APPLICATION INSTRUCTIONS
Cool Season Brown Patch (Rhizoctonia cerealis) Necrotic Ring Spot and Spring Dead Spot (Leptosphaeria korrae)	3.5-5.3 (0.122-0.186 lb. AI)	For prevention, apply in Fall before turf has stopped all growth activity. Apply second application in early Spring when soil temperatures reach 55-60°F or when disease first appears. For curative action, apply when disease first appears in early Spring and continue at 14 day intervals. Water treatment into active root zone.
Leaf Spot (<i>Drechslera</i>) Leaf, Crown, and Root Diseases (<i>Bipolaris</i> , Curvularia, Exserohilum)	3.5-5.3 (0.122-0.186 lb. AI)	Apply when disease first appears and make applications at 14 day intervals as needed. Rotate and/or tank mix combinations with chlorothalonil, iprodione, or mancozeb under severe conditions.
Stripe Smut (Ustilago striiformis)	3.5-5.3 (0.122-0.186 lb. AI)	Apply at 14-day intervals when disease first appears. For prevention, apply in the spring and in the fall.

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

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.

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 container. **DO NOT** reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

[(Nonrefillable container ≤ 5 gallons): 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 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.]

[(Nonrefillable > 5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.]

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

^{**}Use the 3.5-5.3 fl. oz. (0.122-0.186 lb. AI) rate for curative response to Basal Stem Anthracnose.

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 United Turf Alliance, LLC, and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

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

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, UNITED TURF ALLIANCE, LLC 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, UNITED TURF ALLIANCE, LLC, 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 UNITED TURF ALLIANCE, LLC 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 UNITED TURF ALLIANCE, LLC, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT UNITED TURF ALLIANCE, LLC'S ELECTION, THE REPLACEMENT OF THE PRODUCT.

[EPA approval date]

[Note to reviewer: [Text] in brackets denotes optional text.]

[Note to reviewer: {Text} in braces denotes where in the final label text will appear.]

{LANGUAGE ON LABEL AFFIXED TO CONTAINER}

THIOPHANATE-METHYL GROUP 10 FUNGICIDE

ARMORTECH TM 462 F

ACTIVE INGREDIENT:

Thiophanate-Methyl (Dimethyl [(1,2-phenylene)bis	
(iminocarbonothioyl)]bis[Carbamate])*	46.2%
OTHER INGREDIENTS:	<u>53.8%</u>
TOTAL:	100.0%

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

CAUTION

FIRST AID		
If Inhaled	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	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	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	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 pro	duct container or label with you when calling a poison	

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For medical emergency information concerning this product contact the poison control center at 1-800-222-1222. For information on this product call the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8 AM to 12 PM PST, or at http://npic.orst.edu.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if inhaled or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Harmful if swallowed. Avoid breathing vapor or spray mist. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

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.

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 container. **DO NOT** reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

[(Nonrefillable container ≤ 5 gallons): 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 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.]

[(Nonrefillable > 5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.]

[See] [inside] [attached] [label] [booklet] [for] [additional] [Precautionary Statements][,] [and] [Directions for Use].

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EPA Est. No.

Manufactured For:

United Turf Alliance, LLC 8014 Cumming Highway, Suite 403-282 Canton, GA 30115

Net Contents:

[EPA approval date]