



SPECIMEN LABEL

GROUP **1** FUNGICIDE

TM 4.5F SELECT™

FUNGICIDE

**Contains thiophanate-methyl, the active ingredient used in Topsin 4.5FL.
TM 4.5F Select is not manufactured or distributed by Cerexagri.**

ACTIVE INGREDIENT:	% BY WT.
Thiophanate-methyl: (dimethyl[(1,2-phenylene)-bis(iminocarbonothioyl)]bis[carbamate])	46.2%
OTHER INGREDIENTS:	53.8%
TOTAL:	100.0%

Contains 4.5 pounds of thiophanate-methyl per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION

See inside booklet for complete First Aid, Precautionary Statements, Directions For Use, and Storage and Disposal.

EPA Reg. No. 89442-14

AD111813T0

PRIME SOURCE



Albaugh®
Your Alternative™

Manufactured For:
Prime Source, a division of Albaugh LLC
1525 NE 36th Street
Ankeny, IA 50021

FIRST AID	
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 a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
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 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 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.
<p>Have the product label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378, Mon.-Fri., 8:00 a.m. to 12:00 p.m. Pacific Time (NPIC Website: www.npic.orst.edu). Outside of these times, call your poison control center at 1-800-222-1222.</p>	

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION

Harmful if swallowed, absorbed through skin, or inhaled. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water, after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminate, butyl rubber (≥ 14 mils), neoprene rubber (≥ 14 mils) and polyethylene. If you want more options, follow the instructions for category C on an EPA chemical resistance category selection chart.

Handlers mixing, loading, and applying the product as a dip (including application of product in kaolinite clay to conifer seedling roots) must wear:

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

All other mixers, loaders, and applicators must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves
- Chemical-resistant apron for mixers, loaders, and other handlers exposed to the concentrate

User Safety Requirements: Follow manufacturer's instructions for cleaning/maintaining personal protective equipment, 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. Do not reuse them.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- 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.

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 the WPS.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, 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 wash water.

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.

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

AGRICULTURAL USE REQUIREMENTS

Use this product 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 intervals. 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 for each crop is listed in the directions for use associated with each crop.

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water is:

- Coveralls 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 exposure

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 (WPS) 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 until sprays have dried.

PRODUCT INFORMATION

Shake well before using.

Apply TM 4.5F Select with ground or aerial equipment using sufficient volume of spray to provide thorough coverage. Add required amount of TM 4.5F Select to partially filled tank agitated by mechanical or hydraulic means and then add remaining required amount of water. Continuous agitation is required to keep the material in suspension. Do not tank mix with highly alkaline pesticides such as Bordeaux mixture or lime sulfur. No claim of compatibility with other pesticides is implied. Use the higher rate under conditions of severe disease pressure. Also, see local State Extension Service instructions for application schedules.

Use the fl. oz./acre rate for concentrate sprayers (less than 400 gallons on apples, less than 300 gallons on stone fruit). Use the fl. oz./100 gals. rate for dilute ground application. For aerial applications, use a minimum of 5 gals./acre for row crops; use a minimum of 10 gals./acre for tree crops. For ground applications, use a minimum of 20 gals./acre for row crops and 30 gals./acre for tree crops. Higher spray volume will result in better coverage and better disease control.

Chemigation instructions follow the **RESISTANCE MANAGEMENT** section of this labeling. Do not apply through any irrigation system unless these instructions are followed.

In California, chemigation is only allowed for the following crops: beans, cucurbits (cantaloupe, casaba, cucumbers, melons, pumpkins, squash, and watermelons), peanuts, soybeans, strawberries, and sugar beets.

When an adjuvant is to be used with this product, Prime Source, a division of Albaugh LLC suggests the use of a Chemical Producers and Distributors Association certified adjuvant.

RESISTANCE MANAGEMENT

To avoid the development of tolerant or resistant strains of fungi, tank mix TM 4.5F Select with a fungicide of different chemistry and/or alternate a fungicide of different chemistry with TM 4.5F Select at each application. DO NOT USE PRODUCTS CONTAINING THIABENDAZOLE OR OTHER PRODUCTS CONTAINING THIOPHANATE-METHYL IN COMBINATION OR IN ROTATION WITH TM 4.5F SELECT. If after using TM 4.5F Select as directed and the treatment is not effective, a tolerant or resistant strain of fungi may be present. Discontinue the use of TM 4.5F Select for at least one season. Do not use products containing thiabendazole as substitutes for TM 4.5F Select, as they are of similar chemistry and will contribute to the development of resistance. As long as these precautions are followed, TM 4.5F Select can be useful for disease control even if resistant strains are present.

CHEMIGATION INSTRUCTIONS

Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move, or drip (mini-micro sprinklers, strip tubing, trickle) irrigation systems. Do not apply this product through any other type of irrigation system. 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 Cooperative Extension Service specialists, equipment manufacturers, or other experts.

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.

Do not connect the chemigation system to any public water system. Public water system means a system for the provision of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

SYSTEM REQUIREMENTS

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

- 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 backflow.
- 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.

INSTRUCTIONS FOR SPRINKLER (OVERHEAD) IRRIGATION, DRIP (TRICKLE) IRRIGATION

Observe the requirements in the **SYSTEM REQUIREMENTS** section above. Do not apply when wind speed favors drift beyond the area intended for treatment.

Apply TM 4.5F Select only through systems containing anti-siphon and check valves designed to prevent water source contamination or overflow of the mix tank and containing interlocking controls between the metering device and the water pump to ensure simultaneous shut off.

Maintain a gentle continuous agitation in mix tank during mixing and application to ensure a uniform suspension.

Greater accuracy in calibration and distribution will be achieved by injecting a large volume of a more dilute suspension per unit time.

Application of more than the specified quantities of irrigation water per acre can result in decreased product performance.

Do not apply when wind speed favors drift, when system connections or fittings leak, when nozzles do not provide uniform distribution, or when lines containing the product cannot be flushed and must be dismantled and drained. In a center pivot system, block the nozzle set nearest the well/pivot/injection unit to prevent spray being applied to this area.

Where sprinkler distribution patterns do not overlap sufficiently, unacceptable disease control may result.

Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water.

Apply TM 4.5F Select in conjunction with chemically neutral liquid fertilizers. Avoid application in conjunction with highly alkaline fertilizers such as aqueous ammonia, as degradation of the pesticide could result in reduced performance.

Check local restrictions and requirements regarding sprinkler irrigation applications, as they vary from State to State.

SPRAY PREPARATION

Remove scale, pesticide residues, and other foreign matter from the chemical tank and entire injector system. Flush with clean water. Prepare a suspension of TM 4.5F Select in a mix tank. Fill the tank with $\frac{1}{2}$ or $\frac{3}{4}$ the desired amount of water. Start mechanical or hydraulic agitation. Slowly add the required amount of TM 4.5F Select and then the remaining volume of water.

APPLICATION INSTRUCTIONS

Sprinkler Irrigation-Notes

Observe all **SYSTEMS REQUIREMENTS** and **APPLICATION INSTRUCTIONS**. Set sprinkler system to deliver 0.4 inches of water per acre. Volumes of water higher than this could reduce efficacy. Start sprinkler and then uniformly inject the suspension of TM 4.5F Select into the irrigation water line so as to deliver the desired rate per acre. Inject the suspension of TM 4.5F Select with a positive displacement pump into the main line ahead of a right angle to ensure adequate mixing.

NOTE: When treatment with TM 4.5F Select has been completed, do not irrigate the treated area for 24- to 48-hours to prevent washing the chemical off the crop.

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

Observe all **SYSTEM REQUIREMENTS** and **APPLICATION INSTRUCTIONS**.

Pre-Harvest Interval (PHI)

The required days between last application and harvest are given in the **REMARKS** section for each crop.

REI = Restricted-Entry Interval

FOR USE ON CONIFERS
(Not for use in California)

CROP	DISEASES	MAXIMUM APPLICABLE RATE PER ACRE	RATE, MINIMUM GALLONAGE	REMARKS
CONIFERS Pine Austrian Red Scots Christmas Trees	Tip Blight (<i>Diplodia</i>)	60 fl. oz.	20 fl. oz. product per acre applied in spray solution at a rate of 100 gallons of spray per acre	Apply at bud break. Repeat 10 to 14 days later, just before needles emerge from sheath; repeat again 10 to 14 days after needle emergence.
Fir Douglas	Swiss Needle Cast (<i>Phaenocarpa</i>) Rhabdocone Needle Cast	100 fl. oz.	20 fl. oz. product per acre applied in spray solution at a rate of 50 gallons of spray per acre	Apply initially in early May. Repeat at 4-week intervals.

- **Pine:** Do not apply more than 60 fl. oz./acre of TM 4.5F Select per year.
- **Fir:** Do not apply more than 100 fl. oz./acre of TM 4.5F Select per year.
- Add a spreader-sticker to improve coverage.
- Use minimum gallonage with mist-blower types of sprayers and higher gallonage with conventional sprayers.
- Do not graze livestock in treated areas.
- The REI is 12 hours.

CONIFERS (Seedling treatment) Longleaf	Brown Needle Blight (<i>Scirrhia</i>)	---	1.25 fl. oz. per 9.5 oz. of dry kaolinite clay for seedling roots	Wet seedling roots in clean water, then apply TM 4.5F Select / kaolinite mixture to wet roots.
Loblolly Longleaf Slash	Fusarium and Rhizoctonia Root Rot	---	2 fl. oz. / 50 oz. kaolinite clay, plus enough water to make a slurry	Thoroughly cover seedling roots with TM 4.5F Select / kaolinite slurry.

- Do not apply mixture to seedling foliage.
- During treatment, avoid excessive drying of roots or exposure to temperatures greater than 90°F or less than 32°F.
- TM 4.5F Select does not control *Pythium* or *Phytophthora*.
- The REI is 12 hours.

HORTICULTURAL APPLICATIONS
GREENHOUSE, NURSERY, AND LANDSCAPE
REI-12 hours

TM 4.5F Select 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 TM 4.5F Select 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 TM 4.5F Select 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: TM 4.5F Select 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 (*Neprolepis 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
Anthracoese	Woody ornamentals, shade trees ¹
Ascochyta Blight	Herbaceous ornamentals
Black Spot	Roses
Botrytis (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

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

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

FOLIAR SPRAY APPLICATIONS

APPLICATION RESTRICTIONS

Maximum Single Application Rates:

Ornamentals: Do not exceed the maximum single application rate of 85.3 oz. TM 4.5F Select 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. TM 4.5F Select per acre (0.5 lb. thiophanate-methyl active ingredient per acre).

Seasonal Maximum Application:

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

Hydraulic Application Mixing Instructions

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

FOLIAR DISEASES

DISEASE(S) CONTROLLED	CONCENTRATION OF TM 4.5F SELECT 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>Monilinia</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>Marssonina</i> , <i>Mycosphaerella</i> , <i>Myrothecium</i> , <i>Phoma</i> , <i>Physalospora</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 sapinea</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 TM 4.5F Select 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 TM 4.5F Select 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 1,600 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 pts./sq. ft. Rate
4 inch	2 fl. oz.	---
5 inch	2.5 fl. oz.	---
6 inch	---	6.5 fl. oz.
7 inch	---	8.5 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 2½ 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*, *Cylindrocladium*, *Fusarium*, *Gliocladium*, *Myrothecium*, *Penicillium*, *Ramularia*, *Rhizoctonia*, *Sclerotinia*, and *Thielaviopsis*.

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

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 TM 4.5F Select 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 TM 4.5F Select per 100 gallons of water or two teaspoons of TM 4.5F Select 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 heat 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, and Iris.

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

TURF APPLICATIONS

Use TM 4.5F Select 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 TM 4.5F Select both preventatively and curatively; it is not phytotoxic on turfgrass. Do not use TM 4.5F Select 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 TM 4.5F Select 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 TM 4.5F SELECT FL. OZ./1,000 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 homoeocarpa</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 TM 4.5F Select 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 TM 4.5F Select 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 1½ to 2½ gallons per 1,000 sq. ft. of turf area. When treating golf course greens, always treat aprons and approaches to golf greens.

SITE	MAXIMUM SINGLE APPLICATION RATE PER FL. OZ./1,000 SQ. FT.	MAXIMUM SEASONAL APPLICATION RATE FL. OZ./1,000 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 or cleaning of equipment.

PESTICIDE STORAGE: Store in original container in dry area. Do not store in a manner where cross-contamination with other pesticides, fertilizers, food or feed could occur. If spilled during storage or handling, absorb with sand or other inert material and dispose of absorbent in accordance with the Pesticide Disposal instructions listed below.

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 (five gallons or less): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container 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. If recycling is not available, puncture or dispose of in a sanitary landfill or by incineration or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

LIMITATION OF WARRANTY AND LIABILITY

Read the entire directions for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following **CONDITIONS, DISCLAIMER OF WARRANTIES** and **LIMITATIONS OF LIABILITY**.

CONDITIONS: 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. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Prime Source, a division of Albaugh LLC. All such risks shall be assumed by the user or buyer.

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