
4.75"
4.25"
GROUP 11 FUNGICIDE
CASTLON™
envu™
For the control of foliar, stem and root diseases in turf and ornamentals for commercial production and in landscape areas around residential, municipal and commercial properties, field grown ornamentals and ornamentals in greenhouses, interiorscapes and other enclosed structures
INGREDIENTS: % BY WT.
ACTIVE INGREDIENT:
Fluoxastrobin: [(1E)-[2-[[6-(2-Chlorophenoxy)-5-fluoro-4-pyrimidinyl]oxy] phenyl] (5,6-dihydro-1,4,2-dioxazin-3-yl) methanone-O-methyloxime] 40.3%
OTHER INGREDIENTS: 59.7%
TOTAL 100.0%
This product contains 3.98 pounds of fluoxastrobin per gallon (478 g per liter).
EPA Reg. No. 70506-396-101563 EPA Est. No. 070815-GA-001
Net Contents
1 Gallon
D00000623
DPM00000268A 171025AV1
KEEP OUT OF REACH OF CHILDREN
CAUTION / PRECAUCION
Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label find someone to explain it to you in detail.)
See Back Panel for First Aid Instructions and Booklet for Complete Precautionary Statements and Directions for Use.
PRODUCED FOR
Environmental Science U.S., LLC
5000 CentreGreen Way, Suite 400
Cary, NC 27513

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FIRST AID	
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. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Have person sip a glass of water if able to swallow. • Do not give anything to an unconscious person.
In case of emergency call toll free the Environmental Science U.S., LLC Emergency Response Telephone No. 1-800-424-9300. Have a product container or label with you when calling a poison control center or doctor, or going for treatment.	

For Product Use Information Call 1-866-761-9397

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

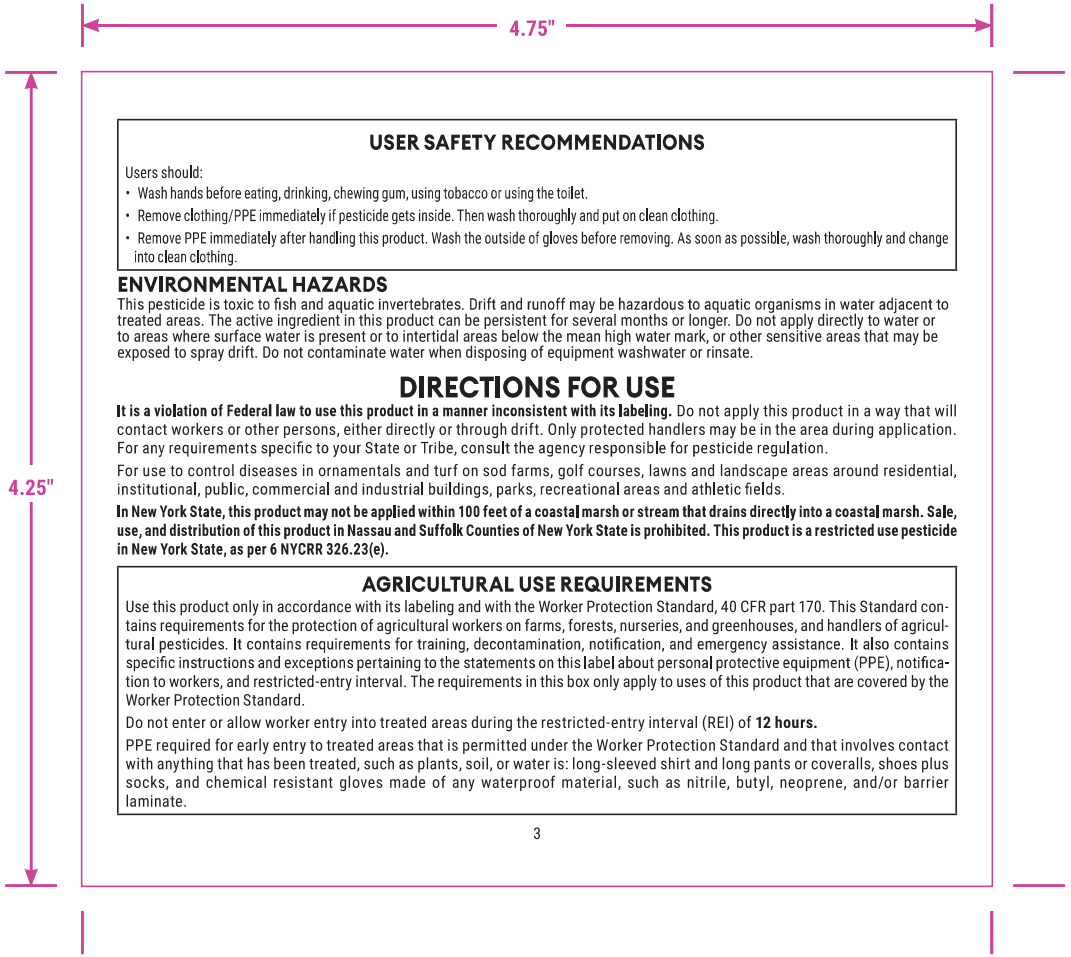
Applicators and other handlers must wear long-sleeved shirt and long pants, shoes plus socks, and chemical resistant gloves made of any waterproof material, such as nitrile, butyl, neoprene and/or barrier laminate.

USER SAFETY

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS STATEMENT

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



USER SAFETY RECOMMENDATIONS

Users should:

- 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.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. The active ingredient in this product can be persistent for several months or longer. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark, or other sensitive areas that may be exposed to spray drift. Do not contaminate water when disposing of equipment washwater or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

For use to control diseases in ornamentals and turf on sod farms, golf courses, lawns and landscape areas around residential, institutional, public, commercial and industrial buildings, parks, recreational areas and athletic fields.

In New York State, this product may not be applied within 100 feet of a coastal marsh or stream that drains directly into a coastal marsh. Sale, use, and distribution of this product in Nassau and Suffolk Counties of New York State is prohibited. This product is a restricted use pesticide in New York State, as per 6 NYCRR 326.23(e).

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), notification to workers, 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.**

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: long-sleeved shirt and long pants or coveralls, shoes plus socks, and chemical resistant gloves made of any waterproof material, such as nitrile, butyl, neoprene, and/or barrier laminate.

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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. Keep children and pets out of treated area until spray has dried.

PRODUCT INFORMATION

CASTLON is a broad-spectrum xylem systemic fungicide for the control of certain diseases in turf and ornamentals. **CASTLON** works by interfering with respiration in plant-pathogenic fungi, and is a potent inhibitor of spore germination and mycelial growth. The active ingredient, fluoxastrobin, moves rapidly into green tissue via translaminar and xylem movement and is rainfast in as little as fifteen minutes after application. Roots of plants also take up the active ingredient where it is translocated throughout the xylem of plants to provide internal inhibition of fungal growth and protect the plant from new infections. The broad spectrum of activity of **CASTLON** makes it an excellent choice as the foundation fungicide for turf and ornamental disease management programs. Other labeled fungicides can be used in tank mixture or alternated with **CASTLON** to cover all the major fungal diseases that attack most, if not all, major turfgrass and ornamental species.

UNDER CERTAIN CONDITIONS CONDUCIVE TO EXTENDED INFECTION PERIODS, ADDITIONAL FUNGICIDE APPLICATIONS BEYOND THE NUMBER ALLOWED BY THIS LABEL MAY BE NEEDED. UNDER THESE CONDITIONS, USE ANOTHER FUNGICIDE REGISTERED FOR THE DISEASE.

RESISTANCE MANAGEMENT

The active ingredient in **CASTLON** (fluoxastrobin) belongs to the strobilurin class of chemistry which exhibits no known cross-resistance to other chemical classes including sterol inhibitors, dicarboximides, benzimidazoles, anilinopyrimidines, or phenylamides. Fluoxastrobin exhibits cross-resistance to other QoI fungicides, such as: trifloxystrobin, azoxystrobin, and kresoxim-methyl (Group 11 fungicides). Certain fungal pathogens are known to develop resistance to products with the same mode of action when used repeatedly. Because resistance development cannot be predicted, the use of this product should conform to resistance management strategies established for turf and ornamentals. Such strategies may include rotating and/or tank-mixing with products having different modes of action, or limiting the total number of applications per season. Environmental Science U.S., LLC encourages responsible resistance management to ensure effective long-term control of the fungal diseases on this label.

Follow specific recommendations that limit the total number of sprays on turf and ornamentals and the required alternations with fungicides from other resistance management groups. In situations requiring multiple fungicide sprays, develop season-long spray programs for using Group 11 (QoI-containing) fungicides with the following guidelines. Turf pathogens that incite Dollar Spot, Gray Leaf Spot, Anthracnose, and Pythium Blight are known to have the capacity to develop resistant populations with the repeated use of a single fungicide or a single class of fungicide chemistry. Certain fungal pathogens of ornamentals also have the capacity to become resistant to single site inhibitor fungicides. In particular, the pathogens that incite Downy Mildew, Powdery Mildew and Rust diseases of ornamentals are known to have the capacity to develop resistance to single site inhibitors.

1. When using a Group 11 fungicide alone, the number of applications made for control of at risk diseases should be no more than one third of the total number of fungicide applications per season.
2. In programs where tank mixes or pre-mixes of a Group 11 fungicide with a fungicide of another Group are utilized, the number of Group 11 fungicide applications made for control of at risk diseases should be no more than one half of the total number of fungicide applications per season.
3. In programs where applications of Group 11 fungicides are made with both solo products and mixtures, the number of Group 11 fungicide applications made for control of at risk diseases should be no more than one half of the total number of fungicide applications per season.

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APPLICATION GUIDELINES

Broadcast Ground Sprayers

Thorough coverage is necessary to provide good disease control. Applications using sufficient water volume to provide thorough and uniform coverage provide the most effective disease control.

Equip sprayers with nozzles that provide accurate and uniform application. Be certain that nozzles are the same size and uniformly spaced across the boom. Calibrate the sprayer before use. Use a pump with the capacity to: (1) maintain a minimum of 35 psi at nozzles, and (2) provide sufficient agitation in the tank to keep the mixture in suspension (this requires recirculation of 10% of the tank volume per minute). Use jet agitators or a liquid sparge tube for vigorous agitation. Use screens to protect the pump and to prevent nozzles from clogging. Screens placed on the suction side of the pump should be 16-mesh or coarser. Do not place a screen in the recirculation line. Use 50-mesh screens at the nozzles. Check nozzle manufacturer's recommendations. For information on spray equipment and calibration, consult sprayer manufacturer's and/or state recommendations. For specific local directions and spray schedules, consult the current state agricultural experiment station recommendations.

Mixing Procedures

Prepare no more spray mixture than is needed for the immediate operation. Thoroughly clean spray equipment before using this product. Agitation is necessary for proper dispersal of the product. Maintain maximum agitation throughout the spraying operation. Do not let the spray mixture stand overnight in the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.

CASTLON Alone

Add 1/2 of the required amount of water to the mix tank. With the agitator running, add the **CASTLON** to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after the **CASTLON** has completely and uniformly dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

CASTLON + Tank-mix Partners

Add 1/2 of the required amount of water to the mix tank. Start the agitator running before adding any tank-mix partners. In general, tank-mix partners should be added in this order: products packaged in water-soluble packaging (see **Note** in next paragraph), wettable powders, wettable granules, dry flowables, liquid flowables (such as **CASTLON**), liquids, and emulsifiable concentrates. Always allow each tank-mix partner to become fully and uniformly dispersed before adding the next product. Provide sufficient agitation while adding the remainder of the water. Maintain agitation until all of the mixture has been applied.

Note: When using **CASTLON** in tank-mixtures, all products in water-soluble packaging should be added to the tank before any other tank-mix partner, including **CASTLON**. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank-mix partner to the tank.

If using **CASTLON** in a tank-mixture, observe all directions for use, sites, use rates, dilution ratios, precautions, and limitations, which appear on the tank-mix product label. No label dosage rate may be exceeded, and the most restrictive label precautions and limitations must be followed. This product must not be mixed with any product that prohibits such mixing. Tank-mixtures or application of other products referenced on this label are permitted only in those states in which the referenced products are registered. 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

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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.

CASTLON is compatible with most pesticides, plant growth regulators and foliar nutrient products. However, the physical compatibility of **CASTLON** with tank-mix partners should be tested before use. To determine the physical compatibility of **CASTLON** with other products, use a jar test, as described in the next paragraph.

Jar Test Procedure: Using a quart jar, add the proportionate amounts of the products to 1/2 qt of water. Add wettable powders and water dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, add the remaining 1/2 qt of water, shake and let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

The safety of all potential tank-mixes including additives and other pesticides on turf and ornamentals has not been tested. Before applying any tank-mixture not specifically recommended on this label, confirm the safety of the tank mixture to turf and ornamentals. To test for turf and ornamental safety, apply CASTLON in a small area and in accordance with label instructions. Observe plants over a period of time for the appearance of phytotoxicity symptoms.

DIRECTIONS FOR USE THROUGH SPRINKLER IRRIGATION SYSTEMS

Apply this product only through overhead sprinkler irrigation systems including center pivot, microjet, wheel lines, lateral move, side roll, or overhead solid set irrigation systems. Do not apply this product through any other type of irrigation system. Reduced effectiveness in turf, can result from non-uniform distribution of the treated irrigation water.

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

SPRAY PREPARATION

Remove scale, pesticide residues, and other foreign matter from the chemical tank and entire injector system. Flush with clean water.

APPLICATION INSTRUCTIONS

First prepare a suspension of **CASTLON** in a mix tank. Fill tank with 1/2 to 3/4 the desired amount of water. Start mechanical or hydraulic agitation. Add the required amount of **CASTLON** and then the remaining volume of water. Then set sprinkler to deliver no more than 0.4 inch of water per acre. Start sprinkler and uniformly inject the suspension of **CASTLON** into the irrigation water line to deliver the desired rate per acre. The suspension of **CASTLON** should be injected with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing. If you have any other questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.

NOTE: Avoid further field irrigation over the treated area for 24 hours after treating with **CASTLON** to prevent washing the chemical off the turf.

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

1. 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. Public water system means a system for the provision to the public 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.

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2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow 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.
3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection.
4. 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 withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
5. 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.
6. 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.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

SPECIAL PRECAUTIONS FOR CHEMIGATION THROUGH SPRINKLER IRRIGATION SYSTEMS

1. Maintain continuous agitation in mix tank during mixing and application to assure a uniform suspension.
2. Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute solution per unit time.
3. 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.
4. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
5. 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 shutdown.
6. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
7. 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.
8. 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.
9. Do not apply when wind speed favors drift beyond the area intended for treatment. If you are unsure of wind conditions, contact your local extension agent.
10. Do not apply when system connections or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product must be dismantled and drained. Reduced effectiveness may result from non-uniform distribution of treated water.

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11. Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. A person knowledgeable of the chemigation system and responsible for its operation, or under supervision of the responsible person, shall shut the system down and make necessary adjustments as needed.
12. Do not connect an irrigation system used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

SPRAY DRIFT

SENSITIVE AREAS

This pesticide must only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitats for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

USE DIRECTIONS FOR TURF

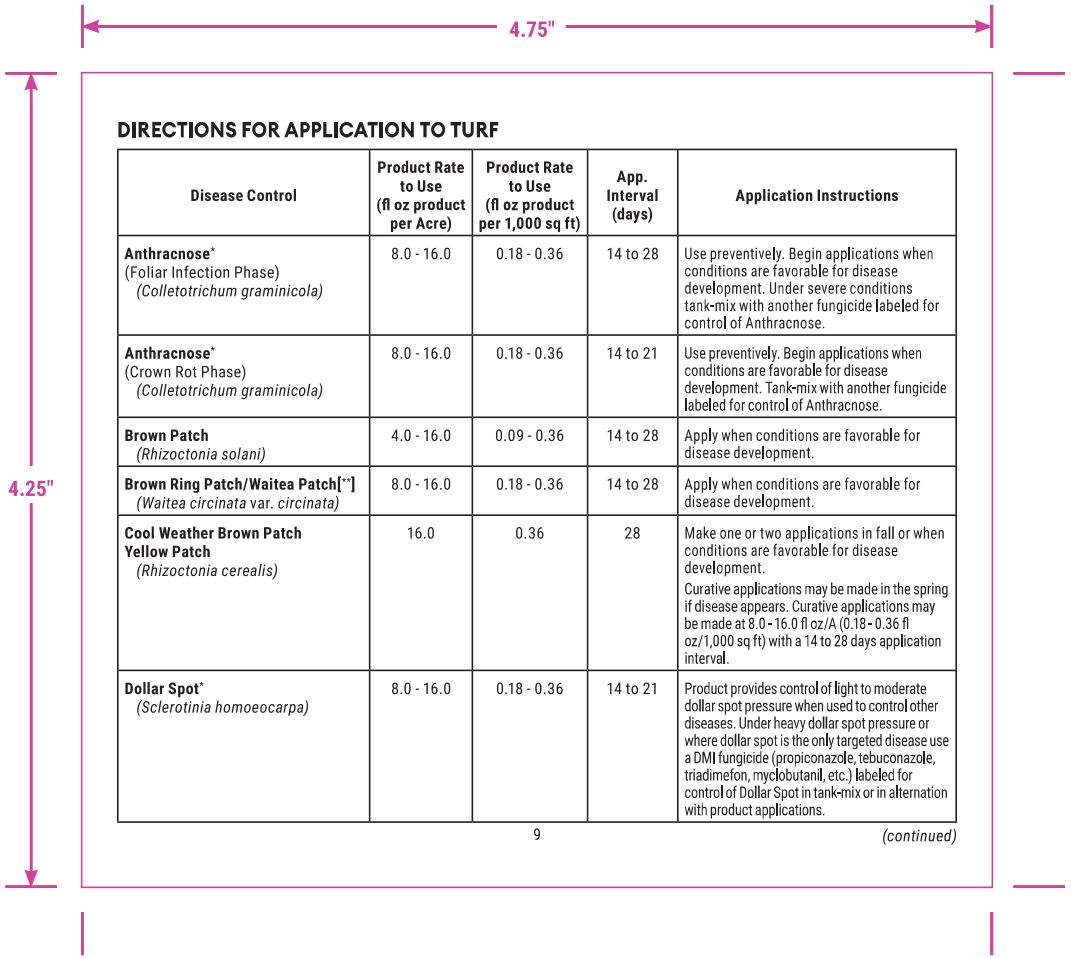
CASTLON provides control of many important diseases in turf. Use **CASTLON** in conjunction with cultural practices that promote healthy, vigorous turf. These practices include nutrient management, thatch management, water management and judicious use of other fungicides and cultural practices.

For use in the establishment of turfgrass from seed or in overseeding of dormant turfgrass:

CASTLON may be used for control of certain turfgrass diseases associated with turfgrass establishment from seed. **CASTLON** may also be used during overseeding of dormant turfgrass.

CASTLON may be safely applied before or after seeding or at seedling germination and emergence to ryegrass, bentgrass, bluegrass, fescue, and other turfgrasses. Optimum application timing for control of seedling diseases is just prior to, during or just after seeding.

Rate Ranges: Use the shorter specified application interval and/or the higher specified rate when prolonged favorable disease conditions exist.



DIRECTIONS FOR APPLICATION TO TURF

Disease Control	Product Rate to Use (fl oz product per Acre)	Product Rate to Use (fl oz product per 1,000 sq ft)	App. Interval (days)	Application Instructions
Anthracnose* (Foliar Infection Phase) *(Colletotrichum graminicola)*	8.0 - 16.0	0.18 - 0.36	14 to 28	Use preventively. Begin applications when conditions are favorable for disease development. Under severe conditions tank-mix with another fungicide labeled for control of Anthracnose.
Anthracnose* (Crown Rot Phase) *(Colletotrichum graminicola)*	8.0 - 16.0	0.18 - 0.36	14 to 21	Use preventively. Begin applications when conditions are favorable for disease development. Tank-mix with another fungicide labeled for control of Anthracnose.
Brown Patch *(Rhizoctonia solani)*	4.0 - 16.0	0.09 - 0.36	14 to 28	Apply when conditions are favorable for disease development.
Brown Ring Patch/Waitea Patch[**] *(Waitea circinata* var. *circinata)*	8.0 - 16.0	0.18 - 0.36	14 to 28	Apply when conditions are favorable for disease development.
Cool Weather Brown Patch Yellow Patch *(Rhizoctonia cerealis)*	16.0	0.36	28	Make one or two applications in fall or when conditions are favorable for disease development. Curative applications may be made in the spring if disease appears. Curative applications may be made at 8.0 - 16.0 fl oz/A (0.18 - 0.36 fl oz/1,000 sq ft) with a 14 to 28 days application interval.
Dollar Spot* *(Sclerotinia homoeocarpa)*	8.0 - 16.0	0.18 - 0.36	14 to 21	Product provides control of light to moderate dollar spot pressure when used to control other diseases. Under heavy dollar spot pressure or where dollar spot is the only targeted disease use a DMI fungicide (propiconazole, tebuconazole, triadimefon, myclobutanil, etc.) labeled for control of Dollar Spot in tank-mix or in alternation with product applications.

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DIRECTIONS FOR APPLICATION TO TURF *(continued)*

Disease Control	Product Rate to Use (fl oz product per Acre)	Product Rate to Use (fl oz product per 1,000 sq ft)	App. Interval (days)	Application Instructions
Fairy Ring *(Basidiomycete fungi)*	12.0 - 16.0	0.28 - 0.36	21 to 28	Apply as soon as fairy ring symptoms develop. Apply in 4 gallons of water per 1,000 sq ft or irrigate after application with 1/4 inch water. A wetting agent may facilitate penetration.
Gray Leaf Spot* *(Pyricularia grisea)*	8.0 - 16.0	0.18 - 0.36	14 to 28	Begin applications before disease is present. Under heavy disease pressure tank-mix with another product labeled for control of Gray Leaf Spot.
Leaf Spot *(Bipolaris sorokiniana)*	8.0 - 16.0	0.18 - 0.36	14 to 21	Apply when conditions are favorable for disease development.
Melting Out *(Drechslera poae)*	8.0 - 16.0	0.18 - 0.36	14 to 21	Apply when conditions are favorable for disease development.
Microdochium (Fusarium) Patch *(Microdochium nivale)*	8.0 - 16.0	0.18 - 0.36	14 to 28	Use preventively. Begin applications when conditions are favorable for disease infection, prior to disease symptom development.
Necrotic Ring Spot[**] *(Leptospheria korrae)*	12.0 - 16.0	0.27 - 0.36	14 to 28	Apply when conditions are favorable for disease development.
Pink Patch *(Limonomyces roseipellis)*	8.0 - 16.0	0.18 - 0.36	14 to 28	Apply when conditions are favorable for disease development.
Powdery Mildew *(Erysiphe graminis)*	8.0 - 16.0	0.18 - 0.36	14 to 28	Apply at first sign of infection. Repeat as necessary.

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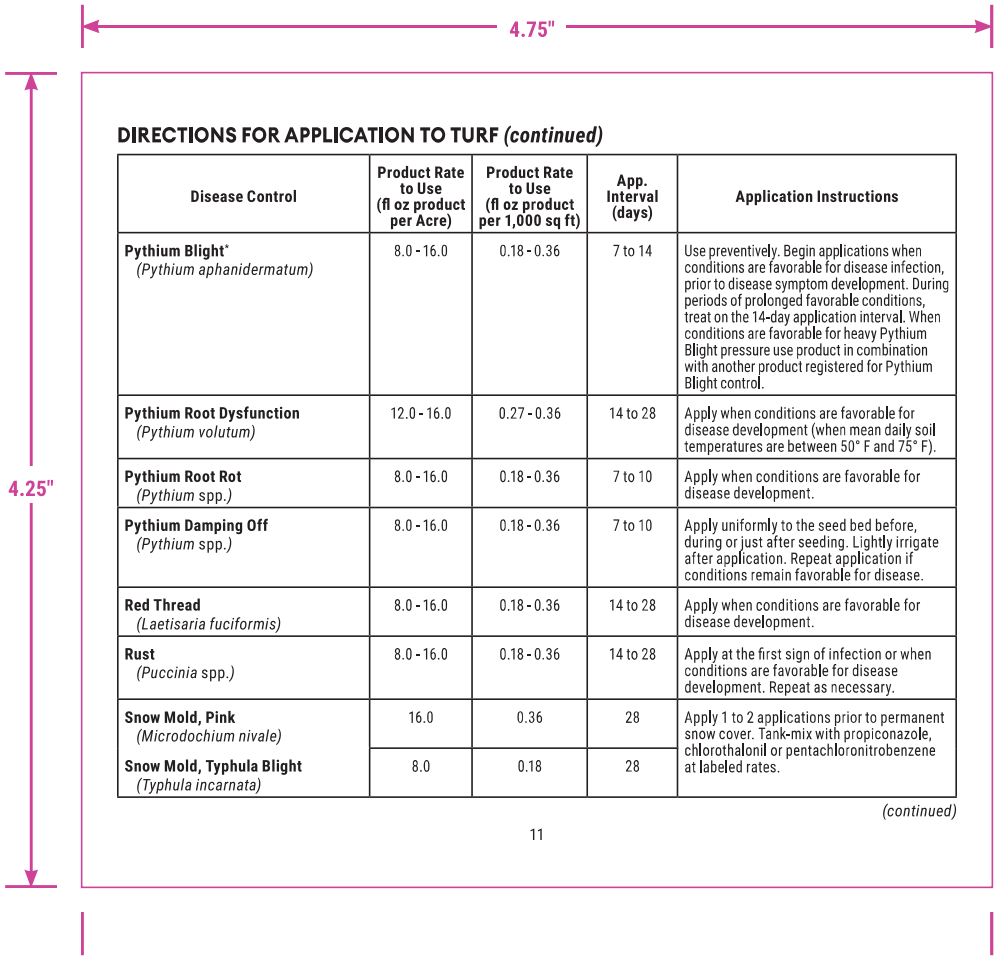

DIRECTIONS FOR APPLICATION TO TURF *(continued)*

Disease Control	Product Rate to Use (fl oz product per Acre)	Product Rate to Use (fl oz product per 1,000 sq ft)	App. Interval (days)	Application Instructions
Pythium Blight* *(Pythium aphanidermatum)*	8.0 - 16.0	0.18 - 0.36	7 to 14	Use preventively. Begin applications when conditions are favorable for disease infection, prior to disease symptom development. During periods of prolonged favorable conditions, treat on the 14-day application interval. When conditions are favorable for heavy Pythium Blight pressure use product in combination with another product registered for Pythium Blight control.
Pythium Root Dysfunction *(Pythium volutum)*	12.0 - 16.0	0.27 - 0.36	14 to 28	Apply when conditions are favorable for disease development (when mean daily soil temperatures are between 50° F and 75° F).
Pythium Root Rot *(Pythium* spp.*)*	8.0 - 16.0	0.18 - 0.36	7 to 10	Apply when conditions are favorable for disease development.
Pythium Damping Off *(Pythium* spp.*)*	8.0 - 16.0	0.18 - 0.36	7 to 10	Apply uniformly to the seed bed before, during or just after seeding. Lightly irrigate after application. Repeat application if conditions remain favorable for disease.
Red Thread *(Laetisaria fuciformis)*	8.0 - 16.0	0.18 - 0.36	14 to 28	Apply when conditions are favorable for disease development.
Rust *(Puccinia* spp.*)*	8.0 - 16.0	0.18 - 0.36	14 to 28	Apply at the first sign of infection or when conditions are favorable for disease development. Repeat as necessary.
Snow Mold, Pink *(Microdochium nivale)*	16.0	0.36	28	Apply 1 to 2 applications prior to permanent snow cover. Tank-mix with propiconazole, chlorothalonil or pentachloronitrobenzene at labeled rates.
Snow Mold, Typhula Blight *(Typhula incarnata)*	8.0	0.18	28	

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DIRECTIONS FOR APPLICATION TO TURF *(continued)*

Disease Control	Product Rate to Use (fl oz product per Acre)	Product Rate to Use (fl oz product per 1,000 sq ft)	App. Interval (days)	Application Instructions
Southern Blight *(Sclerotium rolfsii)*	8.0 - 16.0	0.18 - 0.36	14 to 28	Apply when conditions are favorable for disease development.
Spring Dead Spot *(Leptosphaeria korrae)* or *(Gaeumannomyces graminis* var. *graminis)* or *(Ophiosphaerella herpotricha)*	16.0	0.36	14 to 28	Apply 1 or 2 applications approximately one month prior to bermudagrass dormancy. Apply 1/4" to 1/2" of irrigation after application.
Summer Patch *(Magnaporthe poae)*	8.0 - 16.0	0.18 - 0.36	14 to 28	Start applications in the spring when soil temperatures at 2" depth reach 60 to 65° F or as prescribed by local turf specialists.
Take-All Patch *(Gaeumannomyces graminis* var. *avenae)*	16.0	0.36	28	Begin applications before disease is present and continue applications while conditions are favorable for disease development. Make two applications in the spring and two applications in the fall.
Zoysia Patch **Large Patch of Zoysia** *(Rhizoctonia solani* and/or *Gaeumannomyces* spp.*)*	12.0 - 16.0	0.28 - 0.36	14 to 28	Preventive and Curative: Make 1 to 2 applications in the fall before dormancy. Consult with local turfgrass experts for optimum timing in your area.

*See **RESISTANCE MANAGEMENT** section when using **CASTLON** for control of these diseases.
[Not for use in California.]**

Restrictions:

- Do not apply more than 68.4 fl oz (2.13 lb ai) of product per acre per year, or more than 16 fl oz per acre per application.
- There is a maximum number of 4 applications per season, and a minimum interval of 7 days between applications.

Other Information:

- Under conditions of high disease pressure, use the higher rates, the shortest application interval or both.

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· For soil-borne diseases, use sufficient water to move the active ingredient into the crown and upper root zone.

CASTLON Rate Conversion Chart for Turf					
Fl oz Product per Acre	Fl oz Product per 1,000 sq ft	Lb ai/A	Coverage of One Container		
			16 fl oz	64 fl oz	1 gal
4.0	0.09	0.12	4.0 A	16 A	32 A
8.0	0.18	0.25	2.0 A	8 A	16 A
12.0	0.28	0.37	1.3 A	5.3 A	10.7 A
16.0	0.36	0.50	1.0 A	4 A	8 A

DIRECTIONS FOR APPLICATION TO ORNAMENTALS

CASTLON may be used for control of certain pathogens causing foliar, root and stem diseases of ornamentals. Applications can be made to plants growing in containers, benches, flats, plugs and beds in greenhouses, shadehouses, outdoor nurseries, field plantings, retails nurseries, interiorscapes, residential, public and commercial landscape areas.

Foliar Application: Apply **CASTLON** in sufficient water to ensure complete coverage of the target plant. Apply in enough water to wet the leaf surfaces to the point of drip. Repeat applications at specified intervals as long as conditions for disease are favorable. Begin applications prior to disease development and continue throughout the season at specified intervals. **CASTLON** is most effective when applied preventively before disease is widespread. Do not apply more than 4 applications per year.

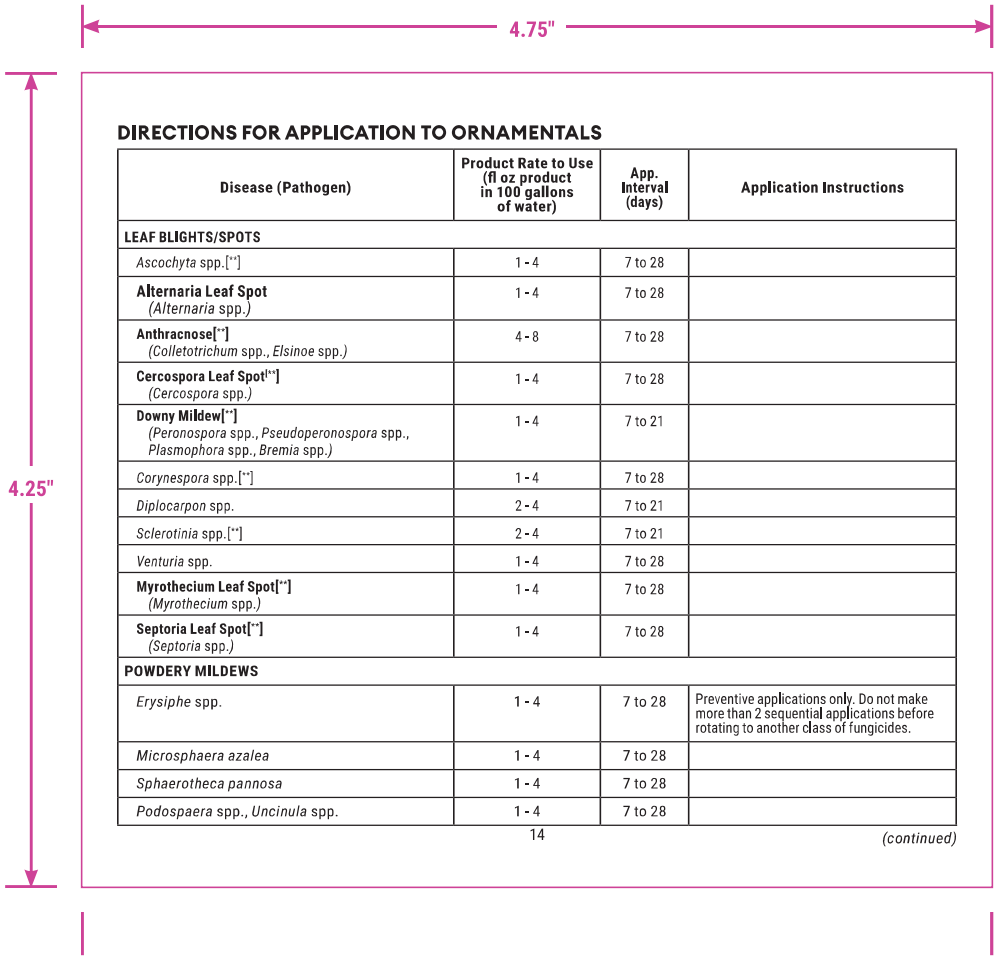
Apply **CASTLON** at use rates of 1 - 4 fl oz/100 gallons every 7 to 28 days. The addition of a non-ionic surfactant at the recommended use rates may enhance coverage on hard-to-wet plant foliage. Under light to moderate disease pressure, use the lower rates (1 - 2 fl oz/100 gallons) on a 7 to 14 day interval or the higher rates (3 - 4 fl oz/100 gallons) on a 14 to 28 day interval. Under environmental conditions which promote severe disease development, use the higher rates (3 - 4 fl oz/100 gallons) on a 7 to 14 day interval. Use a spray volume of 100 to 400 gallons of solution per acre, depending on the size of the plants.

Environmental Science U.S., LLC recommends the use of a Chemical Producers and Distributors Association certified adjuvant.

Drench, Crown and Surface Spray Application: CASTLON may be applied to control soilborne, seedling, and crown diseases of production ornamentals (greenhouse, shadehouse, container grown and field grown) as a preventive, drench, crown or surface spray treatment prior to infection. Good coverage of the pre-infection area (root zone, root ball, crown, etc.) is necessary for satisfactory control. Make applications prior to infection as healthy roots are necessary to optimize product uptake systemic translocation and disease protection.

CASTLON may be applied as drench to container grown ornamentals using 0.15 - 0.6 fl oz/100 gallons of water. Thoroughly wet the root zone of the plants with the solution using up to 1 - 2 pt per sq ft of surface area. If a drench application is not feasible, use 0.4 - 1.6 fl oz/1,000 sq ft of growing area in sufficient water to provide uniform coverage and follow with enough irrigation to completely wet the root zone of the plants. Use of the higher rate drench is limited to one application per year.

Restrictions: Do not apply more than 2.13 lb ai per acre per year.



DIRECTIONS FOR APPLICATION TO ORNAMENTALS

Disease (Pathogen)	Product Rate to Use (fl oz product in 100 gallons of water)	App. Interval (days)	Application Instructions
LEAF BLIGHTS/SPOTS			
Ascochyta spp.[**]	1 - 4	7 to 28	
Alternaria Leaf Spot *(Alternaria* spp.*)*	1 - 4	7 to 28	
Anthracnose[**] *(Colletotrichum* spp., *Elsinoe* spp.*)*	4 - 8	7 to 28	
Cercospora Leaf Spot[**] *(Cercospora* spp.*)*	1 - 4	7 to 28	
Downy Mildew[**] *(Peronospora* spp., *Pseudoperonospora* spp., *Plasmophora* spp., *Bremia* spp.*)*	1 - 4	7 to 21	
Corynespora spp.[**]	1 - 4	7 to 28	
Diplocarpon spp.	2 - 4	7 to 21	
Sclerotinia spp.[**]	2 - 4	7 to 21	
Venturia spp.	1 - 4	7 to 28	
Myrothecium Leaf Spot[**] *(Myrothecium* spp.*)*	1 - 4	7 to 28	
Septoria Leaf Spot[**] *(Septoria* spp.*)*	1 - 4	7 to 28	
POWDERY MILDEWS			
Erysiphe spp.	1 - 4	7 to 28	Preventive applications only. Do not make more than 2 sequential applications before rotating to another class of fungicides.
Microsphaera azalea	1 - 4	7 to 28	
Sphaerotheca pannosa	1 - 4	7 to 28	
Podospaera spp., *Uncinula* spp.	1 - 4	7 to 28	

(continued)

4.75"

4.25"

DIRECTIONS FOR APPLICATION TO ORNAMENTALS *(continued)*

Disease (Pathogen)	Product Rate to Use (fl oz product in 100 gallons of water)	App. Interval (days)	Application Instructions
RUSTS			
Needle Rust[**] *(Melampsora* spp.*)*	1 - 4	7 to 28	
Phragmidium spp.[**]	1 - 4	7 to 28	
Puccinia spp.	1 - 4	7 to 28	
Uromyces spp.[**]	1 - 4	7 to 28	
FLOWER BLIGHTS[**]			
Anthracnose *(Colletotrichum* spp., *Elsinoe* spp.*)*	1 - 4	7 to 28	
Botrytis blight *(Botrytis* spp.*)*	4 - 8	7 to 21	Apply prior to infection.
Crown Spray Application			
SHOOT/STEM DISEASES[**]			
Aerial/Shoot Blight *(Phytophthora* spp.*)*	1 - 4	7 to 28	
SOILBORNE DISEASES			
Rhizoctonia solani	2 - 4	7 to 21	
Sclerotium rolfsii	2 - 4	7 to 21	
Fusarium spp.	2 - 4	7 to 21	

(continued)

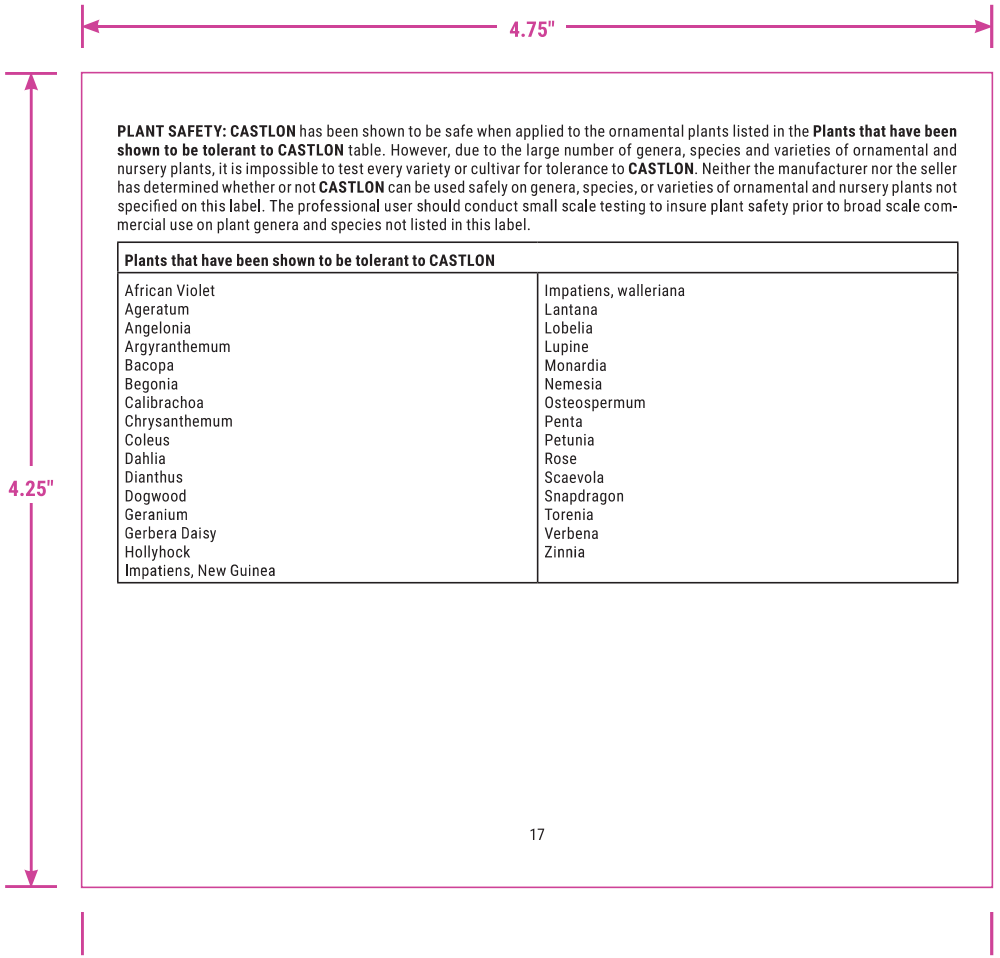
4.75"

4.25"

DIRECTIONS FOR APPLICATION TO ORNAMENTALS *(continued)*

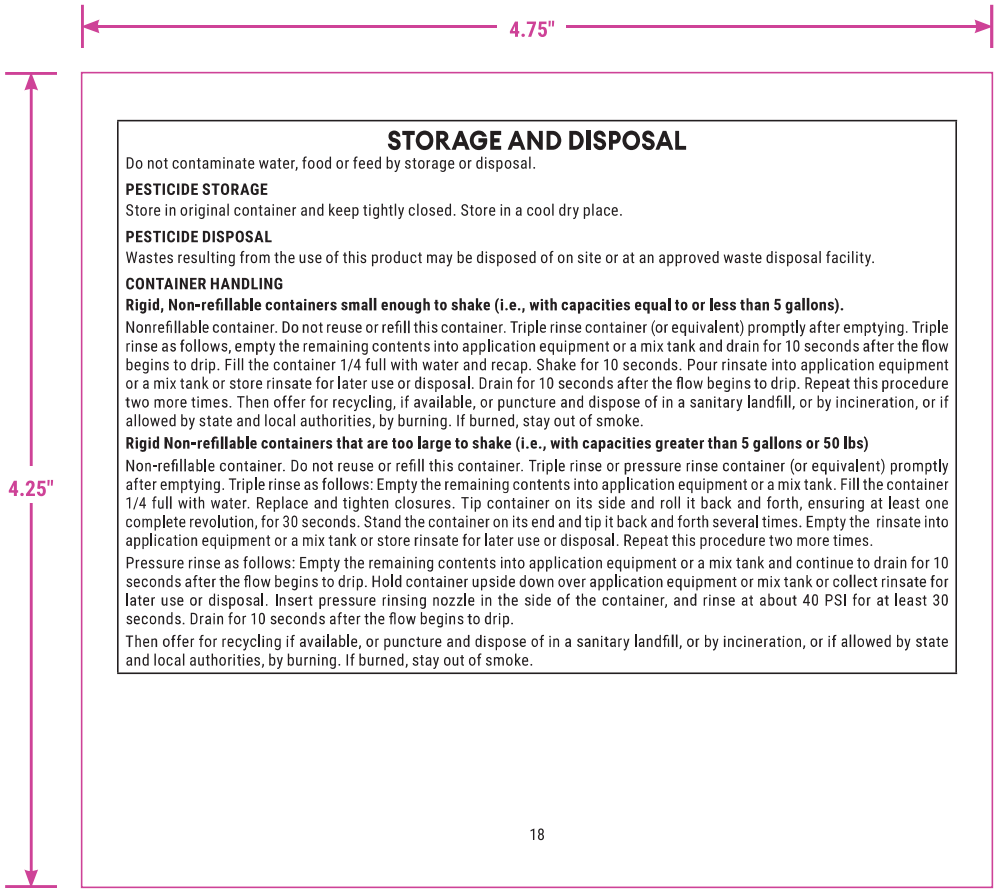
Disease (Pathogen)	Product Rate to Use (fl oz product in 100 gallons of water)	App. Interval (days)	Application Instructions
Drench or Surface Spray			
SOILBORNE DISEASE			
Rhizoctonia solani	0.15 - 0.6	14 to 28	Apply in 1 - 2 pints of solution per sq ft surface area (or enough solution to wet the growing media).
Sclerotium rolfsii[**]	0.15 - 0.6	14 to 28	Apply in 1 - 2 pints of solution per sq ft surface area (or enough solution to wet the growing media).
Fusarium spp.[**]	0.15 - 0.6	14 to 28	Apply in 1 - 2 pints of solution per sq ft surface area (or enough solution to wet the growing media).
Phytophthora spp.	0.15 - 0.6	14 to 28	Apply in 1 - 2 pints of solution per sq ft surface area (or enough solution to wet the growing media).

[Not for use in California.]**



PLANT SAFETY: CASTLON has been shown to be safe when applied to the ornamental plants listed in the **Plants that have been shown to be tolerant to CASTLON** table. However, due to the large number of genera, species and varieties of ornamental and nursery plants, it is impossible to test every variety or cultivar for tolerance to **CASTLON**. Neither the manufacturer nor the seller has determined whether or not **CASTLON** can be used safely on genera, species, or varieties of ornamental and nursery plants not specified on this label. The professional user should conduct small scale testing to insure plant safety prior to broad scale commercial use on plant genera and species not listed in this label.

Plants that have been shown to be tolerant to CASTLON	
African Violet	Impatiens, walleriana
Ageratum	Lantana
Angelonia	Lobelia
Argyranthemum	Lupine
Bacopa	Monardia
Begonia	Nemesia
Calibrachoa	Osteospermum
Chrysanthemum	Penta
Coleus	Petunia
Dahlia	Rose
Dianthus	Scaevola
Dogwood	Snapdragon
Geranium	Torenia
Gerbera Daisy	Verbena
Hollyhock	Zinnia
Impatiens, New Guinea	



STORAGE AND DISPOSAL

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

PESTICIDE STORAGE

Store in original container and keep tightly closed. Store in a cool dry place.

PESTICIDE DISPOSAL

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING

Rigid, Non-refillable containers small enough to shake (i.e., with capacities equal to or less than 5 gallons).

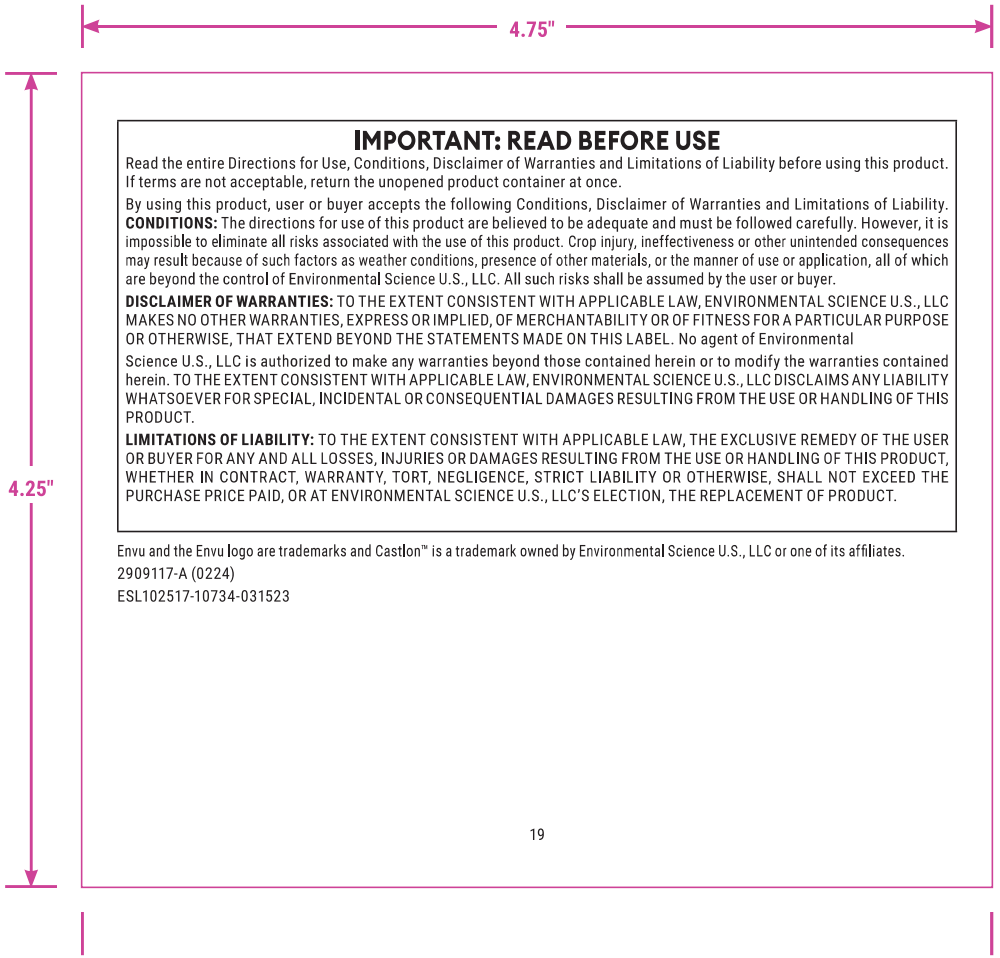
Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows, empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 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, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Rigid Non-refillable containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs)

Non-refillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 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. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Then offer for recycling if available, or puncture and 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.



IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer 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 Environmental Science U.S., LLC. All such risks shall be assumed by the user or buyer.

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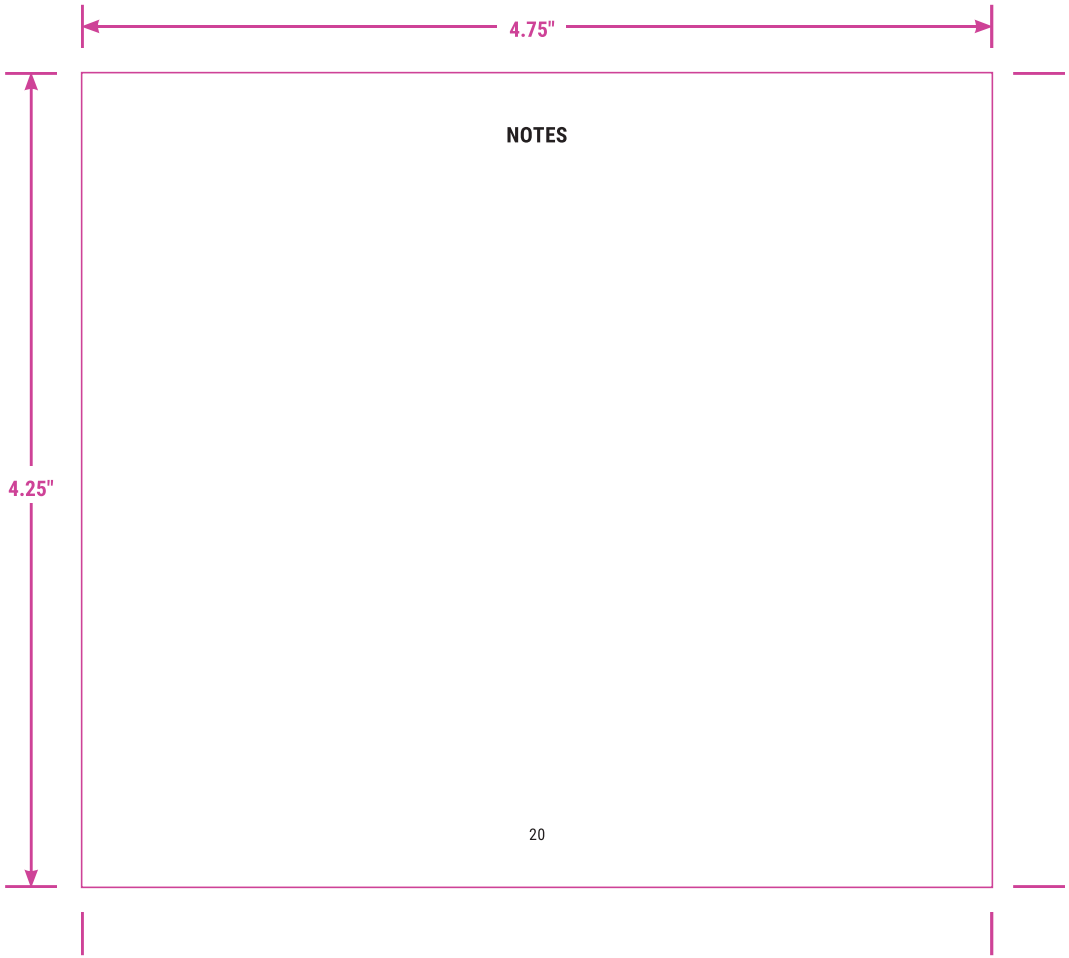
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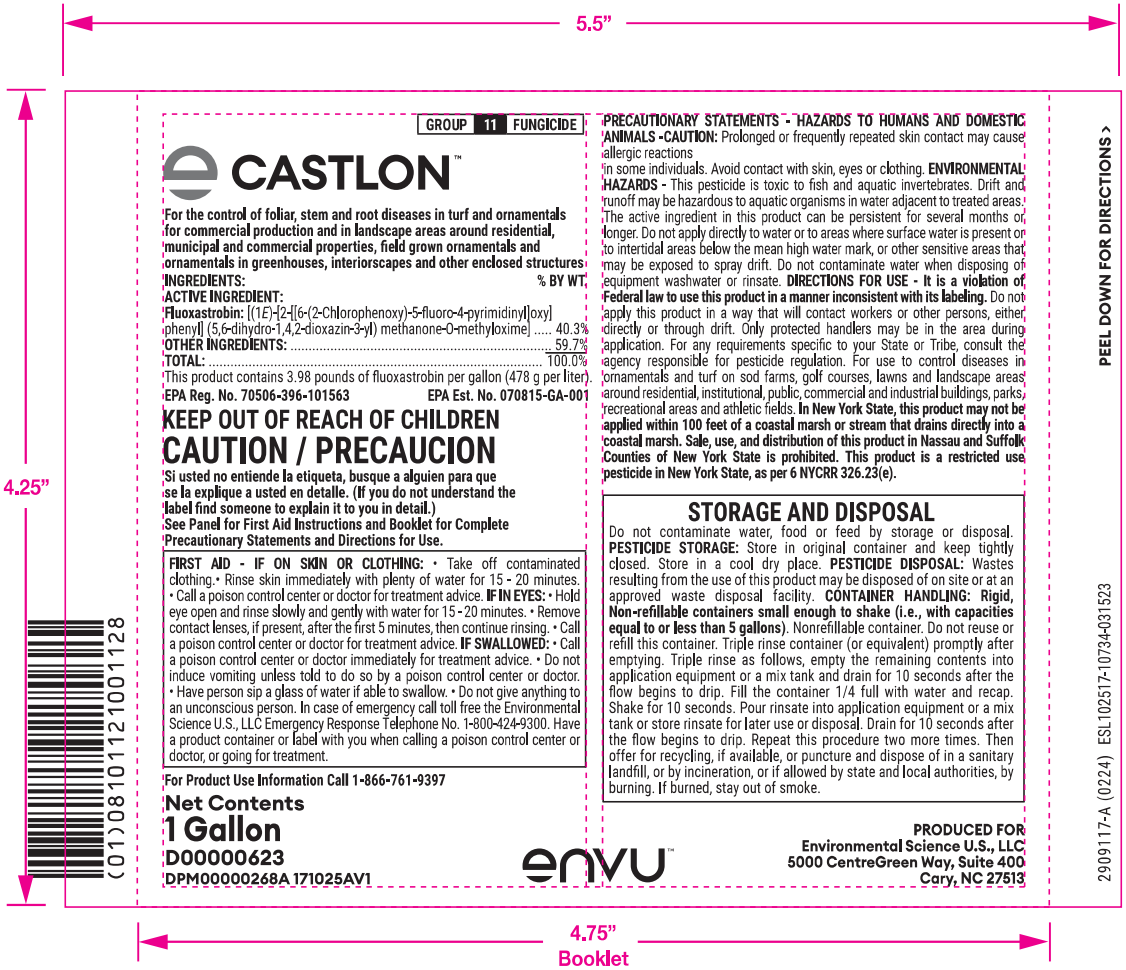
5.5"
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GROUP 11 FUNGICIDE
CASTLON™
For the control of foliar, stem and root diseases in turf and ornamentals for commercial production and in landscape areas around residential, municipal and commercial properties, field grown ornamentals and ornamentals in greenhouses, interiorscapes and other enclosed structures.
INGREDIENTS: % BY WT.
ACTIVE INGREDIENT:
Fluoxastrobin: [(1E)-[2-[[6-(2-Chlorophenoxy)-5-fluoro-4-pyrimidinyl]oxy] phenyl] (5,6-dihydro-1,4,2-dioxazin-3-yl) methanone-O-methyloxime] 40.3%
OTHER INGREDIENTS: 59.7%
TOTAL: 100.0%
This product contains 3.98 pounds of fluoxastrobin per gallon (478 g per liter).
EPA Reg. No. 70506-396-101563 EPA Est. No. 070815-GA-001
KEEP OUT OF REACH OF CHILDREN
CAUTION / PRECAUCION
Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label find someone to explain it to you in detail.)
See Panel for First Aid Instructions and Booklet for Complete Precautionary Statements and Directions for Use.
FIRST AID - 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. • Call a poison control center or doctor for treatment advice. IF SWALLOWED: • Call a poison control center or doctor immediately for treatment advice. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Have person sip a glass of water if able to swallow. • Do not give anything to an unconscious person. In case of emergency call toll free the Environmental Science U.S., LLC Emergency Response Telephone No. 1-800-424-9300. Have a product container or label with you when calling a poison control center or doctor, or going for treatment.
For Product Use Information Call 1-866-761-9397
Net Contents
1 Gallon
D00000623
DPM00000268A 171025AV1
(01)00810112100112 8
envu™
PRECAUTIONARY STATEMENTS - HAZARDS TO HUMANS AND DOMESTIC ANIMALS -CAUTION: Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes or clothing. ENVIRONMENTAL HAZARDS - This pesticide is toxic to fish and aquatic invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. The active ingredient in this product can be persistent for several months or longer. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark, or other sensitive areas that may be exposed to spray drift. Do not contaminate water when disposing of equipment washwater or rinsate. DIRECTIONS FOR USE - It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation. For use to control diseases in ornamentals and turf on sod farms, golf courses, lawns and landscape areas around residential, institutional, public, commercial and industrial buildings, parks, recreational areas and athletic fields. In New York State, this product may not be applied within 100 feet of a coastal marsh or stream that drains directly into a coastal marsh. Sale, use, and distribution of this product in Nassau and Suffolk Counties of New York State is prohibited. This product is a restricted use pesticide in New York State, as per 6 NYCRR 326.23(e).
STORAGE AND DISPOSAL
Do not contaminate water, food or feed by storage or disposal. PESTICIDE STORAGE: Store in original container and keep tightly closed. Store in a cool dry place. PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. CONTAINER HANDLING: Rigid, Non-refillable containers small enough to shake (i.e., with capacities equal to or less than 5 gallons). Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows, empty the remaining contents into application equipment or a mix tank 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, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.
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Environmental Science U.S., LLC
5000 CentreGreen Way, Suite 400
Cary, NC 27513
PEEL DOWN FOR DIRECTIONS >
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Booklet