

### OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

December 4, 2025

Nestor Algarin Regulatory Product Manager Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, NC 27419

Subject: Label Amendment - Registration Review Mitigation for Mefenoxam and

Azoxystrobin

Product Name: Plentrix

EPA Registration Number: 100-1596 Case Number: 671142 and 671145 Application Date: November 21, 2022

### Dear Nestor Algarin:

The Agency, in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Metalaxyl/Mefenoxam and Azoxystrobin Interim Decisions, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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 Assurance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling and must be used at your next label printing. You must

Page 2 of 2 EPA Reg. No. 100-1596 Case No. 671142 and 671145

submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact Concepción Rodríguez by phone at 202-566-0820, or via email at <a href="mailto:rodriguez.concepcion@epa.gov">rodriguez.concepcion@epa.gov</a>.

Sincerely,

Julie Javier, Team Leader

Risk Mitigation and Implementation Branch 4

Pesticide Re-Evaluation Division Office of Pesticide Programs

**ENCLOSURE: Stamped label** 

### [Master Label]



### Plentrix™

### **Fungicide**

- For control of diseases on ornamental plants; ornamental bulb, corm and tuber crops; conifers; Christmas trees; vegetable plants and non-bearing fruit and nut plants.
- For use in greenhouses and nurseries (including field- and container-grown plants grown outdoors and in shade houses, lath houses and other ornamental production structures), conifer and forest nurseries, forestry production, retail nurseries, residential and commercial landscapes, and interior plantscapes.
- For control of diseases on vegetable transplants grown for sale to consumers (outdoor use only).

### Active Ingredients:

Azoxystrobin*:	28.2%
Mefenoxam**:	10.9%
Other Ingredients:	60.9%
Total:	100.0%

<sup>\*</sup>CAS No. 131860-33-8 \*\*CAS No. 70630-17-0

Plentrix<sup>™</sup> is formulated as a suspension concentrate (SC) and contains 2.68 lb of azoxystrobin and 1.04 lb of mefenoxam per gallon.

### KEEP OUT OF REACH OF CHILDREN. CAUTION/PRECAUCIÓN

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 additional precautionary statements and directions for use inside booklet.

EPA Reg. 100-1596 EPA Est.

**Net Contents** 

ACCEPTED

Dec 4, 2025

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 100-1596

### **TABLE OF CONTENTS**

### 1.0 FIRST AID

### 2.0 PRECAUTIONARY STATEMENTS

- 2.1 Hazards to Humans and Domestic Animals
- 2.2 Personal Protective Equipment (PPE)
- 2.3 Environmental Hazards

### **DIRECTIONS FOR USE**

### 3.0 PRODUCT INFORMATION

- 3.1 Integrated Pest Management (IPM)
- 3.2 Resistance Management

### 4.0 APPLICATION DIRECTIONS

- 4.1 Methods of Application
- 4.2 Application Equipment
- 4.3 Application Volume and Spray Coverage
- 4.4 Mixing Directions
- 4.5 Application through Irrigation Systems (Chemigation)

### 5.0 RESTRICTIONS AND PRECAUTIONS

- 5.1 Use Restrictions
- 5.2 Use Precautions
- 5.3 Spray Drift Management

### **6.0 ORNAMENTAL USE DIRECTIONS**

- 6.1 Ornamentals Soil Diseases (Container-Grown Plants)
- 6.2 Ornamentals Soil Diseases (Plants Grown in Ground)
- 6.3 Ornamentals Foliar Diseases

### 7.0 CONIFER USE DIRECTIONS

- 7.1 Conifers in Nurseries
- 7.2 Conifers in Plantations and Forestry Production

### 8.0 VEGETABLE PLANT USE DIRECTIONS

- 8.1 Brassica, Leafy Greens Subgroup
- 8.2 Bulb Vegetables
- 8.2 Cucurbits
- 8.4 Fruiting Vegetables (except Cucurbits)
- 8.5 Herbs (Fresh and Dried)
- 8.6 Leafy Vegetables (except Brassica)
- 8.7 Tomato

### 9.0 STORAGE AND DISPOSAL

### 10.0 CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

## 1.0 FIRST AID

	FIRST AID			
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20</li> </ul>			
	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 to an unconscious person.			
If on skin or	Take off contaminated clothing.			
clothing	Rinse skin immediately with plenty of water for 15-20 minutes.			
	Call a poison control center or doctor for treatment advice.			
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 treatment advice.			
Have the product	t container or label with you when calling a poison control center or			
doctor, or going f	or treatment.			
	SYNGENTA HOTLINE NUMBER			
For 24-	Hour Medical Emergency Assistance (Human or Animal) or			
Chem	ical Emergency Assistance (Spill, Leak, Fire, or Accident),			
Call				
1-800-888-8372				

## 2.0 PRECAUTIONARY STATEMENTS

# 2.1 Hazards to Human and Domestic Animals CAUTION

Causes moderate eye irritation. Avoid contact with eyes or clothing. Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Wear protective eyewear, if appropriate.

# 2.2 Personal Protective Equipment (PPE) Applicators and other handlers must wear:

Long-sleeved shirt and long pants

- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, or Viton™ ≥ 14 mils
- Shoes plus socks

•

In addition, mixers/loaders/applicators using mechanically pressurized handwands, except when applying to Christmas tree farms, nursery ornamentals, landscaping, must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any N, R, or P filter; OR a NIOSH-approved elastomeric particulate respirator with any N, R, or P filter; OR a NIOSH-approved powered air purifying respirator with HE filters.

### Respirator fit testing, medical qualification, and training

Using a program that conforms to OSHA's requirements (see 29 CFR Part 1910.134), employers must verify that any handler who uses a respirator is:

- Fit-tested and fit-checked.
- · Trained, and
- Examined by a qualified medical practitioner to ensure physical ability to safely wear the style of respirator to be worn. A qualified medical practitioner is a physician or other licensed health care professional who will evaluate the ability of a worker to wear a respirator. The initial evaluation consists of a questionnaire that asks about medical conditions (such as a heart condition) that would be problematic for respirator use. If concerns are identified, then additional evaluations, such as a physical exam, might be necessary. The initial evaluation must be done before respirator use begins. Handlers must be reexamined by a qualified medical practitioner if their health status or respirator style or use-conditions change.

Upon request by local/state/federal/tribal enforcement personnel, employers must provide documentation demonstrating how they have complied with these requirements.

### 2.2.1 USER SAFETY REQUIREMENTS

Follow the 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.

### 2.2.2 ENGINEERING CONTROL STATEMENTS

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.

### 2.3 Environmental Hazards

This product is toxic to fish and aquatic invertebrates. Azoxystrobin can be persistent for several months or longer. For terrestrial uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwater or rinsate.

### 2.3.1 GROUND WATER ADVISORY

Azoxystrobin, mefenoxam, and a degradate of azoxystrobin are known to leach through soil to groundwater under certain conditions as a result of label use. These chemicals may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

### 2.3.2 SURFACE WATER ADVISORY

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow groundwater. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of azoxystrobin and a degradate of azoxystrobin from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigations is expected to occur within 48 hours.

Notify state and/or federal authorities and Syngenta immediately if you observe any adverse environmental effects due to use of this product.

## **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.

## FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY AND/OR POOR DISEASE CONTROL

### 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 48 hours.

**Exception:** If product is drenched or soil incorporated, 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. No restricted-entry interval (REI) is required following a soil incorporated or a soil drench application.

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
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, or Viton ≥ 14 mils
- Shoes plus socks

### 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 treated areas without protective clothing until sprays have dried.

Maximum usage when applying both metalaxyl- and mefenoxam-containing products to the same crop within the same season: Do not apply more than the

maximum yearly total application rate for the active ingredient as stated on the label of the product containing the lowest yearly total on that crop.

## 3.0 PRODUCT INFORMATION

Read all label directions before use. All applications must be made according to the use directions that follow.

- Plentrix is a systemic fungicide that provides control of damping off, root and stem diseases caused by Pythium and Phytophthora spp., Rhizoctonia solani, Sclerotium rolfsii, and Fusarium spp. and foliar diseases caused by Phytophthora spp. (including *Phytophthora ramorum*), *Rhizoctonia solani*, and downy mildew fungi.
- Apply Plentrix as a preventative treatment prior to infection for listed plant diseases.
- Plentrix is a member of Syngenta's Plant Performance™ product line and may also improve the yield and/or quality of the crop. These additional benefits are due to the positive effects on plant physiology. The effects may vary according to factors such as the species, variety and environment.

### 3.0.1 PLANT SAFETY

Plentrix has been shown to be safe when applied at the specified rates to the ornamentals listed in **Section 6.0**, conifers listed in **Section 7.0**, and vegetable plants listed in **Section 8.0**, as well as the tolerant varieties of ornamental crabapple species listed below. Ornamentals that are sensitive to Plentrix are listed in **Section 5.1.1**. However, due to the large number of genera, species and varieties of ornamental greenhouse, nursery and landscape plants, it is impossible to test every one for tolerance to Plentrix. Neither the manufacturer nor the seller has determined whether Plentrix can be used safely on genera, species, or varieties of ornamental and nursery plants not specified on this label. The user should conduct small-scale testing at the recommended rates to ensure plant safety prior to broad-scale commercial use on plant genera and species not listed in this label. When using an adjuvant or tank-mix partner, the user should conduct small-scale testing at the specified rates to ensure plant safety prior to broad-scale commercial use.

### **Tolerant Varieties of Ornamental Crabapple Species (Genus Malus)**

Callaway	Golden Raindrops	Mary Potter	Selkirk
Carmine (M. atrosanguinea)	Нора	Molten Lava	Sentinel
Candymint Sargent	Indian Magic	New Centennial	Silver Moon
Christmas Holly	Island	Ormiston Roy	Silverdrift
David	Jackii <i>(M. baccata</i> var. jackii)	Pink Satin	Sinai Fire
Dolgo	Japanese Flowering Crabapple (M. floribunda)	Prairie Maid	Sugar Tyme
Donald Wyman	Katherine	Prairiefire	Van Eseltine
Dorothea	Lancelot	Profusion	White Angel
Doubloons	Louisa	Ralph Shay	Wild crabapple (M. coronaria)
Eleyi	Malus x zumi var. calocarpa	Red Baron	Winter Gold
Evereste	M. sargentii	Red Jade	
Eyelynn	Manchurian (M. baccata var. mandshurica)	Sargent	

### 3.0.2 DISEASE SUPPRESSION

If a use indicates suppression, it refers to erratic control from fair to good, or consistent control at a level below that obtained with products registered for control.

## 3.1 Integrated Pest (Disease) Management (IPM)

- Plentrix should be integrated into an overall disease and pest management strategy whenever the use of a fungicide is required.
- Cultural practices known to reduce disease development should be followed, including
  the selection of varieties with disease tolerance, removal of plant debris in which
  inoculum resides, and proper timing and placement of irrigation.
- Consult your local agricultural authorities for additional IPM strategies established for your area.
- Plentrix may be used in State Agricultural Extension advisory (disease forecasting) programs which recommend application timing based on environmental factors favorable for disease development.

## **3.2** Resistance Management

MEFENOXAM	<b>GROUP</b>	4	<b>FUNGICIDE</b>
AZOXYSTROBIN	<b>GROUP</b>	11	FUNGICIDE

For resistance management, please note that Plentrix contains both a Group 4/[mefenoxam] and Group 11/[azoxystrobin] fungicide. Any fungal population may

contain individuals naturally resistant to Plentrix and other Group 4 or Group 11 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance management strategies should be followed.

Mefenoxam belongs to the phenylamide class of chemistry which interferes with fungal RNA synthesis. Azoxystrobin belongs to the strobilurin class of chemistry which disrupts cellular respiration and energy generation.

To delay fungicide resistance, take one or more of the following steps:

- Rotate the use of Plentrix or other Group 4 or Group 11 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicides 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 use that includes scouting, uses historical information related to pesticide use, 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 applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact your local Syngenta Representative, retailer, or extension specialist for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens.
- For further information or to report suspected resistance contact Syngenta at 1-866-Syngent(a) (866-796-4368). You can also contact your pesticide distributor or university extension specialist to report resistance.

### As part of a resistance management strategy:

- Apply no more than two (2) sequential drench or soil applications before rotating to a non-Group 4 and 11 fungicide, unless otherwise stated in the specific use directions.
- Apply only one (1) foliar application before rotating to a non-Group 4 or 11 fungicide for two sequential foliar applications before reapplying Plentrix.
- Use Plentrix in rotation or in tank mix with an effective fungicide with a different mode of action – one that provides satisfactory disease control when used alone at the mixture rate
- Utilize Integrated Pest Management (IPM) practices in your program which can help reduce disease development and spread.

## 4.0 APPLICATION DIRECTIONS

## **4.1 Methods of Application**

Plentrix may be applied as a drench, soil surface spray (broadcast or banded), or as a stem and foliar spray. Plentrix may also be incorporated into a pre-potting growing media for subsequent seeding or transplanting of ornamentals. Apply Plentrix at the rates specified in **Sections 6.1 and 6.2**. Applications can be made by ground or via chemigation as specified.

### 4.1.1 DRENCH APPLICATION

- Drench application is limited to use on Ornamentals and other listed crops.
- Prepare the Plentrix drench solution according to Section 6.1.
- Plentrix may be applied to ornamentals in outdoor nurseries, forest nurseries, greenhouses, lath and shade houses, interiorscapes, and commercial and residential landscapes.
- Apply enough drench solution to thoroughly wet the root zone of the plants without leaching through the container.

### 4.1.2 FOLIAR AND STEM APPLICATIONS

- Plentrix may be applied as a spray to control downy mildew diseases and foliar diseases caused by *Phytophthora* spp. (including *Phytophthora ramorum*) and *Rhizoctonia solani.*
- Apply thoroughly to all parts of the foliage and stems.

### 4.1.3 SOIL SURFACE SPRAYS

 Apply listed use rates per 1,000 sq ft as a broadcast or banded spray to planting media in sufficient water to reach the root zone. Irrigate within 24 hours of application.

### 4.1.4 PRE-POTTING GROWING MEDIA MIX

- Blend the specified use rate of Plentrix into a sufficient quantity of water. Uniformly mix this solution onto one (1) cubic yard of potting media.
- Uniform mixing can be accomplished by placing the potting mix in a rotating drum and spraying the Plentrix solution onto the mix while the drum is rotating.
- It is recommended that this media treatment be prepared just prior to use. Mix only enough for current use. Restriction: Do not store.

### 4.1.5 BANDED APPLICATIONS

Calculate the amount of Plentrix to apply as follows:

## **4.**2 Application Equipment

Plentrix may be applied with application equipment commonly used for greenhouse and nursery plant production. See **Section 4.5** for information about chemigation equipment.

- Spray equipment configuration should be arranged to provide accurate, uniform and thorough drench application to the target crop and minimize potential for spray drift.
- To ensure accuracy, calibrate sprayer before each use.
- For information on spray equipment and calibration, consult spray equipment manufacturers and/or state recommendations.
- All application equipment must be properly maintained and calibrated using appropriate carriers.

## 4.3 Application Volume and Spray Coverage

- Good coverage, without runoff or leaching, of the pre-infection area (root zone, root ball, crown, etc.) is necessary for satisfactory control.
- In situations where water volumes used are much less than 100 gallons and the area treated is small, the following table provides the Plentrix rates to make small

quantities of solution. Refer to the plant type for the correct amount of product to use when utilizing this table.

 For soil drench, apply the application solution to the soil surface to wet the root area of the plants as listed in **Section 6.1**.

	Amount of Plentrix to add to water to make the following quantities		
Rate of Plentrix (fl oz)	10 gallons	25 gallons	
0.5	1.5 ml / 0.25 tsp	3.8 ml / 0.75 tsp	
1.0	3 ml / 0.5 tsp	7.6 ml / 1.5 tsp	
2.0	6 ml / 1 tsp	15 ml / 3 tsp / 1 Tbsp	
3.0	9 ml / 2 tsp	22.6 ml / 4.5 tsp	
4.0	12 ml / 3 tsp	30 ml / 6 tsp / 2 Tbsp	

## **4.4 Mixing Directions**

- Thoroughly clean spray equipment before using this product.
- Prepare no more spray mixture than is required for the immediate operation.
- Agitate the spray solution before and during application.
- Rinse spray tank thoroughly with clean water after each day's use and dispose of pesticide rinsate by application to an already treated area.
- Avoid allowing the spray mixture to stand overnight or for prolonged periods of time
  without agitation. Delayed application may cause product to settle and be difficult to
  re-suspend. If this occurs, good agitation is required for a minimum of 15 minutes
  before and during spray operation.

### **4.4.1 PLENTRIX ALONE**

- Add ½-¾ of the required amount of water to the spray or mixing tank.
- With the agitator running, add Plentrix to the tank.
- Continue agitation while adding the remainder of the water.
- Begin application of the spray solution after Plentrix has completely dispersed into the mix water.
- Maintain agitation until all of the mixture has been sprayed.

### 4.4.2 TANK-MIX PRECAUTIONS

- When using an adjuvant or tank-mix partner, the user should conduct small-scale testing at the specified rates to ensure plant safety prior to broad scale commercial use.
- Restriction: Do not mix with any product that prohibits such mixing
- Observe all directions for use, crop/sites, use rates, dilution ratios, precautions, and limitations that appear on the tank-mix product label.
- Restriction: Do not exceed any labeled use rate.
- Follow the most restrictive label precautions and limitations.

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 the tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture

### 4.4.3 TANK-MIX COMPATIBILITY

A jar compatibility test is recommended prior to tank-mixing with other pesticides and/or adjuvants, in order to ensure the compatibility of Plentrix with other tank-mixed pesticide, adjuvant or fertilizer partners. The recommended procedure for conducting jar tank-mix compatibility tests is as follows:

**Compatibility Test:** Always conduct a tank-mix compatibility test when mixing with new or unknown tank-mix partners before use. The following test assumes a spray volume of 25 gal/A. For other spray volumes, make appropriate changes in the components. Check tank-mix compatibility using this procedure:

- 1. Add 1 pt of carrier (i.e., water) to be used in the spray operation to each of two clear 1-qt jars with tight lids.
- 2. To **one** of the jars, add ¼ tsp or 1.2 milliliters of a commercially available tank-mix compatibility agent approved for this use (¼ tsp is equivalent to 2 pt/100 gallons spray). Close and seal the lid, Invert the jar, shake, or stir gently to ensure thorough mixing.
- 3. To both jars, add the proportionate amount of each tank-mix partner. If more than one tank-mix partner is to be used, follow the recommended mixing order listed in Section 4.4.4 by adding dry formulations (wettable powders or water dispersible granules) first, followed by liquid flowables, capsule suspensions, emulsifiable concentrates and finally add adjuvants. After each addition, invert the jar, shake or stir gently to thoroughly mix. The appropriate amount of each tank-mix partner for this test, is as follows:
- 4. After adding all ingredients, put lids on and seal the lids, Invert each jar 10 times to fully mix. Let the mixtures stand for 15-30 minutes and then assess by looking for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if a compatibility agent is needed in the application mixture by comparing the 2 jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility: (A) Slurry dry formulations in water before adding to the jar, or (B) add the compatibility agent directly into liquid formulations, before addition to the jar. If these procedures are followed but incompatibility is still observed, do not use the tank mixture.

### 4.4.4 PLENTRIX IN TANK MIXTURES

- Add  $\frac{1}{2}$ - $\frac{2}{3}$  of the required amount of water to the spray or mixing tank.
- With the agitator running, add the tank-mix partner(s) in this order:
  - 1. water-soluble packaging
  - 2. wettable powders
  - 3. wettable granules (dry flowables)
  - 4. liquid flowables (such as Plentrix)
  - 5. emulsifiable concentrates
  - 6. surfactants/adjuvants.
- Allow each product to completely dissolve and disperse into the mix water before adding the next product and continue agitation until all products are added.
- Continue agitation while adding the remainder of the water to the spray tank.
- Begin application of the mixture after all products have been completely dispersed into the application mixture.
- Maintain agitation until all of the application mixture has been applied.

## 4.5 Application through Irrigation Systems (Chemigation)

## 4.5.1 APPLICATION DIRECTIONS FOR IRRIGATION SYSTEMS (CHEMIGATION)

- Apply this product only through overhead, hand-held, micro-irrigation systems and motorized calibrated irrigation systems either alone or with other pesticides that are registered for application through irrigation systems. Do not apply this product through any other type of irrigation system.
- Dilution ratios are typically 1:100 to 1:200.
- Plant injury and/or poor disease control can result from non-uniform distribution of treated water.
- If you have questions about calibration, you should 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 (Section 4.5.3) are in place.
- A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

### 4.5.2 OPERATING INSTRUCTIONS

- The system must contain a functional check-valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent watersource contamination from backflow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
- 3. 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.

- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. 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.
- 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.

### 4.5.3 SPECIFIC INSTRUCTIONS FOR PUBLIC WATER SYSTEMS

- 1. 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.
- 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 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 pump.
- 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.

## **5.0 RESTRICTIONS AND PRECAUTIONS**

## **5**.1 Use Restrictions

- **DO NOT** apply Plentrix by air.
- **DO NOT** allow a drench application to leach through or spill out of the container during or after treatment.
- **DO NOT** use spray equipment which has been previously used to spray Plentrix to spray apple trees. Even trace amounts can cause unacceptable phytotoxicity to certain apple and crabapple varieties.

- DO NOT apply Plentrix to certain crabapple or cherry trees (including flowering or ornamental varieties such as Yoshino) due to possible phytotoxicity. (See Section 5.1.1.) Tolerant crabapple varieties are listed in Section 3.0.1.
- DO NOT apply Plentrix to the following plants:

## 5.1.1 ORNAMENTALS SENSITIVE TO PLENTRIX: Do not apply Plentrix to these species or varieties.

Common Name	Botanical Name
Apple	Malus domestica
Crabapple - Flame variety	Malus spp.
Crabapple - Brandywine variety	Malus spp.
Crabapple - Novamac variety	Malus spp.
Cherry, Flowering - Yoshina variety	Prunus yedoensis.
Leatherleaf Fern	Rumohra adianformis and other species

### 5.2 Use Precautions

- Applications to Ligustrum spp. and Sygonium spp. may cause stunting or chlorosis. Responses may vary depending on environmental conditions. Test Plentrix on a limited area to evaluate for any possible damage before proceeding with treatment of the entire crop.
- If pathogen isolates that are resistant to Group 4 and Group 11 fungicides are present, efficacy may be reduced for certain diseases.
- The higher rates in the rate range (when a rate range is listed) may be required under conditions of heavy infection pressure, for highly susceptible varieties, or when environmental conditions conducive to disease exist.

## **5**.3 Spray Drift Management

### **MANDATORY SPRAY DRIFT**

### **Groundboom Applications:**

- User must only apply with the release height recommended by the manufacturer, but no more than 4 ft above the ground or crop canopy.
- Applicators are required to use a medium or coarser droplet size in accordance with the most current version of the American Society of Agricultural and Biological Engineers Standard 572 (ASAE S572).
- Do not apply when wind speeds exceed 15 mph at the application site.
- Do not apply during temperature inversions.

### SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS

### IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

### **Controlling Droplet Size – Ground Boom**

- Volume Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- **Pressure** Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- **Spray Nozzle** Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

### **BOOM HEIGHT - Ground Boom**

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

### **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

### **WIND**

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

## 6.0 ORNAMENTAL USE DIRECTIONS

## **6**.1 Ornamentals – Soil Diseases (Container-Grown Plants)

FOLIAGE PLANTS (EXCEPT	FOLIAGE PLANTS (EXCEPT PHILODRENDRON AND POTHOS)			
Target Disease	Use Rate	Application Timing	Use Directions	
Fusarium Root/Stem Rot (Fusarium spp.) Phytophthora Root/Crown Rot (Phytophthora spp.) Pythium Root and Stem Rot (Pythium spp.) Rhizoctonia Root/Stem Rot (Rhizoctonia solani) Southern Blight (Sclerotium rolfsii)	Mix 0.5 – 1.3 fl oz per 100 gallons.  Apply 1.5 – 2.0 pt of drench solution per sq ft of surface area.	Apply as a drench at planting and during production.	Apply sufficient drench solution to thoroughly wet the root zone of the plants without leaching through the container.	
FOLIAGE PLANTS – PHILOE	DENDRON			
Target Disease	Use Rate	Application Timing	Use Directions	
Fusarium Root/Stem Rot (Fusarium spp.) Phytophthora Root/Crown Rot (Phytophthora spp.) Pythium Root and Stem Rot (Pythium spp.) Rhizoctonia Root/Stem Rot (Rhizoctonia solani) Southern Blight (Sclerotium rolfsii)	Mix 1.5 – 2.0 fl oz per 100 gallons.  Apply 1.5 – 2.0 pt of drench solution per sq ft of surface area.	Apply as a drench at planting and during production.	Apply sufficient drench solution to thoroughly wet the root zone of the plants without leaching through the container.  Reapply after 4 weeks if needed.	
FOLIAGE PLANTS - POTHO	OS .			
Target Disease	Use Rate	Application Timing	Use Directions	
Fusarium Root/Stem Rot (Fusarium spp.) Phytophthora Root/Crown Rot (Phytophthora spp.) Pythium Root and Stem Rot (Pythium spp.) Rhizoctonia Root/Stem Rot (Rhizoctonia solani) Southern Blight (Sclerotium rolfsii)	Mix 0.5 fl oz per 100 gallons.  Apply 1.5 – 2.0 pt of drench solution per sq ft of surface area.	Apply as a drench at planting and during production.	Apply sufficient drench solution to thoroughly wet the root zone of the plants without leaching through the container.  Reapply after 3 months if needed.	
HERBACEOUS PLANTS, FLOWERING PLANTS, FLOWERS GROWN FOR SEED, GROUND COVERS, ORNAMENTAL GRASSES AND SUCCULENTS				
Target Disease	Use Rate	Application Timing	Use Directions	

Fusarium Root/Stem Rot (Fusarium spp.) Phytophthora Root/Crown Rot (Phytophthora spp.) Pythium Root and Stem Rot	Mix 0.5 fl oz per 100 gallons.  Apply 1 pt drench solution per sq ft of surface area.	Apply as a drench at seeding or to young seedlings or liners.	Make a single drench application, applying sufficient drench solution to thoroughly wet the root zone of the plants without leaching through the container.
( <i>Pythium</i> spp.) Rhizoctonia Root/Stem Rot ( <i>Rhizoctonia solani</i> ) Southern Blight ( <i>Sclerotium rolfsii</i> )	Mix 1.0 – 2.0 fl oz per 100 gallons.  Apply 1.0 – 2.0 pt of drench solution per sq ft of surface area.	Apply as a drench at planting and during production.	Apply sufficient drench solution to thoroughly wet the root zone of the plants without leaching through the container.  Reapply after 4 weeks if needed.
	Mix 0.25 fl oz/cu yd of media	Mix into growing media prior to transplanting.	Dilute Plentrix into a sufficient quantity of water which allows thorough mixing of Plentrix into growing media.
Downy mildew (such as: Peronospora spp. Plasmopara spp. Bremiella spp. Bremia spp.)	Mix 1.0 – 2.0 fl oz per 100 gallons.  Apply 1.0 – 2.0 pt of drench solution per sq ft of surface area.	Apply as a drench at planting and during production.	Apply sufficient drench solution to thoroughly wet the root zone of the plants without leaching through the container.  Reapply after 4 weeks if needed.
Suppression Powdery mildew Rust	Mix 1.3 – 2.0 fl oz per 100 gallons.  Apply 1.0 – 2.0 pt of drench solution per sq ft of surface area.	Apply as a drench at planting and during production.	Apply sufficient drench solution to thoroughly wet the root zone of the plants without leaching through the container.  Reapply after 4 weeks if needed.
POT AND BEDDING PLANTS (ANNUALS AND PERENNIALS); BULB, CORM AND TUBER CROPS (EXCEPT EASTER LILY); BREEDING CROPS AND CUT FLOWERS			
		Application	

Target Disease	Use Rate	Application Timing	Use Directions
Fusarium Root/Stem Rot (Fusarium spp.) Phytophthora Root/Crown Rot (Phytophthora spp.) Pythium Root and Stem Rot	Mix 0.5 fl oz per 100 gallons.  Apply 1 pt of drench solution per sq ft of surface area.	Apply as a drench at seeding or to young seedlings or liners.	Make a single drench application, applying sufficient drench solution to thoroughly wet the root zone of the plants without leaching through the container.
(Pythium spp.) Rhizoctonia Root/Stem Rot (Rhizoctonia solani) Southern Blight (Sclerotium rolfsii)	Apply 2.0 fl oz/1,000 sq ft	Apply as a soil surface spray after transplanting.	Apply as a broadcast or banded spray to the surface of planting media in sufficient water to reach the root zone. Irrigate with ½ inch of water within 24 hours.
	Mix 1.0 – 2.0 fl oz per 100 gallons.  Apply 1 - 2 pt of drench solution per sq ft of surface area.	Apply as a drench at transplanting.	Apply sufficient drench solution to thoroughly wet the root zone of the plants without leaching through the container.  Reapply drench after 4 weeks if needed.
	Mix 0.25 fl oz/cu yd of media	Mix into growing media prior to transplanting.	Dilute Plentrix into a sufficient quantity of water which allows thorough mixing of Plentrix into growing media.
Downy mildew (such as: Peronospora spp. Plasmopara spp.	Mix 0.5 fl oz per 100 gallons.	Apply as a drench at seeding or to young seedlings or liners.	Make a single drench application.  Apply sufficient drench solution to thoroughly wet the root zone of the

Bremiella spp. Bremia spp.)	Apply 1 pt of drench solution per sq ft of surface area.		plants without leaching through the container.
	Mix 0.5 fl oz per 100 gallons.  Apply 1 pt of drench solution per sq ft of surface area.	Apply as a drench at transplanting.	Apply sufficient drench solution to thoroughly wet the root zone of the plants without leaching through the container.  Reapply drench after 4 weeks if
BULB CROPS – EASTER LII	<b>v</b>		needed.
BOLD ONO! O - LAOTEN EIL	- 1	Application	
Target Disease	Use Rate	Timing	Use Directions
Fusarium Root/Stem Rot (Fusarium spp.) Phytophthora Root/Crown Rot (Phytophthora spp.) Pythium Root and Stem Rot (Pythium spp.) Rhizoctonia Root/Stem Rot (Rhizoctonia solani) Southern Blight (Sclerotium rolfsii)  WOODY ORNAMENTALS (E  Ornamental trees and shrubs Evergreens (including conifers  Target Disease  Fusarium Root/Stem Rot (Fusarium spp.) Phytophthora Root/Crown Rot (Phytophthora spp.)	Non-bearing frui Non-bearing nut  Use Rate  Mix 2.0 – 2.75 fl oz per 100 gallons.  Apply 1.5 – 2 pt of drench solution per sq	t trees and plants	Non-bearing vines Palms  Use Directions  Apply sufficient drench solution to thoroughly wet the root zone of the plants without leaching through the container.
Pythium Root and Stem Rot (Pythium spp.) Rhizoctonia Root/Stem Rot (Rhizoctonia solani) Southern Blight (Sclerotium rolfsii)	ft of surface area.		Reapply after 2 - 4 months if needed.
WOODY ORNAMENTALS -	AZALEA		
Target Disease	Use Rate	Application Timing	Use Directions
Fusarium Root/Stem Rot (Fusarium spp.) Pythium Root and Stem Rot (Pythium spp.) Phytophthora Root/Crown Rot (Phytophthora spp.)	Mix 1.3 – 2.5 fl oz per 100 gallons.  Apply 1.5 – 2 pt of drench solution per sq ft of surface area.	Apply as a drench at planting and during production.	Apply sufficient drench solution to thoroughly wet the root zone of the plants without leaching through the container.  Reapply drench after 2 to 4 months if needed.
Rhizoctonia Root/Stem Rot ( <i>Rhizoctonia solani</i> ) Southern Blight ( <i>Sclerotium rolfsii</i> )	Apply 2.0 fl oz/1,000 sq ft	Apply as a soil surface spray after transplanting.	Apply as a broadcast or banded spray to the surface of planting media in sufficient water to reach the root zone. Irrigate with ½ inch of water within 24 hours.
	USE RES	STRICTIONS	

- Maximum Single Application Rate (Plants Grown Outdoors and Indoors): 26.2 fl oz/A/application (equal to 0.55 lb azoxystrobin and 0.21 lb mefenoxam per acre)
- 2) Minimum Application Interval: 4 weeks for those ornamentals where re-application may be applied; a minimum of 3 months for Pothos
- 3) Maximum Annual Rate (Crops Grown Outdoors): 238.8 fl oz/A/year
  - **Do not** apply more than 5.0 lb ai/A/year of azoxystrobin-containing products.
  - **Do not** apply more than 6.0 lb ai/A/year of mefenoxam-containing products.
- 4) Maximum Annual Rate (Crops Grown Indoors): 238.8 fl oz/A/crop
  - a. **Do not** apply more than 5.0 lb ai/A/crop of azoxystrobin-containing products.
  - Do not apply more than 6.0 lb ai/A/crop of mefanoxam-containing products.

## **6**.2 Ornamentals - Soil Diseases (Plants Grown in Ground)

·				
Target Pathogen	Use Rate	Application Timing	Lisa Directions	
Target Pathogen Fusarium spp. Pythium spp. Phytophthora spp. Rhizoctonia solani Sclerotium rolfsii	(fl oz/1,000 row feet) 0.5 fl oz/ 1000 row ft	Application Timing Apply at planting in furrow or banded before the propagated units (seed, seed pieces, bulbs, or corms) are covered by soil.	Use Directions  Apply product as an infurrow or banded application in 3-15 gallons of water per 1,000 rowfeet.  Mount the spray nozzle to allow the spray mixture to be applied directly into the furrow.  See Section 4.1.5 for	
			additional information about banded applications.	
USE RESTRICTIONS				

- Maximum Single Application Rate: 26.2 fl oz/A/application (equal to 0.55 lb azoxystrobin and 0.21 lb mefenoxam per acre) [Note: Maximum single application rate is calculated based on 10" row spacing.]
- Maximum Annual Rate: 238.8 fl oz/A/year
  - **Do not** apply more than 5.0 lb ai/A/year of azoxystrobin-containing products.
  - **Do not** apply more than 6.0 lb ai/A/year of mefenoxam-containing products.

## **6**.3 Ornamentals – Foliar, Crown and Stem Diseases

### **HERBACEOUS ORNAMENTALS**

Breeding crops Flowering plants Ornamental Grasses

Bulb crops Flowers grown for seed Pot and bedding plants (annual and

(including Calla Lilies, Easter Lilies, Foliage Plants perennials)
Gladiolas and Caladiums) Ground covers Succulents

Cut flowers

Target Disease	Use Rate	Application Timing	Use Directions
Aerial Blight (Rhizoctonia solani) Downy mildew (such as:	1.0 fl oz per 100 gallons	Apply to young seedlings or liners.	Spray seedlings or liners thoroughly to ensure good coverage.
Peronospora spp. Plasmopara spp., Bremiella spp. Bremia spp.) Phytophthora spp. (including <i>P. ramorum</i> )	1.0 – 2.0 fl oz per 100 gallons	Apply to transplants or established plants during production.	Spray plants thoroughly to ensure good coverage.  Apply prior to disease development or at the first indication of disease.

### **WOODY ORNAMENTALS**

Evergreens (including conifers)

Non-bearing vines

Palms

Non-bearing fruit trees

Ornamental tree and shrubs

Succulents

Non-bearing nut trees **Application Target Disease Use Rate** Timing **Use Directions** 2.0 - 2.75 fl oz perAerial Blight Apply to Spray plants thoroughly to ensure good (Rhizoctonia solani) 100 gallons transplants or coverage. Downy mildew established plants (such as: during production. Apply prior to disease development or Peronospora spp. at the first indication of disease. Plasmopara spp., Bremiella spp. Bremia spp.) Phytophthora spp. (including P. ramorum)

- 1) Maximum Single Application Rate (Plants Grown Outdoors and Indoors): 26.2 fl oz/A/application (equal to 0.55 lb azoxystrobin and 0.21 lb mefenoxam per acre)
- 2) **Minimum Application Interval:** 4 weeks for those ornamentals where re-application may be applied; a minimum of 3 months for Pothos
- 3) Maximum Annual Rate (Crops Grown Outdoors): 238.8 fl oz/A/year
  - a. **Do not** apply more than 5.0 lb ai/A/year of azoxystrobin-containing products.
  - b. **Do not** apply more than 6.0 lb ai/A/year of mefenoxam-containing products.
- 4) Maximum Annual Rate (Crops Grown Indoors): 238.8 fl oz/A/crop
  - a. **Do not** apply more than 5.0 lb ai/A/crop of azoxystrobin-containing products.
  - b. **Do not** apply more than 6.0 lb ai/A/crop of mefenoxam-containing products.
- 5) Maximum application rates for the following foliar applications with liquid products applied by groundboom or chemigation are not to exceed:
  - a. Field-grown or nursery ornamentals 0.75 lb ai/A.
- 6) Maximum application rate for products applied with handheld equipment for foliar applications are not to exceed:
  - a. Nursery ornamentals, broadcast applications 0.0025 lb ai/gal.
  - b. Landscaping (plants, flowers trees, turf) 0.0025 lb ai/gal.
- 7) Maximum application rates for products applied with mechanically pressurized handwand with liquid products are not to exceed:
  - a. Greenhouse Ornamentals 0.0025 lb ai/gal.

## 7.0 CONIFER USE DIRECTIONS

## 7.1 Conifers in Nurseries

Target Disease	Use Rate	Application Timing	Use Directions
Phytophthora root and stem diseases	2.5 pt/A or 0.9 fl oz/1000 sq ft	Apply to seedbeds and plug-plantings in the spring and again in the fall.	Apply as a soil surface spray in at least 50 gallons of water per acre.  For best efficacy, ½ inch irrigation or
	5 pt/A or 1.8 fl oz/1000 sq ft	Apply to 2-0 transplants in the spring and again in the fall.	rainfall is required within 24 hours after application.
Phytophthora foliar diseases	2.0 fl oz/100 gallons	Apply to seedbeds and plug-plantings.	Apply as a foliar spray until runoff.
	2.0 – 2.75 fl oz/100 gallons	Apply to 2-0 transplants.	For best efficacy, ½ inch irrigation or rainfall is required within 24 hours after application.
		PESTPICTIONS	application.

- 1) Maximum Single Application Rate (Plants Grown Outdoors and Indoors): 11.9 fl oz/A/application (equal to 0.25 lb azoxystrobin and 0.11 lb mefenoxam per acre)
- 2) Minimum Application Interval: 4 weeks
- 3) Maximum Annual Rate (Crops Grown Outdoors): 95.5 fl oz/A/year
  - a. **Do not** apply more than 2.0 lb ai/A/year of azoxystrobin-containing products.
  - b. **Do not** apply more than 6.0 lb ai/A/year of mefenoxam-containing products.
- 4) Maximum Annual Rate (Crops Grown Indoors): 95.5 fl oz/A/crop
  - a. **Do not** apply more than 2.0 lb ai/A/crop of azoxystrobin-containing products.
  - b. **Do not** apply more than 6.0 lb ai/A/crop of mefenoxam-containing products.

## 7.2 Conifers in Plantations and Forestry Production

Target Disease	Use Rate	Application Timing	Use Directions
Phytophthora root and stem diseases	1.3 – 2.5 pt/A	Apply to transplants or established plants during production.  Applications should be made in early spring before growth starts and in the fall before the ground freezes.	Apply as a directed soil spray in a minimum of 50 gallons of water, avoiding applications to the foliage.  If applications are banded, see <b>Section 4.1.5</b> for information.
Phytophthora foliar diseases, including those caused by <i>Phytophthora ramorum</i>	2.0 – 4.0 fl oz/100 gallons	Apply to transplants or established plants during production.	Apply as a foliar spray until runoff.

### **Precautions:**

• Plentrix should be used in conjunction with good cultural practices. The use of Plentrix will not overcome poor management practices, such as planting on sites that are prone to flooding or are poorly drained. Plentrix fungicide will not revitalize trees showing moderate to severe disease symptoms.

- 1) **Maximum Single Application Rate:** 11.9 fl oz/A/application (equal to 0.25 lb azoxystrobin and 0.11 lb mefenoxam per acre
- 2) Minimum Application Interval: 4 weeks
- 3) Maximum Annual Rate: 95.5 fl oz/A/year
  - a. **Do not** apply more than 2.0 lb ai/A/year of azoxystrobin-containing products.
  - b. **Do not** apply more than 6.0 lb ai/A/year of mefenoxam-containing products.
- 4) Maximum application rate for products applied with handheld equipment for foliar applications with liquid products are not to exceed:
  - a. Christmas tree farm 0.00125 lb ai/gal.

## 8.0 VEGETABLE PLANT USE DIRECTIONS

# 8.1 Brassica (Cole) Leafy Vegetables (Crop Group 5) and Turnip Greens

### Crops (including all cultivars, varieties, and/or hybrids of these)

Broccoli Cabbage, Chinese mustard (gai Mizuna

Broccoli, Chinese (gai lon) choy) Mustard Greens
Broccoli raab (rapini) Cauliflower Mustard Spinach
Brussels sprouts Cavalo broccolo Rape Greens

Cabbage Collards Turnip Greens (greens only)

Cabbage, Chinese (bok choy) Kale Cabbage, Chinese (Napa) Kohlrabi

Target Disease	Use Rate	Application Timing	Use Directions
Pythium Damping-Off and Root Rots (Pythium spp.) Rhizoctonia Seedling Blight (Rhizoctonia solani) Seedling root rot, basal stem rot (Rhizoctonia solani)	12.0 fl oz/A or 0.25 fl oz/1,000 sq ft	Apply after seeding.	Apply as a soil surface spray.  Irrigate lightly after application to move product into the root zone.
Downy Mildew (Peronospora parasitica)	2.0 – 4.0 fl oz/A or 1.5 – 3.0 ml/1000 sq ft	Apply when conditions are favorable for disease but before infection.	Apply as a foliar spray.  Plentrix must be used in a tank mix with other fungicides registered for control of downy mildew. Apply with the full labeled rate of the tank-mix partner fungicide.

- 1) Maximum Single Application Rate (Plants Grown Indoors and Outdoors: 12.0 fl oz/A/application
- 2) Make only one application per crop.
- 3) Maximum Annual Rate:
  - a) Do not apply greater than 12 fl oz/A (0.25 lb ai/A of azoxystrobin-containing and 0.10 lb ai/A of mefenoxam- containing products) to a single crop
  - b) When multiple crops are produced in the same production area, do not apply greater than 0.75 lb ai/A/year of azoxystrobin-containing and 1.0 lb ai/A/year of mefenoxam-containing products
- 4) Pre-Harvest Interval (PHI): 21 days

## 8.2 Bulb Vegetables

Bulb Vegetable Crops (including all cultivars, varieties, and/or hybrids of these)				
Dry Bulb Green Onions Green Onions (cont'd)				
Garlic	Leeks	Spring onions		
Onions	Scallions	Scallions Welsh onions		
Shallots	Shallots, fresh leaves			

Target Disease	Use Rate	Application Timing	Use Directions
Pythium Damping-Off and Root Rots ( <i>Pythium</i> spp.) Rhizoctonia Seedling Blight ( <i>Rhizoctonia solani</i> )	12.0 fl oz/A or 0.28 fl oz/1,000 sq ft	Apply after seeding and before plants are infected.	Apply as a soil surface spray.  Irrigate lightly after application to move product into the root zone.

- 1. Maximum Single Application Rate: 12.0 fl oz/A/application
- 2. Make only one application per crop.
- 3. Maximum Annual Rate:
  - a. Do not apply greater than 12.0 fl oz/A (0.25 lb ai/A of azoxystrobin-containing and 0.10 lb ai/A of mefenoxam-containing products) to a single crop.
  - b. When multiple crops are produced in the same production area, do not apply greater than 1.5 lb ai/A/year of azoxystrobin-containing and 1.0 lb ai/A/year of mefenoxam-containing products.
- 4. Pre-Harvest Interval (PHI): 7 days

## 8.3 Cucurbit Vegetables, Crop Group 9

Crops (including all cultivars, varieties, and/or hybrids of these)			
Chayote	Muskmelon		Muskmelon (cont'd)
Chinese waxgourd	Cantaloupe	)	Snake melon
Citron melon	Casaba		True cantalouple
Cucumber	Crenshaw	melon	Pumpkin ·
Gherkin	Golden Pershaw melon		Squash, summer
Gourd, edible	Honeydew melon		Squash, winter
Momordica spp.	Honey balls		Watermelon
Balsam apple	Mango mel	Mango melon	
Balsam pear	Persian me	Persian melon	
Bitter melon	Pineapple melon		
Chinese cucumber	Santa Clau	s melon	
		Application	

Target Disease	Use Rate	Application Timing	Use Directions
Pythium Damping-Off and Root Rots ( <i>Pythium</i> spp.) Rhizoctonia Seedling Blight and Root Rot ( <i>Rhizoctonia solani</i> )	14.8 fl oz/A or 0.34 fl oz/1,000 sq ft	Apply after seeding and before plants are infected.	Apply as a soil surface spray or as a soil treatment.  Irrigate lightly after application to move product into the root zone.

- Maximum Single Application Rate: 12.0 fl oz/A/application
   Make only one application per crop.
- 3. Maximum Annual Rate:
  - a) Do not apply greater than 12.0 fl oz/A (0.25 lb ai/A of azoxystrobin-containing and 0.10 lb ai/A of mefenoxam- containing products) to a single crop.
  - b) When multiple crops are produced in the same production area, do not apply greater than 1.5 lb ai/A/year of azoxystrobin-containing and 1.0 lb ai/A/year of mefenoxam-containing products.
- 4. Pre-Harvest Interval (PHI): 7 days

## 8.4 Fruiting Vegetables (except Cucurbits)

Crops (including all cultivars, varieties, and/or hybrids of these)				
African eggplant	Pea eggplant	Pepper, pimento		
Eggplant	Pepino	Pepper, sweet		
Groundcherry	Pepper, bell	Roselle		
Marynia	Pepper, chili	Scarlet eggplant		
Okra	Pepper, cooking	Tomatillo		

Target Disease	Use Rate	Application Timing	Use Directions
Crown Rot (Phytophthora capsici) Damping Off (Pythium spp.) Rhizoctonia seedling rot (Rhizoctonia solani)	1 pt/A or 0.37 fl oz/1,000 sq ft	Apply after seeding and before plants are infected.	Apply as a soil surface spray.  Irrigate lightly after application to move product into the root zone.

### **Precautions:**

- May cause some yellowing of pepper leaves.
- Plants already infected with Phytophthora cannot be cured with Plentrix.
- The foliar blight phase of Phytophthora cannot be controlled with foliar applications of Plentrix.

- 1. Maximum Single Application Rate: 12.0 fl oz/A/application
- 2. Make only one application per crop.
- 3. Maximum Annual Rate:
  - a. Do not apply greater than 12 fl oz/A (0.25 lb ai/A of azoxystrobin- containing and 0.10 lb ai/A of mefenoxam-containing products) to a single crop.
  - b. When multiple crops are produced in the same production area, do not apply greater than 1.0 lb ai/A/year of azoxystrobin-containing and 1.5 lb ai/A/year of mefenoxam-containing products.
- 4. Pre-Harvest Interval (PHI): 7 days

## 8.5 Herbs (Fresh and Dried)

9.0 Herbs (Fresh and Bried)					
Crops (including all cultivars and varieties)					
Angelica	Costmary		Rosemary		
Balm	Curry (lea	f)	Rue		
Basil	Dillweed		Sage		
Borage	Horehoun	d	Savory, Summer		
Burnet	Hyssop		Savory, Winter		
Catnip	Lavender		Sweet Bay		
Chamomile	Lemongra	SS	Tansy		
Chervil (dried)	Lovage (le	eaf)	Tarragon		
Chinese Chive	Marigold		Thyme		
Chive	Marjoram		Wintergreen		
Cilantro (leaf)	Nasturtium		Woodruff		
Clary	Parsley (dried)		Wormwood		
Coriander (leaf)	Pennyroya	al			
		Application			
Target Disease	Use Rate	Timing	Use Directions		
Damping-Off	12 fl oz /A	Apply after	Apply as a soil surface spray directed to		
( <i>Pythium</i> spp.)	or	seedling	the base of the plants.		
, ,	0.28 fl oz/1000	emergence and	·		
	sq ft	before plants Are	Irrigate lightly after application to move		
		infected.	product into the root zone.		
Basil - Additional Diseased	d Controlled				
Basil Downy Mildew	7.5 fl oz/5,000 sq ft	Apply after	Apply as a spray to plug production		
(Peronospora belbarhrii)		seedling	trays in sufficient water to provide		
		emergence and	uniform coverage.		
		before plants are			
		infected	Irrigate lightly after application to move		
			the product into growing media profile,		
			but not to the point of leaching.		
	USE	RESTRICTIONS			

- 1. **Maximum Single Application Rate:** 12.0 fl oz/A/application
- 2. Make only one application per crop.
- 3. Maximum Annual Rate:
  - a. Do not apply greater than 12.0 fl oz/A (0.25 lb ai/A of azoxystrobin- containing and 0.10 lb ai/A of mefenoxam- containing products) to a single crop.
  - b. When multiple crops are produced in the same production area, do not apply greater than 1.5 lb ai/A/year of azoxystrobin-containing and 1.0 lb ai/A/year of mefenoxam-containing products.
- 4. Pre-Harvest Interval (PHI): 21 days

Plentrix must be used in a tank mix with

other fungicides registered for control of

downy mildew. Apply with the full label rate of the tank-mix partner fungicide.

## 8.6 Leafy Vegetables (except Brassica)

Crops (including all cultivars, varieties, and/or hybrids of these)

oropo (moraum gan outer aro, various), ana/or mysmas or moss/				
Amaranth	Corn Sala	d	Parsley	
Arugula	Cress (Ga	rden)	Purslane (Garden)	
Cardoon	Cress (Up	land)	Purslane (Winter)	
Celery	Dandelion		Radicchio (Red Chicory)	
Celtuce	Dock (Sor	rel)	Rhubarb	
Chervil	Endive (Es	scarole)	Spinach	
Chinese Celery	Fennel, Fl	orence (Finochio)	Spinach (New Zealand)	
Chrysanthemum (Edible-Leav	ved) Lettuce (H	lead and Leaf)	Spinach (Vine)	
Chrysanthemum (Garland)	Orach		Swiss Chard	
		Application		
Target Disease	Use Rate	Timing	Use Directions	
Pythium Damping-Off and	12.0 fl oz/A	Apply after	Apply as a soil surface spray.	
Root Rots	or	seeding and		
( <i>Pythium</i> spp.)	0.28 fl oz/1,000	before plants are	Irrigate lightly after application to move	
	sq ft	infected.	product into the root zone.	
Rhizoctonia Seedling Blight				
and Root Rot				
(Rhizoctonia solani)				
0.11				
Soilborne Diseases				
Web blight, Bottom rot,				
Crater rot, Root rot				
(Rhizoctonia solani)				
Lettuce (Head and Leaf) -	Additional Diseased	Controlled	·	
Downy Mildew	2.0 - 4.0  fl oz/A	Apply when	Apply as a foliar spray.	

### **USE RESTRICTIONS**

disease.

conditions are

favorable for

1. Maximum Single Application Rate (Plants Grown Indoors and Outdoors): 12.0 fl oz/A/application

or 0.05 – 0.09 fl

oz/1,000 sq ft

- 2. Make only one application per crop.
- 3. Maximum Annual Rate:

(Bremia lactucae)

- a. Do not apply greater than 12.0 fl oz/A (0.25 lb ai/A of azoxystrobin- containing and 0.10 lb ai/A of mefenoxam- containing products) to a single crop.
- b. When multiple crops are produced in the same production area, do not apply greater than 1.5 lb ai/A/year of azoxystrobin- containing and 1.0 lb ai/A/year of mefenoxam-containing products.
- 4. Pre-Harvest Interval (PHI): 7 days

## 8.7 Tomato

Crops (including all cultivars and varieties)			
Tomato			
Target Disease	Use Rate	Application Timing	Use Directions
Root and Fruit Rot ( <i>Phytophthora</i> spp.)	4.7 fl oz/A or 0.11 fl oz/1,000 sq	Apply after seeding and before plants are	Apply as a soil surface spray.  Irrigate lightly after application to move
Pythium Damping-Off and Root Rots <i>Pythium</i> spp.)	ft	infected.	product into the root zone.

- 1. Maximum Single Application Rate: 4.7 fl oz/A/application
- 2. Make only one application per crop.
- 3. Maximum Annual Rate:
  - a. Do not apply greater than 4.7 fl oz/A (0.1 lb ai/A of azoxystrobin- containing and 0.04 lb ai/A of mefenoxam-containing products) to a single crop.
  - b. When multiple crops are produced in the same production area, do not apply greater than 0.6 lb ai/A/year of azoxystrobin- containing and 1.5 lb ai/A/year of mefenoxam-containing products
- 4. Pre-Harvest Interval (PHI): 7 days

## 9.0 STORAGE AND DISPOSAL

### STORAGE AND DISPOSAL

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

### **Pesticide Storage**

Store in original containers only. Store in a cool, dry place. Keep container closed when not in use. Do not store near food or feed. In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to the label.

### **Pesticide Disposal**

Pesticide wastes may be hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use 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 in proper disposal methods.

### Container Handling [(less than or equal to 5 gallons)]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and 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 by other procedures approved by state and local authorities.

### Container Handling [(greater than 5 gallons)]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ½ 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, or by other procedures approved by state and local authorities.

### Container Handling [(greater than 5 gallons)]

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the

responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.

# 10.0 CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA 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 referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

Plentrix<sup>™</sup>, the ALLIANCE FRAME, the SYNGENTA Logo and the PURPOSE ICON are Trademarks of a Syngenta Group Company

Viton™ is a trademark of The Chemours Company FC, LLC

©20XX Syngenta

For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-866-796-4368.

Manufactured for: Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, North Carolina 27419-8300

Plentrix 1596 MAS 0217 AMEND-C 0519-CL – jab-10/28/25 000100-01596.20190515C.PLENTRIX.AMEND.MAY2019-CL