

Defeat

FUNGICIDE

For Control of Diseases on Ornamental Plants; Ornamental Bulb, Corm, and Tuber Plants; Conifers and Conifer Nurseries; Christmas Trees and Christmas Tree Plantations; Forest Plantations; Forest Nurseries; and Non-Bearing Citrus Trees and Fruit and Nut Plants Grown in Greenhouses and Nurseries (Including Field- and Container-Grown Plants Grown Outdoors and in Shade Houses, Lath Houses and Other Production Sites and Structures), Retail Nurseries, Residential and Commercial Landscapes, and Interior Plantscape Ornamentals.

For Control of Disease of Vegetable Transplants Grown for Retail Sale to Consumers.

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

ACTIVE INGREDIENT:	WT. BY %
Mefenoxam*	22.0%
OTHER INGREDIENTS:	78.0%
TOTAL:	100.0%
* CAS No. 70630-17-0; 69516-34-3; 57837-19-1 Contains 1.84 lbs. active ingredient per gallon.	

KEEP OUT OF REACH OF CHILDREN / MANTÉNGASE FUERA DEL ALCANCE DE LOS NIÑOS 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 label booklet for complete First Aid, Precautionary Statements,
Directions For Use, and Storage and Disposal.

Manufactured For:
Sharda USA LLC 

**7217 Lancaster Pike, Suite A
Hockessin, Delaware 19707**

EPA Reg. No. 83529-372

EPA Est. No. (AG) 72159-GA-001; (MC) 89332-GA-001; (SC) 39578-TX-001

The EPA Establishment Number is identified by the circled letters above
that match the first two letters in the batch number.

Net Contents: **1 Gallon**

FIRST AID	
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF 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 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 a poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
HOTLINE NUMBERS	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call your poison control center at 1-800-222-1222. For general information about this product, contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8 AM to 12 PM PST, or at http://npic.orst.edu.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION/PRECAUCIÓN

Causes moderate eye irritation. May be fatal if swallowed. Harmful if absorbed through skin or swallowed. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

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

User Safety Requirements

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROL STATEMENTS

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

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

DO NOT apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high-water mark. **DO NOT** apply when weather conditions favor drift from treated areas. **DO NOT** contaminate water when disposing of equipment wash waters or rinsate.

Groundwater Advisory

This chemical is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

PHYSICAL OR CHEMICAL HAZARDS

DO NOT use, pour, spill, or store near heat or open flame.

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 THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR DISEASE CONTROL OR CROP INJURY.

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, 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 the product is soil injected, soil-incorporated, or applied by soil drenching, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated:

- There is no restricted-entry interval (REI) requirement following soil injection, soil incorporated, or a soil drench application to ornamentals.

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

- Coveralls
- 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 or allow others to enter until sprays have dried.

PRODUCT INFORMATION

Defeat is a systemic fungicide for use on ornamental plants; ornamental bulb, corm, and tuber plants; conifers and conifer nurseries; Christmas trees and Christmas tree plantations; forest plantations; forest nurseries; and non-bearing citrus trees and fruit and nut plants grown in greenhouses and nurseries (including field- and container-grown plants grown outdoors and in shade houses, lath houses, and other production sites and structures), retail nurseries, residential and commercial landscapes, and interior plantscape ornamentals; vegetable transplants grown for retail sale to consumers; and turf*.

*Agricultural uses as defined by Arizona Department of Environmental Quality (ADEQ) are not registered for sale or use in Arizona.

Defeat provides control of damping-off, root and stem diseases caused by *Pythium* and *Phytophthora* spp., and foliar diseases including downy mildew and those caused by *Phytophthora* spp., including *Phytophthora ramorum*.

Use Restriction:

- 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.
- The maximum annual rate must not exceed 12.3 lbs. a.i./A.

Refer to the individual use direction sections for specific **Restrictions** and **Precautions**.

PLANT SAFETY

NOTICE TO USER: Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test every one for tolerance to **Defeat** and tank mixtures with **Defeat**. Neither the manufacturer nor the seller has determined whether or not **Defeat** can be used safely on ornamental and nursery plants not specified on this label. The applicator must determine if **Defeat** and tank mixtures with other fungicides can be used safely prior to commercial use. In a small area, test the labeled rates for a particular group of unlabeled plants, i.e., bedding plants, foliage, etc., for phytotoxicity prior to widespread use.

RESISTANCE MANAGEMENT

For resistance management, **Defeat** contains a Group 4 (Phenylamides) fungicide. Any fungal population may contain individuals naturally resistant to **Defeat** and other Group 4 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but are specific for individual chemicals, including enhanced metabolism, may also exist. Appropriate resistance management strategies must be followed.

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

- Rotate the use of **Defeat** or other Group 4 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicide 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 crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal/bacterial populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance management and/or IPM recommendations for specific crops and pathogens.
- For further information or to report suspected resistance, contact your Sharda USA LLC representative. You can also contact your pesticide distributor or university extension specialist to report resistance.

Applications targeted for downy mildew diseases must always be in a tank mixture with a non-Group 4 fungicide.

For foliar applications to ornamentals and conifers, **DO NOT** make more than 1 application before alternating with a non-Group 4 fungicide for sequential foliar applications. For all other applications, **DO NOT** make more than 2 sequential applications of **Defeat** before alternating with a non-Group 4 fungicide. An example of a sound resistance management program would include 2 **Defeat** applications (1 could be a foliar application) followed by 2 non-Group 4 fungicide applications.

SPRAY DRIFT MANAGEMENT

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 specified 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 must 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.

MIXING PROCEDURE

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

Mixing Directions

1. Prepare no more spray mixture than is required for the immediate operation.
2. Agitate the spray solution continuously during mixing and during application.
3. Rinse the spray tank thoroughly with clean water after each day's use and dispose of pesticide rinsate by application to an already treated area.

Defeat Alone

1. Add 1/4 - 1/2 of the required amount of water to the spray tank.
2. With the agitator running, add the **Defeat** to the tank.
3. Continue agitation while adding the remainder of the water.
4. Begin application of the spray solution after the **Defeat** has completely dispersed into the mix water.
5. Maintain agitation until all of the mixture has been sprayed.

Tank Mix Directions

If using **Defeat** in a tank mixture, observe all directions for use, crops/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank mix partner label. Label dosage must not be exceeded and the most restrictive label precautions and limitations must be followed. This product must not be mixed with any product which prohibits such mixing. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the products are registered. Test plant safety of tank mixtures on a small number of plants for safety before treating entire crop.

Tank Mix Compatibility Test

Defeat is usually compatible with products containing Propiconazole, Chlorothalonil + Acibenzolar-s-methyl, Mancozeb, Azoxystrobin, and Fludioxonil. Preform a jar compatibility test prior to tank mixing with other pesticides and/or adjuvants, in order to ensure the compatibility of **Defeat** with other tank mixed pesticide, adjuvant or fertilizer partners.

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 gals. per acre. For other spray volumes, make appropriate changes in the components. Check tank mix compatibility using this procedure:

1. Add 1 pint of carrier (i.e., water) to be used in the spray operation to each of 2 clear 1 quart jars with tight lids.
2. To **one** of the jars, add 1/4 tsp. or 1.2 milliliters (mL) of a commercially available tank mix compatibility agent approved for this use (1/4 tsp. is equivalent to 2 pts. per 100 gals. 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 1 tank mix partner is to be used, follow the recommended mixing order listed in the below **Defeat in Tank Mixtures** section by adding dry formulations (wetttable 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.
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.

Defeat in Tank Mixtures

1. Add 1/4 - 1/2 of the required amount of water to the spray tank.
2. Start the agitator before adding any tank mix partners.
3. Note: When using **Defeat** in tank mixtures, all products in water-soluble packaging must be added to the tank before any other tank mix partner, including **Defeat**. 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.
4. In general, tank mix partners must be added in this order:
 - wettable powders
 - dry flowable formulations
 - liquid flowable formulations
 - microencapsulated formulations, including **Defeat**
 - emulsifiable concentrates
5. Always allow each tank mix partner to become fully dispersed before adding the next product.
6. Provide sufficient agitation while adding the remainder of the water and the **Defeat** to the spray tank.
7. Allow the **Defeat** to completely disperse into the mix water.
8. Maintain agitation until all of the mixture has been sprayed.

APPLICATION DIRECTIONS

Methods of Application

Defeat may be applied through traditional spray equipment or through irrigation systems as a soil drench, soil surface (broadcast or banded), or as a stem and foliar spray. **Defeat** may also be incorporated into a pre-potting growing media for subsequent seeding or transplanting of ornamentals. Refer to each individual use section for specific use directions in addition to those given below. Refer to the **Application through Irrigation Systems (Chemigation)** section for chemigation instructions.

Pre-Potting Growing Media Mix

Combine the specified rate of **Defeat** into 1 gallon of water (refer to the **ORNAMENTALS** section). Uniformly mix this solution onto 1 cubic yard of growing media. Uniform mixing can be accomplished by placing the potting mix in a rotating drum and spraying the **Defeat** solution onto the mix while the drum is rotating. It is advised that this media treatment be prepared just prior to use.

Growing Media Drench

Use enough of the specified **Defeat** water solution to wet the root zone of plants. In general, 1 pt. per sq. ft. of this solution is sufficient for ornamentals growing in containers with 4 inches of growing media. Containers with growing media depth greater than 4 inches generally require 1.5 - 2 pts. per sq. ft. of the solution.

Interiorscape Soil Drench Applications and Individual Plant Use

In situations where water volumes used are much less than 100 gallons and the area treated is small, the below table provides the **Defeat** rates to make small quantities of solution. Refer to the plant type for the correct amount of product to use when utilizing this table. Apply enough solution to the soil surface to wet the root area of the plants.

Mixing Small Quantities of Drench Solution				
Rate of Defeat per 100 Gals.	Amount of Defeat to add to make the following quantities:			
	1 Gallon	5 Gallons	10 Gallons	25 Gallons
0.27 fl. oz. (0.0039 lb. a.i.)	4 drops (0.000039 lb. a.i.)	19 drops (0.000195 lb. a.i.)	40 drops/0.81 mL (0.00039 lb. a.i.)	2.05 mL/0.4 tsp. (0.00098 lb. a.i.)
0.54 fl. oz. (0.0078 lb. a.i.)	7 drops (0.000078 lb. a.i.)	40 drops/0.81 mL (0.0004 lb. a.i.)	81 drops/1.62 mL (0.00083 lb. a.i.)	4.1 mL/0.84 tsp. (0.00195 lb. a.i.)
1.08 fl. oz. (0.0156 lb. a.i.)	16 drops (0.000156 lb. a.i.)	81 drops/1.62 mL (0.00078 lb. a.i.)	3.24 mL (0.00156 lb. a.i.)	8.1 mL/1.62 tsp. (0.00396 lb. a.i.)
1.62 fl. oz. (0.0234 lb. a.i.)	24 drops (0.000234 lb. a.i.)	3.24 mL (0.00117 lb. a.i.)	4.86 mL (0.00234 lb. a.i.)	12.2 mL/2.5 tsp. (0.0059 lb. a.i.)
2.16 fl. oz. (0.0312 lb. a.i.)	32 drops (0.000312 lb. a.i.)	4.586 mL (0.00156 lb. a.i.)	6.5 mL (0.00312 lb. a.i.)	16.2 mL/3.29 tsp. (0.0078 lb. a.i.)

Soil Surface Sprays

For best efficacy with soil surface applications, irrigate in with at least 0.5 inch of water within 24 hours. If applications are banded, calculate the amount of **Defeat** needed by using the formula below:

$$\frac{\text{Band Width in Inches}}{\text{Row Spacings in Inches}} \times \text{Broadcast Rate per Acre} = \text{Amount Needed per Acre of Field}$$

Foliar And Stem Sprays

Apply thoroughly to all parts of the foliage and stems. For *Phytophthora* spp. and *Pythium* spp., **Defeat** can be applied alone. For downy mildew control (and following resistance management practices), you must apply in a tank mixture with a non-Group 4 fungicide.

Application through Irrigation Systems (Chemigation)

Defeat alone or in tank mixture with other pesticides registered for application through irrigation systems may be applied in irrigation water at rates specified on this label. This product may be applied through micro sprinkler or drip irrigation systems. **DO NOT** apply this product through any other type of irrigation system.

Chemigation Precautions:

- Plant injury or lack of effectiveness may result from non-uniform distribution of treated water.
- If you have questions about calibration, contact State Extension Service specialists, equipment manufacturers, or other experts.

Chemigation Restrictions:

- DO NOT** connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system, unless the label-prescribed safety devices for public water supplies are in place.
- A person knowledgeable of the chemigation system and responsible for its operation shall shut the system down and make necessary adjustments when needed.

Application Directions for Irrigation Systems (Chemigation)

- **Defeat** must be applied on the schedule specified in the use recommendations, not according to the irrigation schedule.
- Only pressure injection or Venturi equipment may be used.
- The following calibration and application techniques are provided for user reference, but **DO NOT** constitute a warranty of fitness for application through sprinkler irrigation equipment. Check with State and local regulatory agencies for potential use restrictions before applying any agricultural chemical through sprinkler irrigation equipment.

Calibration Instructions

- Each run of the irrigation system must be calibrated separately to determine the time it takes water to move through the system and to make sure all emitters in the system are putting out the same amount of water.
- Determine the area to be treated in each irrigation run.
- Measure the output of each of the emitters or drip tubes closest to and farthest from the injector site.
- For calibration, substitute a concentrated detergent for the **Defeat** in the injector tank. It is important to use the same volume of soap solution as the planned volume of **Defeat** solution when calibrating the system. The detergent will bubble as it leaves the emitters. The time period over which bubbles occur must be checked for both the closest and farthest emitters. If these times are not within 2 minutes of each other, adjust the dilution ratio and/or the injection rate.

Step-by-Step Calibration and Application Instructions

- Before starting to calibrate, operate the system until all the emitters are putting out at equal flow rates or until the system is operating at full pressure.
- Make up an indicator solution of detergent or fertilizer, using the same ratio to be used with mixing **Defeat**.
- Set the injector to apply the indicator solution at the injection rate to be used in the actual **Defeat** application.
- Attach a 5-inch length of flexible tubing over the emitter closest to the injection point, another length over the emitter farthest away. Both emitters must be monitored to determine the time intervals that the indicator solutions are observed.
- Begin injecting the indicator solution. Direct the flow from the tubes at the emitters into a small container. Begin timing when the indicator solution is first detected, stop timing when the indicator solutions are no longer detected.
- If the period of detection of the indicator solution between the 2 emitters are within 2 minutes of each other, comparable coverage will be obtained. If they are not, make adjustments by increasing the dilution ratio, using more water per part of **Defeat**, or adjust the injector to a slower flow rate.
- Once the system is calibrated, dilute the needed amount of **Defeat** with water and any other tank mix partners in the injection tank using a minimum of 15 parts water to 1 part of **Defeat** in the solution tank. Liquid fertilizer may replace all or part of the water. If diluted in liquid fertilizer, the pH level must be less than 7.5. Follow the directions for mixing and equipment setup in the **Mixing Instructions** section of this label.
- **DO NOT** begin to inject **Defeat** into the system until all emitters are producing equal flow rates, or until the system is at full pressure. Inject the **Defeat** solution at a ratio of 50:1 or greater. Injecting a larger volume of a more dilute mixture will usually allow a more accurate calibration of the metering equipment.
- Inject the **Defeat** into the system at the beginning of the irrigation set in 0.5 - 1 inch of irrigation water.

Safety Devices for Irrigation Systems not Connected to a Public Water Supply

1. 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.
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 the pesticide distribution is adversely affected.
6. Systems must use a metering pump, including a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

Safety Devices for Irrigation Systems Connected to Public Water Supplies

If the source of water for your irrigation system is a public water supply, follow the instructions below.

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, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, water from the public water system must 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, including a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

ROTATIONAL CROP RESTRICTIONS

Crops listed in this label may be replanted immediately in soil treated with mefenoxam. All other crops may not be planted in mefenoxam-treated soil for a period of 12 months.

SPECIFIC USE DIRECTIONS

ORNAMENTALS

Use **Defeat** on ornamentals grown in greenhouses, lath houses and shade houses; outdoor field and container nurseries (including non-bearing citrus trees and fruit and nut plants grown in greenhouses and nurseries); conifer plantations; and in commercial and residential landscapes.

Bedding Plants

Ageratum, Algerian Ivy, Artemisia, Aster, Begonia, Caladium, Carnation, Chrysanthemum, Coleus, Daisy, English Ivy, Foxglove, Gaillardia, Geranium, Impatiens, Marigold, Pansy, Petunia, Phlox, Pinks, Primrose, Prostrate Rosemary, Salvia, Snapdragon, Verbena, Vinca, and Zinnia, including all cultivars, varieties, and/or hybrids of these.

Soil Application			
Target Disease	Use Rate	Application Timing	Use Directions
Damping-Off, Root Diseases, and Stem Diseases caused by <i>Pythium</i> and <i>Phytophthora</i> spp. Foliar Diseases including Downy Mildew and Foliar Diseases caused by <i>Phytophthora</i> spp., including <i>P. ramorum</i>	0.135 - 0.27 fl. oz. per 100 gals. of water (0.002 - 0.0039 lb. a.i.)	Apply drench at-seeding.	For soil or growing media having a depth of up to 4 inches of growing media, apply 1.0 pt. solution per sq. ft. to the soil or growing media surface. Refer to the Mixing Small Quantities of Drench Solution section for drench applications requiring smaller water volumes.
	0.54 - 1.08 fl. oz. per 100 gals. of water (0.0078 - 0.0156 lb. a.i.)	Apply drench at-transplanting. Repeat applications at 1- to 2-month intervals, if necessary.	For soil or growing media having a depth of up to 4 inches, apply 1 pt. of solution per sq. ft. to the soil surface. For growing media depth greater than 4 inches or greater, apply 1.5 pts. ~ 2 pts. of solution per sq. ft. to the soil or growing media surface. Use the lower rate for the shortest interval listed and the higher specified rate for the longest interval. Under severe disease conditions, use the highest specified rate and the shortest interval. Refer to the Mixing Small Quantities of Drench Solution section for drench applications requiring smaller water volumes.
	0.135 fl. oz. per cubic yard of growing media (0.002 lb. a.i.)	Apply just before seeding and transplanting.	Apply to growing media mix just before planting and thoroughly mix. Mix only enough for current use.

(continued)

Bedding Plants (continued)

Soil Application (continued)			
Target Disease	Use Rate	Application Timing	Use Directions
Damping-Off, Root Diseases, and Stem Diseases caused by <i>Pythium</i> and <i>Phytophthora</i> spp. Foliar Diseases including Downy Mildew and Foliar Diseases caused by <i>Phytophthora</i> spp., including <i>P. ramorum</i>	1.08 fl. oz. per 1,000 sq. ft. (0.0156 lb. a.i.)		Apply broadcast or banded spray to the soil surface in sufficient water to obtain thorough coverage of the plant root zone. Avoid application to the foliage. For best efficacy, irrigate in with at least 0.5 inch of water within 24 hours. If applications are banded, calculate the amount of Defeat needed by using the formula in the Soil Surface Sprays section.
Foliar Application			
Target Disease	Use Rate	Application Timing	Use Directions
Downy Mildew <i>Phytophthora</i> spp. <i>Pythium</i> spp.	0.54 - 1.08 fl. oz. per 100 gals. of water (0.0078 - 0.0156 lb. a.i.)	Apply when conditions are favorable for disease, but before infection.	Spray foliage thoroughly. Downy Mildew: Tank mix with a non-Group 4 fungicide labeled for downy mildew.
Restrictions: • Drench Applications At-Transplanting and After: DO NOT apply rates of 0.81 - 1.08 fl. oz. (0.012 - 0.0156 lb. a.i.) per 100 gals. more often than once every 6 weeks. • Maximum Single Application Rate: 151 fl. oz. (2.2 lbs. a.i.) per acre • Minimum Retreatment Interval: 30 days • Maximum Number of Applications per year: • Plants Grown Outdoors: • When applied at the highest listed single application rate, 3 applications may be made per year. • Lower application rates may allow additional applications to be made. DO NOT exceed the maximum annual rate per acre. • Plants Grown Indoors: • When applied at the highest listed single application rate, 3 applications may be made per crop. • Lower application rates may allow additional applications to be made. DO NOT exceed the maximum annual rate per crop. • Maximum Annual Rate: • Plants Grown Outdoors: • DO NOT apply more than 455 fl. oz. per acre per year. • DO NOT apply more than 6.6 lbs. a.i./A/year of Defeat or, mefenoxam- or metalaxyl-containing products. • Plants Grown Indoors: • DO NOT apply more than 455 fl. oz. per acre per crop. • DO NOT apply more than 6.6 lbs. a.i./A/crop of Defeat or, mefenoxam or metalaxyl-containing products.			

Flowers (including Bulb, Corm, and Tuber Plants)

African Violet, Anthurium, Baby's Breath, Carnation, Chrysanthemum, Columbine, Delphinium, Easter Lily, Geranium, Gloxinia, Poinsettia, and Rose, Including all cultivars, varieties, and/or hybrids of these.

Soil Application			
Target Disease	Use Rate	Application Timing	Use Directions
Damping-Off, Root Diseases, and Stem Diseases caused by <i>Pythium</i> and <i>Phytophthora</i> spp. Foliar Diseases including Downy Mildew and Foliar Diseases caused by <i>Phytophthora</i> spp., including <i>P. ramorum</i>	0.54 - 1.08 fl. oz. per 100 gals. of water (0.0078 - 0.0156 lb. a.i.)	Apply drench at-planting. Repeat applications at 1- to 2-month intervals, if necessary.	For soil or growing media having a depth of less than 4 inches, apply 1 pt. of solution per sq. ft. to the soil or growing media surface. For soil or growing media having a depth greater than 4 inches, apply 1.5 pts. - 2 pts. of solution per sq. ft. to the soil or growing media surface. Use the lower rate for the shortest interval listed and the higher specified rate for the longest interval. Under severe disease conditions, use the highest specified rate and the shortest interval. Refer to the Mixing Small Quantities of Drench Solution section for drench applications requiring smaller water volumes.
	0.135 fl. oz. per cubic yard of growing media (0.002 lb. a.i.)	Apply just before seeding and transplanting.	Apply to growing media mix just before planting and thoroughly mix. Mix only enough for current use.
	1 fl. oz. per 1,000 sq. ft. (0.0156 lb. a.i.)	Apply prior to or after seeding or transplanting.	Apply broadcast or banded spray to the soil surface in sufficient water to obtain thorough coverage of the plant root zone. Avoid application to the foliage. For best efficacy, irrigate in with at least 0.5 inch of water within 24 hours after application. If applications are banded, calculate the amount of Defeat needed by using the formula in the Soil Surface Sprays section.

(continued)

Flowers (including Bulb, Corm, and Tuber Plants) (continued)

Foliar Application			
Target Disease	Use Rate	Application Timing	Use Directions
Downy Mildew <i>Phytophthora</i> spp. <i>Pythium</i> spp.	0.54 - 1.08 fl. oz. per 100 gals. of water (0.0078 - 0.0156 lb. a.i.)	Apply when conditions are favorable for disease, but before infection.	Spray foliage thoroughly. Downy Mildew: Tank mix with a non-Group 4 fungicide labeled for downy mildew.
Restrictions: • Drench Applications: DO NOT apply rates of 0.81 - 1.08 fl. oz. (0.0117 - 0.0156 lb. a.i.) per 100 gals. more often than once every 6 weeks. • Easter Lily: DO NOT apply more than 0.54 fl. oz. (0.0078 lb. a.i.) per 100 gals. of water. Only make 1 at-planting application. • Maximum Single Rate: 151 fl. oz. (2.2 lbs. a.i.) per acre • Minimum Retreatment Interval: 30 days • Maximum Number of Applications per Year: • Plants Grown Outdoors: • When applied at the highest listed single application rate, 3 applications may be made per year. • Lower application rates may allow additional applications to be made. DO NOT exceed the maximum annual rate per acre. • Plants Grown Indoors: • When applied at the highest listed single application rate, 3 applications may be made per crop. Lower application rates may allow additional applications to be made. • DO NOT exceed the maximum annual rate per crop. • Maximum Annual Rate: • Plants Grown Outdoors: • DO NOT apply more than 455 fl. oz. per acre per year. • DO NOT apply more than 6.6 lbs. a.i./A/year of Defeat, or mefenoxam or metalaxyl-containing products. • Plants Grown Indoors: • DO NOT apply more than 455 fl. oz. per acre per crop. • DO NOT apply more than 6.6 lbs. a.i./A/crop of Defeat, or mefenoxam or metalaxyl-containing products.			

Foliage Plants

Aglaonema, Aphelandra, Dieffenbachia, Peperomia, Philodendron, Pothos, Schefflera, Sedum, Sempervivum, and Zygocactus, including all cultivars, varieties, and/or hybrids of these.

Soil Application			
Target Disease	Use Rate	Application Timing	Use Directions
Damping-Off, Root Diseases, and Stem Diseases caused by <i>Pythium</i> and <i>Phytophthora</i> spp. Foliar Diseases including Downy Mildew and Foliar Diseases caused by <i>Phytophthora</i> spp., including <i>P. ramorum</i>	0.324 - 0.65 fl. oz. per 100 gals. of water (0.0047 - 0.0094 lb. a.i.) Philodendron: 0.54 - 1.08 fl. oz. per 100 gals. of water (0.0078 - 0.0156 lb. a.i.) Pothos: 0.324 - 0.41 fl. oz. per 100 gals. of water (0.0047 - 0.0059 lb. a.i.)	Apply drench at 2- to 3-month intervals, if necessary.	For soil or growing media having a depth of less than 4 inches, apply 1 pt. of solution per sq. ft. to the soil or growing media surface. For soil or growing media having a depth greater than 4 inches, apply 1.5 pts. - 2 pts. of solution per sq. ft. to the soil or growing media surface.
		Apply drench at 3-month intervals if necessary.	Use the lower rate for the shortest interval listed and the higher specified rate for the longest interval. Under severe disease conditions, use the highest specified rate and the shortest interval. Refer to the Mixing Small Quantities of Drench Solution section for drench applications requiring smaller water volumes.
	0.135 fl. oz. per cubic yard of growing media (0.002 lb. a.i.)	Apply just before planting.	Apply to growing media mix just before planting and thoroughly mix. Mix only enough for current use.
	1.08 fl. oz. per 1,000 sq. ft. (0.0156 lb. a.i.)	Apply prior to or after transplanting.	Apply broadcast or banded spray to the soil surface in sufficient water to obtain thorough coverage of the plant root zone. Avoid application to the foliage. For best efficacy, irrigate in with at least 0.5 inch of water within 24 hours after application. If applications are banded, calculate the amount of Defeat needed by using the formula in the Soil Surface Sprays section.

(continued)

Foliage Plants (continued)

Foliar Application			
Target Disease	Use Rate	Application Timing	Use Directions
Downy Mildew <i>Phytophthora</i> spp. <i>Pythium</i> spp.	0.54 - 1.08 fl. oz. per 100 gals. of water (0.0078 - 0.0156 lb. a.i.)	Apply when conditions are favorable for disease, but before infection.	Spray foliage thoroughly. Downy Mildew: Tank mix with a non-Group 4 fungicide labeled for downy mildew.
Restrictions: • Drench Application to Pothos: To minimize the potential for injury, use the rates listed in the table and DO NOT apply more frequently than once every 3 months. • Drench Applications: DO NOT apply rates of 0.81 - 1.08 fl. oz. (0.0117 - 0.0156 lb. a.i.) per 100 gals. more often than once every 6 weeks. • Maximum Single Rate: 151 fl. oz. (2.2 lbs. a.i.) per acre • Minimum Retreatment Interval: 30 days • Maximum Number of Applications per Year: • Plants Grown Outdoors: • When applied at the highest listed single application rate, 3 applications may be made per year. • Lower application rates may allow additional applications to be made. DO NOT exceed the maximum annual rate per acre. • Plants Grown Indoors: • When applied at the highest listed single application rate, 3 applications may be made per year. • Lower application rates may allow additional applications to be made. DO NOT exceed the maximum annual rate per crop. • Maximum Annual Rate: • Plants Grown Outdoors: • DO NOT apply more than 455 fl. oz. per acre per year. • DO NOT apply more than 6.6 lbs. a.i./A/year of Defeat, or mefenoxam or metalaxyl-containing products. • Plants Grown Indoors: • DO NOT apply more than 455 fl. oz. per acre per crop. • DO NOT apply more than 6.6 lbs. a.i./A/crop of Defeat, or mefenoxam or metalaxyl-containing products.			

Woody Ornamentals - Azaleas

(Including all cultivars, varieties, and/or hybrids.)

Soil Application			
Target Disease	Use Rate	Application Timing	Use Directions
Pythium and Phytophthora root and crown rot	0.68 - 1.35 fl. oz. per 100 gals. of water (0.0098 - 0.0195 lb. a.i.)	Apply drench at 2- to 4-month intervals if necessary.	For soil or growing media having a depth of less than 4 inches, apply 1 pt. of solution per sq. ft. to the soil or growing media surface. For soil or growing media having a depth of 4 inches or greater, apply 1.5 pts. - 2 pts. of solution per sq. ft. to the soil or growing media surface. Use the lower rate for the shortest interval listed and the higher specified rate for the longest interval. Under severe disease conditions, use the highest specified rate and the shortest interval. Refer to the Mixing Small Quantities of Drench Solution section for drench applications requiring smaller water volumes.
	1.35 - 2.7 fl. oz. per 1,000 sq. ft. (0.0196 - 0.039 lb. a.i.)	Apply prior to or after transplanting.	Apply broadcast or banded spray to the soil surface in sufficient water to obtain thorough coverage of the plant root zone. Avoid application to the foliage. For best efficacy, irrigate in with at least 0.5 inch of water within 24 hours after application. If applications are banded, calculate the amount of Defeat needed by using the formula in the Soil Surface Sprays section.
Foliar Application			
Target Disease	Use Rate	Application Timing	Use Directions
Phytophthora spp. Pythium spp.	0.54 - 1.08 fl. oz. per 100 gals. of water (0.0078 - 0.0156 lb. a.i.)	Apply when conditions are favorable for disease, but before infection.	Spray foliage thoroughly.

(continued)

Woody Ornamentals - Azaleas (continued)

Precaution:

- Use the lower rate for "Coral Bell" variety.

Restrictions:

- Soil Applications: **DO NOT** apply repeat soil application of 1.35 fl. oz. (0.0195 lb. a.i.) per 100 gals. closer than every 3 months, and **DO NOT** exceed a total of 2.7 fl. oz. (0.039 lb. a.i.) in 6 months.
- **Maximum Single Rate:** 151 fl. oz. (2.2 lbs. a.i.) per acre
- **Minimum Retreatment Interval:** 30 days
- **Maximum Number of Applications per Year:**
 - **Plants Grown Outdoors:**
 - When applied at the highest listed single application rate, 3 applications may be made per year.
 - Lower application rates may allow additional applications to be made. **DO NOT** exceed the maximum annual rate per acre.
 - **Plants Grown Indoors:**
 - When applied at the highest listed single application rate, 3 applications may be made per crop.
 - Lower application rates may allow additional applications to be made. **DO NOT** exceed the maximum annual rate per crop.
- **Maximum Annual Rate:**
 - **Plants Grown Outdoors:**
 - **DO NOT** apply more than 455 fl. oz. per acre per year.
 - **DO NOT** apply more than 6.6 lbs. a.i./A/year of **Defeat**, or mefenoxam or metalaxyl-containing products.
 - **Plants Grown Indoors:**
 - **DO NOT** apply more than 455 fl. oz. per acre per crop.
 - **DO NOT** apply more than 6.6 lbs. a.i./A/crop of **Defeat**, or mefenoxam or metalaxyl-containing products.

Woody Ornamentals other than Azaleas

Aucuba japonica, Arbovitae, Boxwood, Ceanothus, Cotoneaster, Dogwood, Ficus, "Halls" Honeysuckle, Ilex, *Juniperus* spp., Photinia, *Pieris japonica*, *Pinus* spp., Pittosporum, Rhododendron, White Cedar, White Pine, and Yew, including all cultivars, varieties, and/or hybrids of these.

Soil Application			
Target Disease	Use Rate	Application Timing	Use Directions
Pythium and Phytophthora root and crown rot	1.08 - 2.16 fl. oz. per 100 gals. of water (0.0156 - 0.0312 lb. a.i.)	Apply drench at 2- to 3-month intervals, if necessary.	For soil or growing media having a depth of less than 4 inches, apply 1 pt. of solution per sq. ft. to the soil or growing media surface. For soil or growing media having a depth of 4 inches or greater, apply 1.5 pts. - 2 pts. of solution per sq. ft. to the soil or growing media surface. Use the lower rate for the shortest interval listed and the higher specified rate for the longest interval. Under severe disease conditions, use the highest specified rate and the shortest interval. Refer to the Mixing Small Quantities of Drench Solution section for drench applications requiring smaller water volumes.
	1.35 - 2.7 fl. oz. per 1,000 sq. ft. (0.0195 - 0.039 lb. a.i.)	Apply prior to or after transplanting.	Apply broadcast or banded spray to the soil surface in sufficient water to obtain thorough coverage of the plant root zone. Avoid application to the foliage. For best efficacy, irrigate in with at least 0.5 inch of water within 24 hours. If applications are banded, calculate the amount of Defeat needed by using the formula in the Soil Surface Sprays section.
Foliar Application			
Target Disease	Use Rate	Application Timing	Use Directions
Downy Mildew	0.54 - 2.16 fl. oz. per 100 gals. of water (0.0078 - 0.0312 lb. a.i.)		Tank mix with a non-Group 4 fungicide labeled for downy mildew and spray foliage thoroughly.
<i>Phytophthora</i> spp. <i>Pythium</i> spp.	0.54 - 1.08 fl. oz. per 100 gals. of water (0.0078 - 0.0156 lb. a.i.)		Spray foliage thoroughly.

(continued)

Woody Ornamentals other than Azaleas (*continued*)

Restrictions:

- **Drench Applications:** **DO NOT** apply rates of 2.16 fl. oz. (0.0312 lb. a.i.) per 100 gals. more often than every 10 weeks.
- **Drench RTI:** 8 weeks
- **Maximum Single Application Rate:** 151 fl. oz. (2.2 lbs. a.i.) per acre
- **Minimum Retreatment Interval:** 30 days
- **Maximum Number of Applications per Year:**
 - **Plants Grown Outdoors:**
 - When applied at the highest listed single application rate, 3 applications may be made per year.
 - Lower application rates may allow additional applications to be made. **DO NOT** exceed the maximum annual rate per acre.
 - **Plants Grown Indoors:**
 - When applied at the highest listed single application rate, 3 applications may be made per crop.
 - Lower application rates may allow additional applications to be made. **DO NOT** exceed the maximum annual rate per crop.
- **Maximum Annual Rate:**
 - **Plants Grown Outdoors:**
 - **DO NOT** apply more than 455 fl. oz. per acre per year.
 - **DO NOT** apply more than 6.6 lbs. a.i./A/year of **Defeat**, or mefenoxam or metalaxyl-containing products.
 - **Plants Grown Indoors:**
 - **DO NOT** apply more than 455 fl. oz. per acre per crop.
 - **DO NOT** apply more than 6.6 lbs. a.i./A/crop of **Defeat**, or mefenoxam or metalaxyl-containing products.

Citrus in Nurseries and Landscape Plantings (Non-Bearing)

Target Disease	Use Rate	Application Timing	Use Directions
Citrus Foot Rot, Root Rot, and Trunk Canker caused by <i>Phytophthora</i> spp.	2.16 - 3.24 fl. oz. per 100 gals. of water (0.0312 - 0.0468 lb. a.i.)	Make the first application at the time of planting. Make repeat applications at 3-month intervals during the period when trees are actively growing.	Apply as a drench to the soil at the rate of 100 - 250 gallons of solution per 1,000 ft. of row. The width of the drench treatment must be wide enough to cover the root systems of the plants. Use the lower rate for the shortest interval listed and the higher specified rate for the longest interval. Under severe disease conditions, use the highest specified rate and the shortest interval. Refer to the Mixing Small Quantities of Drench Solution section for drench applications requiring smaller water volumes.
	1.35 - 2.7 fl. oz. per 1,000 sq. ft. (0.0196 - 0.039 lb. a.i.)		Apply as a broadcast or banded surface spray to seedbeds, liner, or bedded stock in sufficient water to obtain uniform coverage. For best efficacy, 0.5 inch irrigation or rainfall is required within 24 hours after application. If applications are banded, the treated area must be wide enough to cover the root systems of the plants. Calculate the amount of Defeat needed by using the formula in the Soil Surface Sprays section.
	2.16 fl. oz. per 100 gals. of water (0.0312 lb. a.i.)		Apply directed spray to the base of the plant.

(continued)

Citrus in Nurseries and Landscape Plantings (Non-Bearing) (continued)

Precaution:

- Avoid application to the foliage.

Restrictions:

- **DO NOT** use in greenhouse citrus nursery stock intended for commercial fruit production.
- **Drench Applications: DO NOT** apply rates of 3.24 fl. oz. (0.047 lb. a.i.) per 100 gallons more often than every 3 months.
- **Maximum Single Application Rate:** 151 fl. oz. (2.2 lbs. a.i.) per acre
- **Maximum Number of Applications per Year:**
 - **Plants Grown Outdoors:**
 - When applied at the highest listed single application rate, 3 applications may be made per year.
 - Lower application rates may allow additional applications to be made. **DO NOT** exceed the maximum annual rate per acre.
 - **Plants Grown Indoors:**
 - When applied at the highest listed single application rate, 3 applications may be made per crop.
 - Lower application rates may allow additional applications to be made. **DO NOT** exceed the maximum annual rate per crop.
- **Maximum Annual Rate:**
 - **Plants Grown Outdoors:**
 - **DO NOT** apply more than 455 fl. oz. per acre per year.
 - **DO NOT** apply more than 6.6 lbs. a.i./A/year of **Defeat**, or mefenoxam or metalaxyl-containing products.
 - **Plants Grown Indoors:**
 - **DO NOT** apply more than 455 fl. oz. per acre per crop.
 - **DO NOT** apply more than 6.6 lbs. a.i./A/crop of **Defeat**, or mefenoxam or metalaxyl-containing products.

Non-Bearing Fruit and Nut Plants in Nurseries

Target Disease	Use Rate	Application Timing	Use Directions
Phytophthora Root, Crown, and Collar Rot Pythium Root Rot	3.24 fl. oz. per 1,000 sq. ft. (0.0468 lb. a.i.)	Additional applications may be made as necessary at 3-month intervals during the growing season.	Apply as a soil surface spray in sufficient water to obtain thorough coverage of the soil under the canopy of the trees. Treat sufficient surface area in nurseries to cover the root zone of the plants. For best efficacy, 0.5-inch irrigation or rainfall is required within 24 hours after application. Avoid application to the foliage.
Restrictions: • DO NOT use in greenhouse nursery stock intended for commercial fruit production. • Maximum Single Application Rate: 151 fl. oz. (2.2 lbs. a.i.) per acre • Minimum Retreatment Interval: 90 days • Maximum Number of Applications per Year: • Plants Grown Outdoors: • When applied at the highest listed single application rate, 3 applications may be made per year. • Lower application rates may allow additional applications to be made. DO NOT exceed the maximum annual rate per acre. • Plants Grown Indoors: • When applied at the highest listed single application rate, 3 applications may be made per crop. • Lower application rates may allow additional applications to be made. DO NOT exceed the maximum annual rate per crop. • Maximum Annual Rate: • Plants Grown Outdoors: • DO NOT apply more than 455 fl. oz. per acre per year. • DO NOT apply more than 6.6 lbs. a.i./A/year of Defeat, or mefenoxam or metalaxyl-containing products. • Plants Grown Indoors: • DO NOT apply more than 455 fl. oz. per acre per crop. • DO NOT apply more than 6.6 lbs. a.i./A/crop of Defeat, or mefenoxam or metalaxyl-containing products.			

CONIFER (INCLUDING CHRISTMAS TREES*)

* Agricultural uses as defined by Arizona Department of Environmental Quality (ADEQ) are not registered for sale or use in Arizona.

Conifers (including Christmas Trees) in Nurseries and Forest Nurseries

Target Disease	Use Rate	Application Timing	Use Directions
Phytophthora Root and Stem Diseases	21.6 fl. oz. per acre (0.31 lb. a.i.)	Apply to seedbeds and plug-plantings in the spring and again in the fall.	Apply as a soil surface spray in at least 50 gals. of water per acre. For best efficacy, 0.5-inch irrigation or rainfall is required within 24 hours after application.
	43.2 fl. oz. per acre (0.625 lb. a.i.)	Apply to 2-0 transplants in the spring and again in the fall.	
Phytophthora Foliar Diseases	1.08 fl. oz. per 100 gals. of water (0.0156 lb. a.i.)	Apply to seedbeds and plug-plantings.	Apply as a foliar spray until runoff. For best efficacy, 0.5-inch irrigation or rainfall is required within 24 hours after application.
	1.08 - 2.16 fl. oz. per 100 gals. of water (0.0156 - 0.0312 lb. a.i.)	Apply to 2-0 transplants.	

Restrictions:

- **Maximum Single Application Rate:** 151 fl. oz. (2.2 lbs. a.i.) per acre
- **Minimum Retreatment Interval:** 30 days
- **Maximum Number of Applications per Year:**
 - **Plants Grown Outdoors:**
 - When applied at the highest listed single application rate, 3 applications may be made per year.
 - Lower application rates may allow additional applications to be made. **DO NOT** exceed the maximum annual rate per acre.
 - **Plants Grown Indoors:**
 - When applied at the highest listed single application rate, 3 applications may be made per crop.
 - Lower application rates may allow additional applications to be made. **DO NOT** exceed the maximum annual rate per crop.
- **Maximum Annual Rate:**
 - **Plants Grown Outdoors:**
 - **DO NOT** apply more than 455 fl. oz. per acre per year.
 - **DO NOT** apply more than 6.6 lbs. a.i./A/year of **Defeat**, or mefenoxam or metalaxyl-containing products.
 - **Plants Grown Indoors:**
 - **DO NOT** apply more than 455 fl. oz. per acre per crop.
 - **DO NOT** apply more than 6.6 lbs. a.i./A/crop of **Defeat**, or mefenoxam or metalaxyl-containing products.
- **DO NOT** make more than 12 applications per year.
- **Maximum Annual Rate:** **DO NOT** apply more than 3 gallons (6 lbs. a.i.) **Defeat** per acre per year.
- For sequential foliar applications, **DO NOT** make more than 1 foliar application of **Defeat** before alternating with a non-Group 4 fungicide.

Conifers (including Christmas Trees*) in Plantations

* Agricultural uses as defined by Arizona Department of Environmental Quality (ADEQ) are not registered for sale or use in Arizona.

Target Disease	Use Rate	Application Timing	Use Directions
Phytophthora Root, Stem, and Foliar Diseases	0.675 - 1.35 gals. per acre (1.25 - 2.5 lb. a.i.)	Apply in early spring before growth starts and in the fall before the ground freezes.	Apply as a directed soil surface spray in at least 50 gals. of water per acre. Avoid applications to the foliage. For best efficacy, 0.5-inch irrigation or rainfall is required within 24 hours after application. If applications are banded, calculate the amount of Defeat needed by using the formula in the Soil Surface Sprays section.
Foliar Diseases caused by <i>Phytophthora</i> spp., including <i>P. ramorum</i>	1.08 - 2.16 fl. oz. per 100 gals. of water (0.0156 - 0.0312 lb. a.i.)	Apply when conditions are favorable for disease, but before infection.	Apply as a foliar spray until runoff. For best efficacy, 0.5-inch irrigation or rainfall is required within 24 hours after application.
Precautions: • Use of Defeat will aid in the control of Phytophthora root, stem, and foliar disease when used in conjunction with good cultural practices. • The use of Defeat will not overcome poor management practices, including planting on sites that are prone to flooding or are poorly drained. • Defeat will not revitalize trees showing moderate to severe disease symptoms. Restrictions: • DO NOT apply more than 1.35 gals. (2.5 lbs. a.i.) per acre per application. • Minimum Retreatment Interval: 30 days • Maximum Number of Applications per Year: • Plants Grown Outdoors: • When applied at the highest listed single application rate, 2 applications may be made per year. • Lower application rates may allow additional applications to be made. DO NOT exceed the maximum annual rate per acre. • Maximum Annual Rate: • Plants Grown Outdoors: • DO NOT apply more than 455 fl. oz. per acre per year. • DO NOT apply more than 6.6 lbs. a.i./A/year of Defeat, or mefenoxam or metalaxyl-containing products. • For sequential foliar applications, DO NOT make more than 1 foliar application of Defeat before alternating with a non-Group 4 fungicide.			

VEGETABLE TRANSPLANTS GROWN FOR RETAIL SALES TO CONSUMERS*

*Agricultural uses as defined by Arizona Department of Environmental Quality (ADEQ) are not registered for sale or use in Arizona.

Cole Crops

Broccoli, Broccoli Raab (Rapini), Brussels Sprouts, Cabbage, Cauliflower, Cavalo Broccoli, Chinese Broccoli (Gai Ion), Chinese Cabbage (Bok Choy and Napa), Chinese Mustard Cabbage (Gai Choy), Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach, Rape Greens, and Turnip Greens (Greens Only), Including all cultivars, varieties, and/or hybrids of these.

Target Disease	Use Rate	Application Timing	Use Directions
Basal Stem Rot (<i>Phytophthora</i> spp.)	23.4 - 47 mL per 1,000 sq. ft. (34.5 - 69.1 fl. oz. per acre; 0.5 - 1 lb. a.i.)	Apply at-seeding.	Apply as a soil surface spray or a soil treatment. Irrigate lightly after application to move product into the root zone.
Damping-Off (<i>Pythium</i> spp.)	5.8 - 11.8 mL per 1,000 sq. ft. (8.6 - 17.3 fl. oz. per acre; 0.125 - 0.25 lb. a.i.)		
Downy Mildew (<i>Peronospora parasitica</i>)	2.9 - 5.8 mL per 1,000 sq. ft. (4.3 - 8.64 fl. oz. per acre; 0.063 - 0.125 lb. a.i.)	Apply when conditions are favorable for disease, but before infection, on a 14-day schedule.	Foliar spray 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.

(continued)

Cole Crops (continued)

Restrictions:

- Foliar applications to turnip plants may not be made to dual-purpose turnip cultivars or varieties which produce a harvestable root.
- **DO NOT** apply foliar sprays of **Defeat** without a labeled tank mix partner.
- **DO NOT** apply the **Defeat** mixture where downy mildew is already established.
- **DO NOT** apply within 7 days of harvest, unless tank mix partner requires a more restrictive PHI.
- **Maximum Single Application RATE:** 69.1 fl. oz. (1 lb. a.i.) per acre per year.
- When multiple crops are produced in the same area, **DO NOT** apply more than 2 soil and 4 foliar applications per year.
- **Minimum Retreatment Interval:** 30 days
- **Maximum Number of Applications per Year:**
 - **Plants Grown Outdoors:**
 - When applied at the highest listed single application rate, 1 application may be made per year.
 - Lower application rates may allow additional applications to be made. **DO NOT** exceed the maximum annual rate per acre.
 - **Plants Grown Indoors:**
 - When applied at the highest listed single application rate, 1 application may be made per crop.
 - Lower application rates may allow additional applications to be made. **DO NOT** exceed the maximum annual rate per crop.
- **Maximum Annual Rate:**
 - **Plants Grown Outdoors in Nurseries (Including Outdoor Growing Structures):** When multiple crops are produced in the same production area, **DO NOT** apply more than 1.0 lb. a.i./A/year of soil-applied and 0.50 lb./A/year of foliar-applied **Defeat**, or mefenoxam or metalaxyl-containing products.
 - **Plants Grown in Greenhouses:** **DO NOT** apply more than 1.0 lb. a.i./A/crop of soil-applied and 0.50 lb./A/crop of foliar-applied **Defeat**, or mefenoxam or metalaxyl-containing products.

Cucurbits

Cantaloupe, Chayote, Chinese Waxgourd, Citron Melon, Cucumber, Gherkin, Gourd (Edible), Honeydew, *Momordica* spp. (Balsam Apple, Balsam Pear, Bitter Melon, and Chinese Cucumber), Muskmelons (Casaba Melon, Crenshaw Melon, Golden Pershaw Melon, Honey Balls, Mango Melon, Persian Melon, Pineapple Melon, Santa Claus Melon, and Snake Melons), Pumpkin, Squash (Summer and Winter), and Watermelon, including all cultivars, varieties, and/or hybrids of these.

Target Disease	Use Rate	Application Timing	Use Directions
Damping-Off (<i>Pythium</i> spp.) Suppression: Phytophthora Blight (<i>Phytophthora capsici</i>)	23.4 - 47 mL per 1,000 sq. ft. (34.5 - 69.1 fl. oz. per acre; 0.5 - 1 lb. a.i.)	Apply at-seeding.	Apply as a soil surface spray or a soil treatment. Irrigate lightly after application to move product into the root zone.
Restrictions: • DO NOT apply within 5 days of harvest. • DO NOT apply more than 69.1 fl. oz. (1 lb. a.i.) per acre per application. • Minimum Retreatment Interval: 30 days • Maximum Number of Applications per Year: • Plants Grown Outdoors: • When applied at the highest listed single application rate, 1 application may be made per year. • Lower application rates may allow additional applications to be made. DO NOT exceed the maximum annual rate per acre. • Plants Grown Indoors: • When applied at the highest listed single application rate, 1 application may be made per crop. • Lower application rates may allow additional applications to be made. DO NOT exceed the maximum annual rate per crop. • Maximum Annual Rate: • Plants Grown Outdoors in Nurseries (Including Outdoor Growing Structures): When multiple crops are produced in the same production area, DO NOT apply more than 1.0 lb. a.i./A/year of soil-applied and 0.50 lb./A/year of foliar-applied Defeat, or mefenoxam or metalaxyl-containing products. • Plants Grown in Greenhouses: DO NOT apply more than 1.0 lb. a.i./A/crop of soil-applied and 0.50 lb./A/crop of foliar-applied Defeat, or mefenoxam or metalaxyl-containing products.			

Fruiting Vegetables (except Cucurbits)

Eggplant, Groundcherry, Pepino, Pepper (Bell Pepper, Chili Pepper, Cooking Pepper, Pimento, and Sweet Pepper), and Tomatillo, including all cultivars, varieties, and/or hybrids of these. Refer to the **Tomato** section for use directions.

Target Disease	Use Rate	Application Timing	Use Directions
Damping-Off (<i>Pythium</i> spp.) Crown Rot (<i>Phytophthora capsici</i>)	23.4 mL per 1,000 sq. ft. (34.5 fl. oz. per acre; 0.5 lb. a.i.)	To control crown rot, apply before the plants are infected to obtain satisfactory control. Plants already infected with <i>P. capsici</i> cannot be cured with Defeat .	Apply as a soil surface spray or a soil treatment. Irrigate lightly after application to move product into the root zone.
Restrictions: • DO NOT apply within 7 days of harvest. • DO NOT apply more than 34.5 fl. oz. (0.5 lb. a.i.) per acre per application. • Minimum Retreatment Interval: 30 days • Maximum Number of Applications per Year: • Plants Grown Outdoors: • When applied at the highest listed single application rate, 3 applications may be made per year. • Lower application rates may allow additional applications to be made. DO NOT exceed the maximum annual rate per acre. • Plants Grown Indoors: • When applied at the highest listed single application rate, 3 applications may be made per crop. • Lower application rates may allow additional applications to be made. DO NOT exceed the maximum annual rate per crop. • Maximum Annual Rate: • Plants Grown Outdoors in Nurseries (Including Outdoor Growing Structures): When multiple crops are produced in the same production area, DO NOT apply more than 1.5 lbs. a.i./A/year of soil-applied Defeat, or mephenoxam or metalaxyl-containing products. • Plants Grown in Greenhouses: DO NOT apply more than 1.5 lbs. a.i./A/crop of soil-applied Defeat, or mephenoxam or metalaxyl-containing products.			

Herbs

Angelica, Balm, Basil, Borage, Burnet, Catnip, Chamomile, Chervil (Dried), Chinese Chive, Chive, Cilantro (Leaf), Clary, Coriander (Leaf), Costmary, Curry (Leaf), Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (Leaf), Marigold, Marjoram, Nasturtium, Parsley (Dried), Pennyroyal, Rosemary, Rue, Sage, Savory (Summer and Winter), Sweet Bay, Tansy, Tarragon, Thyme, Wintergreen, Woodruff, and Wormwood, Including all cultivars, varieties, and/or hybrids of these.

Target Disease	Use Rate	Application Timing	Use Directions
Damping-Off (<i>Pythium</i> spp.)	23.4 - 47 mL per 1,000 sq. ft. (34.5 - 69.1 fl. oz. per acre; 0.5 - 1 lb. a.i.)	Apply at-seeding.	Apply as a soil surface spray or a soil treatment. Irrigate lightly after application to move product into the root zone.
Damping-Off (<i>Pythium</i> spp.) Downy Mildew (<i>Peronospora belbahrii</i>) Foliar diseases including downy mildew and foliar diseases caused by <i>Phytophthora</i> spp., <i>P. ramorum</i>	23.4 mL per 1,000 sq. ft. (34.5 fl. oz. per acre; 0.5 lb. a.i.)	Apply at-seeding.	Apply as a soil surface spray or a soil treatment to plug-production trays after seeding and before seedling emergence in sufficient water to provide uniform coverage. Irrigate lightly after application to move product into the root zone, but not to the point of leaching. Plug production refers to the production of a young plant grown from seed in a multi-celled germination tray for a short period of time. After growing to a desired size, the plug is then transplanted in a larger pot or container to grow to a larger size suitable to sell.
	0.54 - 1.08 fl. oz. (0.0078 - 0.0156 lb. a.i.) per 100 gallons of water	Apply at transplanting, not sooner than 28 days after the application at seeding.	Apply as a drench at 1.0 pt of solution per sq. ft. to the soil surface (for soil depth up to 4 inches deep). For growing media depth greater than 4 inches, apply 1.5 to 2.0 pts. of solution per sq. ft. to the soil surface. Under severe disease conditions, use the highest specified rate.
Downy Mildew (<i>Peronospora belbahrii</i>)	23.4 mL per 1,000 sq. ft. (34.5 fl. oz. per acre; 0.5 lb. a.i.)	Apply when conditions are favorable for disease, but before infection, on a 14-day schedule.	Apply as a foliar spray. Defeat 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.

(continued)

Herbs (continued)

Restrictions:

- **DO NOT** make more than 1 application to plants grown in plug-production trays.
- **DO NOT** make more than 1 foliar application after plugs are transplanted to a larger pot or container.
- **DO NOT** apply within 21 days of harvest.
- **DO NOT** apply more than 69.1 fl. oz. (1 lb. a.i.) per acre per application.
- **Minimum Retreatment Interval:** 30 days
- **DO NOT** make more than two applications of **Defeat** to the target crop.
- **Maximum Annual Rate:**
 - **Plant Grown Outdoors in Nurseries (including outdoor growing structures):** When multiple crops are produced in the same production area, **DO NOT** apply more than 2 lbs. a.i./A/year of soil-applied and 0.5 lb. a.i./A/year of foliar-applied mefenoxam- and metalaxyl-containing products.
 - **Plants Grown in Greenhouses:** **DO NOT** apply more than 2 lbs. a.i./A/crop of soil applied and 0.5 lb. a.i./A/crop of foliar-applied mefenoxam- and metalaxyl-containing products.

Leafy Vegetables (except Brassica)

Amaranth, Arugula, Chervil, Chrysanthemum (Edible-Leaved and Garland), Corn Salad, Cress (Garden and Upland), Dandelion, Dock, Endive, Lettuce (Head and Leaf), Orach, Parsley, Purslane (Garden and Winter), Radicchio, Spinach, and Spinach (New Zealand and Vine), Including all cultivars, varieties, and/or hybrids of these. – Refer to the **Lettuce (Head and Leaf)** section for additional use directions.

Target Disease	Use Rate	Application Timing	Use Directions
Damping-Off (<i>Pythium</i> spp.)	23.4 - 47 mL per 1,000 sq. ft. (34.5 - 69 fl. oz. per acre; 0.5 - 1 lb. a.i.)	Apply at-seeding.	Apply as a soil surface spray or a soil treatment. Irrigate lightly after application to move product into the root zone.

Restrictions:

- **DO NOT** make more than 1 soil application per crop.
- **DO NOT** apply within 7 days of harvest (except Spinach).
- For Spinach, **DO NOT** apply within 21 days of harvest.
- **DO NOT** apply more than 69 fl. oz. (1 lb. a.i.) per acre per application.
- **Maximum Annual Rate (except Lettuce):**
 - **Plant Grown Outdoors in Nurseries (including outdoor growing structures):** When multiple crops are produced in the same production area, **DO NOT** apply more than 1 lb. a.i./A/year of soil-applied **Defeat** or any mefenoxam- or metalaxyl-containing products.
 - **Plants Grown in Greenhouses:** **DO NOT** apply more than 1 lb. a.i./A/crop of soil applied **Defeat** or any mefenoxam- or metalaxyl-containing products.

Lettuce (Head and Leaf)

(Including all cultivars, varieties, and/or hybrids.)

Target Disease	Use Rate	Application Timing	Use Directions
Downy Mildew (<i>Bremia lactucae</i>)	2.9 - 5.9 mL per 1,000 sq. ft. (4.3 - 8.6 fl. oz. per acre; 0.063 - 0.125 lb. a.i.)	Apply when conditions are favorable for disease, but before infection, on a 14-day schedule.	Apply as a foliar spray. Defeat 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.
Restrictions: • DO NOT apply foliar sprays of Defeat without a labeled tank mix partner. • DO NOT apply the Defeat mixture where downy mildew is already established. • DO NOT make more than 4 foliar applications per crop. • DO NOT apply more than 8.6 fl. oz. (0.125 lb. a.i.) per acre per application. • Minimum Retreatment Interval: 30 days • Maximum Annual Rate: • Plant Grown Outdoors in Nurseries (including Outdoor Growing Structures): When multiple crops are produced in the same production area, DO NOT apply more than 27.8 fl. oz. of Defeat or 0.4 lb. a.i./A/year of any foliar-applied mefenoxam or metalaxyl-containing products. • Plants Grown in Greenhouses: DO NOT apply more than 27.8 fl. oz. of Defeat or 0.4 lb. a.i./A/year of any foliar-applied mefenoxam or metalaxyl-containing products.			

Bulb Crops

Dry Bulb Crops: Chinese Onion Bulb, Garlic (Dry), Great-Headed Garlic, Lily Bulb, Onions (Dry), Pearl Onion, Potato Onion Bulb, Serpent Garlic, and Shallots

Green Bulb Crops: Beltsville Bunching Onions, Chinese Chive (Fresh Leaves), Chive (Fresh Leaves), Fritillaria (Leaves), Green Eschalots, Green Onions, Green Shallots, Hosta Elegans, Japanese Bunching Onions, Kurrai, Lady's Leek, Leeks, Macrostem Onion, Onion (Fresh), Scallions, Shallot (Fresh Leaves), Spring Onions, Tree Tops Onion, Welsh Onion (Tops)

Including all cultivars, varieties, and/or hybrids of these.

Target Disease	Use Rate	Application Timing	Use Directions
Damping-off (<i>Pythium</i> spp.)	11.8 - 23.4 mL per 1,000 sq. ft. (17.3 - 34.5 fl. oz. per acre; 0.25 - 0.5 lb. a.i.)	Apply at-seeding.	Apply as a soil surface spray or a soil treatment. Irrigate lightly after application to move product into the root zone.
Restrictions: • DO NOT apply more than 34.5 fl. oz. (0.5 lb. a.i.) per acre per application. • Minimum Retreatment Interval: 30 days • Maximum Number of Applications per Year: • Plants Grown Outdoors: • When applied at the highest listed single application rate, 2 applications may be made per year. • Lower application rates may allow additional applications to be made. DO NOT exceed the maximum annual rate per acre. • Plants Grown indoors: • When applied at the highest listed single application rate, 2 applications may be made per crop. • Lower application rates may allow additional applications to be made. DO NOT exceed the maximum annual rate per crop. • Maximum Annual Rate: • Plant Grown Outdoors in Nurseries (including outdoor growing structures): When multiple crops are produced in the same production area, DO NOT apply more than 1 lb. a.i. per acre per year of soil-applied mefenoxam-containing products. • Plants Grown in Greenhouses: DO NOT apply more than 1.0 lb. a.i./acre/crop of soil-applied mefenoxam-containing products.			

Tomato

(Including all cultivars, varieties, and/or hybrids.)

Target Disease	Use Rate	Application Timing	Use Directions
Damping-Off (<i>Pythium</i> spp.)	23.4 - 47 mL per 1,000 sq. ft. (34.5 - 69.1 fl. oz. per acre; 0.5 - 1 lb. a.i.)	Apply at-seeding.	Apply as a soil surface spray or a soil treatment. Irrigate lightly after application to move product into the root zone.
Root and Fruit Rot (<i>Phytophthora</i> spp.) (<i>Pythium</i> spp.)	23.4 mL per 1,000 sq. ft. (34.5 fl. oz. per acre; 0.5 lb. a.i.)		

Restrictions:

- **DO NOT** apply more than 69.1 fl. oz./A (1 lb. a.i.) per acre per application.
- **Minimum Retreatment Interval:** 30 days
- **Maximum Number of Applications per Year:**
 - **Plants Grown Outdoors:**
 - When applied at the highest listed single application rate, 1 application may be made per year.
 - Lower application rates may allow additional applications to be made. **DO NOT** exceed the maximum annual rate per acre.
 - **Plants Grown Indoors:**
 - When applied at the highest listed single application rate, 1 application may be made per crop.
 - Lower application rates may allow additional applications to be made. **DO NOT** exceed the maximum annual rate per crop.
- **Maximum Annual Rate:**
 - **Plant Grown Outdoors in Nurseries (including Outdoor Growing Structures):** When multiple crops are produced in the same production area, **DO NOT** apply more than 104 fl. oz. of (1.5 lbs. a.i.) **Defeat** or other soil applied mefenoxam- or metalaxyl-containing products per acre per year.
 - **Plants Grown in Greenhouses:** **DO NOT** apply more than 0.5 lb. a.i./acre/crop of soil-applied mefenoxam-containing products.

TURF*

*Agricultural uses as defined by Arizona Department of Environmental Quality (ADEQ) are not registered for sale or use in Arizona. Use **Defeat** on turf on golf courses; lawns; landscape areas around residential, institutional, public, commercial, and industrial buildings; parks, recreational areas, and athletic fields; and sod farms.

Target Disease	Use Rate	Application Timing	Use Directions
Downy Mildew in St. Augustinegrass Pythium Blight Pythium Damping-Off Yellow Tuft (Downy Mildew) in Bluegrass	0.54 - 1.08 fl. oz. per 1,000 sq. ft. (0.0078 - 0.0156 lb. a.i.)	Apply immediately after seeding. Re-treat at 7- to 14-day intervals if conditions remain favorable for disease.	Apply to newly seeded areas in 1 - 5 gals. of water. For best efficacy, 0.5-inch irrigation or rainfall is required within 24 hours after application. Within the rate range given for turf, use the lower rate for the shortest interval listed and the higher specified rate for the longest interval. Under severe disease conditions, use the specified highest rate and shortest interval.
Pythium Blight		Apply 7 - 10 days after seeding.	For long-term control, use this treatment when seed has been treated with the active ingredient contained in Defeat .
Downy Mildew in St. Augustinegrass Pythium Blight Yellow Tuft (Downy Mildew) in Bluegrass	0.54 - 1.08 fl. oz. per 1,000 sq. ft. (0.0078 - 0.0156 lb. a.i.)	Apply as a preventative treatment. Re-treat at 10- to 21-day intervals.	Apply as a foliar application to established turf in 1 - 5 gals. of water. Within the rate range given for turf, use the lower rate for the shortest interval listed and the highest specified rate for the longest interval. Under severe disease conditions, use the highest specified rate and shortest interval. During periods of prolonged conditions favorable for disease development, apply on a 14-day schedule.
Other Diseases of Turf	Refer to registered propiconazole-containing label for rates, precautions, restrictions, etc.		Use propiconazole-containing products registered for this use alone or in a tank mix combination with Defeat . Refer to the propiconazole label for rates, precautions, restrictions, etc.

(continued)

TURF* (continued)

* Agricultural uses as defined by Arizona Department of Environmental Quality (ADEQ) are not registered for sale or use in Arizona.

Resistance Management:

- **To Minimize the Potential for Insensitivity: DO NOT** make more than 2 applications per season of any product in which the **Defeat** active ingredient is applied alone. Apply an alternate EPA-registered fungicide for Pythium control at least once during the season.

Restrictions:

- **DO NOT** apply more than 47 fl. oz. (0.68 lb. a.i.) per acre per application.
- **DO NOT** make more than 59 applications per year.
- **Minimum Retreatment Interval:** 7 days
- **DO NOT** apply more than 459 fl. oz. of **Defeat**, or 6.6 lbs. a.i./A of all mefenoxam- or metalaxyl-containing products per year.

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Store in original containers only. 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 label.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

Rigid Plastic Less Than or Equal to 5 Gallons: Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling if available. 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 reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by other procedures allowed by State and local authorities.

(continued)

STORAGE AND DISPOSAL *(continued)*

CONTAINER HANDLING: *(continued)*

Rigid Plastic Greater Than 5 Gallons: Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling, if available. 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 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of empty container in a sanitary landfill or by other procedures allowed by State and local authorities.

Rigid Plastic Bulk and Mini-Bulk Containers: Refillable container. Refill this container with pesticide only. **DO NOT** use 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% 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 other procedures allowed by State and local authorities.

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

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. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Sharda USA LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Sharda USA LLC and Seller harmless for any claims relating to such factors.

Sharda USA LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent consistent with applicable law, 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 Sharda USA LLC and Buyer and User assume the risk of any such use. To the extent consistent with applicable law, SHARDA USA LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, neither Sharda USA LLC nor Seller shall be liable for any incidental, consequential, or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SHARDA USA LLC 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 SHARDA USA LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

Sharda USA LLC 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 Sharda USA LLC.

All trademarks are the property of their respective owners.

PRIMEROS AUXILIOS	
SI ENTRA EN CONTACTO CON LOS OJOS:	• Mantenga el ojo abierto y enjuáguelo lenta y cuidadosamente con agua, durante 15 a 20 minutos. • Si ubilza lentes de contacto, relrelos después de los primeros 5 minutos, luego conbnúe enjuagando los ojos. • Llame al centro de control de envenenamientos o a un médico para consejo de tratamiento.
SI CAE EN LA PIEL O LA ROPA:	• Quítese la ropa contaminada. • Enjuague la piel inmediatamente con bastante agua por 15 - 20 minutos. • Llame al centro de control de envenenamientos o a un médico para consejo de tratamiento.
SI SE INGIERE:	• Llame de inmediato a un centro de control de envenenamientos o a un médico para consejo de tratamiento. • Si la persona puede tragar, haga que tome pequeños sorbos de agua. • NO induzca el vómito a menos que así se lo indique un centro de control de envenenamientos o un médico. • NO administre nada por boca a una persona que haya perdido el conocimiento.
NÚMERO DE TELÉFONO DIRECTO	
Cuando llame a un centro de control de envenenamiento, o a un médico, o intente obtener tratamiento, tenga a la mano el envase o la ebiqueta del producto. Para información de emergencia sobre este producto, llame al centro de control de envenenamientos a 1-800-222-1222. Para información general sobre este producto, contacte al Centro Nacional de Información de Pesbcidas (NPIC, por sus siglas en inglés) a 1-800-858-7378, Lunes a Viernes, 8 AM a 12 PM PST (hora del Pacífico), o a http://npic.orst.edu.	

DECLARACIONES PREVENTIVAS

RIESGOS PARA LOS SERES HUMANOS Y ANIMALES DOMÉSTICOS

PRECAUCIÓN

Causa irritación moderada en los ojos. Puede ser mortal si se ingiere. Dañino si se absorbe por la piel o se ingiere. Evite el contacto con la piel, los ojos o la ropa. Lávese bien con agua y jabón después de manipular y antes de comer, beber, masbcar chicle, usar tabaco o usar el baño.

EQUIPO DE PROTECCIÓN PERSONAL (PPE, POR SUS SIGLAS EN INGLÉS)

Los aplicadores y otros manipuladores deberán usar:

- Camisa de manga larga y pantalones largos
- Guantes resistentes a productos químicos fabricados con laminado de barrera, goma de buble ≥ 14 mils, goma de nitrilo ≥ 14 mils, goma de neopreno ≥ 14 mils, goma natural ≥ 14 mils, poliebleno, cloruro de polivinilo (PVC) ≥ 14 mils, o Viton[®] ≥ 14 mils
- Zapatos y calcebnes

Requisitos de Seguridad del Usuario

Siga las instrucciones del fabricante para la limpieza y el mantenimiento del equipo de protección personal (PPE, por sus siglas en inglés). En caso de no exisbr dichas instrucciones de lavado, ublice detergente y agua caliente. Mantenga y lave el PPE por separado del resto de la ropa.

DECLARACIONES DE CONTROL TÉCNICO

Cuando los manipuladores de este producto utilizan sistemas cerrados o cabinas cerradas de conformidad con los requisitos establecidos en la Norma de Protección al Trabajador (WPS) relativos a los pesticidas agrícolas [40 CFR 170.240 (d)(4-6)], es posible reducir o modificar los requisitos relativos al equipo protector personal del manipulador, según lo especificado en el WPS.

RECOMENDACIONES DE SEGURIDAD DEL USUARIO

Los usuarios deben:

- Lavarse las manos antes de comer, beber, mascar chicle, utilizar tabaco o utilizar el baño.
- Quitarse inmediatamente la ropa/equipo de protección personal (PPE) si el pesticida penetra o ingresa a los mismos. Luego deben lavarse muy bien y ponerse ropa limpia.
- Quitarse equipo de protección personal (PPE) inmediatamente después de manipular este producto. Lávese bien y póngase ropa limpia lo antes posible.

RIESGOS AMBIENTALES

NO aplique directamente al agua, en áreas donde haya aguas superficiales, o en áreas intermareales que se encuentren bajo el nivel promedio máximo del agua. **NO** aplique cuando las condiciones meteorológicas favorezcan la deriva desde las áreas tratadas. **NO** contamine el agua cuando disponga de las aguas de lavado de equipo o aguas de enjuague.

Advertencia Sobre Aguas Subterráneas

Se sabe que este producto químico se filtra a través del suelo hacia las aguas subterráneas en determinadas condiciones como resultado de su uso agrícola. El uso de este producto químico en zonas con suelos permeables, especialmente donde el nivel freático es poco profundo, puede contaminar las aguas subterráneas.

PELIGROS FÍSICOS O QUÍMICOS

NO ubique, vierta, derrame ni almacene cerca del calor o llamas abiertas.

El uso de este producto de forma contraria a lo indicado en su etiqueta constituye una infracción de la ley federal.

ALMACENAMIENTO Y DESECHO

NO contamine el agua, los alimentos ni los forrajes durante el almacenamiento o el desecho.

ALMACENAMIENTO DE PESTICIDAS: Almacene únicamente en los envases originales. Mantenga el envase cerrado cuando no lo use. **NO** almacene cerca de forraje o alimentos. En caso de derrame sobre el suelo o superficies pavimentadas, recoja el producto con un trapeador y trasládalo a un área de almacenamiento de residuos químicos para su eliminación adecuada, siempre que no sea posible utilizarlo de acuerdo con las instrucciones de la etiqueta.

DESECHO DE PESTICIDAS: Los residuos de pesticidas son altamente peligrosos. Los residuos resultantes del uso de este producto deben eliminarse en el lugar de origen o en una instalación de eliminación de residuos autorizada. La disposición inadecuada de pesticidas, mezclas de pulverización o aguas de enjuague no utilizados constituye una infracción a la ley federal. Si estos residuos no pueden ser eliminados de acuerdo con las instrucciones de la etiqueta, contacte la agencia estatal de pesticidas o de control ambiental de su estado, o el representante para el Manejo de Residuos Peligrosos de la Oficina Regional de la EPA más cercana para obtener instrucciones sobre métodos adecuados de eliminación.

MANIPULACIÓN DE ENVASES:

Plástico rígido menos o igual a 5 galones: Envase no rellenable. **NO** reutilice ni rellene este envase. Ofrézcalo para reciclaje si está disponible. Enjuague tres veces el envase (o equivalente) inmediatamente después de vaciarlo. Enjuague tres veces siguiendo estas indicaciones: vacíe los contenidos restantes en el equipo de aplicación o un tanque de mezcla, y drene por 10 segundos después de que el flujo empiece a gotear. Llene el envase hasta 1/4 de su capacidad con agua y tape de nuevo. Agite por 10 segundos. Vierta las aguas de enjuague en el equipo de aplicación o tanque de mezcla, o almacene aguas de enjuague para uso posterior o eliminación. Drene por 10 segundos después de que el flujo empiece a gotear. Repita este procedimiento dos veces más. Luego ofrézcalo para reciclaje si está disponible o perforo y deseche en un relleno sanitario, o por otros procedimientos aprobados por las autoridades estatales y locales.

Plástico rígido más de 5 galones: Envase no rellenable. **NO** reutilice ni rellene este envase. Ofrézcalo para reciclaje si está disponible. Enjuague tres veces el envase (o equivalente) inmediatamente después de vaciarlo. Enjuague tres veces siguiendo estas indicaciones: vacíe los contenidos restantes en el equipo de aplicación o un tanque de mezcla. Llene el envase hasta 1/4 de su capacidad con agua. Reemplace y asegure los cierres. Vuelque el envase al lado y hágalo rodar por 30 segundos, asegurando por lo menos una revolución completa. Ponga el envase vertical e inclínelo hacia adelante y hacia atrás varias veces. Dé vuelta al envase hacia el lado opuesto e inclínelo hacia adelante y hacia atrás varias veces. Vierta las aguas de enjuague en el equipo de aplicación o tanque de mezcla, o almacene aguas de enjuague para uso posterior o eliminación. Repita este procedimiento dos veces más. Luego ofrézcalo para reciclaje si está disponible o perforo y deseche en un relleno sanitario, o por otros procedimientos aprobados por las autoridades estatales y locales.

(continuado)

ALMACENAMIENTO Y DESECHO *(continuado)*

MANIPULACIÓN DE ENVASES: *(continuado)*

Plás-co rígido contenedores y mini-contenedores a granel: Envase rellenable. Rellene este envase sólo con pesticida. **NO** reutilice este envase para ningún otro propósito. La limpieza del envase antes de su eliminación final es la responsabilidad de la persona que se deshace del envase. La limpieza antes de rellenarlo es responsabilidad de la persona que lo rellena. Para limpiar el envase antes de su eliminación final, vacíe el contenido restante de este envase en el equipo de aplicación o en el tanque de mezcla. Llene el envase con un 10% de agua. Agite vigorosamente o haga recircular el agua con la bomba durante 2 minutos. Vierta o bombee las aguas de enjuague en el equipo de aplicación o en el sistema de recolección de aguas de enjuague. Repita este procedimiento dos veces más. Luego ofrézcalo para reciclaje si está disponible o perfore y deseche en un relleno sanitario, o por otros procedimientos aprobados por las autoridades estatales y locales.

¡EL ENVASE NO ES SEGURO PARA ALIMENTOS, FORRAJES, NI AGUA POTABLE!

NOTES

Defeat

For Control of Diseases on Ornamental Plants; Ornamental Bulb, Corm, and Tuber Plants; Conifers and Conifer Nurseries; Christmas Trees and Christmas Tree Plantations; Forest Plantations; Forest Nurseries; and Non-Bearing Citrus Trees and Fruit and Nut Plants Grown in Greenhouses and Nurseries (Including Field- and Container-Grown Plants Grown Outdoors and in Shade Houses, Lath Houses and Other Production Sites and Structures), Retail Nurseries, Residential and Commercial Landscapes, and Interior Plantscape Ornamentals.

For Control of Disease of Vegetable Transplants Grown for Retail Sale to Consumers.

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

ACTIVE INGREDIENT:	WT. BY %
Mefenoxam*	22.0%
OTHER INGREDIENTS:	78.0%
TOTAL:	100.0%

* CAS No. 70630-17-0; 69516-34-3; 57837-19-1

Contains 1.84 lbs. active ingredient 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.)

FIRST AID - IF IN EYES: • Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice. **IF 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 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 a poison control center or doctor. • **DO NOT** give anything by mouth to an unconscious person.

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

PRECAUTIONARY STATEMENTS - HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION/PRECAUTION - Causes moderate eye irritation. May be fatal if swallowed. Harmful if absorbed through skin or swallowed. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. **ENVIRONMENTAL HAZARDS** - **DO NOT** apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high-water mark. **DO NOT** apply when weather conditions favor drift from treated areas. **DO NOT** contaminate water when disposing of equipment wash waters or rinsate. **Groundwater Advisory** - This chemical is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. **PHYSICAL OR CHEMICAL HAZARDS - DO NOT** use, pour, spill, or store near heat or open flame. **DIRECTIONS FOR USE** - It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal. **PESTICIDE STORAGE:** Store in original containers only. 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 label. **PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. **CONTAINER HANDLING:** **Rigid Plastic Less Than or Equal to 5 Gallons:** Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling if available. 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 reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by other procedures allowed by State and local authorities.

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

See label booklet for complete Precautionary Statements, Directions For Use, and Storage and Disposal.

Manufactured For: Sharda USA LLC

7217 Lancaster Pike, Suite A, Hockessin, Delaware 19707

EPA Reg. No. 83529-372 EPA Est. No. (AG) 72159-GA-001;

(MC) 89332-GA-001; (SC) 39578-TX-001

The EPA Establishment Number is identified by the circled letters above that match the first two letters in the batch number.

Net Contents: **1 Gallon**

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