

PULL HERE TO OPEN ►

GROUP 4 FUNGICIDE

ArielTM



Department of Agriculture
STATE OF HAWAII

LICENSED

PERIOD 2015-2017 LIC. NO.

9226.511



Department of Agriculture
STATE OF HAWAII

LICENSED

PERIOD 2012-2014 LIC. NO.

FUNGICIDE

*For the control of certain diseases
in conifers, nonbearing citrus,
nonbearing deciduous fruits and
nuts, ornamentals, and turf*

Active Ingredient:

Mefenoxam* 22.0%

Other Ingredients: 78.0%

Total: 100.0%

*CAS No. 70630-17-0 and 69516-34-3

EPA Reg. No. 100-1413

EPA Est. 39578-TX-1

**KEEP OUT OF REACH
OF CHILDREN.**

CAUTION

*See additional precautionary
statements and directions for use
inside booklet.*

**SCP 1413A-L1 0511
357010**

1 gallon

Net Contents

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have a 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.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Causes moderate eye irritation. Harmful if swallowed or absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

continued...

PRECAUTIONARY STATEMENTS (*continued*)

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

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 immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Environmental Hazards

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

Groundwater Advisory Statement

This chemical is known to leach through soil into ground water 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.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

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

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. To the extent permitted by applicable law, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

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

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

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.

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:

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

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- 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 the treated areas until sprays have dried.

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

USE INFORMATION

Ariel is a systemic fungicide for use on ornamentals; turf; nonbearing citrus grown in nurseries and as landscape plantings; conifers grown in nurseries and plantations, including Christmas trees; and nonbearing deciduous fruit and nut trees grown in nurseries.

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 seasonal total for the active ingredient as stated on the label of the product containing the lowest seasonal total on that crop.

Resistance Management Recommendations: Ariel is a systemic fungicide having a specific mode of action. Use of Ariel could result in development of insensitive strains of fungi. Development of insensitivity cannot be predicted. Consult with your State Agricultural Experiment Station or Extension Service Specialist for guidance and ways to control any possible Ariel insensitive strains of fungi which may occur.

The active ingredient in Ariel is mefenoxam, a Group 4 fungicide (phenylamide). Some disease pathogens are known to have developed resistance to fungicides used repeatedly for their control. To prevent the development of insensitive strains of fungi to mefenoxam, apply Ariel in an alternation or tank-mix program with fungicides that are not in Group 4 and to which pathogen resistance has not developed. Applications targeted for downy mildew diseases should always be in a tank mixture with a non-Group 4 fungicide.

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

Spray Drift Precaution: To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, or crop injury may result.

Rotational Crops: 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.

APPLICATION PROCEDURES

Ariel 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. Ariel may also be incorporated into a pre-potting growing media for subsequent seeding or transplanting of ornamentals.

Banded Applications:

Calculate the amount of Ariel needed as follows:

$$\frac{\text{band width in inches}}{\text{row width in inches}} \times \frac{\text{broadcast rate}}{\text{per acre}} = \frac{\text{amount needed}}{\text{per acre}}$$

Application through Irrigation Systems

Ariel alone or in tank mixture with other pesticides registered for application through irrigation systems may be applied in irrigation water at rates recommended 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.

Uniform Water Distribution and System Calibration: Plant injury or lack of effectiveness may result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system, unless the 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 should the need arise.

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 should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

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, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

Chemigation Application Instructions

Ariel must be applied on the schedule specified in the use directions, not according to the irrigation schedule.

Only pressure injection or venturi equipment is recommended.

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.

General Calibration Instructions

1. 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.
2. Only pressure injection or venturi equipment is recommended.
3. Determine the area to be treated in each irrigation run.
4. Measure the output of each of the emitters or drip tubes closest to and farthest from the injector site.
5. For calibration, substitute a concentrated detergent (such as Wisk) for the Ariel in the injector tank. It is important to use the same volume of soap solution as the planned volume of Ariel solution when calibrating the system. The detergent will bubble as it leaves the emitters. The time period over which bubbles occur should 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

1. 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.
2. Make up an indicator solution of detergent or fertilizer, using the same ratio to be used with mixing Ariel.
3. Set the injector to apply the indicator solution at the injection rate to be used in the actual Ariel application.
4. 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 should be monitored to determine the time intervals that the indicator solutions are observed.
5. 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.

6. 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 Ariel, or adjust the injector to a slower flow rate.
7. Once the system is calibrated, dilute the needed amount of Ariel with water and any other tank mix partners in the injection tank using a minimum of 15 parts water to 1 part of Ariel 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.
8. Do not begin to inject Ariel into the system until all emitters are producing equal flow rates, or until the system is at full pressure. Inject the Ariel 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.
9. Inject the Ariel into the system at the beginning of the irrigation set in $\frac{1}{2}$ to 1 inch of irrigation water.

MIXING INSTRUCTIONS

Prepare no more spray mixture than is required for the immediate operation. Agitate the spray solution continuously during mixing and during application. 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.

Compatibility: Ariel is usually compatible with Banner MAXX®, Daconil®, Fore®, Heritage®, and Medallion®.

To determine the compatibility of Ariel with these and other products, pour the products into a small container of water in the correct proportions. After thorough mixing, let stand for 5 minutes. If the combination remains mixed, or can be remixed readily, the mixture should be considered compatible.

Ariel Alone: Add $\frac{1}{4}$ to $\frac{1}{2}$ of the required amount of water to the spray tank. With the agitator running, add the Ariel to the tank. Continue agitation while adding the remainder of the water. Begin application of the spray solution after the Ariel has completely dispersed into the mix water. Maintain agitation until all of the mixture has been sprayed.

Ariel + Tank Mixtures: Add $\frac{1}{4}$ to $\frac{1}{2}$ of the required amount of water to the spray tank. Start the agitator before adding any tank-mix partners. In general, tank-mix partners should be added in this order: wettable powders, dry flowable formulations, liquid flowable formulations, microencapsulated formulations, such as Ariel, and emulsifiable concentrates. Always allow each tank-mix partner to become fully dispersed before adding the next product. Provide sufficient agitation while adding the remainder of the water and the Ariel to the spray tank. Allow the Ariel to completely disperse into the mix water. Maintain agitation until all of the mixture has been sprayed.

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

If using Ariel 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.

ORNAMENTALS

Ariel is a systemic fungicide that provides control of damping off, root and stem diseases caused by *Pythium* and *Phytophthora* spp., and foliar diseases such as downy mildew and foliar diseases caused by *Phytophthora* spp. including *Phytophthora ramorum*.

Use Ariel on ornamentals grown in greenhouse, lath and shade-houses, outdoor field and container nurseries (including non-bearing fruit and nut trees), conifer plantations, and in commercial and residential landscapes.

Ariel may be applied through traditional spray equipment or through irrigation systems, as a soil drench or as a soil surface spray (broadcast or banded), or as a stem and foliar spray. Ariel may also be incorporated into a pre-potting growing media for subsequent seeding or transplanting of ornamentals.

Apply in a minimum of 50 gallons of water per acre for foliar and soil surface (non-drench) applications.

Rate Selection: Within a rate range given for a specific group of ornamentals, use the lower rate for the shortest interval listed and the higher rate for the longest interval. Under severe disease conditions, use the highest rate and the shortest interval.

Soil Surface Sprays: For best efficacy with soil surface applications, irrigate in with at least 1/2 inch of water within 24 hours. If applications are banded, calculate the amount of Ariel needed by using the formula for banded application under **Application Procedures** in the **Use Information** section of this label.

Growing Medium Drench: Use enough of the specified Ariel water solution to wet the root zone of plants. In general, 1.0 pt./sq. ft. of this solution is sufficient for ornamentals growing in containers with 4 inches of growth media. Containers with growth media depth greater than 4 inches generally require 1 1/2 to 2.0 pts./sq. ft. of the solution. As part of a sound resistance management program, do not make more than two (2) sequential applications of Ariel before alternating with a fungicide of a different mode of action.

Foliar and Stem Sprays: Apply thoroughly to all parts of the foliage and stems. For *Phytophthora* spp. and *Pythium* spp., you may apply Ariel alone. For downy mildew control (and following resistance management practices), you must apply in a tank mixture with a non-Group 4 fungicide. As part of a sound resistance management program, apply only one (1) foliar application of Ariel before alternating with a non-Group 4 fungicide for sequential foliar applications.

Pre-Potting Growing Media Mix: Combine 0.125 to 0.25 fl. ozs. Ariel into 1.0 gallon of water. Uniformly mix this solution onto one (1) cubic yard of potting media. Uniform mixing can be accomplished by placing the potting mix in a rotating drum and spraying the Ariel solution onto the mix while the drum is rotating. It is recommended that this media treatment be prepared just prior to use.

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 Ariel and tank mixtures with Ariel. Neither the manufacturer nor the seller has determined whether or not Ariel can be used safely on ornamental and nursery plants not specified on this label. The applicator must determine if Ariel 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.

<p>Foliage Plants</p> <p>Aglaonema Aphelandra Dieffenbachia Peperomia Philodendron* Pothos Schefflera Sedum Sempervivum Zygocactus</p>	<p>Drench: Mix 0.3 to 0.6 fl. oz. Ariel with 100 gals. of water. Apply 1.0 pt. of solution per sq. ft. to the soil surface. For growth media depth greater than 4 inches, apply 1.5 to 2.0 pts. of solution per sq. ft. to the soil surface. Repeat applications at 2 to 3-month intervals, if necessary.</p> <p>*On Philodendron, use 0.50 to 1.0 fl. oz. Ariel per 100 gals.</p> <p><i>Precaution: To minimize the potential for injury to Pothos, do not use more than 0.38 fl. oz. Ariel per 100 gals. and do not apply more frequently than once every 3 months.</i></p> <p>Pre-Potting Growing Media Mix: Apply to growing media mix just before planting. Mix only enough for current use. Do not store. Thoroughly mix 0.125 to 0.25 fl. oz. Ariel with each cu. yd. of pre-potting growing media.</p> <p>Soil Surface Spray: Apply 1.0 fl. oz. Ariel per 1,000 sq. ft. to the soil surface in a broadcast or banded spray 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 1/2 inch of water within 24 hours.</p> <p>Foliar Application: Spray foliage thoroughly. For downy mildew, apply Ariel at 0.50 to 1.0 fl. oz. per 100 gals. of water in a tank mix (for resistance management) with a non-Group 4 fungicide labeled for downy mildew. For <i>Phytophthora</i> spp. and <i>Pythium</i> spp., apply Ariel at 0.5 to 1.0 fl. oz. per 100 gals. of water.</p> <p>Resistance Management: Apply only one (1) foliar application of Ariel (alone or in a tank mix) before alternating with a non-Group 4 fungicide for sequential foliar applications.</p>
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<p>Bedding Plants</p> <p>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 Zinnia</p>	<p>Drench at Seeding (Soil 2-3 inches deep): Mix 0.125 to 0.25 fl. oz. Ariel with 100 gals. of water and apply 1.0 pt. of solution per sq. ft. to the soil surface.</p> <p>Drench at Transplanting (Soil 2-3 inches deep): Mix 0.50 to 1.0 fl. oz. Ariel with 100 gals. of water and apply 1.0 pt. of solution per sq. ft. to the soil surface. For growth media depth greater than 4 inches, apply 1.5 to 2.0 pts. of solution per sq. ft. to the soil surface. Repeat applications at 1 to 2-month intervals, if necessary. Do not apply rates of 0.75 to 1.0 fl. oz. Ariel per 100 gals. more often than once every 6 weeks.</p> <p>Pre-Potting Growing Media Mix At Seeding and At Transplanting: Apply to growing media mix just before planting. Mix only enough for current use. Do not store. Thoroughly mix 0.125 fl. oz. Ariel with each cu. yd. of pre-potting growing media.</p> <p>Soil Surface Spray: Apply 1.0 fl. oz. Ariel per 1,000 sq. ft. to the soil surface in a broadcast or banded spray 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 1/2 inch of water within 24 hours.</p> <p>Foliar Application: Spray foliage thoroughly. For downy mildew, apply Ariel at 0.50 to 1.0 fl. oz. per 100 gals. of water in a tank mix (for resistance management) with a non-Group 4 fungicide labeled for downy mildew. For <i>Phytophthora</i> spp. and <i>Pythium</i> spp., apply Ariel at 0.5 to 1.0 fl. oz. per 100 gals. of water.</p> <p>Resistance Management: Apply only one (1) foliar application of Ariel (alone or in a tank mix) before alternating with a non-Group 4 fungicide for sequential foliar applications.</p>
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<p>Flowers</p> <p>African violet Anthurium Baby's breath Carnation Chrysanthemum Columbine Delphinium Easter lily Geranium Gloxinia Poinsettia Rose</p>	<p>Drench: Mix 0.50 to 1.0 fl. oz. Ariel with 100 gals. of water and apply 1.0 pt. of solution per sq. ft. to the soil surface. For growth media depth greater than 4 inches, apply 1.5 to 2.0 pts. of solution per sq. ft. to the soil surface. Repeat applications at 1 to 2-month intervals, if necessary. Do not apply rates of 0.75 to 1.0 fl. oz. Ariel per 100 gals. more often than every 6 weeks.</p> <p><i>Precaution: Do not apply more than 0.50 fl. oz. Ariel per 100 gals. of water to Easter lily and only make one at-planting application.</i></p> <p>Pre-Potting Growing Media Mix at Seeding and at Transplanting: Apply to growing media mix just before planting. Mix only enough for current use. Do not store. Thoroughly mix 0.125 fl. oz. Ariel with each cubic yard of pre-potting media.</p> <p>Soil Surface Spray: Apply 1.0 fl. oz. Ariel per 1,000 sq. ft. to the soil surface in a broadcast or banded spray 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 1/2 inch of water within 24 hours.</p> <p>Foliar Application: Spray foliage thoroughly. For downy mildew, apply Ariel at 0.50 to 1.0 fl. oz. per 100 gals. of water in a tank mix (for resistance management) with a non-Group 4 fungicide labeled for downy mildew. For <i>Phytophthora</i> spp. and <i>Pythium</i> spp., apply Ariel at 0.5 to 1.0 fl. oz. per 100 gals. of water.</p> <p>Resistance Management: Apply only one (1) foliar application of Ariel (alone or in a tank mix) before alternating with a non-Group 4 fungicide for sequential foliar applications.</p>
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Azaleas	<p>Drench: Pythium, Phytophthora root and crown rot - Mix 0.63 to 1.25 fl. oz. Ariel with 100 gals. of water and apply 1.0 pt. of solution per sq. ft. to the soil surface. For growth media depth greater than 4 inches, apply 1.5 to 2.0 pts. of solution per sq. ft. to the soil surface. Repeat applications at 2 to 4-month intervals, if necessary.</p> <p>Soil Surface Spray: Apply 1.25 to 2.50 fl. oz. Ariel per 1,000 sq. ft. to the soil surface in a broadcast or banded spray 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 1/2 inch of water within 24 hours.</p> <p>Foliar Application: Spray foliage thoroughly. For <i>Phytophthora</i> spp. and <i>Pythium</i> spp., apply Ariel at 0.50 to 1.0 fl. oz. per 100 gals. of water.</p> <p>Resistance Management: Apply only one (1) foliar application of Ariel (alone or in a tank mix) before alternating with a non-Group 4 fungicide for sequential foliar applications.</p> <p><i>Precautions: (1) To minimize the potential for injury to azaleas, do not apply repeat soil applications of 1.25 fl. oz. Ariel per 100 gals. closer than every 3 months, and do not exceed a total of 2.5 fl. oz. Ariel in 6 months. (2) Use the lower rate for "Coral Bell" variety.</i></p>
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<p>Woody Ornamentals Other Than Azaleas</p> <p>Aucuba japonica Arborvitae Boxwood Ceanothus Cotoneaster Dogwood Ficus "Halls" Honeysuckle Ilex <i>Juniperus</i> spp. Photinia <i>Pieris japonica</i> <i>Pinus</i> spp. Pittosporum Rhododendron White cedar White pine Yew</p>	<p>Drench: Mix 1.0 to 2.0 fl. oz. Ariel per 100 gals. of water and apply 1.0 pt. of solution per sq. ft. to the soil surface. For growth media depth greater than 4 inches, apply 1.5 to 2.0 pts. of solution per sq. ft. to the soil surface. Repeat applications at 2 to 3-month intervals, if necessary. Do not apply rates of 2.0 fl. oz. Ariel per 100 gals. more often than every 10 weeks.</p> <p>Soil Surface Spray: Apply 1.25 to 2.50 fl. oz. Ariel per 1,000 sq. ft. to the soil surface in a broadcast or banded spray 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 1/2 inch of water within 24 hours.</p> <p>Foliar Application: Spray foliage thoroughly. For downy mildew, apply Ariel at 0.50 to 2.0 fl. oz. per 100 gals. of water in a tank mix (for resistance management) with a non-Group 4 fungicide labeled for downy mildew. For <i>Phytophthora</i> spp. and <i>Pythium</i> spp., apply Ariel at 0.5 to 1.0 fl. oz. per 100 gals. of water.</p> <p>Resistance Management: Apply only one (1) foliar application of Ariel (alone or in a tank mix) before alternating with a non-Group 4 fungicide for sequential foliar applications.</p>
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INTERIORESCAPE SOIL DRENCH APPLICATIONS AND INDIVIDUAL PLANT USE

In situations where water volumes used are much less than 100 gals. and the area treated is small, the following table provides the Ariel rates to make small quantities of solution. Refer to the plant type for the correct fl. oz. of product to use when utilizing this table.

Rate of Ariel (fl. oz.)	Amount of Ariel to add to water to make the following quantities			
	1 gal.	5 gals.	10 gals.	25 gals.
0.25	4 drops	18 drops	37 drops/ 0.75 ml	1.9 ml/ 3/8 tsp.
0.5	7 drops	37 drops/ 0.75 ml	75 drops/ 1.5 ml	3.8 ml/ 3/4 tsp.
1.0	15 drops	75 drops/ 1.5 ml	3.0 ml/ 1/2 tsp.	7.5 ml/ 1.5 tsp./ 1/2 Tbsp.
1.5	22 drops	3.0 ml/ 1/2 tsp.	4.5 ml/ 1 tsp.	11.3 ml/ 2.25 tsp./ 3/4 Tbsp.
2.0	30 drops	4.5 ml/ 1 tsp.	6.0 ml/ 1.5 tsp.	15.0 ml/ 3 tsp./ 1 Tbsp.

Soil Drench: Apply enough solution to the soil surface to wet the root area of the plants.

CITRUS IN NURSERIES AND LANDSCAPE PLANTINGS (NONBEARING)

Use Ariel on nonbearing citrus for control of citrus foot rot, root rot, and trunk canker caused by *Phytophthora* spp. Apply to the soil as a drench or as a spray in a banded application, or as a directed spray.

Apply in a minimum of 50 gallons of water per acre for foliar and soil surface (non-drench) applications.

Make the first application of Ariel at the time of planting. Make repeat applications at 3-month intervals during the period when trees are actively growing.

Soil Drench: Mix 2.0 to 3.0 fl. oz. Ariel per 100 gals. of water and apply as a drench to the soil at the rate of 100 to 250 gals./1,000 ft. of row. Make the width of the drench treatment wide enough to cover the root systems of the plants. Avoid application to the foliage.

Soil Surface Spray: Apply 1.25 to 2.5 fl. oz. Ariel per 1,000 sq. ft. as a broadcast or banded surface spray to seedbeds, liners, or bedded stock in sufficient water to obtain uniform coverage. If applications are banded, make the treated area wide enough to cover the root systems of the plants. Avoid application to the foliage. For best efficacy, $\frac{1}{2}$ inch irrigation or rainfall is required within 24 hours after application.

If applications are banded, calculate the amount of Ariel needed by using the formula for banded application under **Application Procedures** in the **Use Information** section of this label.

Directed Spray: Use 2.0 fl. oz. Ariel per 100 gals. and apply directly to the base of the plant.

Restriction: Do not use in greenhouse citrus nursery stock intended for commercial fruit production.

CONIFERS IN NURSERIES AND PLANTATIONS (INCLUDING CHRISTMAS TREES)

Ariel provides control of Phytophthora root, stem and foliar disease of conifers. For best efficacy, 1/2 inch irrigation or rainfall is required within 24 hours after application.

Conifers in Nurseries

Seedbeds and Plug-Plantings	<p>Soil Surface Spray: Apply 1.25 pts. of Ariel in at least 50 gals. of water per acre in the spring and again in the fall.</p> <p>Foliar Application: Use 1.0 fl. oz. Ariel per 100 gals. of water and apply to runoff.</p> <p>Resistance Management: Apply only one (1) foliar application of Ariel before alternating with a non-Group 4 fungicide for sequential foliar applications.</p>
2-0 Transplants	<p>Soil Surface Spray: Apply 2.5 pts. of Ariel in at least 50 gals. of water per acre in the spring and again in the fall.</p> <p>Foliar Application: Use 1.0 to 2.0 fl. oz. Ariel per 100 gals. of water and apply to runoff.</p> <p>Resistance Management: Apply only one (1) foliar application of Ariel before alternating with a non-Group 4 fungicide for sequential foliar applications.</p>

Conifers in Plantations

Use of Ariel will aid in the control of Phytophthora root, stem and foliar disease, when used in conjunction with good cultural practices. The use of Ariel will not overcome poor management practices, such as planting on sites that are prone to flooding or are poorly drained. Ariel fungicide will not revitalize trees showing moderate to severe disease symptoms.

Soil Surface Applications: Apply 0.625 to 1.25 gals. of Ariel per acre in a minimum of 50 gals. of water as a directed soil spray. Avoid application to the foliage. Make applications in early spring before growth starts and in the fall before the ground freezes. If applications are banded, calculate the amount of Ariel needed for a banded treatment by using the formula in the **Application Procedures** section of the label.

Foliar Applications: For foliar Phytophthora (including *Phytophthora ramorum*), apply 1.0 to 2.0 fl. oz. Ariel per 100 gals. of water and apply to runoff.

Resistance Management: Apply only one (1) foliar application of Ariel before alternating with a non-Group 4 fungicide for sequential foliar applications.

DECIDUOUS FRUITS AND NUTS IN NURSERIES (NONBEARING)

Ariel provides control of Pythium root rot and Phytophthora root, crown, and collar rot of nonbearing deciduous fruits and nuts.

Soil Surface Application: Apply 3.0 fl. oz. per 1,000 sq. ft. in a minimum of 50 gallons of water per acre to obtain thorough coverage of the soil under the canopy of the trees. Avoid application to the foliage. Treat sufficient surface area in nurseries to cover the root zone of the plants. Additional applications may be made as necessary at 3-month intervals during the growing season. For best efficacy, 1/2 inch irrigation or rainfall is required within 24 hours after application.

Notes: (1) Do not apply to trees that will bear harvestable fruit within 12 months of the last application, or possible illegal residues may result. (2) Do not apply more than 9.0 fl. oz. per 1,000 sq. ft. (3.0 gals./A) of Ariel per year.

TURF (GOLF COURSES, LAWNS, LANDSCAPE AREAS AROUND RESIDENTIAL, INSTITUTIONAL, PUBLIC, COMMERCIAL AND INDUSTRIAL BUILDINGS, PARKS, RECREATIONAL AREAS, AND ATHLETIC FIELDS, SOD FARMS)

Ariel controls Pythium blight and Pythium damping-off in turf, yellow tuft (downy mildew) in bluegrass, and downy mildew in St. Augustinegrass. **Within the rate range given for turf, use the lower rate for the shortest interval listed and the higher rate for the longest interval. Under severe disease conditions, use the highest rate and shortest interval.**

<p>Established Turf</p> <p>Pythium Blight Yellow Tuft Downy Mildew</p>	<p>Foliar Application: Apply as a preventative treatment at 0.50 to 1.0 fl. oz. in 1 to 5 gals. of water per 1,000 sq. ft. Re-treat at 10 to 21-day intervals. During periods of prolonged conditions favorable for disease development, use 0.50 to 1.0 fl. oz. on a 14-day schedule.</p>
<p>Newly Seeded Areas</p> <p>Pythium Damping-off Pythium Blight Yellow Tuft Downy Mildew</p>	<p>Soil Surface Spray: Apply 0.50 to 1.0 fl. oz. in 1 to 5 gals. of water per 1,000 sq. ft. immediately after seeding. Re-treat at 7 to 14-day intervals if conditions remain favorable for disease. For best efficacy, ¹/₂ inch irrigation or rainfall is required within 24 hours after application.</p> <p>Note: For long-term control of Pythium in areas when using seed treated with the active ingredient contained in Ariel, make an application of Ariel 7-10 days after seeding.</p>

Note: For control of other diseases of turf, use Banner® alone or in a tank-mix combination with Ariel. Refer to the Banner label for rates, precautions, restrictions, etc.

Resistance Management Precautions: To minimize the potential for insensitivity, (1) Make no more than 2 applications per season of any product in which the Ariel active ingredient is applied alone, and (2) Apply an alternate EPA-registered fungicide for Pythium control at least once during the season.

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. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Handling (< 5 gallons)

Non-refillable 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 $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Container Handling (> 5 gallons)

Non-refillable 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 $\frac{1}{4}$ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least once 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 and disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

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

Ariel™, Banner®, Banner MAXX®, Daconil®,
Heritage®, Medallion®, the ALLIANCE FRAME
the SYNGENTA Logo and the PURPOSE ICON
are Trademarks of a Syngenta Group Company



Fore® trademark of Dow Agrosciences, Inc.

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For non-emergency (e.g., current product information), call
Syngenta Crop Protection at 1-800-334-9481.

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

SCP 1413A-L1 0511
357010

BAR CODE # IS
(01) 0 07 02941 46981
LAST DIGIT IS CHECK DIGIT
UC/CEAN 128

GROUP 4 FUNGICIDE

Ariel™

Fungicide

For the control of certain diseases in conifers, nonbearing citrus, nonbearing deciduous fruits and nuts, ornamentals, and turf

Active Ingredient:	
Mefenoxam*	22.0%
Other Ingredients:	78.0%
Total:	100.0%

*CAS No. 70630-17-0 and 69516-34-3

EPA Reg. No. 100-1413

EPA Est. 39578-TX-1

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

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

**SCP 1413A-L1 0511
357010**

1 gallon

Net Contents

KEEP OUT OF REACH OF CHILDREN. CAUTION

See additional storage, disposal, precautionary statements, and directions for use inside booklet.

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 a 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. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

HOT LINE NUMBER: For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372

PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals CAUTION

Causes moderate eye irritation. Harmful if swallowed or absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling.

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

- Long-sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material
- Shoes plus socks

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

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 immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Environmental Hazards: For terrestrial uses. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

Groundwater Advisory Statement: This chemical is known to leach through soil into ground water 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.

STORAGE AND 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. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Handling [**< 5 gallons**]: Non-refillable 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 and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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

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