



# Mefenoxam 2 AQ

## Fungicide

An aqueous flowable fungicide for the control of certain diseases in various turf, nursery, and ornamental crops caused by the Oomycete class of fungi.

Contains mefenoxam, the active ingredient used in Subdue MAXX®. Quali-Pro®

Mefenoxam 2 AQ is not manufactured or distributed by Syngenta Crop Protection, Inc.

#### ACTIVE INGREDIENT:

BY WT.

TOTAL: .....

.100.0%

\*Contains 2 lbs. active ingredient per gallon.

EPA Reg. No. 66222-216

# WARNING/AVISO

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING

Causes substantial but temporary eye injury. Harmful if swallowed or absorbed through the skin. Do not get in eyes or on clothing. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

For additional precautionary, handling, and use statements, see inside of this booklet.

Manufactured for: Makhteshim Agan of North America, Inc. 3120 Highwoods Blvd, Suite 100 - Raleigh, NC 27604

13864; 13866; 13865; 13849 EPA 112310/032411/Rev C

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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 soap and 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 by a poison control center or doctor. Do not give anything by mouth to an unconscious person.			
IF INHALED:	Move person to fresh air.     If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably by mouth-to-mouth, if possible.     Call a poison control center or doctor for further treatment advice.			
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact Proser at 1-877-250-9291 for				

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact Prosar at 1-877-250-9291 for emergency medical treatment information.

NOTE TO PHYSICIAN: If ingested, induce emesis or lavage stomach. Treat symptomatically.

#### 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
- · Goggles or face shield

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 CONTROLS STATEMENTS

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







#### USER SAFETY RECOMMENDATIONS

#### Users Should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on 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 washwaters 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 can 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, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of **48 hours**.

Exception: If 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 areas if there will be no contact with anything that has been treated.

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

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- Goggles or face shield
- 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.

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

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.









#### PRODUCT INFORMATION

Quali-Pro® Mefenoxam 2 AQ is an aqueous flowable systemic fungicide for use on selected turf, nursery, and ornamental crops to control certain diseases caused by members of the Oomycete class of fungi. Other fungicides must be used to control diseases incited by other classes of fungi.

#### RESISTANCE MANAGEMENT

Quali-Pro Mefenoxam 2 AQ is a systemic fungicide having a specific mode of action and its use could be subject to development of insensitive strains of fungi. Development of insensitivity cannot be predicted. If treatment is not effective following the use of Quali-Pro Mefenoxam 2 AQ as instructed, an insensitive strain of fungi may be present. If the treatment is ineffective due to the presence of an insensitive strain of fungi, neither Quali-Pro Mefenoxam 2 AQ nor any other fungicide with similar action will effectively control that disease. Consideration should then be given to the prompt use of other types of suitable fungicides. Consult with your State Agricultural Experiment Station or Extension Service Specialist for guidance on your particular disease control situation.

Do not make foliar applications unless specified since this practice may encourage more rapid development of insensitivity.

#### SPRAY DRIFT PRECAUTION

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

#### MIXING INSTRUCTIONS

Prepare only the amount of spray mixture that is immediately required. Agitate the spray solution continuously during mixing and application. Thoroughly rinse the mix tank and spray tank with clean water after each day's use and dispose of rinsate by application to area(s) already treated.

Quali-Pro Mefenoxam 2 AQ Alone: Add 1/4 – 1/2 of the required amount of water to the spray tank. With the agitator running, add the proper amount of Quali-Pro Mefenoxam 2 AQ; then add the rest of the water. Begin application of the spray solution after this product has completely dispersed into the mix water. Maintain agitation until all of the mixture has been sorayed.

Tank Mixtures: When tank mixing other products with Quali-Pro Mefenoxam 2 AQ, follow the proper sequence of adding products to the spray tank. Wettable powders or water-dispersible granules should be added to the water in the tank first, followed by liq-







uid flowable products such as Quali-Pro Mefenoxam 2 AQ, with emulsifiable concentrates added last. Provide continuous agitation during mixing and application.

**Note:** When tank mixing with products packaged in water-soluble packaging, those products should be added to the mix tank first and the water-soluble packaging must be allowed to completely dissolve and the product(s) allowed to completely disperse before adding any other tank mix partner to the tank.

**Note:** Compatibility with tank mix partners must be determined. To determine the compatibility of Quali-Pro Mefenoxam 2 AQ with 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 re-mixed readily, the mixture should be considered compatible.

BEFORE TANK MIXING QUALI-PRO MEFENOXAM 2 AQ WITH OTHER REGISTERED PRODUCTS FOR ANY USE ON THIS LABEL, READ THE LABEL OF THE TANK MIX PARTNER TO BE CERTAIN IT IS LABELED FOR USE ON THE PARTICULAR CROP AND THAT USE PATTERNS ARE COMPATIBLE WITH THOSE OF QUALI-PRO MEFENOXAM 2 AQ. OBSERVE ALL DIRECTIONS, PRECAUTIONS, AND LIMITATIONS OF TANK MIX PARTNER LABELS, OBSERVING THE MOST RESTRICTIVE REQUIREMENT(S).

#### 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 INSTRUCTIONS

Quali-Pro Mefenoxam 2 AQ may be applied through traditional spray equipment or through irrigation systems such as a soil drench, soil surface (broadcast or banded), or as a stem and foliar spray. Quali-Pro Mefenoxam 2 AQ may also be incorporated into a pre-potting growing media for subsequent seeding or transplanting of ornamentals.

#### **Banded Applications:**

Calculate the amount of Quali-Pro Mefenoxam 2 AQ needed as follows:

<u>band width in inches</u> X broadcast rate = amount needed row spacing in inches per acre per acre

#### APPLICATION THROUGH IRRIGATION SYSTEMS

Quali-Pro Mefenoxam 2 AQ alone or in combination with other pesticides which are registered for application through irrigation systems, may be applied through irrigation systems. Apply this product only through center pivot, solid set, hand move, moving wheel,









micro-sprinkler, pressurized drench (flood) or drip (trickle), micro-irrigation such as spaghetti tube or individual tube irrigation, calibrated hand-held irrigation equipment such as the hand-held wand with injector, calibrated overhead watering booms, ebb and flow or bench flooding sub or drip irrigation systems. Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. Quali-Pro Mefenoxam 2 AQ should be diluted with water on a 1/10 basis prior to injection into an irrigation system. Proper tank mix agitation is required during this mixing procedure.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system, unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

#### Safety Devices for Chemigation Systems Connected to Public Water Systems If the source of water for your irrigation system is a public water supply, follow the instructions below.

- 1. A "public water system" is a system used to provide to the public piped water for human consumption if such system has a minimum of 15 service connections or regularly serves an average of a minimum of 25 individuals per day at least 60 days of the year.
- 2. A chemigation system that is connected to a public water system must contain a functional, reduced pressure zone, backflow preventer (RPZ) (or the functional equivalent) in the water supply line upstream from where the pesticide is introduced. An option to the RPZ: Discharge the water from the public water system into a reservoir tank before pesticide introduction. There must be a complete physical break (air gap) between the fill pipe's outlet end and the top (or overflow) rim of the reservoir tank of at least twice the fill pipe's inside diameter.
- 3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve that will prevent the flow of fluid from flowing back toward the injection pump.
- 4. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve that is located on the injection pump's intake side and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either manually or automatically shut down.
- 5. The system must contain functional interlocking controls that will automatically shut off the pesticide injection pump when the water pump motor stops, or if there is no water pump, when water pressure decreases to the point when pesticide distribution is adversely affected.







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

#### Safety Devices for Chemigation 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 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.

#### Application Instructions—Irrigation Systems

Quali-Pro Mefenoxam 2 AQ must be applied on the schedule specified in the specific crop use sections, not according to the irrigation schedule.

Quali-Pro Mefenoxam 2 AQ has not been sufficiently tested when applied through irrigation systems to assure consistent product performance for all labeled uses. The following calibration and application techniques are provided for user reference. Users must check with state and local regulatory agencies for potential use restrictions before applying any agricultural chemical through sprinkler or drip irrigation equipment.

Note: Do not inject at full strength; always dilute with at least 10 parts water to 1 part Quali-Pro Mefenoxam 2 AQ.

#### Center Pivot Irrigation Equipment

Use only with drive systems that provide uniform distribution.









- Determine the size of the area to be treated.
- 2. Determine the time required to apply 1/2 to 1 inch of water over the area to be treated when the system and injection equipment are operated at normal pressures as specified by the equipment manufacturer. Run the system at 80 - 95% of the manufacturer's rated capacity.
- 3. Using water, determine the injection pump output when operated at normal line pressure.
- 4. Determine the amount of Quali-Pro Mefenoxam 2 AQ required to treat the area covered by the irrigation system.
- 5. Add the required amount of Quali-Pro Mefenoxam 2 AQ and sufficient water to the solution (mix) tank to meet the injection time requirements to the solution tank.
- 6. Make sure the system is fully charged with water before starting injection of the Quali-Pro Mefenoxam 2 AQ solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
- 7. Maintain constant solution tank agitation during the injection period.
- 8. Continue to operate the system until the Quali-Pro Mefenoxam 2 AQ solution has cleared the last sprinkler head.

#### Solid Set, Hand Move, and Moving Wheel Irrigation Equipment

- 1. Determine the acreage covered by the sprinklers.
- 2. Fill injector solution tank with plain water and calibrate the flow rate of the system to deliver the contents of the tank over a 20- to 30-minute time interval.
- 3. Determine the amount of Quali-Pro Mefenoxam 2 AQ required to treat the area covered by the irrigation system.
- 4. Add the required amount of Quali-Pro Mefenoxam 2 AQ into the same quantity of water used to calibrate the injection period.
- 5. Operate the system at the same pressure and time interval established during the calibration.
- 6. Inject Quali-Pro Mefenoxam 2 AQ at the end of the irrigation cycle in 1/2 1 inch of water or as a separate application to maximize the effectiveness of the fungicide. Do not apply in excess of 1 inch of water.
- 7. Stop injection equipment after treatment is completed. Continue to operate the system until the Quali-Pro Mefenoxam 2 AQ solution has cleared the last sprinkler head.

#### Micro-Sprinkler, Overhead Watering Booms, or Drip Irrigation Systems

#### 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.
- Use only pressure injection or venturi equipment.











- 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.
- For calibration, substitute a concentrated detergent (such as Wisk®) or a soluble fertilizer for the Quali-Pro Mefenoxam 2 AQ in the injector tank. 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.
- 6. If a soluble fertilizer is used, measure the time intervals with a salt bridge.
- 7. If a drip system is being calibrated, substitute soluble fertilizer for the Quali-Pro Mefenoxam 2 AQ in the injector and measure the time intervals with a salt bridge.

#### Step-by-Step 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 when mixing the Quali-Pro Mefenoxam 2 AQ.
- 3. Set the injector to apply the indicator solution at the injection rate to be used in the actual Quali-Pro Mefenoxam 2 AQ 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 is 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 Quali-Pro Mefenoxam 2 AQ, or adjust the injector to a slower flow rate.
- 7. Once the system is calibrated, dilute the needed amount of Quali-Pro Mefenoxam 2. AQ with water in the mix tank using a minimum of 10 parts water to 1 part Quali-Pro Mefenoxam 2 AQ in the solution tank.
- 8. Do not begin to inject Quali-Pro Mefenoxam 2 AQ into the system until all emitters are producing equal flow rates, or until the system is at full pressure.

Inject the Quali-Pro Mefenoxam 2 AQ into the system at the end of the irrigation set in 1/2 - 1 inch of irrigation water.

#### ORNAMENTALS

Quali-Pro Mefenoxam 2 AQ 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 Quali-Pro Mefenoxam 2 AQ on ornamentals grown in greenhouse, lath and shadehouses, outdoor field and container nurseries (including nonbearing fruit and nut trees), conifer plantations, and in commercial and residential landscapes.

Quali-Pro Mefenoxam 2 AQ 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. Quali-Pro Mefenoxam 2 AQ may also be incorporated into a pre-potting growing media for subsequent seeding or transplanting of ornamentals.

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 Quali-Pro Mefenoxam 2 AQ needed by using the formula for banded application under APPLICATION INSTRUCTIONS in the PRODUCT INFORMATION section of this label.

Growing Medium Drench: Use enough of the specified Quali-Pro Mefenoxam 2 AQ water solution to wet the root zone of plants. As part of a sound resistance management program, do not make more than two (2) sequential applications of Quali-Pro Mefenoxam 2 AQ 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., apply Quali-Pro Mefenoxam 2 AQ 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 Quali-Pro Mefenoxam 2 AQ before alternating with a non-Group 4 fungicide for sequential foliar applications.

Pre-Potting Growing Media Mix: Combine 0.12 to 0.24 fl oz Quali-Pro Mefenoxam 2 AQ 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 Quali-Pro Mefenoxam 2 AQ solution onto the mix while the drum is rotating. Prepare this media treatment 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 Quali-Pro Mefenoxam 2 AQ. Neither the manufacturer nor the seller has determined whether or not Quali-Pro Mefenoxam 2 AQ can be used safely on ornamental and nursery plants not specified on this label. The user should determine if Quali-Pro Mefenoxam 2 AQ can be used safely prior to commercial use. In a small area, test the specified rates for a particular group of unlabeled plants, i.e., bedding plants, foliage, flowers, or woody ornamentals, for phytotoxicity prior to widespread use.

#### Foliage Plants

Aglaonema Aphelandra Dieffenbachia Peperomia Philodendron\* Pothos Schefflera Sedum Sempervivum Zygocactus

DRENCH: Mix 0.29 - 0.59 fl oz Quali-Pro Mefenoxam 2 AQ with 100 gals of water. Apply 1 pt solution per sq ft to the soil surface. For growth media depth greater than 4 inches, apply 1.47 - 1.96 pts solution per sq ft to the soil surface. Repeat applications at 2- to 3month intervals, if necessary,

\*On Philodendron, use 0.49 - 0.98 fl oz Quali-Pro Mefenoxam 2 AQ per 100 gals.

Precaution: To minimize the potential for injury to Pothos, do not use more than 0.37 fl oz Quali-Pro Mefenoxam 2 AQ per 100 gals and do not apply more frequently than once every 3 months.

PRE-POTTING GROWING MEDIA MIX: Apply to growing media mix just before planting. Mix only enough for current use. Do not store. Thoroughly mix 0.12 to 0.25 fl oz Quali-Pro Mefenoxam 2 AQ with each cubic yard of pre-potting growing media.

SOIL SURFACE SPRAY: Apply 0.98 fl oz Quali-Pro Mefenoxam 2 AQ per 1000 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.

FOLIAR APPLICATIONS: Spray foliage thoroughly. For downy mildew, apply Quali-Pro Mefenoxam 2 AQ at 0.49 - 0.98 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 Phytophthora spp. and Pythium spp., apply Quali-Pro Mefenoxam 2 AQ at 0.49 - 0.98 fl oz per 100 gals of water.

RESISTANCE MANAGEMENT: Apply only one (1) foliar application of Quali-Pro Mefenoxam 2 AQ (alone or in a tank mix) before alternating with a non-Group 4 fungicide for sequential foliar applications.







#### Bedding Plants

Ageratum
Algerian Ivy
Artemisia
Aster
Begonia
Caladium
Carnation
Chrysanthemum
Coleus
Daisy
Endlish Ivy

Geranium Impatiens Marigold Pansy Petunia Phlox Pinks Primrose Prostrate Rosemary

Foxglove

Gaillardia

Salvia Snapdragon Verbena Vinca Zinnia BRENCH AT SEEDING (Soil 2 – 3 inches deep): Mix 0.12 – 0.24 fl oz Quali-Pro Mefenoxam 2 AQ with 100 gals of water and apply 1 pt solution per sq ft to the soil surface.

DRENCH AT TRANSPLANTING (Soil 2 – 3 inches deep): Mix 0.49 – 0.98 fl oz Quali-Pro Mefenoxam 2 AQ with 100 gals of water and apply 1 pt solution per sq ft to the soil surface. For growth media depth greater than 4 inches, apply 1.47 – 1.96 pts solution per sq ft to the soil surface. Repeat applications at 1- to 2-month intervals, if necessary. Do not apply rates of 0.74 – 0.98 fl oz Quali-Pro Mefenoxam 2 AQ per 100 gals more often than once every 6 weeks.

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 0.12 fl oz Quali-Pro Mefenoxam 2 AQ with each cubic yard of prepotting growing media.

SOIL SURFACE SPRAY: Apply 0.98 fl oz Quali-Pro Mefenoxam 2 AQ per 1000 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.

**FOLIAR APPLICATION:** Spray foliage thoroughly. For downy mildew, apply Quali-Pro Mefenoxam 2 AQ at 0.49 – 0.98 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 *Phytophthora* spp. and *Pythium* spp., apply Quali-Pro Mefenoxam 2 AQ at 0.49 – 0.98 fl oz per 100 gals of water.

RESISTANCE MANAGEMENT: Apply only one (1) foliar application of Quali-Pro Mefenoxam 2 AQ (alone or in a tank mix) before alternating with a non-Group 4 fungicide for sequential foliar applications.







Flowers
African Violet
Anthurium
Baby's Breath
Carnation
Chrysanthemum
Columbine
Delphinium
Easter Lily
Geranium
Gloxinia
Poinsettia
Bose

DRENCH: Mix 0.49 – 0.98 fl oz Quali-Pro Mefenoxam 2 AQ with 100 gals of water and apply 1 pt solution per sq ft to the soil surface. For growth media depth greater than 4 inches, apply 1.47 – 1.96 pts solution per sq ft. Repeat applications at 1- to 2-month intervals, if necessary. Do not apply rates of 0.74 – 0.98 fl oz Quali-Pro Mefenoxam 2 AQ per 100 gals more often than every 6 weeks.

Precaution: Do not apply more than 0.49 fl oz Quali-Pro Mefenoxam 2 AQ per 100 gals water to Easter lily and only make one at planting application.

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 0.12 fl oz Quali-Pro Mefenoxam 2 AQ with each cubic yard of prepotting media.

SOIL SURFACE SPRAY: Apply 0.98 fl oz Quali-Pro Mefenoxam 2 AQ per 1000 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.

**FOLIAR APPLICATION:** Spray foliage thoroughly. For downy mildew, apply Quali-Pro Mefenoxam 2 AQ at 0.49 – 0.98 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 *Phytophthora* spp. and *Pythium* spp., apply Quali-Pro Mefenoxam 2 AQ at 0.49 – 0.98 fl oz per 100 gals of water.

RESISTANCE MANAGEMENT: Apply only one (1) foliar application of Quali-Pro Mefenoxam 2 AQ (alone or in a tank mix) before alternating with a non-Group 4 fungicide for sequential foliar applications.







#### Azaleas

DRENCH: Pythium, Phytophthora root and crown rot - Mix 0.62 -1.23 fl oz Quali-Pro Mefenoxam 2 AQ 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 1.47 - 1.96 pts of solution per sq ft to the soil surface. Repeat applications at 2- to 4month intervals, if necessary,

SOIL SURFACE SPRAY: Apply 0.12 - 2.45 fl oz Quali-Pro Mefenoxam 2 AQ per 1000 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.

FOLIAR APPLICATION: Spray foliage thoroughly. For Phytophthora spp. and Pythium spp., apply Quali-Pro Mefenoxam 2 AQ at 0.49 - 0.98 fl oz per 100 gals of water.

RESISTANCE MANAGEMENT: Apply only one (1) foliar application of Quali-Pro Mefenoxam 2 AQ (alone or in a tank mix) before alternating with a non-Group 4 fungicide for seguential foliar applications.

**Precautions**: (1) To minimize the potential for injury to azaleas, do not apply repeat soil applications of 1.23 fl oz Quali-Pro Mefenoxam 2 AQ per 100 gals closer than every 3 months, and do not exceed a total of 2.45 fl oz Quali-Pro Mefenoxam 2 AQ in 6 months. (2) Use the lower rate for "Coral Bell" variety.







Other Than Azaleas Aucuba japonica Arborvitae Boxwood Ceanothus Cotoneaster Dogwood Ficus "Halls" Honevsuckle Juniperus spp. Photinia Pieris iaponica Pinus spp. Pittosporum Rhododendron White cedar White pine

Yew

Woody Ornamentals DRENCH: Mix 0.98 - 1.96 fl oz Quali-Pro Mefenoxam 2 AQ with 100 gals of water and apply 1 pt solution per sq ft to the soil surface. For growth media depth greater than 4 inches, apply 1.47 -1.96 pts solution per sq ft. Repeat applications at 2- to 3-month intervals, if necessary. Do not apply rates of 1.96 fl oz Quali-Pro Mefenoxam 2 AQ per 100 gals more often than every 10 weeks.

SOIL SURFACE SPRAY: Apply 1.23 - 2.45 fl oz Quali-Pro Mefenoxam 2 AQ per 1000 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 efficacv. irrigate in with at least 1/2 inch of water within 24 hours.

FOLIAR APPLICATION: Spray foliage thoroughly. For downy mildew, apply Quali-Pro Mefenoxam 2 AQ at 0.49 - 1.96 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 Phytophthora spp. and Pythium spp., apply Quali-Pro Mefenoxam 2 AQ at 0.49 - 1.96 fl oz per 100 gals of water.

RESISTANCE MANAGEMENT: Apply only one (1) foliar application of Quali-Pro Mefenoxam 2 AQ (alone or in a tank mix) before alternating with a non-Group 4 fungicide for sequential foliar applications.

#### INTERIORSCAPE 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 Quali-Pro Mefenoxam 2 AQ 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 Quali-Pro Mefenoxam 2 AQ	Amount of Quali-Pro Mefenoxam 2 AQ to Add to Water to Make the Following Quantities			
(fl oz)	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

tsp = teaspoon: Tbsp = tablespoon









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 Quali-Pro Mefenoxam 2 AQ 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.

Make the first application of Quali-Pro Mefenoxam 2 AQ at the time of planting. Make repeat applications at 3-month intervals during the period when trees are actively growing.

Soil Drench: Mix 1.96 - 2.94 fl oz Quali-Pro Mefenoxam 2 AQ per 100 gals of water and apply as a drench to the soil at the rate of 100 - 250 gals/1000 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 1.23 - 2.45 fl oz Quali-Pro Mefenoxam 2 AQ per 1000 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, the treated area should be wide enough to cover the root systems of the plants. Avoid application to the foliage. For best efficacy, 1/2 inch irrigation or rainfall is required within 24 hours after application.

Calculate the amount of Quali-Pro Mefenoxam 2 AQ needed for a banded treatment by using the formula at the end of the APPLICATION INSTRUCTIONS section of this label.

Directed Spray: Use 1.96 fl oz Quali-Pro Mefenoxam 2 AQ per 100 gals and apply directly to the base of the plant.

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

CONIFERS IN NURSERIES AND PLANTATIONS (INCLUDING CHRISTMAS TREES) Quali-Pro Mefenoxam 2 AQ provides control of Phytophthora root, stem, and foliar disease of conifers.









#### Conifers in Nurseries

Seedbeds and Plug-Plantings	SOIL SURFACE SPRAY: Apply 1.23 pts of Quali-Pro Mefenoxam 2 AQ in at least 50 gals of water per acre in the spring and again in the fall.
	FOLIAR APPLICATION: Use 0.98 fl oz Quali-Pro Mefenoxam 2 AQ per 100 gals of water and apply to runoff.
	RESISTANCE MANAGEMENT: Apply only one (1) foliar application of Quali-Pro Mefenoxam 2 AQ before alternating with a non-Group 4 fungicide for sequential foliar applications.
2-0 Transplants	SOIL SURFACE SPRAY: Apply 2.45 pts of Quali-Pro Mefenoxam 2 AQ in at least 50 gals of water per acre in the spring and again in the fall.
	FOLIAR APPLICATION: Use 0.98 – 1.96 fl oz Quali-Pro Mefenoxam 2 AQ per 100 gals of water and apply to runoff.
	RESISTANCE MANAGEMENT: Apply only one (1) foliar application of Quali-Pro Mefenoxam 2 AQ before alternating with a non-Group 4 fungicide for sequential foliar applications.

#### Conifers in Plantations

Use of Quali-Pro Mefenoxam 2 AQ will aid in the control of *Phytophthora* root, stem, and foliar disease when used in conjunction with good cultural practices. The use of Quali-Pro Mefenoxam 2 AQ will not overcome poor management practices such as planting on sites that are prone to flooding or are poorly drained. Quali-Pro Mefenoxam 2 AQ fungicide will not revitalize trees showing moderate to severe disease symptoms.

Soil Surface Applications: Apply 0.61 to 1.23 gals of Quali-Pro Mefenoxam 2 AQ per acre in a minimum of 50 gals of water as a directed soil spray. Avoid application to the foliage. Applications should be made in early spring before growth starts and in the fall before the ground freezes. If applications are banded, calculate the amount of Quali-Pro Mefenoxam 2 AQ needed for a banded treatment by using the formula in the APPLICATION INSTRUCTIONS section of the label.

Foliar Applications: For foliar *Phytophthora* (including *Phytophthora ramorum*), apply 0.98 to 1.96 fl oz Quali-Pro Mefenoxam 2 AQ per 100 gals of water and apply to runoff.

Resistance Management: Apply only one (1) foliar application of Quali-Pro Mefenoxam 2 AQ before alternating with a non-Group 4 fungicide for sequential foliar applications.

For best results, 1/2 inch irrigation or rainfall is required within 24 hours after application.







#### **DECIDUOUS FRUITS AND NUTS IN NURSERIES (NONBEARING)**

Quali-Pro Mefenoxam 2 AQ provides control of *Pythium* root rot and *Phytophthora* root, crown, and collar rot of nonbearing deciduous fruits and nuts.

Soil Surface Application: Apply 2.94 fl oz Quali-Pro Mefenoxam 2 AQ per 1000 sq ft in sufficient water 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 results, 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 8.8 fl oz/1000 sq ft (2.94 gals/A) of Quali-Pro Mefenoxam 2 AQ per year.

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

Quali-Pro Mefenoxam 2 AQ controls *Pythium* blight and *Pythium* damping-off in turf, yellow tuft (downy mildew) in bluegrass, and downy mildew in St. Augustine grass. **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.



Established Turf	FOLIAR APPLICATION: Apply as a preventative treatment at 0.49
Pythium Blight	- 0.98 fl oz Quali-Pro Mefenoxam 2 AQ in 1 to 5 gals of water per
Yellow Tuft	1000 sq ft. Re-treat at 10- to 21-day intervals. During periods of
Downy Mildew	prolonged conditions favorable for disease development, use 0.49
	- 0.98 fl.oz Quali-Pro Mefenovam 2.40 on a 14-day schedule

#### Newly Seeded Areas Pythium Damping-off Pythium Blight Yellow Tuft Downy Mildew

SOIL SURFACE SPRAY: Apply 0.49 – 0.98 fl oz Quali-Pro Mefenoxam 2 AQ in 1 to 5 gals of water per 1000 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.

Note: For long-term control of *Pythium* in areas when using seed treated with the active ingredient contained in Quali-Pro Mefenoxam 2 AQ, make an application of Quali-Pro Mefenoxam 2 AQ 7 – 10 days after seeding.

Note: For control of other diseases of turf, use Quali-Pro Propiconazole 14.3 alone or in a tank mix combination with Quali-Pro Mefenoxam 2 AQ. Refer to the Quali-Pro





Propiconazole 14.3 label for rates, precautions, restrictions, etc.

Precautions: To minimize the potential for insensitivity, (1) Make no more than 3 applications per season of any product in which the Quali-Pro Mefenoxam 2 AQ 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:

Do not use, pour, spill or store near heat or open flame.

PESTICIDE DISPOSAL:

Wastes resulting from the use of this product are acutely toxic. Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of Federal law. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office.

#### CONTAINER HANDLING:

Nonrefillable Container (five gallons or less): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 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.

Nonrefillable Container (greater than five gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. 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.

Refillable Container (greater than 55 gallons): Refillable container. Refill this container with mefenoxam only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiler. To clean the container before final disposal, empty the remaining contents from this container





## STORAGE AND DISPOSAL (cont.)

into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. For final disposal, offer for recycling or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

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.

IMPORTANT: Read the entire DIRECTIONS FOR USE and the LIMITATION OF WAR-RANTY AND LIABILITY before using this product. If terms are not acceptable, return the unopened product container at once.

#### LIMITATION OF WARRANTY AND LIABILITY

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

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

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Makhteshim Agan of North America, Inc. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, Makhteshim Agan of North America, Inc. makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of Makhteshim Agan of North America, Inc. is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Makhteshim Agan of North America, Inc. disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

**LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at Makhteshim Agan of







North America, Inc.'s election, the replacement of product.

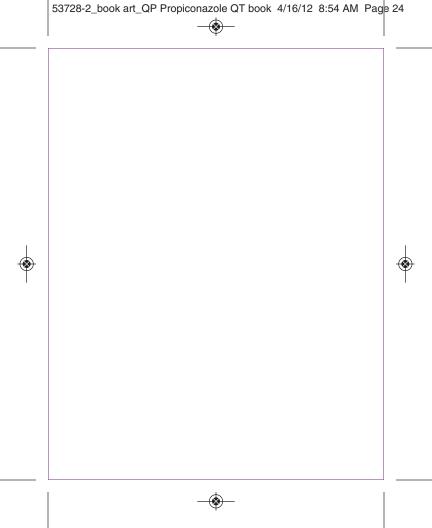
Quali-Pro is a registered trademark of Makhteshim Agan of North America, Inc. Wisk is a registered trademark of the Sun Products Corporation.















# Mefenoxam 2 AQ

## Fungicide

An aqueous flowable fungicide for the control of certain diseases in various turf, nursery, and ornamental crops caused by the Oomycete class of fungi. Contains mefenoxam, the active ingredient used in Subdue MAXX®, Quali-Pro® Mefenoxam 2 AQ is not manufactured or distributed by Syngenta Crop Protection, Inc.

#### ACTIVE INGREDIENT:

% BY WT.

Mefenoxam\*: (R)-2-[(2,6-dimethylphenyl) methoxyacetylamino]propionic acid methyl ester ...22.5% OTHER INGREDIENTS: 77.5%

\*Contains 2 lbs. active ingredient per gallon.

EPA Reg. No. 66222-216

## KEEP OUT OF REACH OF CHILDREN **WARNING/AVISO**

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING

Causes substantial but temporary eve injury. Harmful if swallowed or absorbed through the skin. Do not get in eyes or on clothing. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum. using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

For additional precautionary, handling, and use statements, see inside of this booklet.

Manufactured for: Makhteshim Agan of North America, Inc. 3120 Highwoods Blvd, Suite 100 - Raleigh, NC 27604

FPA 112310/032411/Rev C

EPA Est. No. 37429-GA-00187: 37429-GA-00280 Letter(s) in lot number correspond(s) to superscript in EPA Est. No.

**Net Contents: 2.5 Gallon** 



☐ dp proofed\_\_



created by: customer alt: 4-16-12 bm size: 4"(w) x 5"(h)

