Broad-spectrum fungicide for control of plant diseases

ACTIVE INGREDIENTS:
Azoxystrobin ................................................................. 13.5%
Propiconazole ............................................................... 11.7%
OTHER INGREDIENTS: .................................................. 74.8%
TOTAL: ........................................................................ 100.0%
Contains 1.02 lb ai propiconazole and 1.18 lb ai azoxystrobin per gallon.

AVARIS® 2XS Fungicide is formulated as a suspo-emulsion (SE).

KEEP OUT OF REACH OF CHILDREN.
WARNING/AVISO
Si usted no entiende la etiqueta, busque a alguien
para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)
See additional precautionary statements and directions for use inside booklet.
See First Aid statement inside booklet or on container label.

EPA Reg. No. 100-1324-5905
EPA Est. 100-NE-001

SCPSR-HEL-1324B-L1D 1016
4086448
AD 102116

NET CONTENTS: 2.5 gallons

MANUFACTURED FOR
HELENA CHEMICAL COMPANY
225 SCHILLING BOULEVARD, SUITE 300 • COLLIERVILLE, TN 38017
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 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 to an unconscious person.

If on skin
• 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 inhaled
• Move person to fresh air.
• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
• Call a poison control center or doctor for further treatment advice.

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

HOTLINE NUMBER
For 24-Hour Medical Emergency Assistance (Human or Animal)
Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident)
Call Chemtrec at 
1-800-424-9300

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING/AVISO
Causes substantial but temporary eye injury. Harmful if swallowed. Do not get in eyes or on clothing. Wear appropriate protective eyewear such as goggles, face shield, or safety glasses. Avoid contact with skin or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:
• Long-sleeved shirt and long pants
• Chemical-resistant gloves made of any waterproof material such as polyvinyl chloride, nitrile rubber or butyl rubber
• Shoes and socks

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

Engineering Controls
Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

continued...
PRECAUTIONARY STATEMENTS (continued)

USER SAFETY RECOMMENDATIONS

Users should:
• Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
• Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
• Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Azoxystrobin can be persistent for several months or longer. Azoxystrobin has degradation products which have properties similar to chemicals which are known to leach through soil to 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 ground water contamination.

Azoxystrobin and propiconazole are toxic to freshwater and estuarine/marine fish; and azoxystrobin is toxic to aquatic invertebrates. Propiconazole is toxic to shrimp. Do not apply directly to water except as specified on this label. For terrestrial uses, do not apply directly to water except as specified on this label. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

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

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 HELENA CHEMICAL COMPANY or Seller. To the extent consistent with applicable law, Buyer and User agree to hold HELENA and Seller harmless for any claims relating to such factors.

HELENA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent consistent with applicable law: (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 HELENA, and (2) Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, HELENA 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 consistent with applicable law, in no event shall HELENA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF HELENA 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 HELENA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

HELENA 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 HELENA.
DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

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

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, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

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

- Coveralls
- Chemical-resistant gloves made of any waterproof material such as polyvinyl chloride, nitrile rubber or butyl rubber
- Shoes plus socks
- Protective eyewear

PRODUCT USE RESTRICTIONS

Do not use in nurseries, greenhouses or landscape plantings.

PRODUCT INFORMATION

AVARIS® 2XS is a broad-spectrum, preventative fungicide with systemic and curative properties recommended for the control of many important plant diseases. AVARIS® 2XS Fungicide is a member of Helena’s Plant Performance™ product line and may also improve the yield and/or quality of the crop. These additional benefits are due to positive effects on plant physiology. The effects may vary according to other factors such as the crop, crop hybrid, or environment. AVARIS® 2XS may be applied as a foliar spray in alternating spray programs or in tank mixes with other crop protection products. All applications should be made according to the use directions that follow.

PRODUCT USE INSTRUCTIONS

Application: Thorough coverage is necessary to provide good disease control. Make up no more spray solution than is needed for application. Avoid spray overlap, as crop injury may occur.

Adjuvants: For some uses on this label, a spreading/penetrating type adjuvant such as a non-ionic surfactant, crop oil concentrate, or blend may be added at the manufacturer’s recommended rates. Adjuvants that contain some form of silicone can contribute to phytotoxicity. When an adjuvant is used with this product, the use of an adjuvant that meets the standards of the Chemical Producers and Distributors Association (CPDA) adjuvant certification program is recommended.

Crop Tolerance/Phytotoxicity: AVARIS® 2XS demonstrates some phytotoxic effects when mixed with products that are formulated as ECs. These effects are enhanced if applications are made under cool, cloudy conditions and these conditions remain for several days following application. In addition, adjuvants that contain some form of silicone can contribute to phytotoxicity. Under certain environmental conditions, tank mixes of AVARIS® 2XS plus herbicides and/or fertilizers may cause crop injury in barley, triticale and wheat.

Efficacy: Under certain conditions conducive to extended infection periods, use another registered fungicide for additional applications if maximum amount of AVARIS® 2XS has been used. If resistant isolates to Group 3 or Group 11 fungicides are present, efficacy can be reduced. The higher rates in the rate range and/or shorter spray intervals may be required under conditions of heavy infection pressure, highly susceptible varieties, or when environmental conditions conducive to disease exist.
Integrated Pest Management: AVARIS® 2XS should be integrated into an overall disease and pest management strategy whenever the use of a fungicide is required. Cultural practices known to reduce disease development should be followed. The SPECIFIC USE DIRECTIONS section in this label identifies specific IPM recommendations for each crop. Consult your local agricultural authorities for additional IPM strategies established for your area. AVARIS® 2XS may be used in State Agricultural Extension advisory (disease forecasting) programs which recommend application timing based on environmental factors favorable for disease development.

RESISTANCE MANAGEMENT

A VARIS® 2XS is a mixture of Group 3 (propiconazole) and Group 11 (azoxystrobin) fungicides. A VARIS® 2XS has two modes of action: Group 3: DMI (Demethylation Inhibitor) of sterol biosynthesis which disrupts membrane synthesis, and Group 11: inhibitor of the Qo (quinone outside) site within the electron transport system which disrupts fungal respiration. Fungal pathogens can develop resistance to products with the same mode of action when used repeatedly. Because resistance development cannot be predicted, use of this product should conform to resistance management strategies established for the crop and use area. Consult your local or state agricultural authorities for resistance management strategies that are complementary to those in this label. Resistance management strategies may include rotating and/or tank mixing with products having different modes of action or limiting the total number of applications per season. Helena encourages responsible resistance management to ensure effective long-term control of the fungal diseases on this label.

Follow the specific crop recommendations that limit the total number of sprays on a crop and the required alternations with fungicides from other resistance management groups. In situations requiring multiple sprays, develop season long spray programs for Group 11 QoI (quinone outside inhibiting) fungicides. The program should meet the goal of no more than \( \frac{1}{3} \) of the total sprays per season, when a Group 11 fungicide is used as a solo product, or \( \frac{1}{2} \) the total sprays when a Group 11 fungicide is used in a mixture. Programs that include both solo Group 11 products and/or mixes containing Group 11 products should be no more than \( \frac{1}{2} \) the total sprays.

A VARIS® 2XS should not be alternated or tank mixed with any fungicide to which resistance has already developed.

Rotational Crops:

<table>
<thead>
<tr>
<th>Rotational Crops</th>
<th>Planting Time From Last AVARIS® 2XS Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brassica, leafy greens (subgroup 5B)</td>
<td></td>
</tr>
<tr>
<td>Bulb crops</td>
<td></td>
</tr>
<tr>
<td>Carrots</td>
<td></td>
</tr>
<tr>
<td>Celery (and other leaf petiole crops - subgroup 4B)</td>
<td></td>
</tr>
<tr>
<td>Cereals (wheat, barley, triticale)</td>
<td></td>
</tr>
<tr>
<td>Corn (field, seed, popcorn, and sweet)</td>
<td></td>
</tr>
<tr>
<td>Dill</td>
<td></td>
</tr>
<tr>
<td>Grasses grown for seed (Cool season grasses only)</td>
<td></td>
</tr>
<tr>
<td>Mint</td>
<td></td>
</tr>
<tr>
<td>Oats</td>
<td></td>
</tr>
<tr>
<td>Peanuts</td>
<td></td>
</tr>
<tr>
<td>Quinoa</td>
<td></td>
</tr>
<tr>
<td>Radish</td>
<td></td>
</tr>
<tr>
<td>Rice</td>
<td></td>
</tr>
<tr>
<td>Rye</td>
<td></td>
</tr>
<tr>
<td>Sorghum</td>
<td></td>
</tr>
<tr>
<td>Soybeans</td>
<td></td>
</tr>
<tr>
<td>Strawberries</td>
<td></td>
</tr>
<tr>
<td>Sugar beets</td>
<td></td>
</tr>
<tr>
<td>Watercress</td>
<td></td>
</tr>
<tr>
<td>Wild rice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 days</td>
</tr>
</tbody>
</table>
### Rotational Crops | Planting Time From Last AVARIS® 2XS Application
---|---
Buckwheat | 12 Months
Millet | 75 days
Alfalfa (if propiconazole rate does not exceed 0.22 lb ai/acre/season) | 105 days
All Other Crops Intended for Food and Feed | 105 days

**Spray Drift Management:** To avoid spray drift, do not apply when conditions favor drift beyond the target area. The interaction of many equipment and weather related factors determine the potential for spray drift. AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. More information on managing spray drift can be found on this website:

**ATTENTION**

**AVARIS® 2XS** is extremely phytotoxic to certain apple varieties. AVOID SPRAY DRIFT. Extreme care must be used to prevent injury to apple trees (and apple fruit).

DO NOT spray **AVARIS® 2XS** where spray drift may reach apple trees.

DO NOT spray when conditions favor drift beyond area intended for application. Conditions which may contribute to drift include thermal inversion, wind speed and direction, sprayer nozzle/pressure combinations, spray droplet size, etc. Contact your state extension agent for spray drift prevention guidelines in your area.

DO NOT use spray equipment which has been previously used to apply **AVARIS® 2XS** to spray apple trees. Even trace amounts can cause unacceptable phytotoxicity to certain apple and crabapple varieties.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

**MIXING AND APPLICATION METHODS**

**AVARIS® 2XS** may be applied with all types of spray equipment commonly used for making ground and aerial applications. Proper adjustments and calibration of spraying equipment to give good canopy penetration and coverage is essential for good disease control.

**Spray Equipment**

**Nozzles**
- Equip sprayers with nozzles that provide accurate and uniform application.
- Nozzles should be the same size and uniformly spaced across the boom.
- Calibrate sprayer before use.
- It is suggested that screens be used to protect the pump and to prevent nozzles from clogging.
- Screens placed on suction side of pump should be 16-mesh or coarser.
- Do not place a screen in the recirculation line.
- Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles.
- Check nozzle manufacturer’s recommendations.

**Pump**
- Use a pump with capacity to:
  1. Maintain 35-40 psi at nozzles.
  2. Provide sufficient agitation in tank to keep mixture in suspension. Use a jet agitator or liquid sparge tube for agitation.

For more information on spray equipment and calibration, consult sprayer manufacturer’s and state recommendations. For specific local directions and spray schedules, consult the current state agricultural recommendations.
Mixing Instructions

- **AVARIS® 2XS** is a suspoemulsion (SE) formulation.
- Prepare no more spray mixture than is required for the immediate operation.
- Thoroughly clean spray equipment before using this product.
- Agitate the spray solution before and during application.
- Rinse spray tank thoroughly with clean water after each day’s use and dispose of pesticide rinsate by application to an already treated area.

**AVARIS® 2XS Alone (no tank mix)**

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

**AVARIS® 2XS + Tank Mixtures:** **AVARIS® 2XS** is usually compatible with all tank-mix partners listed on this label. Do not combine **AVARIS® 2XS** in the spray tank with pesticides, surfactants, or fertilizers unless compatibility charts or your own prior use has shown that the combination is physically compatible, effective, and non-injurious to the crop under your conditions of use. To determine the physical compatibility of **AVARIS® 2XS** with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to 1 qt of water. Add wettable powders and water dispersible granular products first, then liquid flowables (which includes suspoemulsions), followed by emulsifiable concentrates and additives/adjuvants last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

Mixing in the Spray Tank

- Add 1/2-2/3 of the required amount of water to the spray or mixing tank.
- With the agitator running, add the tank-mix partner(s) into the tank in the same order as described above in the “**AVARIS® 2XS + Tank Mixtures**” section.
- Allow the material to completely dissolve and disperse into the mix water. Continue agitation while adding the remainder of the water and the **AVARIS® 2XS** to the spray tank.
- Allow **AVARIS® 2XS** to completely disperse.
- Spray the mixture with the agitator running.
- Observe all directions for use, crops/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank-mix product label.
- No label dosage rate may be exceeded, and the most restrictive label precautions and limitations must be followed.
- This product may not be mixed with any product which prohibits such mixing.

Application Instructions

Avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur. Do not apply in a manner that will result in exposure to humans or animals.

Ground Application

- For field crops (non-trees), apply in a minimum of 10 gallons of water per acre unless specified otherwise.
- For tree crops, apply in a minimum of 50 gallons of water per acre unless specified otherwise.
- Thorough coverage is necessary to provide good disease control.

Aerial Application

- Use only on crops where aerial applications are indicated.
- For field crops (non-trees), apply in a minimum spray volume of 2 gallons per acre unless specified otherwise.
- For ULV applications (corn), apply in a minimum spray volume of 1 gallon per acre. For ULV applications, thorough coverage is necessary to provide good results. Please refer to the “Application” instructions section for details regarding best practices to achieve good coverage. [Not for ULV use in California.]
- For tree crops, apply in a minimum of 10 gallons of water per acre unless specified otherwise.
• Thorough coverage is necessary to provide good disease control.
• **AVARIS® 2XS** is extremely phytotoxic to certain apple varieties.
• AVOID SPRAY DRIFT. Extreme care must be used to prevent injury to apple trees (and apple fruit).
• DO NOT spray **AVARIS® 2XS** where spray drift may reach apple trees.

**Application Through Irrigation Systems (Chemigation)**

- Use only on crops for which chemigation is specified on this label.
- Apply this product only through center pivot, solid set, hand move, or moving wheel 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.
- Apply in 0.125-0.25 inches per acre of water. Excessive water may reduce efficacy.
- 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.

**Spray Preparation:** Chemical tank and injector system should be thoroughly cleaned. Flush system with clean water.

**Operating Instructions**

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. Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
8. 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.
9. Do not apply when wind speed favors drift beyond the area intended.

**Center Pivot Irrigation Equipment**

**Notes:** (1) Use only with drive systems which provide uniform water distribution. (2) Do not use end guns when chemigating **AVARIS® 2XS** through center pivot systems because of non-uniform application.

• Determine the size of the area to be treated.
• Determine the time required to apply 0.125-0.25 inches per acre of water over the entire area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. When applying **AVARIS® 2XS** through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution. Run the system at 80-95% of the manufacturer's rated capacity.
Using water, determine the injection pump output when operated at normal line pressure.

Determine the amount of **AVARIS® 2XS** required to treat the area covered by the irrigation system.

Add the required amount of **AVARIS® 2XS** and sufficient water to meet the injection time requirements to the solution tank.

Make sure the system is fully charged with water before starting injection of the **AVARIS® 2XS** solution. Time the injection to last at least as long as it takes to bring the system to full pressure.

Maintain constant solution tank agitation during the injection period.

Continue to operate the system until the **AVARIS® 2XS** solution has cleared the sprinkler head.

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

Determine the acreage covered by the sprinklers.

Fill injector solution tank with water and adjust flow rate to use the contents over a 20- to 30-minute interval. When applying **AVARIS® 2XS** through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution.

Determine the amount of **AVARIS® 2XS** required to treat the area covered by the irrigation system.

Add the required amount of **AVARIS® 2XS** into the same quantity of water used to calibrate the injection period.

Operate the system at the same pressure and time interval established during the calibration.

Stop injection equipment after treatment is completed. Continue to operate the system until the **AVARIS® 2XS** solution has cleared the last sprinkler head.

**Specific Instructions for Public Water Systems**

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone (RPZ), back-flow preventer or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

7. Do not apply when wind speed favors drift beyond the area intended for treatment.
**SPECIFIC DIRECTIONS FOR USE**

<table>
<thead>
<tr>
<th>Crop</th>
<th>Target Diseases</th>
<th>Use Rate fl oz product/A</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almonds</td>
<td>Brown Rot Blossom Blight <em>(Monilinia spp.)</em></td>
<td>14 - 26</td>
<td>Apply AVARIS® 2XS at early bloom stage. If disease pressure is low, a second application of 14 fl oz/A may be made as needed through petal fall. Under conditions of high disease pressure and/or very susceptible varieties, applications may be needed at 50-75% bloom and petal fall. AVARIS® 2XS may be used on only 2 blossom blight applications. Orbit® Fungicide may be used for one of these applications.</td>
</tr>
<tr>
<td></td>
<td>Alternaria Leaf Spot <em>(A. alternata)</em></td>
<td>17.5 - 26</td>
<td>Apply AVARIS® 2XS beginning at bud break on a 7- to 14-day interval. Make no more than 2 consecutive applications before switching to a non-Group 11 fungicide.</td>
</tr>
<tr>
<td></td>
<td>Anthracnose <em>(Collectotrichum acutatum)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leaf Blight <em>(Seimatosporium lichenicola)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leaf Rust <em>(Tranzschelia discolor)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Scab <em>(Cladosporium carpophilum)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shothole <em>(Wilsonomyces carpophilus)</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Application:** Make no more than 2 sequential applications of a Group 11 fungicide prior to alternating with another product with a different mode of action than Group 11 fungicides. Almond diseases are more effectively controlled by ground application, using sufficient water volume to provide thorough and uniform coverage. AVARIS® 2XS may be applied by ground or by air (minimum of 15 gal/A). Aerial application may be used if necessary but disease control may be reduced. AVARIS® 2XS may be applied by air only at growth stages prior to and including 5 weeks after petal fall.

**Specific Use Restrictions:**
1) Do not apply more than 112 fl oz/A of AVARIS® 2XS per crop.
2) Do not apply more than 0.9 lb ai of propiconazole-containing products/A/season.
3) Do not apply more than 1.5 lb ai of azoxystrobin-containing products/A/season.
4) Do not graze livestock in treated areas or cut treated cover crop for feed.
5) Do not apply within 60 days of harvest (60-day PHI).
<table>
<thead>
<tr>
<th>Crop</th>
<th>Target Diseases</th>
<th>Use Rate</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bananas</td>
<td>Black Sigatoka (Mycosphaerella fijiensis) &amp; Yellow Sigatoka (Mycosphaerella musicola)</td>
<td>10.5</td>
<td>Apply AVARIS® 2XS before disease symptoms appear at the onset of the rainy season. Apply 10.5 fl oz of AVARIS® 2XS/A in 10-20 gallons of water/A. Apply no more than 2 consecutive applications on a 21- to 25-day schedule before rotating to another labeled product with a different mode of action for at least 2 sprays. A maximum of 8 applications can be made. If possible, it is recommended to have at least 2 consecutive months ‘triazole free’ during the period of lower disease pressure.</td>
</tr>
<tr>
<td>Plantains</td>
<td></td>
<td></td>
<td>Application: AVARIS® 2XS may be applied by ground (minimum of 15 gal/A) or aerial application (minimum of 5 gal/A).</td>
</tr>
</tbody>
</table>

**Specific Use Restrictions:**

1. Do not apply AVARIS® 2XS within 100 yards of non-bagged bananas.
2. Do not apply AVARIS® 2XS on bananas unless they are protected by polyethylene bags.
3. Do not apply AVARIS® 2XS on plantains if the fruit present are not protected with polyethylene bags.
4. Do not apply more than 84 fl oz of AVARIS® 2XS during each growing season (this includes any preharvest sprays).
5. Do not feed whole bananas and plantains to animals.
6. Do not apply more than 0.67 lb ai propiconazole-containing products/A/season.
7. Do not apply more than 1.08 lb ai azoxystrobin-containing products/A/season.
## Dry and Succulent Beans: Cicer arietinum (chickpea, garbanzo bean); Lupinus spp. (including sweet lupine, white sweet lupine, white lupine, and grain lupine); Phaseolus spp. (including kidney bean, lima bean, mung bean, navy bean, pinto bean, snap bean, and waxbean); Vicia faba (broad bean, fava bean); Vigna spp. (including asparagus bean, blackeyed pea and cowpea)

<table>
<thead>
<tr>
<th>Crop</th>
<th>Target Diseases</th>
<th>Use Rate fl oz product/A</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beans, Dry and Succulent</td>
<td>Alternaria Blight (Alternaria spp.)</td>
<td>10.5 - 14</td>
<td>Apply when conditions are conducive for disease. Up to three applications may be made on a 7- to 14-day interval. NOTE: On certain bean varieties, AVARIS® 2XS application may cause crinkled and/or greener leaves. Yields of beans displaying these characteristics have not been reduced.</td>
</tr>
<tr>
<td>Bean (Cicer arietinum)</td>
<td>Alternaria Leaf Spot (Alternaria alternata)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Lupinus spp.)</td>
<td>Anthracnose (Colletotrichum lindemuthianum)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Phaseolus spp.)</td>
<td>Ascochyta Blight (Mycosphaerella pinodes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Vigna spp.)</td>
<td>Ascochyta Leaf Spot (Ascochyta phaseolorum)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Vicia faba)</td>
<td>Bean Rust (Uromyces appendiculatus)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rust (Phakopsora spp.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Southern Blight (Sclerotium rolfsii)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Web Blight (Rhizoctonia solani)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Application Instructions: AVARIS® 2XS may be applied by ground or by air. 

### Specific Use Restrictions:
1. Not for use on cowpea cultivars intended for livestock feeding only.
2. Do not apply more than 42 fl oz of AVARIS® 2XS/crop/A.
3. Do not apply more than 0.34 lb ai of propiconazole-containing products.
4. Do not apply more than 1.5 lb ai of azoxystrobin-containing products.
5. Do not apply within 7 days of harvest (7-day PHI) for succulent beans.
6. Do not apply within 14 days of harvest (14-day PHI) for dry beans.
<table>
<thead>
<tr>
<th>Crop</th>
<th>Target Diseases</th>
<th>Use Rate fl oz product/A</th>
<th>Remarks</th>
</tr>
</thead>
</table>
| Berry, Bushberry Subgroup 13-07B Blueberry (high and low bush) Cranberry, Highbush Currant, Black Currant, Red Elderberry Gooseberry Including all cultivars and/or hybrids of these | Botryosphaeria Canker *(Botryosphaeria spp.)* Leaf Spot and Stem Canker *(Septoria albopunctata)* Leaf Spot *(Septoria spp.)* Mummyberry *(Monilinia vaccini-corymbosi)* Phomopis Twig Blight, Fruit Rot, and Stem Canker *(P. vaccini)* Powdery Mildew *(Microsphaera vaccini)* Rust *(Pucciniastrum vaccini)* | 14 - 21 | For mummyberry, make the first application of AVARIS® 2XS beginning at green tip and repeat in 7 to 10 days. If conditions are favorable for disease development, additional application may need to be made at pink bud and repeating every 7 to 10 days through petal fall. Do not apply more than 2 consecutive applications before alternating to a non-Group 11 containing fungicide.  
For other diseases listed, AVARIS® 2XS should be applied prior to disease development and continue throughout the season on a 7- to 14-day interval.  
Make no more than two consecutive sprays before alternating to a non-Group 11 fungicide. Make no more than 3 applications per crop of AVARIS® 2XS or other Group 11 fungicides. |
| | See below for complete list of bushberry subgroup. | | |

**Bushberry Subgroup:** Aronia berry; Blueberry, highbush; Blueberry, lowbush; Buffalo currant; Chilean guava; Cranberry, highbush; Currant, black; Currant, red; Elderberry; European barberry; Gooseberry; Honeysuckle, edible; Huckleberry; Jostaberry; Juneberry (Saskatoon berry); Lingonberry; Native currant; Salal; Sea buckthorn

**Application:** AVARIS® 2XS may be applied by ground or by air (minimum of 15 gal/A).

**Specific Use Restrictions:**
1. Do not apply more than 82 fl oz/A/season of AVARIS® 2XS per crop.
2. Do not apply more than 0.84 lb ai of a propiconazole-containing product/A/season.
3. Do not apply more than 0.75 lb ai azoxystrobin-containing product/A/season on bushberries.
4. Do not apply within 30 days of harvest (30-day PHI).
<table>
<thead>
<tr>
<th>Crop</th>
<th>Target Diseases</th>
<th>Use Rate fl oz product/A</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berry, Caneberry Subgroup 13-07A</td>
<td></td>
<td></td>
<td><strong>AVARIS</strong>® 2XS applications should begin prior to disease development and continue throughout the season on a 14-day interval. Make no more than two consecutive sprays before alternating to a non-Group 11 fungicide. Make no more than 3 applications per crop of <strong>AVARIS</strong>® 2XS or other Group 11 fungicides.</td>
</tr>
<tr>
<td>Blackberry</td>
<td>Anthracnose (Spaceloma nectator, Elsinoe veneta)</td>
<td>14 - 21</td>
<td></td>
</tr>
<tr>
<td>Bingleberry</td>
<td>Botryosphaeria Canker (B. dothidea)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boysenberry</td>
<td>Leaf and Cane Spot (Septoria rubi)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dewberry</td>
<td>Leaf Spot (Septoria spp.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raspberry, red and black</td>
<td>Powdery Mildew (Sphaerotheca macularis)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wild Raspberry</td>
<td>Rosette or Double Blossom of Blackberries (Cercosporella rubi)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rust (Phragmidium violaceum)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Other Caneberries in Subgroup: Loganberry, Lowberry, Marionberry, Olallieberry and Youngberry</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Application:** **AVARIS**® 2XS may be applied by ground or by air (minimum of 15 gal/A).

**Specific Use Restrictions:**
1) Do not apply more than 105 fl oz/A of **AVARIS**® 2XS per crop.
2) Do not apply more than 0.84 lb ai of a propiconazole-containing product/A/season.
3) Do not apply more than 1.5 lb ai of an azoxystrobin-containing product/A/season on caneberries.
4) Do not apply within 30 days of harvest (30-day PHI).
<table>
<thead>
<tr>
<th>Crop</th>
<th>Target Diseases</th>
<th>Use Rate fl oz product/A</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulb Vegetables</td>
<td>Cladosporium Leaf Blotch (C. allii)</td>
<td>14 - 21</td>
<td>Begin applications when conditions favor disease development and continue on a 7- to 10-day interval. Use the higher rate and shorter interval when disease conditions are severe. Make only 1 application before alternating to a non-Group 11 fungicide.</td>
</tr>
<tr>
<td>Dry Bulb Onions Subgroup 3-07A</td>
<td>Purple Blotch (Alternaria porri)</td>
<td>17.5 - 26</td>
<td></td>
</tr>
<tr>
<td>Garlic</td>
<td>Rust (Puccinia allii)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Onions (dry bulb)</td>
<td>Botrytis Leaf Blight (B. squamosa)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shallots (dry bulb)</td>
<td>Downy Mildew (Peronospora destructor)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green Onions Subgroup 3-07B</td>
<td>White Rot (Sclerotium cepivorum)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leeks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Onions (green)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shallots (green)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Including all cultivars and/or hybrids of these</td>
<td></td>
<td></td>
</tr>
<tr>
<td>See below for complete list of bulb vegetables.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete List of Bulb Vegetables: Chive, fresh leaves; chive, Chinese, fresh leaves; daylily, bulb; elegans hosta; fritillaria, bulb; fritillaria, leaves; garlic, bulb; garlic, great-headed, bulb; garlic, serpent, bulb; kurrat; lady’s leek; leek; leek, wild; lily, bulb; onion, Beltsville bunching; onion, bulb; onion, Chinese, bulb; onion, fresh; onion, green; onion, macrostem; onion, pearl; onion, potato, bulb; onion, tree, tops; onion, Welsh, tops; shallot, bulb; shallot, fresh leaves; cultivars, varieties, and/or hybrids of these.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application: AVARIS® 2XS may be applied by ground (15 gal/A minimum) or aerial application (minimum of 5 gal/A). NOTE: Mixing with products formulated as an EC may result in phytotoxicity.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Use Restrictions:</td>
<td>1) Do not apply more than 56 fl oz/A/season of AVARIS® 2XS per crop.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2) Do not apply more than 0.45 lb ai of propiconazole-containing products/A/season.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3) Do not apply more than 1.5 lb ai of azoxystrobin-containing products/A/season.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4) Do not apply within 14 days of harvest (14-day PHI) on dry bulb onions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5) AVARIS® 2XS may be applied the day of harvest (0-day PHI) for green onion types.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carrots</td>
<td>Alternaria Leaf Blight (Alternaria dauci)</td>
<td>14</td>
<td>Apply AVARIS® 2XS when conditions favor disease development. Continue applications on a 7- to 10-day interval, using the shorter interval when disease conditions are severe. Make no more than one application before alternating to a non-Group 11 fungicide.</td>
</tr>
<tr>
<td></td>
<td>Early Blight (Cercospora carotae)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Powdery Mildew (Erysiphe polygoni)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application: AVARIS® 2XS may be applied by ground (minimum of 15 gal/A) or aerial application (minimum of 5 gal/A), or chemigation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Use Restrictions:</td>
<td>1) Do not apply more than 56 fl oz/A of AVARIS® 2XS per crop.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2) Do not apply more than 0.45 lb ai of propiconazole-containing products/A/season.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3) Do not apply more than 2.0 lb ai of azoxystrobin-containing products/A/season.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4) Do not apply within 14 days of harvest (14-day PHI).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crop</td>
<td>Target Diseases</td>
<td>Use Rate fl oz product/A</td>
<td>Remarks</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------------------------------------------</td>
<td>--------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Celery</td>
<td>Early Blight <em>(Cercospora apii)</em></td>
<td>14</td>
<td>Apply <strong>AVARIS® 2XS</strong> on a 7- to 10-day schedule in alternation with Tilt® or another product with a different mode of action than Group 11 fungicides.</td>
</tr>
<tr>
<td></td>
<td>Late Blight <em>(Septoria apiicola)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application: <strong>AVARIS® 2XS</strong> may be applied by ground, air (5 gal/A minimum) or chemigation.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Specific Use Restrictions:**
1) Do not apply more than 56 fl oz/A.
2) Do not apply more than 0.45 lb ai propiconazole-containing products/A/season.
3) Do not apply more than 1.5 lb ai azoxystrobin-containing products/A/season.
4) Do not apply within 14 days of harvest (14-day PHI).

<table>
<thead>
<tr>
<th>Cereals</th>
<th>Early season suppression of:</th>
<th>Use Rate fl oz product/A</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Glume Blotch <em>(Stagonospora nodorum)</em></td>
<td>7 - 14</td>
<td>Apply <strong>AVARIS® 2XS</strong> in the spring for suppression of early season diseases. Follow up with a second application (see below) for full season control. You may see flecking and burning if you mix with fertilizers and herbicides at this timing.</td>
</tr>
<tr>
<td>Wheat</td>
<td>Leaf Blight <em>(Septoria tritici)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Powdery Mildew <em>(Blumeria spp., Erysiphe spp.)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tan Spot <em>(Pyrenophora tritici-repentis)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foot Rot/Eyespot <em>(Tapesia spp.)</em></td>
<td>14</td>
<td>Apply full rate of <strong>AVARIS® 2XS</strong> plus half the rate specified on other EPA-registered fungicides such as Topsin® M. Apply at tillering but before elongation has occurred.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control of Leaf Diseases:</th>
<th>Use Rate fl oz product/A</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glume Blotch <em>(Stagonospora nodorum)</em></td>
<td>10.5 - 14</td>
<td>Protecting the flag leaf is important for maximizing the potential yield. Highest yields are normally obtained when <strong>AVARIS® 2XS</strong> is applied when the flag leaf is 50% to fully emerged. Applications may be made no closer than a 14-day interval. <strong>AVARIS® 2XS</strong> can be applied through full head emergence (Feekes growth stage 10.54). Do not apply after this stage to avoid possible illegal residues.</td>
</tr>
<tr>
<td>Helminthosporium Leaf Blight <em>(Drechslera tritici-repentis)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leaf Blight <em>(Septoria tritici)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powdery Mildew <em>(Blumeria spp., Erysiphe spp.)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rust <em>(Puccinia spp.)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spot Blotch <em>(Bipolaris sorokiniana)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tan Spot <em>(Pyrenophora tritici-repentis)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foot Rot/Eyespot <em>(Tapesia spp.)</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Application: AVARIS® 2XS** is most effective when applied and allowed to dry before a rainfall. For best results, sufficient coverage is very important. Use a higher water volume for aerial application (greater than 2 GPA) if equipment and/or conditions would not provide good coverage. **AVARIS® 2XS** may be applied by ground, air, or chemigation.

**Specific Use Restrictions:**
1) Do not apply more than 2 applications/A/year.
2) Do not apply after Feekes 10.54.
3) Do not apply more than 28 fl oz/A/season of **AVARIS® 2XS**.
4) Do not apply more than 0.22 lb ai propiconazole-containing products/A/season.
5) Do not apply more than 0.40 lb ai azoxystrobin-containing products/A/season.
6) Under certain environmental conditions, tank mixes of **AVARIS® 2XS** plus herbicides and/or fertilizers may cause crop injury.
7) Do not apply within 7 days of harvest (7-day PHI) for forage and hay.
### Cereals

<table>
<thead>
<tr>
<th>Crop</th>
<th>Target Diseases</th>
<th>Use Rate fl oz product/A</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barley</td>
<td>Early season suppression of:</td>
<td>7 - 14</td>
<td>Apply <strong>AVARIS® 2XS</strong> in the spring for suppression of early season diseases. Follow up with a second application (see below) for full season control. You may see flecking and burning if you mix with fertilizers and herbicides at this time.</td>
</tr>
<tr>
<td>Oats</td>
<td>Glume Blotch (<em>Stagonospora nodorum</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rye</td>
<td>Leaf Blight (<em>Septoria tritici</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Triticale</td>
<td>Powdery Mildew (<em>Blumeria</em> spp., <em>Erysiphe</em> spp.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tan Spot (<em>Pyrenophora tritici-repentis</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control of Leaf Diseases:</td>
<td>10.5 - 14</td>
<td>Protecting the flag leaf is important for maximizing the potential yield. Highest yields are normally obtained when <strong>AVARIS® 2XS</strong> is applied when the flag leaf is 50% to fully emerged. Applications may be made no closer together than a 14-day interval.</td>
</tr>
<tr>
<td></td>
<td>Barley Scald (<em>Rhynchosporium secalis</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Barley Stripe (<em>Pyrenophora graminea</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Glume Blotch (<em>Stagonospora nodorum</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Helminthosporium Leaf Blight (<em>Drechslera tritici-repentis</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kernel Blight (<em>Alternaria</em> spp.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leaf Blight (<em>Septoria tritici</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Net Blotch (<em>Pyrenophora teres</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Powdery Mildew (<em>Blumeria</em> spp., <em>Erysiphe</em> spp.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rust (<em>Puccinia</em> spp.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spot Blotch (<em>Bipolaris sorokiniana</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tan Spot (<em>Pyrenophora tritici-repentis</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foot Rot/Eyespot (<em>Tapesia</em> spp.)</td>
<td>14</td>
<td>Apply full rate of <strong>AVARIS® 2XS</strong> plus half the rate specified on other EPA-registered fungicides such as Topsin M. Apply at tillering but before elongation has occurred.</td>
</tr>
</tbody>
</table>

**Application:** **AVARIS® 2XS** is most effective when applied and allowed to dry before a rainfall. For best results, sufficient coverage is very important. Use a higher water volume for aerial application (greater than 2 GPA) if equipment and/or conditions would not provide good coverage. An adjuvant may be added at recommended rates to improve canopy coverage and penetration while reducing evaporation and drift. **AVARIS® 2XS** may be applied by ground, air, or chemigation.

**Specific Use Restrictions:**
1. Do not apply more than 2 applications/A/season.
2. Do not apply after Feekes 10.54.
3. Do not apply within 7 days of harvest (7-day PHI) for forage and hay.
4. Do not apply more than 28 fl oz/A/season of **AVARIS® 2XS**.
5. Do not apply more than 0.22 lb ai propiconazole-containing products/A/season.
6. Do not apply more than 0.40 lb ai azoxystrobin-containing products/A/season.
7. Under certain environmental conditions, tank mixes of **AVARIS® 2XS** plus herbicides and/or fertilizers may cause crop injury.
<table>
<thead>
<tr>
<th>Crop</th>
<th>Target Diseases</th>
<th>Use Rate fl oz product/A</th>
<th>Remarks</th>
</tr>
</thead>
</table>
| Corn Field Pop (Includes Seed Production) | Anthracnose Leaf Blight *(Colletotrichum graminicola)*  
Eye Spot *(Aureobasidium zeae)*  
Gray Leaf Spot *(Cercospora zeae-maydis)*  
Northern Corn Leaf Blight *(Setosphaeria turcica)*  
Northern Corn Leaf Spot *(Cochliobolus carbonum)*  
Physoderma Brown Spot *(Physoderma maydis)*  
Rusts *(Puccinia spp.)*  
Southern Corn Leaf Blight *(Cochliobolus heterostrophus)*  
also known as Helminthosporium Leaf Blights *(H. maydis, H. turcicum, H. carbonum)*  
Suppression of: Dipodia Ear Rot *(D. maydis)* | 10.5 | Early application (V4-V8):  
An early application (V4-V8) of AVARIS® 2XS may be applied for early season disease control and plant performance benefits. If mixing with herbicides other than solo glyphosate products, Callisto® or Callisto Xtra, consult your local Helena representative.  
Later season applications:  
For gray leaf spot, rusts, anthracnose, and eye spot, apply 10.5-14 fl oz/A AVARIS® 2XS when disease first appears. If conditions favorable for disease persist, continue to apply on a 14-day schedule.  
For leaf blights apply 10.5-14 fl oz AVARIS® 2XS when disease first appears. Continue on a 7- to 14-day schedule. Use the low rate when disease pressure is low. Under heavy disease pressure or if conditions are favorable for disease, apply the high rate.  
Do not use adjuvants or other additives after the V8 growth stage and prior to the VT growth stage, as use during these development times may impose stress on the plant that could inhibit proper kernel development. VT is defined as when the last branch of the tassel is completely visible, but silks have not yet emerged from the ear shoot.  
Apply no more than 2 applications of AVARIS® 2XS or any other Group 11 fungicide per year.  
Use of an adjuvant such as COC may provide additional disease control. |

**Application:** For best results, sufficient coverage is very important. For ULV aerial applications DO NOT use less than 1.0 GPA. [Not for ULV use in California.] Use a higher water volume for aerial application if equipment and/or conditions will not provide good coverage. AVARIS® 2XS may be applied by ground, air [Not for ULV use in California] [(ULV)], or chemigation.

**Specific Use Restrictions:**
1. Do not apply more than 56 fl oz/A/season of AVARIS® 2XS.
2. Do not apply more than 28 fl oz (0.224 lb ai propiconazole) for field corn harvested for forage.
3. Do not apply more than 0.45 lb ai propiconazole-containing products/A/season.
4. Do not apply more than 2.0 lb ai azoxystrobin-containing products/A/season.
5. Do not apply within 30 days of harvest (30-day PHI) for forage, grain, or stover.
### Crop | Target Diseases | Use Rate fl oz product/A | Remarks
---|---|---|---
Corn | Anthracnose Leaf Blight (Colletotrichum graminicola) Eye Spot (Aureobasidium zeae) Gray Leaf Spot (Cercospora zeae-maydis) Northern Corn Leaf Blight (Setosphaeria turcica) Northern Corn Leaf Spot (Cochliobolus carbox) Rusts (Puccinia spp.) Southern Corn Leaf Blight (Cochliobolus heterostrophus) | 10.5 - 14 | Apply AVARIS® 2XS when disease first appears. If conditions favorable for disease persist, continue to apply on a 14-day schedule. For leaf blights apply AVARIS® 2XS when disease first appears. Continue on a 7- to 14-day schedule. Use the low rate when disease pressure is low. Under heavy disease pressure or if conditions are favorable for disease, apply the high rate. Alternate applications of AVARIS® 2XS with Tilt or another product with a different mode of action than Group 11 fungicides.

Application: For best results, sufficient coverage is very important. Use of a crop oil concentrate is recommended for aerial applications to reduce evaporation and enhance canopy penetration and coverage. Consult your aerial applicator for recommended concentration of crop oil concentrate. DO NOT use less than 1.0 GPA for the ULV applications. [Not for ULV use in California.] Use higher water volumes for aerial applications if equipment and/or conditions will not provide good coverage. AVARIS® 2XS may be applied by ground, air [Not for ULV use in California] [(ULV)], or chemigation.

Specific Use Restrictions:
1) Do not apply more than 56 fl oz/A/season of AVARIS® 2XS.
2) Do not apply more than 0.45 lb ai propiconazole-containing products/A/season.
3) Do not apply more than 2.0 lb ai azoxystrobin-containing products/A/season.
4) Do not apply to sweet corn within 14 days of harvest (14-day PHI) for ears or forage.

Cranberries | Cottonball (Monilinia oxyccci) Fruit Rots (Physalospora vaccinii) (Glomerella cingulata) (Coleophoma empetri) Lophodermium Twig Blight (Lophodermium spp.) | 14 - 21 | Make the first application at leaf bud break and repeat in 14 days. Additional applications should be made at early bloom. Make no more than 2 consecutive sprays before alternating to a non-Group 11 fungicide. For resistance management, make no more than 3 sprays per season using any Group 11 (QoI containing) fungicide. Under severe pressure, use the higher rate for control.

Application: AVARIS® 2XS may be applied by ground (minimum of 10 gal/A) or aerial application (minimum of 20 gal/A).

Specific Use Restrictions:
1) Do not apply more than 84 fl oz/A of AVARIS® 2XS per crop.
2) Do not apply more than 0.67 lb ai of propiconazole-containing products/A/season.
3) Do not apply more than 1.5 lb ai of azoxystrobin-containing products/A/season.
4) Do not use cranberry fields used for aquaculture of fish and crustaceans.
5) Do not apply when weather conditions favor drift from treated areas to non-target aquatic habitat. Applicators should use care in making applications near non-target aquatic habitats.
6) Do not apply to flooded crop.
7) Do not allow release of irrigation or flood water to non-target aquatic habitat for at least 14 days after the last application.
8) Do not apply within 45 days of harvest (45-day PHI).
9) Use is limited to Oregon, Washington, and Wisconsin only.
<table>
<thead>
<tr>
<th>Crop</th>
<th>Target Diseases</th>
<th>Use Rate fl oz product/A</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filberts</td>
<td>Eastern Filbert Blight (Anisogramma anomal\a)</td>
<td>14 - 21</td>
<td>Begin applications when green leaf tissue becomes visible and continue on a 2- to 3-week interval. Under severe disease conditions, use the higher rate and shorter interval. Apply no more than 2 sequential applications before alternating to a non-Group 11 fungicide. <strong>NOTE:</strong> On certain varieties, <strong>AVARIS® 2XS</strong> applications may cause smaller and/or greener leaves. Yields of filberts displaying these characteristics have not been reduced due to <strong>AVARIS® 2XS</strong> treatments.</td>
</tr>
</tbody>
</table>

**Application:** **AVARIS® 2XS** may be applied by ground or aerial application (minimum of 15 gal/A).

**Specific Use Restrictions:**
1) Do not apply more than 112 fl oz/A of **AVARIS® 2XS** per crop.
2) Do not apply more than 0.9 lb ai of propiconazole-containing products/A/season.
3) Do not apply more than 1.2 lb ai of azoxystrobin-containing products/A/season.
4) Do not graze livestock in treated areas or cut treated cover crop for feed.
5) Do not apply within 60 days of harvest (60-day PHI).

**Grasses grown For Seed (Cool season grasses only)**

| Ergot Stem Diseases Powdery Mildew (Erysiphe graminis) Ruts (Puccinia spp.) | 14 - 26                  | Apply **AVARIS® 2XS** when powdery mildew infections, and/or rust pustules are noticeable and increasing in number in late spring or early summer. To maximize control of severe rust pressure, apply 26 fl oz/A (except bluegrass apply 14 fl oz/A) and make applications at 14-day intervals until the seed is mature. For bluegrass, it is important to begin application early in the growing season. Make no more than 2 sequential applications of a Group 11 fungicide before alternating to another product with a different mode of action than Group 11 fungicides. |

**Application:** **AVARIS® 2XS** is most effective when applied and allowed to dry before a rainfall. For best results, sufficient coverage is very important. Apply **AVARIS® 2XS** in a minimum of 20 gal of water per acre for ground or in a minimum of 10 gal of water per acre for aerial. **AVARIS® 2XS** may be applied by ground, air, or chemigation.

**Specific Use Restrictions:**
1) Do not feed hay cut within 20 days of the last application.
2) Do not graze treated areas within 140 days of the last application.
3) Do not apply more than 86.0 fl oz/A/season of **AVARIS® 2XS**.
4) Do not apply more than 0.90 lb ai propiconazole-containing products/A/season.
5) Do not apply more than 0.8 lb ai azoxystrobin-containing products/A/season.
6) Do not apply within 20 days of harvest (20-day PHI) of seed.
7) Do not apply to bermudagrass grown for seed.
<table>
<thead>
<tr>
<th>Crop</th>
<th>Target Diseases</th>
<th>Use Rate fl oz product/A</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mint Peppermint Spearmint</td>
<td>Powdery Mildew (Erysiphe spp.)</td>
<td>10.5 - 14</td>
<td>Begin applications when the plants are 2-4 inches high or when conditions become favorable for disease development. Make a second application 14 days after the first application.</td>
</tr>
<tr>
<td></td>
<td>Rust (Puccinia menthae)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application: AVARIS® 2XS</td>
<td>[Not for use in California]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peanuts</td>
<td>Early Leaf Spot (Cercospora arachidicola)</td>
<td>10.5 - 14</td>
<td>Apply AVARIS® 2XS beginning 35 to 40 days after planting or at the first appearance of disease. Continue applications on a 14-day schedule. Under heavy disease pressure use higher recommended application rates. AVARIS® 2XS also may be used in State Agricultural Extension advisory (disease forecasting) programs which recommend application timing based on environmental factors favorable for disease development. Make no more than two sequential applications of a Group 11 fungicide before alternating to another product with a different mode of action than Group 11 fungicides.</td>
</tr>
<tr>
<td></td>
<td>Late Leaf Spot (Cercosporidium personatum)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rust (Puccinia arachidis)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Web Blotch (Phoma arachidicola)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soil-Borne Diseases - mid-late season</td>
<td>21 - 28</td>
<td></td>
<td>Apply AVARIS® 2XS at approximately 60 and 90 days after planting as a foliar application. This application regime may be applied earlier in the season if environmental conditions favor disease development. This application will provide protection against soil-borne diseases and will also provide control of the foliar diseases listed for a 10- to 14-day period after each spray. Under heavy pressure and/or heavy rainfall or irrigation, use 28 fl oz of AVARIS® 2XS per acre. Under lighter pressure and dry conditions (non-irrigated, low rainfall), use 21-28 fl oz of AVARIS® 2XS per acre.</td>
</tr>
<tr>
<td>Crop</td>
<td>Target Diseases</td>
<td>Use Rate fl oz product/A</td>
<td>Remarks</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>--------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Peanuts (cont.) [Not for use in California] | Soil-Borne Diseases - mid-late season
Rhizoctonia Peg and Pod Rot (R. solani)
Stem Rot/White Mold/Southern Blight (Sclerotium rolfsii)
Suppression only:
Cylindrocladium Black Rot (C. crotalariae)
Pythium Pod Rot (P. myriotylum) | 14 - 28 plus Abound® in tank mix | Tank-mix option: Apply 14 fl oz/A of AVARIS® 2XS in a tank mix with Quadris® or other fungicides for control of soil-borne diseases. A minimum of 0.15 lb ai/A azoxystrobin should be in the tank mix (see AVARIS® 2XS rate conversion table below). Do not exceed 0.4 lb of azoxystrobin/A/application.
Apply AVARIS® 2XS plus Abound at approximately 60 and 90 days after planting as a foliar application. This application regime may be applied earlier in the season if environmental conditions favor disease development. This application will provide protection against soil-borne diseases and will also provide control of the foliar diseases listed for a 10- to 14-day period after each spray.
Under heavy pressure and/or heavy rainfall or irrigation, there should be 0.3-0.4 lb ai of azoxystrobin in the tank.
Under lighter pressure and dry conditions (non-irrigated, low rainfall), 0.2-0.4 lb ai of azoxystrobin can be used. |

**Application:** When applying AVARIS® 2XS via irrigation or as a directed ground application, additional methods should be employed for leaf spot control. AVARIS® 2XS may be applied by ground, air or chemigation.

**Specific Use Restrictions:**
1) Do not apply more than 56 fl oz/A/season.
2) Do not apply more than 0.45 lb ai propiconazole-containing products/A/season.
3) Do not apply more than 0.80 lb ai azoxystrobin-containing products/A/season.
4) Do not apply within 14 days of harvest (14-day PHI) when using a maximum rate of 14 fl oz/A.
5) Do not apply within 21 days of harvest (21-day PHI) when using rates above 14 fl oz/A and do not feed hay from treated fields to livestock if using rates higher than 14 fl oz/A.
<table>
<thead>
<tr>
<th>Crop</th>
<th>Target Diseases</th>
<th>Use Rate fl oz product/A</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pecans</td>
<td>Anthracnose (Glomerella cingulata) Downy Spot (Mycosphaerella caryigena) Liver Spot (Gnomonia caryae pv pecanae) Pecan Scab (Cladosporium caryigenum) Powdery Mildew (Microsphaerella penicillata) Vein Spot (Gnomonia nerviseda) Zonate Leaf Spot (Cristulariella moricola)</td>
<td>14 - 21</td>
<td>Pecan scab: Apply 14-21 fl oz/A <strong>AVARIS® 2XS</strong> on a 14-day schedule during bud break and pre-pollination sprays. Apply 20-21 fl oz/A during nut formation and cover sprays. Use higher rates when disease pressure is heavier. Do not apply after shuck split. Other foliar diseases: <strong>AVARIS® 2XS</strong> may be applied for control of mid to late season foliar diseases at 14-20.5 fl oz/A with other pecan products labeled for these diseases. Observe all directions, precautions, and limitations for the other products. Make no more than two sequential applications of a Group 11 fungicide before alternating to another non-Group 11 fungicide. Use of an adjuvant such as COC may provide additional disease control.</td>
</tr>
</tbody>
</table>

**Application:** Ground applications should be applied in sufficient water to provide for full coverage. **AVARIS® 2XS** may be applied by ground or air (minimum of 20 gal/A).

**Specific Use Restrictions:**
1) Do not apply more than 115 fl oz/A of **AVARIS® 2XS** per season.
2) Do not graze livestock in treated areas or cut treated cover crops for feed.
3) Do not apply more than 0.9 lb ai propiconazole-containing products/A/season.
4) Do not apply more than 1.2 lb ai azoxystrobin-containing products/A/season.
5) Do not apply after shuck split or within 45 days of harvest (45-day PHI), whichever is first.

| Pistachios | Alternaria Late Blight (A. alternata) Botryosphaeria Panicle and Shoot Blight (B. dothidea) Septoria Leaf Spot (S. pistaciarium) | 17.5 - 21 | Begin applications when green leaf tissue becomes visible and continue on a 14- to 21-day interval. Under severe disease conditions, use the higher rate and the shorter interval. Make no more than 2 consecutive applications of **AVARIS® 2XS** before alternating to another non-Group 11 fungicide. |

**Application:** **AVARIS® 2XS** may be applied by ground or aerial application (15 gal/A minimum).

**Specific Use Restrictions:**
1) Do not apply more than 112 fl oz/A of **AVARIS® 2XS** per crop.
2) Do not apply more than 0.9 lb ai of propiconazole-containing products/A/season.
3) Do not apply more than 1.5 lb ai of azoxystrobin-containing products/A/season.
4) Do not graze livestock in treated areas or cut treated cover crop for feed.
5) Do not apply within 60 days of harvest (60-day PHI).
<table>
<thead>
<tr>
<th>Crop</th>
<th>Target Diseases</th>
<th>Use Rate fl oz product/A</th>
<th>Remarks</th>
</tr>
</thead>
</table>
| Rice         | Aggregate Sheath Spot (\textit{Rhizoctonia oryzae-sativa}) | 14 - 27                  | Timing of \textit{AVARIS\textsuperscript{®} 2XS} application will depend on disease severity, disease complex and rice variety/growth stage. Consult local extension experts for local economic thresholds established for various rice varieties and diseases.  
Leaf blast: \textit{AVARIS\textsuperscript{®} 2XS} must be applied for preventive control. Apply 21-27 fl oz/A.  
Panicle blast: Apply \textit{AVARIS\textsuperscript{®} 2XS} at 10\% head emergence with an additional application of Quadris at 90\% emergence. Refer to the Quadris label for rates and timing.  
All other leaf/stem diseases: Apply 15.75-27 fl oz/A at initial sign of disease. Apply higher rates when disease pressure is heavy and/or when environmental conditions are highly favorable for disease development. A second application may be made 14 days later.  
Tank mix option: Apply 15.75-20.5 fl oz/A of \textit{AVARIS\textsuperscript{®} 2XS} in a tank mix with Quadris or other fungicides for control of rice diseases. A minimum of 0.15 lb ai/A azoxystrobin should be in the tank mix (see \textit{AVARIS\textsuperscript{®} 2XS} rate conversion table below). Do not exceed 0.3 lb of azoxystrobin/A/application to rice or 0.25 lb of azoxystrobin/A/application to wild rice.  
The lower rate of 14 fl oz/A may only be used for hybrids or varieties with at least moderate resistance to sheath blight. Apply from late boot to boot split for control of diseases (except leaf blast and false smut) of rice (including wild rice). When applying prior to late boot or after boot split growth stages, use the higher rates listed above.  
Make no more than 2 applications of a Group 11 (QoI) fungicide per year. |

<table>
<thead>
<tr>
<th>Remarks</th>
<th>For disease suppression of:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>False Smut (\textit{Ustilaginoidea virens})</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textbf{Application:} For aerial application, volumes should be 5-10 GPA. An adjuvant may be added at recommended rates to improve canopy coverage and penetration while reducing evaporation and drift.

\textbf{Specific Use Restrictions:}
1) Do not apply to stubble or ratoon crop rice.
2) Do not use in rice fields where commercial farming of crayfish will be practiced.
3) Do not drain water from treated rice fields into ponds used for commercial fish farming.
4) Do not use water drained from treated fields to irrigate other crops.
5) Do not apply more than 42 fl oz/A/season of \textit{AVARIS\textsuperscript{®} 2XS}.
6) Do not apply more than 0.34 lb ai propiconazole-containing products/A/season.
7) Do not apply more than 0.70 lb ai azoxystrobin-containing products/A/season.
8) Do not release floodwater within 14 days of an application.
9) Do not apply within 35 days of harvest (35-day PHI).
<table>
<thead>
<tr>
<th>Crop</th>
<th>Target Diseases</th>
<th>Use Rate fl oz product/A</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sorghum</td>
<td>Anthracnose <em>(Colletotrichum graminicola)</em>&lt;br&gt;Ergot <em>(Claviceps sorghi)</em>&lt;br&gt;Gray Leaf Spot <em>(Cercospora sorghi)</em>&lt;br&gt;Ladder Leaf Spot <em>(Cercospora fusimaculans)</em>&lt;br&gt;Leaf Blight <em>(Exserohilum turcicum)</em>&lt;br&gt;Zonate Leaf Spot <em>(Gloeocercospora sorghi)</em></td>
<td>10.5 - 14</td>
<td>For ergot control, make the first application at or just prior to flowering. Repeat on a 5- to 7-day interval. For other diseases, apply at first sign of disease. Apply on a 14-day interval.</td>
</tr>
</tbody>
</table>

**Application:** AVARIS® 2XS may be applied by ground or aerial application.

**Specific Use Restrictions:**
1) Do not apply more than 56 fl oz/A of AVARIS® 2XS per crop.
2) Do not apply more than 0.45 lb ai of propiconazole-containing products/A/season.
3) Do not apply more than 0.75 lb/A/season of azoxystrobin-containing products to sorghum grown for grain and/or stover.
4) Do not apply more than 0.5 lb/A/season of azoxystrobin-containing products to sorghum grown for forage.
5) Do not graze livestock or cut for green chop or silage within 30 days of application.
6) Do not apply more than 28 fl oz (0.22 lb ai propiconazole) on sorghum harvested for forage.
7) Do not apply within 30 days of harvest (30-day PHI) for forage.
8) Do not apply within 21 days of harvest (21-day PHI) for grain or stover.
<table>
<thead>
<tr>
<th>Crop</th>
<th>Target Diseases</th>
<th>Use Rate fl oz product/A</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soybeans</td>
<td>Aerial Web Blight <em>&lt;em&gt;(Rhizoctonia solani)&lt;/em&gt;</em>, Alternaria Leaf Spot *&lt;em&gt;(Alternaria spp.)&lt;/em&gt;, Anthracnose <em>&lt;em&gt;(Colletotrichum truncatum)&lt;/em&gt;</em>, Brown Spot *&lt;em&gt;(Septoria glycines)&lt;/em&gt;, Cercospora Blight and Leaf Spot *&lt;em&gt;(C. kickuchii)&lt;/em&gt;, Frogeye Leaf Spot *&lt;em&gt;(Cercospora sojina)&lt;/em&gt;, Pod and Stem Blight *&lt;em&gt;(Diaporthe spp.)&lt;/em&gt;, Soybean Rust *&lt;em&gt;(Phakopsora pachyrhizi)&lt;/em&gt;</td>
<td>10.5 - 21</td>
<td>Foliar diseases (except rust): Apply 14-21 fl oz/A at growth stage R3 (early pod set) when pods are $\frac{1}{8}-\frac{1}{4}$ inch long) and 14-21 days later at growth stage R5 (pod fill). AVARIS® 2XS may be applied earlier should conditions be conducive for disease. Soybean Rust: Apply 14-21 fl oz/A at first indication that disease is in the area. For best control, preventive applications work best. Repeat on a 14- to 21-day interval. Use higher rate and shorter interval when diseases are present in the field and incidence is less than 2% (2 plants in 100 are infected). If incidence is greater than this or if disease is in mid-canopy, control will not be acceptable. Scouting for the disease and/or being aware of the proximity of the disease via monitoring systems will aid in the proper timing to maximize the effectiveness of the fungicide applications. On certain varieties, AVARIS® 2XS applications may cause crinkled, smaller and/or greener leaves. Yields of beans displaying these characteristics have not been reduced due to AVARIS® 2XS treatments.</td>
</tr>
</tbody>
</table>

**Application:** AVARIS® 2XS is most effective when applied and allowed to dry before a rainfall. For best results, sufficient coverage is very important. DO NOT use less than 2.0 GPA. Use a higher water volume for aerial application if equipment and/or conditions will not provide for good coverage. AVARIS® 2XS may be applied by ground, air, or chemigation.

**Specific Use Restrictions:**
1) Do not apply more than 42 fl oz/A of AVARIS® 2XS per crop.
2) Do not apply more than 0.34 lb ai of propiconazole-containing products/A/season.
3) Do not apply more than 1.5 lb ai of azoxystrobin-containing products/A/season.
4) Apply up to Stage R6.
<table>
<thead>
<tr>
<th>Crop</th>
<th>Target Diseases</th>
<th>Use Rate fl oz product/A</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stone Fruits Crop Group 12-12</td>
<td>Alternaria Spot and Fruit Rot (A. alternata) Anthracnose (Colletotrichum prunicola) Brown Rot Blossom Blight (Monilinia spp.) Brown Rot on Fruit (Monilinia spp.) Cherry Leaf Spot (Blumeriella jaapii) Powdery Mildew (Podosphaera clandestina, Sphaerotheca pannosa) Rust (Tranzschelia discolor) Scab (Cladosporium carpophilum) Shothole (Wilsonomyces carpophilus)</td>
<td>14</td>
<td>For brown rot blossom blight, apply AVARIS® 2XS at early bloom stage. If disease pressure is low, a second application of 14 fl oz/A may be made as needed through petal fall. Under conditions of high disease pressure and/or very susceptible varieties, applications may be needed at 50-75% bloom and petal fall. Apply no more than 2 sequential applications before switching to a non-Group 11 fungicide. For brown rot on fruit, apply as needed, a maximum of 2 sprays of AVARIS® 2XS, during the preharvest period up to the day of harvest. Make the two applications no closer than 10 days apart. For powdery mildew, rust, and cherry leaf spot, follow the blossom blight schedule. Make up to 2 additional applications on a 10- to 14-day interval from the end of petal fall to harvest. For scab, begin applications at petal fall and continue on a 7- to 14-day interval. For other diseases, begin applications at onset of disease and continue on a 10- to 14-day interval. Make no more than 2 sequential applications of a Group 11 fungicide prior to alternating with another product with a different mode of action than Group 11 fungicides.</td>
</tr>
<tr>
<td>Apricot</td>
<td>Including all cultivars and hybrids of these</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cherry, sweet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cherry, tart</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nectarine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peach</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plumcot</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prune</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Application:** Stone fruit diseases are more effectively controlled by ground application, using sufficient water volume to provide thorough and uniform coverage. Aerial application (minimum of 15 gal/A) may be used if necessary but disease control may be reduced.

Applications of AVARIS® 2XS during bloom to Stanley plums have occasionally caused fruit to be less oval in shape and smaller in size at harvest. To avoid this, do not apply AVARIS® 2XS to Stanley plums earlier than 21 days prior to harvest.

**Specific Use Restrictions:**
1) Do not apply more than 70 fl oz/A/season of AVARIS® 2XS.
2) Do not apply more than 0.56 lb ai propiconazole-containing products/A/season.
3) Do not apply more than 1.5 lb ai azoxystrobin-containing products/A/season.
4) AVARIS® 2XS may be applied the day of harvest (0-day PHI).
<table>
<thead>
<tr>
<th>Crop</th>
<th>Target Diseases</th>
<th>Use Rate fl oz product/A</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Strawberries and Low-Growing Berry Subgroup 13-07G (except cranberry)</em></td>
<td>Anthracnose (Colletotrichum spp.)</td>
<td>14</td>
<td>Begin applications prior to disease development. Repeat on a 10- to 14-day interval. Do not make more than two consecutive applications before switching to a non-Group 11 fungicide. Make no more than 4 applications per season of AVARIS® 2XS or other QoI-containing product.</td>
</tr>
<tr>
<td>Bearberry</td>
<td>Leaf Rust (Phragmidium potentiellae)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bilberry</td>
<td>Leaf Spot (Cercospora fragariae)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cloudberry</td>
<td>Powdery Mildew (Sphaerotheca macularis)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muntries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partridgeberry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Including all cultivars and/or hybrids of these</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Application:** AVARIS® 2XS may be applied by ground (20 gal/A minimum) or aerial application (15 gal/A minimum).

**Specific Use Restrictions:**
1) Do not apply more than 56 fl oz/A of AVARIS® 2XS per crop.
2) Do not apply more than 0.45 lb ai of propiconazole-containing products/A/season.
3) Do not apply more than 1.0 lb ai of azoxystrobin-containing products/A/season.
4) AVARIS® 2XS may be applied the day of harvest (0-day PHI).

**Sugar Beets**

<table>
<thead>
<tr>
<th>Crop</th>
<th>Target Diseases</th>
<th>Use Rate fl oz product/A</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Not for use in California]</td>
<td>Cercospora Leaf Spot (C. beticola)</td>
<td>14</td>
<td>Begin applications preventively or on a forecast system. For powdery mildew, apply at first sign of disease. Apply AVARIS® 2XS on a 10- to 21-day schedule. Make only one AVARIS® 2XS spray then alternate to a non-triazole fungicide (non-Group 3) that is registered on sugar beets for these diseases. If disease pressure is high, use the highest rate and shortest interval.</td>
</tr>
<tr>
<td></td>
<td>Powdery Mildew (Erysiphe polygoni)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rhizoctonia Crown Rot (R. solani)</td>
<td></td>
<td>For Rhizoctonia crown rot, apply 14 oz. in a 7-inch band over the row at the 4- to 8-leaf stage.</td>
</tr>
</tbody>
</table>

**Application:** For best results, sufficient water volume must be used to provide thorough coverage. A minimum of 15 gal/A for ground applications is recommended. For aerial applications a minimum of 5 gal/A of water is recommended. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy. AVARIS® 2XS may be applied by ground, chemigation, or aerial application.

**Specific Use Restrictions:**
1) Do not apply more than 42 fl oz/A/season of AVARIS® 2XS.
2) Do not apply more than 0.34 lb ai of propiconazole-containing products per crop per season.
3) Do not apply more than 2.0 lb ai of azoxystrobin-containing products per crop per season.
4) Do not apply within 21 days of harvest (21-day PHI).
### Sugarcane

**Target Diseases**
- Brown Rust (*Puccinia melanocephela*)
- Orange Rust (*Puccinia kuehnii*)

**Use Rate**
- 16 - 22 fl oz product/A

**Remarks**
- Begin applications prior to rust development and continue throughout the season every 14-28 days following resistance management guidelines.
- Scout fields and begin applications at the earliest sign of rust. Applications may be made by ground, air or chemigation.

### Specific Use Restrictions:
1. Do not apply more than 88 fl oz/A/season of AVARIS® 2XS.
2. Do not apply within 30 days of harvest (30-day PHI).
3. Do not apply more than 0.80 lb ai of azoxystrobin-containing products per season.

### True Nuts

**Crop Group**
- 14-12

**See list below for tree nuts**
- See specific directions for Almond, Filbert, Pecan, Pistachios

**Foliar Diseases**
- 14 - 21 fl oz product/A
- Apply AVARIS® 2XS at first sign of disease. Repeat on a 7- to 14-day interval. Do not make more than two consecutive applications before switching to a non-Group 11 fungicide. Make no more than 4 applications of a AVARIS® 2XS or other QoI containing product per season.

### Additional tree nuts:
- Almond (see specific directions), Beechnut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (see specific directions), Hickory, Macadamia, Pecan (see specific directions), Pistachios (see specific directions), Walnut.

**Application:** For best control of tree nut diseases, ground applications are recommended. AVARIS® 2XS may be applied by ground or aerial application (15 gal/A minimum).

### Specific Use Restrictions:
1. Do not apply more than 112 fl oz/A of AVARIS® 2XS per crop.
2. Do not apply more than 0.9 lb ai of propiconazole-containing products/A/season.
3. Do not apply more than 1.2 lb ai of azoxystrobin-containing products/A/season.
4. Do not graze livestock in treated areas or cut treated cover crop for feed.
5. Do not apply within 60 days of harvest (60-day PHI) except for pecan (see specific use directions).

### AVARIS® 2XS Rate Conversion Table

<table>
<thead>
<tr>
<th>Fl Oz Product/A</th>
<th>Lb ai Azoxystrobin</th>
<th>Lb ai Propiconazole</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0.028</td>
<td>0.024</td>
</tr>
<tr>
<td>4</td>
<td>0.037</td>
<td>0.032</td>
</tr>
<tr>
<td>7</td>
<td>0.056</td>
<td>0.06</td>
</tr>
<tr>
<td>10.5</td>
<td>0.10</td>
<td>0.08</td>
</tr>
<tr>
<td>14.0</td>
<td>0.13</td>
<td>0.11</td>
</tr>
<tr>
<td>15.75</td>
<td>0.15</td>
<td>0.125</td>
</tr>
<tr>
<td>17.5</td>
<td>0.16</td>
<td>0.14</td>
</tr>
<tr>
<td>21</td>
<td>0.19</td>
<td>0.17</td>
</tr>
<tr>
<td>26</td>
<td>0.24</td>
<td>0.21</td>
</tr>
<tr>
<td>27</td>
<td>0.25</td>
<td>0.22</td>
</tr>
<tr>
<td>28</td>
<td>0.26</td>
<td>0.22</td>
</tr>
</tbody>
</table>
STORAGE AND DISPOSAL

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

PESTICIDE STORAGE
Store in original container only. Store in a cool, dry and well-ventilated place. Protect from excessive heat. Keep container closed when not in use. Do not store near food or feed.

PESTICIDE DISPOSAL
Pesticide wastes may be toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal Law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

CONTAINER HANDLING [equal to or less than 5 gallons]
Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

For Bulk and Minibulk Containers:
CONTAINER HANDLING [greater than 5 gallons]
Refillable container. Refill this container with pesticide only. Do not reuse the container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

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

Abound®, Callisto®, Orbit®, Plant Performance™, Quadris®, Tilt® are Trademarks of a Syngenta Group Company
Topsin® trademark of Pennwalt Corporation
AVARIS® 2XS is a trademark of Helena Holding Company
©2017 Helena

For non-emergency (e.g., current product information), call
Helena Chemical Company at 1-901-761-0050

MANUFACTURED FOR
HELENA CHEMICAL COMPANY
225 SCHILLING BOULEVARD, SUITE 300
COLLIerville, TN  38017

SCPSR-HEL-1324B-L1D 1016
4086448
AD 102116
AVARIS 2XS Broad-spectrum fungicide for control of plant diseases

ACTIVE INGREDIENTS:
Azoxystrробин ........................................ 13.5%
Propiconazole ........................................... 11.7%
OTHER INGREDIENTS: ............................ 74.8%
TOTAL: ................................................. 100.0%

Contains 1.02 lb ai propiconazole and 1.18 lb ai azoxystrobin per gallon.

AVARIS 2XS is a trademark of Helena Holding Company

KEEP OUT OF REACH OF CHILDREN.
WARNING/AVISO
Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

LANGUAGE REQUIREMENTS
See ADDITIONAL 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 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 to an unconscious person.
If on skin: 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 inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
Have the product container or label with you when calling a poison control center or doctor or going for treatment.

HOTLINE NUMBER: For 24-Hour Medical Emergency Assistance (Human or Animal) Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident) Call 1-800-424-9300.

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.

Environmental Hazards
Azoxystrобин can be persistent for several months or longer. Azoxystrобin has degradation products which have properties similar to chemicals which are known to leach through soil to 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 ground water contamination.

Azoxystrobin and propiconazole are toxic to freshwater and estuarine/marine fish; and azoxystrobin is toxic to aquatic invertebrates. Propiconazole is toxic to shrimp. Do not apply directly to water except as specified on this label. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

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

Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

CONTAINER HANDLING
Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

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

EPA Reg. No. 100-1324-5905   EPA Est. 100-NE-001
SCPSR-HEL-1324B-L1D 1016
4086448
AD 102116