



## OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

May 21, 2025

Daniel Sandoval  
daniel.sandoval@innvictis.com  
AXION AG PRODUCTS, LLC

Subject: Non-PRIA (Pesticide Registration Improvement Act) Approval of  
Label Amendment; Only Indicated Changes Reviewed - Minor label revisions  
Product Name: AX PENDI H2O  
Admin Number: 89167-77  
EPA Receipt Date: 07/06/2023  
Action Case Number: 00476523

Dear Daniel Sandoval:

The amended labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable.

However, EPA reviewed only the label changes highlighted, marked, or otherwise indicated on the submitted label. Any other changes to the previously approved label that were not clearly highlighted, marked, or otherwise indicated in your submission were not reviewed and may form the basis of regulatory and/or enforcement action if later discovered by the Agency. Further, submission of a label amendment application with unidentified changes may be considered a knowing submission of false information to the Agency.

This approval does not affect any terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

The label submitted with the application has been stamped "Accepted Only Indicated Revisions Reviewed" and is enclosed for your records.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains statements or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6.

If you have questions, please contact Jamie Millard via email at [millard.jamie@epa.gov](mailto:millard.jamie@epa.gov).

Sincerely,

A handwritten signature in black ink that reads "Jamie Millard for". The script is elegant and cursive.

Emily Schmid, Product Manager 25  
HB, RD  
Office of Pesticide Programs

**MASTER LABEL INCLUDES**

**Sublabel A: Agricultural Crop Uses Complete Directions for Use**

**Sublabel B: Non-Agricultural Uses Complete Directions for Use**

PENDIMETHALIN	GROUP	3	HERBICIDE
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**ACCEPTED**

ONLY INDICATED

REVISIONS REVIEWED

05/21/2025

# AX PENDI H20

**[HERBICIDE]**

**[FOR USE IN SELECTED CROPS]**

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

89167-77

No label revisions other than those indicated were  
reported to the Agency.

**ACTIVE INGREDIENT:**

Pendimethalin: N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzenamine .....	<b>% BY WT.</b>
	38.7%

<b>OTHER INGREDIENTS:</b> .....	61.3%
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<b>TOTAL:</b> .....	100.0%
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1 gallon contains 3.8 pounds of pendimethalin formulated as an aqueous capsule suspension.

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION / PRECAUCIÓN**

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

**For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300.**

**[SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS.]**

**[See inside for additional Precautionary Statements and complete Directions for Use.]**

**[See attached booklet for additional Precautionary Statements and complete Directions for Use.]**

**[See containers inside for additional Precautionary Statements and complete Directions for Use.]**

**[See inside booklet for First Aid, Precautionary Statements, and complete Directions for Use.]**

**EPA Reg. No.: 89167-77**

**EPA Est. No.: \_\_\_\_\_**

**Net Contents: \_\_\_\_ Gal (\_\_\_\_ L)**

**Manufactured For:**

AXION AG PRODUCTS, LLC  
1880 Fall River Drive, Suite 100  
Loveland, CO 80538

~~410824~~052025

Sublabel A: Agricultural Crop Uses Complete Directions for Use

PENDIMETHALIN	GROUP	3	HERBICIDE
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FIRST AID	
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after first 5 minutes; then continue rinsing eyes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOTLINE NUMBER</b> <u>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergencies call the poison control center at 1-800- 222-1222. For non-emergency resource information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 Monday – Friday 8 am – Noon Pacific Time, (NPIC Web site: <a href="http://www.npic.orst.edu">www.npic.orst.edu</a>).</u> <del>For Chemical Spill, Leak, Fire or Exposure, call CHEMTREC 800-424-9300. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 or your poison control center at 1-800-222-1222.</del> <del>For Chemical Spill, Leak, Fire or Exposure, call CHEMTREC 800-424-9300.</del>	

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**  
**CAUTION**

Causes moderate eye irritation. Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes, or clothing.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

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

**Engineering Controls**

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

**USER SAFETY RECOMMENDATIONS**

**Users should:**

- Wash hands 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**

This product is toxic to fish. **DO NOT** apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. **DO NOT** contaminate water when disposing of equipment washwater or rinsate.

**Non-Target Organism Advisory Statement**

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

### **Endangered Species Protection**

This product may have effects on federally listed threatened or endangered plant species or their critical habitat. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the county or parish in which you are applying the pesticide. To determine whether your country or parish has a bulletin, and to obtain that bulletin, consult <http://www.epa.gov/espp/> or call 1-844-447-3813 no more than 6 months before using this product. Applicators must use bulletins that are in effect in the month in which the pesticide will be applied. New bulletins will generally be available from the above sources 6 months prior to their effective dates.

If endangered plant species occur in proximity to the application site, the following mitigation measures are required:

- If applied by ground, leave an untreated buffer zone of 200 feet. The product must be applied using a low boom (20 inches above the ground) and ASABE fine to medium/coarse nozzles.
- If applied by air, leave an untreated buffer zone of 170 feet. Must use straight-stream nozzles (D-6 or larger). Wind can be no more than 8 mph and release height must be 15 feet or less.

### **DIRECTIONS FOR USE**

It is a violation of federal law to use this product in a manner inconsistent with its labeling. This label must be in the possession of the user at the time of pesticide application.

**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 protection.

Observe all cautions and restrictions in this label and the labels of products used in combination with this product. The use of this product not consistent with this label can result in injury to crops, animals, or persons. Keep containers closed to avoid spills and contamination.

**DO NOT** allow spray to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, non-target crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.

**DO NOT** enter or allow other people (or pets) to enter the treated area until sprays have dried.

#### **If material is released or spilled:**

- Dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal.
- Remove contaminated clothing and wash affected skin areas with soap and water.
- Wash clothing before reuse.
- Keep the spill out of all sewers and open bodies of water.

### **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.**

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, including plants, soil, or water, is: long-sleeved shirt and long pants, waterproof gloves and shoes plus socks.

## PRODUCT INFORMATION

This product is a selective herbicide for controlling most annual grasses and certain broadleaf weeds as they germinate. Refer to **Table 1** for crop uses. Refer to **Table 2** for a complete list of controlled weeds.

**Table 1. Crop Uses**

Alfalfa	Leafy Brassica greens
Artichoke	Leek
Asparagus	Lentil and peas
Berries, low-growing	Melons
Brassica head and stem vegetables	Mint
Bushberries, bearing and non-bearing	Nut trees, bearing and non-bearing
Caneberries, bearing and non-bearing	Olive trees, bearing and non-bearing
Carrot	Onions and shallots (dry bulb, green)
Carrot, grown for seed production	Peanut
Citrus fruit trees, bearing and non-bearing	Perennial grasses grown for seed
Corn (field, field seed, fresh sweet, popcorn, popcorn seed)	Pome fruit trees, bearing and non-bearing
Cotton	Pomegranate
Date palm trees, non-bearing	Potato
Edible beans	Rice
Fallow	Safflower
Farmstead	Small fruit climbing vines, bearing and non-bearing
Fig trees, non-bearing	Soybean
Forage grasses (cool-season)	Stone fruit trees, bearing and non-bearing
Forage grasses (warm-season)	Strawberry
Fruiting vegetables	Sugarcane
Garlic	Sunflower (and other Group 20B oilseeds)
Grain sorghum	Tobacco
Grape, bearing and non-bearing vineyards	Triticale
Hops	Vegetable soybean (edamame)
Leaf lettuce	Wheat

**Table 2. Weeds Controlled**

(See crop sections for additional weeds controlled)

Weeds controlled with AX PENDI H2O applied up to 4 pints (1.9 lb ai) per acre		
Grass Weeds		
Annual ryegrass*	Foxtail, green	Oat, wild*
Barnyard grass	Foxtail, yellow	Panicum, fall
Canarygrass*, <sup>2</sup>	Goosegrass	Panicum, Texas
Cheat* <sup>2</sup>	Hairy chess* <sup>1</sup>	Sandbur, field
Crabgrass	Itchgrass*	Shattercane*
Crowfootgrass	Italian ryegrass*	Signalgrass*
Cupgrass	Japanese brome* <sup>1</sup>	Wild proso millet*
Downy brome*	Johnsongrass (seedling)	Witchgrass
Foxtail, giant	Jointed goatgrass* <sup>1</sup>	Woolly cupgrass*

Broadleaf Weeds		
Amaranth, Palmer	Lambsquarters, common	Pusley, Florida
Bugloss, small <sup>1</sup>	Lambsquarters, slimleaf <sup>2</sup>	Shepherdspurse*
Carpetweed	London rocket*	Smartweed, Pennsylvania*
Chickweed, common*	Mustard, black <sup>2</sup>	Spurge, annual
Henbit	Pigweed species	Velvetleaf*
Kochia	Purslane	Waterhemp species
Lady's thumb		
* Suppression, but controlled when the rate of this product exceeds 4 pints (1.9 lb ai) per acre.		
<sup>1</sup> Not suppressed or controlled in California		
<sup>2</sup> Not controlled in California		
Weeds controlled with AX PENDI H2O applied at 4 pints (1.9 lb ai) per acre or more		
Grass Weeds		
Annual bluegrass	Junglerice	Sprangletop, red
Browntop panicum	Lovegrass	Swollen fingergrass
Grass, Guinea <sup>2</sup>	Sprangletop, Mexican	
Broadleaf Weeds		
Dodder†	Morning glory**	Puncturevine
Fiddleneck	Prostrate, knotweed	
† For optimum dodder control, use the highest labeled rate of this product specified in the specific crop.		
**Suppression		
<sup>2</sup> Not controlled in California		

#### Mode of Action

AX PENDI H2O is a meristematic inhibitor that interferes with the plant's cellular division or mitosis. This and/or other products with the meristematic inhibiting mode of action may not effectively control naturally occurring biotypes of some of the weeds listed on this label. A weed biotype is a naturally occurring plant within a given species that has a slightly different, but distinct, genetic makeup from other plants. Other herbicides with the meristematic inhibiting mode of action include other dinitroaniline herbicides, such as trifluralin. If naturally occurring meristematic inhibiting resistant biotypes are present in a field, apply a tank mix of this product and/or any other meristematic inhibiting mode of action herbicide or apply sequentially with an appropriate-registered herbicide having a different mode of action to ensure control.

#### RESISTANCE MANAGEMENT

For resistance management, this product is a Group 3 herbicide. Any weed population may contain or develop plants naturally resistant to this product and other Group 3 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance-management strategies should be followed.

#### Weed Management

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

- Rotate the use of this product or other Group 3 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in the field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species



normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.

- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact AXION AG PRODUCTS, LLC at [855-466-8428 or 844-425-8488 or other appropriate telephone number].

### Management of Resistant Biotypes

Since the occurrence of resistant weeds cannot be determined until after product use and scientific confirmation, manufacturer is not responsible for any losses that may result from the failure of this product to control resistant weed biotypes.

The following good agronomic practices are recommended to reduce the spread of resistant biotypes:

- If a naturally occurring resistant biotype is present in your application site, this product should be tank-mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control.
- Cultural and mechanical control practices (e.g. crop rotation or tillage) may also be used as appropriate.
- Scout treated application site after herbicide applications and control escaping weeds including resistant biotypes before they set seed.
- Thoroughly clean equipment before leaving fields known to contain resistant biotypes.
- Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to these Mode of Actions have been found in your region. Do not assume that each listed weed is being controlled by multiple mechanisms of action. Co-formulated active ingredients are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredients in this product.

### Integrated Pest (Weed) Management

This product may be integrated into an overall weed pest management strategy whenever the use of an herbicide is required. Practices known to reduce weed development (tillage, crop competition) and herbicide use (weed scouting, proper application timing, banding) should be followed wherever possible. Consult local agricultural and weed authorities for additional IPM strategies established for your area.

### Application Rate

Use rates for AX PENDI H2O when used alone, in tank mix, or for sequential applications are given in **Crop-specific Information**. Use rates of this product vary by soil texture and organic matter. See **Table 3** for soil texture groupings used in this label.

**Table 3. Soil Texture Groups**

COARSE	MEDIUM	FINE
Sands Loamy sands Sandy loams	Sandy clay loams* Sandy clays Loams Silt loams Silt Silt	Silty clay loams* Silty clays Clay loams Clays
* These soils are sometimes considered transitional soils and may be classified as either medium- or fine- textured soils.		

COARSE	MEDIUM	FINE
If this product is used on <b>peat and muck soils</b> , weed control may be inconsistent and/or reduced. Use maximum labeled use rate allowed in the specific crop.		

### Application Timings

AX PENDI H2O will provide most effective weed control when applied by ground or aerial equipment and subsequently incorporated into soil by rainfall, sprinkler irrigation, or mechanical tillage before weed seedling germination. This product can also be applied through chemigation, including flooded basin irrigation systems. This product may be applied preplant surface, preplant incorporated, surface incorporated, preemergence, early postemergence, postemergence incorporated (CULTI-SPRAY), or by layby treatment. See **Crop-specific Information** for specific application directions and restrictions by crop.

**Preplant Surface Application:** For use in minimum-tillage or no-tillage production systems, apply alone or in tank mixes within 45 days of planting. When making early preplant surface application (15 to 45 days before planting), use a tank mix of AX PENDI H2O with other herbicides registered for use in a given crop, or follow this application with another postemergence herbicide application. Rainfall or sprinkler irrigation after application is required to move this product into the upper soil surface where weed seeds germinate.

**Preplant Incorporated Application:** Apply and incorporate into the upper (1 to 2 inches) soil surface within 60 days of planting. Use an implement capable of giving uniform incorporation; two-pass incorporation usually results in a more consistent result.

**Surface Incorporated Application:** Uniformly apply as broadcast or banded treatment to soil surface underneath established trees and/or in ground areas between trees rows. Incorporate into upper (1 to 2 inches) soil surface using rainfall, sprinkler irrigation, or shallow mechanical incorporation using an implement capable of giving uniform incorporation; two-pass mechanical incorporation usually results in a more consistent result.

**Preemergence Surface Application:** Broadcast treatment uniformly to the soil surface at planting and up to 2 days after planting. Rainfall, sprinkler irrigation, or shallow mechanical incorporation after application is required to move this product into the upper soil surface where weed seeds germinate. If adequate rainfall or irrigation does not occur, or soil crusting or soil compaction has occurred, and weed seedling emergence begins, a shallow cultivation or rotary hoeing or light harrow will improve performance. Make sure that crop seeds are below the tilled soil surface area.

**Early Postemergence Application:** AX PENDI H2O must be applied before weed seedling emergence or in a tank mix with products that control the emerged weeds. Refer to **Crop-specific Information** for specific postemergence application instructions by crop.

**Postemergence Incorporated Application (CULTI-SPRAY):** Prior to application, crop must be cultivated in such a manner as to throw at least 1 inch of soil over the base of the crop plants. This will prevent direct contact of AX PENDI H2O and the zone of brace root formation. This product must be applied broadcast with a ground sprayer when crop is at least 4 inches tall up to layby. Use drop nozzles if crop foliage will prevent uniform coverage of the soil surface within the rows. Thoroughly and uniformly incorporate treatments of this product into the soil:

1. With a sweep-type or rolling cultivator set to provide thorough incorporation in the top 1 inch of soil, or
2. With adequate overhead irrigation water or rainfall. See **Crop-specific Information (Corn and Grain Sorghum)** for more details on (CULTI-SPRAY) application.

**Layby Application:** Apply directly to the soil between rows as a directed spray after the last normal cultivation (layby). See **Crop-specific Information** for more details on layby application.

**Split Application:** Apply AX PENDI H2O preplant incorporated within 60 days of planting and followed by a preemergence application at planting or up to 2 days after planting. The total amount of this product

applied per acre per year cannot exceed the highest labeled rate for any given soil type. See **Crop-specific Information** for more details on split applications.

**Fall Application:** Use AXPENDI H2O in fall application programs in certain crops. See **Crop-specific Information** for details on fall application timing.

### Spraying Instructions

AX PENDI H2O may be applied using water or sprayable fluid fertilizer (including straight 32-0-0 or 28-0-0) as the spray carrier. Additionally, this product may be impregnated on dry bulk fertilizer. Sprayable fluid fertilizer as a carrier is not for use after crop emergence unless the typical fertilizer burn symptoms on the crop are acceptable.

### Aerial Application

Uniformly apply in 5 or more gallons of water per acre. Exercise caution to minimize drift. Spray drift can cause injury to sensitive crops. Use a flagman or an automatic mechanical flagging unit on the aircraft to avoid overlapping and possible crop injury.

### Restriction – Aerial Applications

- **DO NOT** apply during periods of gusty winds or when wind conditions favor drifting.

### Ground Application (Broadcast)

Uniformly apply with properly calibrated ground equipment in 10 or more gallons of water per acre or 20 or more gallons of liquid fertilizer per acre. Use sprayers equipped with appropriate nozzles that provide uniform and accurate spray distribution and minimize drift. Keep the bypass line on or near the bottom of the tank to minimize foaming. Nozzle and in-line screens must be no finer than 50 mesh. Application of this product during periods of gusty winds may result in uneven applications.

If liquid fertilizer/herbicide(s) mixture separates in the spray tank, clogged equipment and uneven application can result. Always predetermine the compatibility of this product alone or with other herbicides based on the following compatibility “**jar test**”:

1. Add 1 pint of fertilizer to a quart jar.
2. Add 1 to 4 teaspoon(s) of the Dry Flowable (DF), Wettable Powder (WP), Aqueous Solution (AS), Flowable (F) or Liquid (L) formulation (depending on mixing ratio required) to the liquid fertilizer. The number of teaspoons of the formulation to add can be determined by the following formula:

$$\frac{\text{lbs or pts of product/acre}}{\text{gallons of fertilizer/acre}} \times 11.4 = \text{number of teaspoons of herbicide to add to 1 pint of fertilizer}$$

3. Close the jar and agitate until the herbicide(s) are evenly dispersed in the liquid fertilizer. If the materials do not disperse well, it may be necessary to slurry the chemicals in water before adding to the fertilizer.
4. After dispersing the materials, add appropriate number of teaspoons of this product to the jar and shake well. Add water soluble concentrate herbicides to the mixture last and agitate. Let the mixture stand for 30 minutes and then observe the results. Look for signs of separation: an oily layer or globules, sludge, flakes or other precipitates.
5. Evaluate compatibility.
  - a. If the herbicide(s) and liquid fertilizer mixture does not separate, use this mixture in your spray tank.
  - b. If the mixture separates but mixes readily with shaking, the mixture can be used provided that good agitation is maintained in the spray tank.
  - c. If separation of the mixture occurs and agitation does not correct this problem, a compatibility agent is needed.
6. If the need for a compatibility agent is demonstrated, the following procedure is recommended: Using a clean quart jar, repeat step 1 above and add 1/2 teaspoon of the compatibility agent to the liquid fertilizer. Mix well and repeat steps 2, 3 and 4. If separation or precipitation occurs with the compatibility agent, **DO NOT** use this product with that specific liquid fertilizer.

### Ground Applications (Band)

Uniformly apply the broadcast equivalent rate and volume per acre. To determine these:

$$\frac{\text{Band Width in Inches}}{\text{Row Width in Inches}} \times \text{Broadcast Rate per Acre} = \text{Band Rate per Acre}$$

$$\frac{\text{Band Width in Inches}}{\text{Row Width in Inches}} \times \text{Broadcast Volume per Acre} = \text{Band Volume per Acre}$$

### Ground Applications (Dry Bulk Fertilizer)

Apply this product /dry bulk fertilizer mixtures only with ground equipment. Dry fertilizer blends containing mixtures of ammonium nitrate or limestone may be impregnated with this product. A minimum of 200 pounds of impregnated dry bulk fertilizer, excluding the weight of ammonium nitrate or limestone, must be applied per acre.

Use the following formula to determine the amount (in pints) of this product to be impregnated on a ton of dry bulk fertilizer based on the rate of fertilizer to be applied per acre:

$$\frac{2000}{\text{Pounds of Dry Fertilizer per Acre}} \times \text{Pints of AX PENDI H2O (Rate per Acre)} = \text{Pints of AX PENDI H2O per Ton of Fertilizer}$$

To impregnate this product on bulk fertilizer, use a closed rotary-drum mixer or other commonly used dry bulk fertilizer blender equipped with suitable spray equipment. Spray nozzles must be placed to provide uniform coverage of this product onto the fertilizer during mixing.

Apply this product /dry bulk fertilizer mixture with an accurately calibrated dry fertilizer spreader. The AX PENDI H2O /dry bulk fertilizer mixture must be spread uniformly on the soil surface.

### Restrictions – Ground Applications

- **DO NOT** apply this product postemergence in liquid fertilizers.
- **DO NOT** impregnate this product onto coated ammonium nitrate or limestone because these materials will not absorb the herbicide.

### Chemigation Applications via Sprinkler Irrigation Systems

This product may be applied as a chemigation treatment through sprinkler irrigation systems. Refer to **Crop-specific Information** sections for individual crops.

Apply this product only through a sprinkler irrigation system of the following type: center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move. Apply this product only through a drip irrigation system that has emitters above the soil surface.

Uniform distribution of irrigation water treated with this product is the sole responsibility of the applicator and is required to avoid crop injury, lack of herbicide effectiveness or illegal pesticide residues in the crop. If you have any questions about calibration, you should contact state extension service specialists, equipment manufacturers, or other experts.

The system must be properly calibrated (with water only) to ensure that the amount of this product applied corresponds to the specified rate. Apply this product in 1/2 to 3/4 inches of water during the first sprinkler set (use at least 1 inch of water in the states of Texas, New Mexico and Oklahoma). Axion Ag Products, LLC recommends that this product is mixed with water at a 1:1 ratio in the injection nurse tank to assist with product flowability. Maintain agitation in the injection nurse tank to keep a uniform herbicide suspension during application. When application is complete, flush the system with water.

### Chemigation Instructions (for low volume micro sprinklers)

Output of low volume sprinkler equals 4 to 50 gallons per hour (gph) per emitter. Point of application must be above ground.

Irrigation system should run a sufficient amount of time prior to injection of this product to have all emitters functioning properly. After system is operating properly, length of injection should be such that at one period of time during the injection, the first and last emitters in the system contain water treated with this product. Add this product to the supply tank already filled with the volume of water required for the injection period. Maintain proper agitation in injection tank. This product should be mixed in clean water and injected down-line from filters. Following injection of this product, system should be flushed for a period of time sufficient to clear the line of this product. (If application of this product is made during a normal irrigation cycle, injection should be made during the last stage.)

### **Chemigation Calibration (for low volume micro sprinklers)**

Calculation of use rate is based on wetted area around emitters - not on tree acres. To determine correct amount of this product, use the following formula:

1. Treated area per each emitter = A  
 $A = 3.14 \times (\text{radius} \times \text{radius})$
2. The area in square feet wet in each acre = B  
$$B = \frac{A \times \text{emitters/acre}}{144}$$
3. The total area (in square feet) wet by your system = C  
 $C = B \times \text{acres covered by system.}$
4. Rate per treated acre of this product  
(based on length of control desired) = R

Amount of this product to inject = S

$$S = \frac{C}{43,560} \times R = \text{Quarts of this product}$$

### **Example:**

If the average distance from emitter to perimeter of wetted area measured one inch below soil surface is 13 inches, then

$$A = 3.14 \times (13" \times 13"),$$

and  $A = 530.7$  square inches.

If there are 300 emitters per acre, then

$$B = \frac{530.7 \times 300}{144}$$

and  $B = 1105.6$  square feet wetted per acre.

If the system covers 20 acres, then

$$C = 1105.6 \text{ square feet per acre} \times 20 \text{ acres and}$$
$$C = 22,112 \text{ square feet wetted by system.}$$

If the desired application rate per treated acre is 2 quarts of this product, then

$$S = \frac{22,112}{43,560} \times 2$$

and  $S = 1$  quart of this product should be injected into the system.

### **Chemigation Systems Connected to 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 backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, 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. All chemigation systems connected to public water systems must also follow restrictions listed in the preceding section titled **Chemigation**.

#### **Restrictions for Chemigation**

- **DO NOT** apply this product via chemigation to crops unless specified in **Crop-specific Information** section.
- **DO NOT** apply this product through any other type of sprinkler irrigation system.
- **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.
- **DO NOT** connect an irrigation system 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.
- Tail water (runoff water) from chemigation that contains this product must be recirculated and/or contained in the field in a cistern or holding reservoir from the initial application and/or used only on adjacent, approved crops for which this product is registered for this type of application.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. It 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.
- The sprinkler chemigation 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. In addition, 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.
- The sprinkler chemigation 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.
- The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

#### **Application via Flood, Flooded Basin, or Gravity Flow Irrigation Systems**

AX PENDI H2O may be applied via flood, flooded basin, or gravity flow irrigation systems, but only to the following crops: alfalfa, bearing and non-bearing fruit and nut trees, bearing and non-bearing olive trees, bearing and non-bearing vineyards.

#### **Use Instructions and Restrictions for Flood, Flooded Basin, and Gravity Flow Irrigation**

1. This product may be applied through flood, flooded basin, or gravity flow irrigation systems designed to uniformly distribute irrigation water along the soil surface. Solid set systems using tall riser for overhead application are excluded.
2. Follow all label directions for this product regarding rates per acre, timing of application, and crop-specific restrictions and precautions.
3. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.



4. Mix this product with water at a 1:1 ratio in the injection nurse tank to assist with product flowability. Maintain agitation in the injection nurse tank to keep a uniform herbicide suspension during application. When application is complete, flush the system with water.
5. Systems using a gravity-flow pesticide dispensing system must meter the pesticide in the water at the head of the field downstream of a hydraulic discontinuity, including a drop structure or weir box, to decrease potential for water source contamination from backflow water.
6. Tail water (runoff water) from flood, flooded basin, or gravity flow irrigation that contains this product must be recirculated and/or contained in the field in a cistern or holding reservoir from the initial application and/or used only on adjacent approved crops for which this product is registered for this type of application.
7. Systems using a pressurized water and pesticide injection system must meet the following requirements:
  - The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located in the irrigation pipe to prevent water source contamination from backflow.
  - The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent flow of fluids back toward the injection pump.
  - 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 automatically or manually shut down.
  - The system must contain a functional interlocking control to automatically shut off the pesticide injection pump when the water pump stops.
  - The irrigation pipe or water pump must include a functional pressure switch, which will stop the pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
  - Systems must use a metering pump, including a positive displacement injection pump (e.g. diaphragm pump) of effective design and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
  - Any alternative to the above safety devices must conform to the list of EPA-approved alternative devices.
8. Regularly measure the flow in the field to ensure the correct amount of this product is metered into irrigation water and also regularly monitor to ensure treated water is uniformly distributed across the field. Flow rates through metering devices and distribution of this product can vary with water temperature and speed of water flow across the field.
9. Uniform distribution of irrigation water treated with this product is the sole responsibility of the applicator and is required to avoid crop injury, lack of herbicide effectiveness, or illegal pesticide residues in the crop.
10. For questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.

#### **Restriction - Flooded Basin Irrigation**

- **DO NOT** connect an irrigation system used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

#### **MANDATORY SPRAY DRIFT**

##### **Aerial Applications**

- **DO NOT** release spray at a height greater than 10 feet above the crop canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 15 mph at the application site. If the wind speed is greater than 10 mph, the boom length must be 65% of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- Applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.

- **DO NOT** apply during temperature inversions.

#### **Ground Boom Applications**

- Applicators must only apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 15 mph at the application site.
- **DO NOT** apply during temperature inversions.

#### **Boom-less Ground Applications**

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1) for all applications.
- **DO NOT** apply when wind speeds exceed 15 mph at the application site.
- **DO NOT** apply during temperature inversions.

### **SPRAY DRIFT ADVISORIES**

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

#### **IMPORTANCE OF DROPLET SIZE**

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

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

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

#### **Controlling Droplet Size – Aircraft**

- **Adjust Nozzles** - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

#### **Boom-less Ground Applications**

- Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

#### **Handheld Technology Applications**

- Take precautions to minimize spray drift.

#### **BOOM HEIGHT – Ground Boom**

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

#### **RELEASE HEIGHT – Aircraft**

Higher release heights increase the potential for spray drift.

#### **SHIELDED SPRAYERS**

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

#### **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

#### **TEMPERATURE INVERSIONS**

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



## WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY OR WINDLESS CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

## Spray Additives

Spray adjuvants have little or no influence on performance of AX PENDI H2O when applications are made before weed emergence. However, several tank mixes with this product require adjuvants to improve burndown of emerged weeds. Therefore, surfactants, liquid fertilizer (28%, 30%, or 32% UAN (urea ammonium nitrate) or AMS (ammonium sulfate), or crop oil concentrate (COC) may be used with tank mixes of this product applied preplant, preemergence, or early postemergence to the crop. Follow the adjuvant directions on the tank mix partner's label. The adjuvants must contain ingredients accepted by the Environmental Protection Agency.

## Tank Mixing Information

AX PENDI H2O may be applied in a tank mix or a sequential application with other herbicides registered for use in a given crop. Refer to the companion label for weeds controlled in addition to AX PENDI H2O alone.

When using tank mixtures or sequential applications with this product, always read the companion product label(s) to determine the specific use rates by soil types, weed species, and weed or crop growth stage. In addition, follow all precautions and restrictions including state and local use restrictions that may apply to specific products. Always follow the most restrictive label.

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

## Tank Mixes with Other Products

Always perform a mixing test to check the compatibility of this product with all potential tank mix partners.

## Mixing Instructions

1. Fill tank 1/2 to 3/4 full with clean water or liquid fertilizer and agitate. Prior to mixing this product or tank mixtures of this product in liquid fertilizer, refer to appropriate label sections for specified uses in liquid fertilizer, application instructions, and compatibility determinations.

**Note:** This product will not mix in high salt formulation fertilizers, such as 10-34-0. When utilizing high salt formulation fertilizers as the spray carrier, use one of the following:

- a. Pre-slurry this product in water prior to adding to tank; use 1:1 ratio of water to this product.
- b. Add water to fertilizer solution prior to adding this product. The amount of water should be equal to or greater than the amount of this product to be used.

2. **AX PENDI H2O Alone**

When using this product alone, add this product to the partially filled tank while agitating and then fill the remainder of the tank with water or liquid fertilizer.

3. **AX PENDI H2O Tank Mixes**

Add the tank mixture ingredients in the order listed below prior to adding this product (for tank mixtures with 2,4-DB, paraquat or glyphosate, see mixing instructions at the end of this section):

- a. **Wettable Powder (WP) formulations** - Make a slurry of the WP in water (1:2 ratio). Add the slurry slowly into the partially filled tank while agitating.
- b. **Dry Flowable (DF)/Water Dispersible Granule (WDG) formulations** - Add the granules to the partially filled tank while agitating. Make a slurry of the granules in water before adding to liquid fertilizer.
- c. **Flowable (F) formulations** - Add the F formulation to the partially filled tank while agitating.
- d. Add AX PENDI H2O to the partially filled tank while agitating.

- e. **Water Soluble Concentrate (WSC) formulations** - Add the WSC formulation to the partially filled tank while agitating.
- f. **Emulsifiable Concentrate (EC) formulations** - Add the EC formulation to the partially filled tank while agitating.

Fill the remainder of the tank with water or liquid fertilizer while agitating.

4. Thorough and continuous sprayer-tank agitation must be maintained during mixing and spraying of this product. If the spray mixture is allowed to settle for any period of time, thorough agitation is essential to resuspend the mixture before spraying is resumed. Continue agitation while spraying.

### **Cleaning Spray Equipment**

Clean application equipment thoroughly by using a strong detergent or commercial spray cleaner according to the manufacturer's directions; then triple rinse the equipment before and after applying this product.

### **Use Precautions**

- This product will not control established weeds. Destroy emerged weeds prior to application.
- This product is most effective in controlling weeds mechanically incorporated or when incorporated into the weed germination zone by adequate rainfall or overhead irrigation after application.
- When using tank mixtures with this product, always read the companion product label(s) to determine the specific use rates by soil types, weed species, and weed or crop growth stage. In addition, follow all precautions and restrictions including state and local use restrictions that may apply to specific products. Follow all precautions and restrictions on the labels of all products applied in combination with this product. Always follow the most restrictive label.
- In the event of a crop loss because of adverse weather conditions or other reasons, any crop registered for a preplant incorporated **application of this product can be replanted without adverse effects the same year (see Crop-specific Information for exceptions)**. If replanting is necessary, **DO NOT** work the soil deeper than the treated zone.
- Refer to **Crop-specific Information** for crop-specific preharvest intervals and feeding and grazing restrictions.

### **Rotational Crop Restrictions**

- Use of this product in accordance with label directions is expected to result in normal growth of rotational crops in most situations; however, various environmental and agronomic factors, including arid conditions, make it impossible to eliminate all risks associated with the use of this product and, therefore, rotational crop injury is always possible. Soil characteristics and environmental conditions which may contribute to crop stress that may be accentuated by the use of this product include: coarse soils, compaction, high salinity, eroded knolls/hilltops, cold and/or wet soils, drought, and heavy rainfall soon after application.
- When this product is used in tank mix or sequential combinations, refer to label of other herbicides for additional rotational crop restrictions.
- Restrictions for rotational cropping after the use of this product depend on the application use rate of this product in the primary crop. The user must thoroughly read the following restrictions to determine the rotational crops for the specific situation, according to application use rate.

### **Rotational Crop Restrictions following AX PENDI H2O Application to Field and Row Crops**

#### **1. Application Rate less than or equal to 4 pints (1.9 lb ai) per acre**

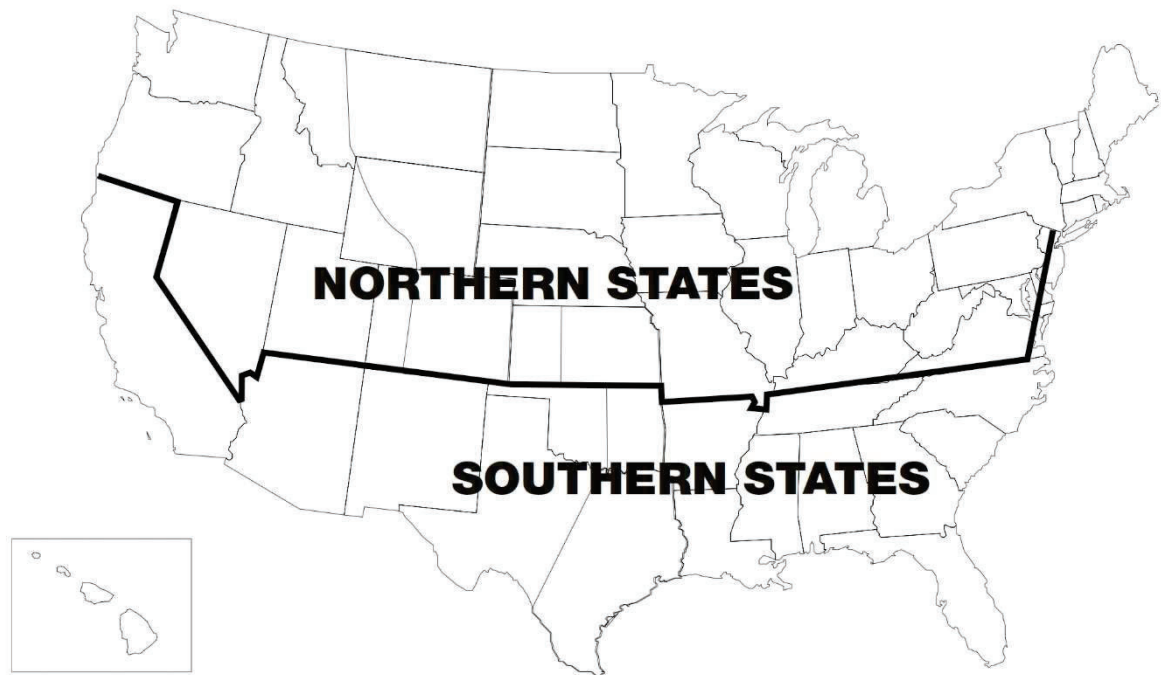
- a. Crops labeled for preplant incorporated application may be planted the same season this product was applied.
- b. **Sugar beets, Red Beets and Spinach:** To avoid crop injury, **DO NOT** plant sugar beets, red beets or spinach for 12 months following a spring application of this product or 14 months following a fall application of this product.
  - If rainfall or irrigation was not sufficient to produce a crop, these crops must not be planted for 18 months following a spring application of this product or 20 months following a fall application of this product.

- Plow the land using a moldboard plow to a depth of 12 inches to ensure thorough mixing of soil prior to planting sugar beets, red beets or spinach.
- c. Proso Millet, Sorghum (Milo) and Annual or Perennial grass crops or mixtures**  
Proso millet, sorghum (milo) and annual or perennial grass crops or mixtures must not be planted for 10 months after a spring application of this product or 12 months after a fall application of this product, except in the following conditions:
- In the states of Minnesota, North Dakota and South Dakota, these crops must not be planted for 18 months following a spring application of this product or 20 months following a fall application of this product.
  - If rainfall or irrigation was not sufficient to produce a field or row crop, to avoid the possibility of crop injury in areas that receive less than 20 inches of rainfall or irrigation to produce a crop, these crops must not be planted for 18 months following a spring application of this product or 20 months following a fall application of this product.
- d. Wheat and Barley in Colorado, Idaho, Kansas, Montana, Nebraska Nevada, Oregon, Utah, Washington and Wyoming**  
Wheat and barley may be planted 4 months after an application of this product applied at rates less than or equal to 3.2 pints (1.52 lb ai) per acre with normal rainfall and/or irrigation. Following harvest of furrow- irrigated crops, thoroughly mix the soil by plowing or deep disking to minimize the potential for herbicide carryover to the following crop. For application rates of this product greater than 3.2 pints (1.52 lb ai) per acre but less than or equal to 4 pints (1.9 lb ai) per acre, follow the wheat and barley crop rotation guidelines listed in Section e. **Wheat and Barley in All Other States.**
- e. Wheat and Barley in All Other States**  
Wheat and barley may be planted 4 months after an application of this product, except under the following conditions:
- If less than 12 inches of rainfall or overhead irrigation was received between application and rotational crop planting, wheat must not be planted before 12 months after a spring application of this product or 14 months after a fall application of this product.
  - In dryland areas and/or areas where irrigation is necessary to produce the crop treated with this product, **DO NOT** plant winter wheat or barley as a follow crop if crop failure/destruction occurs and land is fallowed during the summer.
- f. All Other Rotational Crops Not Specifically Addressed Above**  
In dryland areas and/or areas where irrigation is necessary to produce the crop treated with this product, **DO NOT** plant winter wheat or barley as a follow crop if crop failure/destruction occurs and land is fallowed during the summer.
- If rainfall or irrigation was not sufficient to produce a crop, delay planting for 18 months following a spring application of this product or 20 months following a fall application of this product.
- 2. Application Rate greater than 4 pints (1.9 lb ai) per acre**  
In the growing season following application of this product to field and row crops at greater than 4 pints (1.9 lb ai) per acre, plant only those crops for which this product is labeled for preplant incorporated treatment or crop injury may occur. **DO NOT** plant other crops for 24 months.

### **Rotational Crop Restrictions following AX PENDI H2O Application to Orchard, Grove and Vineyard Crops**

In the growing season following application of this product to bearing fruit and nut trees, olive trees, or grapes, plant only those crops for which this product is labeled for preplant incorporated treatment or crop injury may occur. **DO NOT** rotate to other crops (except for nut crops, fruit trees, olive trees, or grapes) for 24 months following an application of this product to bearing fruit or nut trees, olive trees, or grapes.

## Use Area



**Note:** Southern States includes Hawaii

### CROP-SPECIFIC INFORMATION

**Crop Injury.** AX PENDI H2O herbicide use may result in crop injury, loss or damage to certain crops under a number of conditions, including but not limited to agronomic, cultural, mechanical, and environmental. Numerous risks of loss or damage to certain crops may be associated with the use of this product even when directions for use are followed completely. The user or grower should take all such risks into consideration before deciding to apply the product. Axion recommends testing on a small portion of the target crop to determine if damage is likely to occur. Each grower who is considering the product for such use should test this product to determine its suitability. A grower should use this product only to the extent that, in his sole opinion, the benefit of AX PENDI H2O use outweighs the potential injury to the grower's crop.

In addition, many factors can affect crop growth and/or yield, including but not limited to insects, diseases, weed competition, poor seed quality, improper planting depth, mechanical cultivation, poor weather (including freezing or excessive wind, rain, heat, or cold), lack of or excessive moisture, crusting, fertility, or hardpans. Risk of loss or damage to crops may be associated with the use of AX PENDI H2O and contribute to poor stands because of failure of crop to emerge, swelling of roots or other below-ground plant parts, less vigorous plant growth and development, and reduction in yield potential. AX PENDI H2O may also cause injury to sensitive rotational crops.

### ALFALFA (Grown for Forage, Hay, or Seed)

**Application Methods:** Apply AX PENDI H2O by ground; air; chemigation; flood, flooded basin, and gravity flow irrigation systems; or on dry bulk fertilizer.

#### Use Method, Rate, and Timing

**Established Alfalfa for Forage/Hay and Seed Production.** Apply to established alfalfa grown for forage or hay or seed production (defined as alfalfa planted in the fall or spring which has gone through a first

cutting/ mowing). Apply in a single application or in sequential applications. Uniformly apply AX PENDI H2O at a broadcast rate of 1.1 to 4.2 quarts (1.05 to 4 lb ai) per acre before weed germination. Application can be made in the fall after the last cutting/mowing, during winter dormancy, in the spring, or between cuttings. Apply before alfalfa reaches 6 inches in regrowth.

**Established Alfalfa Grown for Seed Production.** Apply to established alfalfa grown for seed production (defined as alfalfa planted in the fall or spring which has gone through a summer season of cutting/mowing). Uniformly apply at a broadcast rate of 1.1 to 4.2 quarts (1.05 to 4 lb ai) per acre prior to weed emergence in one of the following ways:

- Apply to dormant established alfalfa.
- Apply before alfalfa exceeds 10 inches in height after first mowing/beating.
- When the alfalfa reaches 10 inches in height or if the alfalfa has been mowed/beaten 2 or more times, AX PENDI H2O must be applied with drop nozzles directing the spray so that there is little to no contact with the foliage.

**Seedling Alfalfa.** Apply to seedling alfalfa grown for forage or hay or seed production (defined as alfalfa planted in the fall or spring which has not gone through a cutting/ mowing/seed harvest). Uniformly apply AX PENDI H2O at a broadcast rate of 1.1 to 2.1 pints (0.52 to 1 lb ai) per acre prior to weed germination. Application can be made when seedling alfalfa has reached the second trifoliate growth stage. Apply before alfalfa reaches 6 inches in growth.

**Alfalfa Stand Establishment.** Apply AX PENDI H2O at a broadcast rate of 1.0 to 1.5 pints (0.48 to 0.71 lb ai) per acre as a preplant incorporated or preemergence treatment in direct-seeded alfalfa. Some crop stand reduction and stunting may occur with this use of this product; however, reduced weed competition will allow establishment of a quality stand. Use lower rates on coarse-texture soil or in lower rainfall areas (receiving less than 20 inches of rainfall and irrigation a year).

- **Preplant Incorporated.** Uniformly incorporate this product into the top 2 to 3 inches of the final seedbed before planting.
- **Preemergence.** Apply directly after drill seeding alfalfa. Alfalfa should be planted into a seedbed that is firm and free of clods.

### **Chemigation Application**

AX PENDI H2O may be applied through sprinkler irrigation systems. Follow all directions, special instructions, and restrictions about chemigation in the Spraying Instructions section of this label.

### **Flood, Flooded Basin, and Gravity Flow Irrigation Systems**

AX PENDI H2O may be applied in flood, flooded basin, and gravity flow irrigation systems. Follow all directions, special instructions, and restrictions about flood, flooded basin, and gravity flow irrigation systems in the Spraying Instructions section of this label.

### **Precautions**

- Some stunting and chlorosis of the alfalfa may occur with postemergence applications.
- Application made after alfalfa exceeds 6 inches in height may result in poor weed control because of possible reduced spray coverage to the soil.

### **Restrictions**

- **DO NOT** apply more than 4.2 quarts (4 lb ai) per acre per application.
- For multiple applications, **DO NOT** apply more than 4.2 quarts (4 lb ai) per acre per year.
- **Preharvest Interval (PHI):**
  - Alfalfa forage and hay - 14 days
  - Alfalfa seed - 90 days

## ARTICHOKE

AX PENDI H2O may be applied by ground or air.

### Use Method, Rate, and Timing

With a single application, uniformly apply this product up to 3.0 pints (1.42 lb ai) per acre as a broadcast spray to the soil surface at least 60 days before harvest, or uniformly apply 3.1 to 8.2 pints (1.47 to 3.89 lb ai) per acre as a broadcast spray to the soil surface at least 200 days before harvest. Application must be made pretransplant to artichoke, at no less than 1 to 2 days prior to transplanting.

### Precaution

- **DO NOT** apply postemergence over the top of or to foliage of artichoke because severe injury may occur.

### Restrictions

- **DO NOT** apply more than 8.2 pints (3.89 lb ai) per acre per application.
- **DO NOT** apply more than 8.2 pints (3.89 lb ai) per acre per year.
- **DO NOT** make more than one application per year.
- **Preharvest Interval (PHI):**
  - For applications up to 3.0 pints (1.42 lb ai) per acre per season - 60 days.
  - For application at 3.1 to 8.2 pints (1.47 to 3.89 lb ai) per acre per season - 200 days.
- **DO NOT** feed forage or graze livestock in treated fields.

## ASPARAGUS

**Application Methods:** Apply by ground or air.

### Use Method, Rate, and Timing

Apply AX PENDI H2O only to established asparagus or to newly planted crown asparagus. When applying to newly planted crown asparagus, assure crowns are fully covered with 2 to 4 inches of soil.

With a single application, uniformly apply to asparagus up to 8.2 pints (3.89 lb ai) per acre as a broadcast spray to the soil surface at least 14 days before the first spear harvest or after seasonal harvest is complete. Application must be made before spear emergence or remove emerged spears before making the application. If asparagus is grown on sandy soils, **DO NOT** apply AX PENDI H2O at more than 2.4 pints (1.14 lb ai) per acre.

### Precaution

- **DO NOT** apply postemergence over the top of emerged spears or severe injury may occur.

### Restrictions

- **DO NOT** apply to newly seeded asparagus.
- **DO NOT** apply more than 8.2 pints (3.89 lb ai) per acre per application.
- **DO NOT** apply more than 8.2 pints (3.89 lb ai) per acre per season.
- **DO NOT** make more than 1 application per year.
- **Preharvest Interval (PHI):** 14 days
- **DO NOT** feed forage or graze livestock in treated fields.
- **DO NOT** apply by chemigation methods.

## BEARING AND NON-BEARING FRUIT AND NUT TREES

AX PENDI H2O may be applied in the following individual crops within the fruit tree and tree nut crop groups:

**Citrus Fruit Crop Group 10-10:** Australian desert lime; Australian finger-lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; mount white lime; New Guinea wild lime; orange, sour;



orange, sweet; pummelo; Russell River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin); tangor; trifoliate orange; uniq fruit; cultivars, varieties, and/or hybrids of these.

**Tree Nut Crop Group 14-12:** African nut-tree; almond; beechnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; Cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; coquito nut; dika nut; ginkgo; Guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut; mongongo nut; monkey-pot; monkey puzzle nut; Okari nut; Pachira nut; peach palm nut; pecan; pequi; Pili nut; pine nut; pistachio; Sapucaia nut; tropical almond; walnut, black; walnut, English; yellowhorn; cultivars, varieties, and/or hybrids of these.

**Pome Fruits Crop Group 11-10:** Apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these.

**Stone Fruits Crop Group 12-12:** Apricot; apricot, Japanese; capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; Jujube, Chinese; nectarine; peach; plum; plum, American; plum, beach; plum, Canada; plum, cherry; plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; sloe; cultivars, varieties, and/or hybrids of these.

**Other Fruit Trees:** Olive, Pomegranate, Date palm\*, Fig\* (non-bearing only)

\*Not for use in California.

**Application Methods:** Apply by ground, chemigation, or flood, flooded basin, and gravity flow irrigation systems.

#### **Use Method, Rate, and Timing**

Apply AX PENDI H2O either in a single application or sequentially with an interval of 30 days or more. Apply between 2.0 to 6.3 quarts (1.9 to 6 lb ai) per acre in citrus, nut trees, and non-bearing date palm or fig trees and between 2.0 to 4.2 quarts (1.9 to 4 lb ai) per acre in olive, pome, stone fruit, and pomegranate trees depending on the grower's weed control program, level of weed infestation, and desired use strategy.

#### **Ground Application (Bearing)**

AX PENDI H2O may be applied surface incorporated or (surface) preemergence.

Apply AX PENDI H2O broadcast or banded using ground equipment before weed germination. Apply spray directly to the ground beneath trees and/or in areas between rows. Contact by the spray mixture with leaves, shoots, or buds may cause injury or result in illegal pesticide residues on fruit.

#### **Ground Application (Non-bearing)**

AX PENDI H2O may be applied for preplant incorporated, preplant surface, surface incorporated, or preemergence weed control in several non-bearing fruit and nut tree crops. This product may be used before or after transplanting non-bearing crops.

**Preplant Surface.** Before transplanting, uniformly apply with ground equipment. Avoid root contact with treated soil when placing transplants into the hole or injury may occur.

**Preplant Incorporated.** Uniformly apply AX PENDI H2O before transplanting but before weeds germinate. Incorporate this product to a depth of 1 to 2 inches. Application and incorporation must be made before transplanting to avoid mechanical injury to the crop. Avoid root contact with treated soil when placing transplants into the hole or injury may occur.

**Preemergence.** Application may be in a band or broadcast.

### Chemigation Application

AX PENDI H2O may be applied through sprinkler irrigation and drip irrigation systems. Follow all directions, special instructions, and restrictions about chemigation in the Spraying Instructions section of this label.

### Flood, Flooded Basin, and Gravity Flow Irrigation Systems

AX PENDI H2O may be applied in flood, flooded basin, and gravity flow irrigation systems. Follow all directions, special instructions, and restrictions about flood, flooded basin, and gravity flow irrigation systems in the Spraying Instructions section of this label.

### Restrictions

- For Chemigation, **DO NOT** apply AX PENDI H2O-treated irrigation water over the top of trees with leaves, buds, or fruit. Contact with leaves, shoots, or buds by spray mixture may cause injury or result in illegal pesticide residues on fruit.
- **DO NOT** apply over the top of trees with leaves, buds, or fruit.
- **DO NOT** apply by air.
- **DO NOT** apply to newly seeded nursery stock.
- **DO NOT** apply more than 4.2 quarts (4 lb ai) per acre per year in olive, pome, pomegranate, and stone fruit trees.
- **DO NOT** apply more than 6.3 quarts (6 lb ai) per acre per year in citrus and nut trees, and non-bearing date palm and non-bearing fig trees.
- **DO NOT** feed forage or graze livestock in treated groves or orchards.
- **Preharvest Interval (PHI):**
  - Citrus fruit: 1 day
  - Olive, Pome, Pomegranate, Stone fruit, and Tree nuts: 60 days

### BEARING AND NON-BEARING BUSHBERRIES AND CANEBERRIES

AX PENDI H2O herbicide may be applied in the following individual crops in bushberry and caneberry groups:

**Bushberry Subgroup 13-07B:** 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; cultivars, varieties, and/or hybrids of these.

**Caneberry Subgroup 13-07A:** Blackberry; loganberry; raspberry, black and red; wild raspberry; cultivars, varieties, and/or hybrids of these

**Application Methods:** Apply by ground; chemigation; or flood, flooded basin, and gravity flow irrigation systems.

### Use Method, Rate, and Timing

Apply AX PENDI H2O either in a single application or sequentially with an interval of 30 days or more. Apply this product at 2.0 to 6.3 quarts (2 to 6 lb ai) per acre depending on the grower's weed control program, level of weed infestation, and desired use strategy per application, not exceeding a total of 6.3 quarts (6 lb ai) per acre per year.

### Ground Application (Bearing)

AX PENDI H2O may be applied surface incorporated or (surface) preemergence.

Apply AX PENDI H2O as a broadcast or banded treatment using ground equipment before weed germination. Apply spray directly to the ground beneath the bushes or canes and/or in areas between rows or trellised rows.



AX PENDI H2O may also be broadcast applied to (wild) low-bush blueberry after pruning in fall or spring but before new growth/emergence in spring, or broadcast applied over the top of dormant bushes before new growth/emergence in spring.

#### **Ground Application (Non-bearing)**

Apply for preplant incorporated, preplant surface, surface incorporated, or preemergence weed control in non-bearing bushberries and caneberries. AX PENDI H2O may be used before or after transplanting and the establishment of the non-bearing crops.

#### **Preplant Surface**

Prior to transplanting, apply uniformly with ground equipment. Avoid allowing roots to contact treated soil when placing transplants into the hole, as injury may occur.

#### **Preplant Incorporated**

Uniformly apply AX PENDI H2O before transplanting but before weeds germinate. Incorporate to a depth of 1 to 2 inches. In order to avoid mechanical injury to the crop, apply and incorporate before transplanting. Avoid allowing roots to contact treated soil when placing transplants into the hole, as injury may occur.

#### **Preemergence**

Apply in a band or broadcast.

#### **Chemigation Application**

AX PENDI H2O may be applied through sprinkler irrigation and drip irrigation systems. Follow all directions, special instructions, and restrictions about chemigation in the Spraying Instructions section of this label.

#### **Flood, Flooded Basin, and Gravity Flow Irrigation Systems Application**

AX PENDI H2O may be applied in flood, flooded basin, and gravity flow irrigation systems. Follow all directions, special instructions, and restrictions about flood, flooded basin, and gravity flow irrigation systems in the Spraying Instructions section of this label.

#### **Precautions**

- For ground applications (bearing)
  - **DO NOT** apply over the top of bushes, canes, or primocanes with leaves, buds, or fruit because this may cause injury.
- For chemigation applications
  - **DO NOT** apply AX PENDI H2O-treated irrigation water over the top of bushes, canes, or primocanes with leaves, buds, or fruit. Contact with leaves, shoots, or buds by spray mixture may cause injury.

#### **Restrictions**

- For ground applications (bearing):
  - **DO NOT** apply over the top of (wild) lowbush blueberries if new spring growth or emergence is imminent.
- **DO NOT** apply broadcast over the top of (wild) low-bush blueberry if new spring growth/emergence is imminent.
- **DO NOT** apply by air.
- **DO NOT** apply more than 6.3 quarts (6 lb ai) per acre per application.
- **DO NOT** apply more than 6.3 quarts (6 lb ai) per acre per year.
- **DO NOT** feed forage or graze livestock in treated field or planting.
- **Preharvest Interval (PHI):** 30 days
- **DO NOT** apply to newly seeded nursery stock.

## BEARING AND NON-BEARING GRAPE

**Application Methods:** Apply by ground; chemigation; or flood, flooded basin, and gravity flow irrigation systems.

### Use Method, Rate, and Timing

AX PENDI H2O may be applied in a single application or sequentially with an interval of 30 days or more. Uniformly apply in bearing grape vineyards up to 3.2 to 6.3 quarts (3 to 6 lb ai) per acre depending on the grower's weed control program, level of weed infestation, and desired use strategy.

AX PENDI H2O may be applied anytime after fall harvest, during winter dormancy, and in spring.

### Ground Application (Bearing)

AX PENDI H2O may be applied surface incorporated or (surface) preemergence.

Apply AX PENDI H2O broadcast or banded using ground equipment before weed germination. Apply spray directly to the ground beneath grape vines and/or in areas between rows.

### Restriction

- **DO NOT** apply over the top of grape vines with leaves, buds, or fruit. Contact with leaves, shoots, or buds by the spray mixture may cause injury or result in illegal pesticide residues on fruit.

### Ground Application (Non-bearing)

AX PENDI H2O may be applied for preplant incorporated, preplant surface, surface incorporated, or preemergence weed control in non-bearing vineyards. This product may be used before or after transplanting.

**Preplant Surface.** Prior to transplanting, uniformly apply with ground equipment. Avoid root contact with treated soil when placing transplants into the hole or injury may occur.

**Preplant Incorporated.** Uniformly apply AX PENDI H2O prior transplanting but before weeds germinate. Incorporate this product to a depth of 1 to 2 inches. Application and incorporation must be made before transplanting to avoid mechanical injury to the crop. Avoid root contact with treated soil when placing transplants into the hole or injury may occur.

**Preemergence.** Application may be in a band or broadcast.

### Non-bearing Grape

#### Restrictions - Newly Transplanted and One-year-old Grapevines:

- **DO NOT** allow spray to contact buds or leaves or leaf distortion may occur.
- **DO NOT** apply to newly transplanted vines until ground has settled and no cracks are present.

### Chemigation Application

AX PENDI H2O may be applied through sprinkler irrigation and drip irrigation systems. Follow all directions, special instructions, and restrictions about chemigation in the Spraying Instructions section of this label.

### Flood, Flooded Basin, and Gravity Flow Irrigation Systems

AX PENDI H2O may be applied in flood, flooded basin, and gravity flow irrigation systems. Follow all directions, special instructions, and restrictions about flood, flooded basin, and gravity flow irrigation systems in the Spraying Instructions section of this label.

### Restrictions

- For chemigation application, **DO NOT** apply AX PENDI H2O-treated irrigation water over the top of grape vines with leaves, buds, or fruit. Contact with leaves, shoots, or buds by spray mixture may cause injury or result in illegal pesticide residues on fruit.

- **DO NOT** apply over the top of grape vines with leaves, buds, or fruit.
- **DO NOT** apply by air.
- **DO NOT** apply more than 6.3 quarts (6 lb ai) per acre per application.
- **DO NOT** apply more than 6.3 quarts (6 lb ai) per acre per year.
- **Preharvest Interval (PHI):** 90 days
- **DO NOT** feed forage or graze livestock in treated vineyards.

#### **BEARING AND NON-BEARING SMALL FRUIT CLIMBING VINES**

**Amur River Grape, Gooseberry, Fuzzy Kiwifruit, Hardy Kiwifruit, Maypop, and Schisandra Berry**

**Application Methods:** Apply by ground; chemigation; flood, flooded basin, and gravity flow irrigation systems.

#### **Use Method, Rate, and Timing**

AX PENDI H2O may be applied in a single application or sequentially with an interval of 30 days or more. Uniformly apply this product in small fruit climbing vines at 3.2 to 4.2 quarts (3 to 4 lb ai) per acre depending on the grower's weed control program, level of weed infestation, and desired use strategy.

AX PENDI H2O may be applied anytime after fall harvest, during winter dormancy, and in spring.

#### **Ground Application**

AX PENDI H2O may be applied surface incorporated or (surface) preemergence. Apply AX PENDI H2O as a broadcast or banded using ground equipment before weed germination. Apply spray directly to the ground beneath small fruit climbing vines and/or in areas between rows.

#### **Chemigation Application**

AX PENDI H2O may be applied through sprinkler irrigation and drip irrigation systems. Follow all directions, special instructions, and restrictions about chemigation in the Spraying Instructions section of this label.

#### **Flood, Flooded Basin, and Gravity Flow Irrigation Systems**

AX PENDI H2O herbicide may be applied in flood, flooded basin, and gravity flow irrigation systems. Follow all directions, special instructions, and restrictions about flood, flooded basin, and gravity flow irrigation systems in the Spraying Instructions section of this label.

#### **Restrictions**

- For ground applications, **DO NOT** apply over the top of small fruit climbing vines with leaves, buds, or fruit. Contact with leaves, buds, or fruit by the spray mixture may cause injury or result in illegal pesticide residues on fruit.
- For chemigation applications, **DO NOT** apply AX PENDI H2O-treated irrigation water over the top of small fruit climbing vines with leaves, buds, or fruit. Contact with leaves, buds, or fruit by the spray mixture may cause injury or result in illegal pesticide residues on fruit.
- **DO NOT** apply over the top of small fruit climbing vines with leaves, buds, or fruit.
- **DO NOT** apply by air.
- **DO NOT** apply more than 4.2 quarts (4 lb ai) per acre per application.
- **DO NOT** apply more than 4.2 quarts (4 lb ai) per acre per year.
- **Preharvest Interval (PHI):** 60 days
- **DO NOT** feed forage or graze livestock in treated vines.
- **DO NOT** apply this product when impregnated onto dry bulk fertilizer in small fruit climbing vines.

#### **BRASSICA HEAD AND STEM VEGETABLES**

**Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Cavalo Broccolo, Chinese Broccoli, Chinese Cabbage (napa), Chinese Mustard Cabbage, Kohlrabi**

**Application Methods:** Apply by ground or air.

### Use Method, Rate, and Timing

Uniformly apply AX PENDI H2O to Brassica head and stem vegetables by ground or air as a preplant surface application before transplanting or as a postemergence application.

Uniformly apply AX PENDI H2O only by ground as a postemergence-directed application to transplanted or established direct-seeded Brassica head and stem vegetables.

With a single application, apply up to 2.1 pints (1 lb ai) per acre of AX PENDI H2O to Brassica head and stem vegetables as a broadcast or banded spray to the soil surface at pretransplant time, as a broadcast postemergence foliar spray, or as a postemergence-directed spray between vegetable rows. Apply postemergence or postemergence-directed to 2-leaf to 4-leaf vegetable transplants at 1 to 3 days after transplanting, or to the 2-leaf to 4-leaf stage of direct-seeded vegetable plants.

Apply AX PENDI H2O as a postemergence-directed spray on the soil, beneath plants, and between vegetative rows. Roots of transplants must be established. Following the postemergence-directed application if sufficient rainfall or irrigation does not occur, mechanically incorporate to activate the herbicide. Apply this product before weed germination. Emerged weeds will not be controlled by this treatment.

### Use Rate

#### Pretransplant, Postemergence, Postemergence-directed

Soil Texture	Broadcast Rate (Pints per Acre)
Coarse	1 to 1.5 (0.48 to 0.71 lb ai)
Medium	1.5 to 2.1 (0.71 to 1 lb ai)
Fine	1.5 to 2.1 (0.71 to 1 lb ai)

### Precautions

- Avoid root contact with AX PENDI H2O-treated soil when placing transplants into furrow or hole, or crop injury may occur.
- **DO NOT** spray foliage or stems because crop injury will occur.
- Avoid overlapping spray patterns because crop injury can occur.

### Restrictions

- **DO NOT** apply before direct-seeded Brassica head and stem vegetables.
- **DO NOT** apply more than 2.1 pints (1 lb ai) per acre per application.  
**DO NOT** apply more than 2.1 pints (1 lb ai) per acre per year.
- **Preharvest Interval (PHI):**
  - Broccoli: 60 days
  - Cabbage and other Brassica head and stem vegetables: 70 days
- **DO NOT** feed forage or graze livestock in treated fields.
- **DO NOT** apply via chemigation methods.
- [Not for use in California.]

## CARROTS

**Application Methods:** Apply by ground, air, or chemigation.

### Use Method, Rate, and Timing

**Preemergence.** Make a single broadcast application at 2.0 pints (0.95 lb ai) per acre as a ~~postplant~~[postplant](#) treatment before emergence of the crop and before weed germination. Apply as a preemergence treatment within 2 days after planting.

**Layby.** Apply AX PENDI H2O only by ground equipment at layby (last mechanical cultivation) at 2.0 pints (0.95 lb ai) per acre as a directed spray to the soil between rows. Apply this product before weed germination. Emerged weeds will not be controlled by this treatment.

### **Chemigation Application**

AX PENDI H2O may be applied through sprinkler irrigation systems. Follow all directions, special instructions, and restrictions about chemigation in the Spraying Instructions section of this label.

### **Precautions**

- **For Layby Applications:**
  - **DO NOT** allow the spray to contact carrot plants or injury may occur.
- **DO NOT** apply as a broadcast spray over top of carrots or crop injury may result.

### **Restrictions**

- **For Layby Applications:**
  - **DO NOT** apply by chemigation or air.
- **For chemigation applications:**
  - **DO NOT** allow AX PENDI H2O-treated irrigation water to contact carrot plants.
  - **DO NOT** apply tank mixes through any type of irrigation system unless the label instructions on chemigation of all products are followed.
- **DO NOT** apply more than 2 pints (0.95 lb ai) per acre per application.
- **DO NOT** apply more than 2 pints (0.95 lb ai) per acre per season.
- **Preharvest Interval (PHI):** 60 days
- **DO NOT** feed forage or graze livestock in treated fields.

## **CARROTS GROWN FOR SEED PRODUCTION**

**Application Methods:** Apply only by layby with ground equipment.

### **Use Method, Rate, and Timing**

**Last Cultivation (Layby).** Apply AX PENDI H2O after the last normal mechanical cultivation (layby) at a rate of 1.0 to 4.0 pints (0.48 to 1.9 lb ai) per acre (on a broadcast basis). Uniformly apply as a directed spray to the soil between rows. Use protective shields to avoid contact with carrot foliage. Use calibrated nozzles and equipment.

Layby application can be made to carrots previously treated with herbicides registered in/on carrots. Consult the labels of those herbicides for suggested treatments, rates, and precautions or restrictions for use in carrots and for rotational crop restrictions.

### **Precautions**

- **DO NOT** allow the spray to contact carrot plants or injury may occur.
- **DO NOT** apply as a broadcast spray over top of carrots or crop injury may result.

### **Restrictions**

- **DO NOT** apply layby applications by chemigation or air.
- **DO NOT** apply more than 4 pints (1.9 lb ai) per acre per application.
- **DO NOT** apply more than 4 pints (1.9 lb ai) per acre per year.
- **Preharvest Interval (PHI):** 60 days before carrot seed harvest.
- **DO NOT** feed, forage, or graze livestock in treated fields.
- **DO NOT** harvest carrots for food or feed use.

### **Special Crop Use Restrictions**

The pesticide applicator, the producer of the crop, and the seed conditioner must be aware that use of this product according to this labeling is deemed a nonfeed/nonfood use. If the applicator of this pesticide is not the producer, the applicator must provide a copy of this labeling to the producer of the crop. Producers of this crop who use this product, or cause the product to be used on a field they operate, shall provide a copy of this pesticide label to the seed conditioner.

Consequently, no portion of this carrot seed crop, including but not limited to green chop, hay, pellets, meal, whole seed, cracked seed, roots, bulbs, foliage, and seed screenings, may be used or distributed for food or feed purposes.

Processed carrot seed from a field treated with this product must bear a specific tag or conspicuous container labeling, or if shipped in bulk, on the shipment invoice or bill of lading, with the following statement: "Not for human consumption or animal feed." All seed screenings from seed processing shall be disposed of in such a manner that the screenings cannot be distributed or used for human food or animal feed purposes.

The seed conditioner shall keep records of screening disposal for three years from the date of disposal and shall furnish the records immediately upon request. Conditioner disposal records shall consist of documentation of on-farm disposal, disposal at a controlled dumpsite, incinerator, composter, or other equivalent disposal site and shall include the lot numbers, amount of material disposed of, the grower(s), and the date of disposal.

## **CORN**

### **(Field, Field Seed, Fresh Sweet, Popcorn and Popcorn Seed)**

**Application Methods:** Apply by ground, air or chemigation.

#### **Use Methods, Timings and Use Rates**

Apply AX PENDI H2O in conventional, minimum or no-till as a preemergence, postemergence or postemergence application (CULTI-SRYAY) application in field corn.

Apply AX PENDI H2O in conventional tillage as a preemergence or postemergence application in field seed corn, popcorn, popcorn seed corn, and fresh sweet corn.

Regardless of tillage system, plant corn at least 1-1/2 inches deep and completely cover with soil.

In conventional-tillage systems, plant into a seedbed that is firm and free of clods and trash. Use only where tillage provides good soil coverage of corn seed.

In no-till systems, use a no-till planter capable of planting through crop residue. Use of no-till planters under conditions that **DO NOT** allow good soil coverage of the corn seed can result in reduced crop stand or injury if AX PENDI H2O contacts the germinating corn seed. Check equipment to ensure good seed coverage.

AX PENDI H2O tank mix combination treatments are most effective in controlling weeds when adequate rainfall or overhead irrigation is received after application. If cultivation is necessary because of soil crusting or weed germination, use shallow tillage and make certain corn seeds are below the tilled area.

**Additional Weeds Controlled.** In addition to weeds listed in Table 2, AX PENDI H2O controls the following weeds in corn with CULTI-SPRAY application: wild proso millet and shattercane.

**Preemergence.** Apply after planting but before weeds germinate and crop emerges.

**Postemergence.** Apply postemergence until field corn is 30 inches tall (20 to 24 inches tall for popcorn, popcorn seed, field seed, and fresh sweet corn) or in the V8 growth stage, whichever is more restrictive. If the corn canopy prevents applications from reaching the soil, use drop nozzles and apply as a directed spray.

**CULTI-SPRAY.** Apply AX PENDI H2O alone or AX PENDI H2O plus atrazine when field corn is at least 4 inches tall until last cultivation (layby). This product plus atrazine must be applied before the field corn reaches 12 inches in height.

Under situations of low rainfall or soil moisture, when deep germinating weeds like shattercane or field sandbur are anticipated, mechanical incorporation provides the best results. If cultivation is needed after application and incorporation of AX PENDI H2O, the depth of cut should be no deeper than the depth of cut used to incorporate.

### Chemigation Application

AX PENDI H2O herbicide may be applied through sprinkler irrigation systems. Follow all directions, special instructions, and restrictions about chemigation in the Spraying Instructions section of this label.

### Use Rate

#### Preemergence, Postemergence

Soil Texture	Organic Matter		
	< 1.5% (Pints per Acre)	1.5% to 3.0% (Pints per Acre)	> 3.0% (Pints per Acre)
Coarse	2.0 (0.95 lb ai)	3.0 (1.42 lb ai)	3.0 (1.42 lb ai)
Medium	3.0 (1.42 lb ai)	3.0 (1.42 lb ai)	4.0 (1.9 lb ai)
Fine	3.0 (1.42 lb ai)	4.0 (1.9 lb ai)	4.0 (1.9 lb ai)

#### CULTI-SPRAY (Field Corn ONLY)

Soil Texture	Southern States* (Pints per Acre)	Northern States* (Pints per Acre)
Coarse	1.5 (0.71 lb ai)	2.0 (0.95 lb ai)
Medium	2.0 (0.95 lb ai)	3.0 (1.42 lb ai)
Fine	3.0 (1.42 lb ai)	3.0 (1.42 lb ai)

\* See **Use Precautions** for map of specific states.

### Precautions

- This product may be applied sequentially in a single crop season as long as the total use rate applied in the crop season does not exceed the highest rate per acre for any given soil type

### Restrictions

- **DO NOT** apply more than 1.2 lbs ai per acre of atrazine, as specified on the atrazine label.
- **DO NOT** apply this product in reduced-tillage, minimum-tillage, or no-till fresh sweet corn, seed corn, or popcorn.
- **DO NOT** apply more than the highest yearly rate per acre for any given soil type.
- **DO NOT** apply this product in no-till in California.
- **DO NOT** apply preplant incorporated.
- **DO NOT** apply postemergence in liquid fertilizer.
- **DO NOT** graze livestock or feed forage from treated corn less than 21 days after application.

## COTTON

**Application Methods:** Apply by ground, air, or chemigation in conventional, minimum, stale seedbed, or no-till as a preplant surface, preplant incorporated, preemergence, layby or postemergence application in cotton.

### Use Method, Rate, and Timing

Preplant surface, preemergence, layby and postemergence treatments are most effective in controlling weeds when adequate rainfall or overhead irrigation is received after application. Shallow cultivate if soil crusting or soil compaction occurs. If weeds begin to germinate or adequate moisture is not received after application, use shallow tillage (rotary hoe or light harrow) and make sure cotton seeds are below tilled area. The use of a postemergence herbicide treatment may be required to control weed escapes at planting or following cotton emergence



**Additional Weeds Suppressed.** In addition to weeds listed in Table 2, AX PENDI H2O will suppress Russian thistle in the state of Arizona.

**Preplant Surface.** Apply AX PENDI H2O within 15 days of planting. Apply tank mixes and sequential program as specified under the tank mix section.

**Preplant Incorporated.** Apply AX PENDI H2O within 60 days of planting and incorporate. Apply tank mixes and sequential program as specified under the tank mix section.

**Preemergence.** Apply AX PENDI H2O at planting or up to 2 days after planting. Apply to a seedbed that is firm and free of clods. Apply tank mixes and sequential program as specified under the tank mix section.

**Preplant Incorporated followed by Preemergence.** Apply AX PENDI H2O within 60 days of planting and incorporate. Apply overlay application of this product at planting or up to 2 days after planting. Total amount of this product applied per acre cannot exceed the highest labeled rate for a given soil type. Preplant incorporated and preemergence applications of AX PENDI H2O may be applied with the labeled tank mix herbicide(s).

**Layby Application (at last cultivation).** Apply AX PENDI H2O directly to the soil between rows as a directed spray following the last normal cultivation (layby). Layby applications can be applied in cotton previously treated with this product or any herbicide(s) registered for use in cotton. Consult the labels of those herbicides for suggested treatments, rates to be used, and precautions or restrictions for use in cotton, and for rotation crop restrictions. The total amount of AX PENDI H2O applied per acre per season must not exceed the highest labeled rate for a given soil type.

Glyphosate-containing products may be applied with this product at layby in cotton with the glyphosate tolerant gene. **DO NOT** apply glyphosate-containing products at layby on non-glyphosate tolerant cotton.

**Postemergence.** Apply by ground or air as a broadcast over-the-top postemergence application in cotton. Not for use postemergence in California.

Postemergence treatments are most effective in controlling weeds when adequate rainfall or overhead irrigation is received after application. Apply AX PENDI H2O before weeds germinate or after clean cultivation to remove existing weeds because this product will not control emerged weeds. Apply a postemergence herbicide to control emerged weeds.

### **Tank Mixing**

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

AX PENDI H2O may be used alone or tank mixed with glyphosate (on glyphosate-resistant cotton or Roundup Ready Flex cotton), or glufosinate (on glufosinate-resistant cotton). When tank mixing this product with another herbicide product, always follow the most restrictive labeling.

Dry ammonium sulfate (AMS) at 17 pounds per 100 gallons of spray solution must be used when tank mixing AX PENDI H2O with glyphosate. Liquid AMS may also be used, but must be used at an equivalent rate to 17 pounds of dry weight AMS per 100 gallons of spray solution. A nitrogen replacement should not be used with this tank mix unless specified as acceptable from Axion in writing. An appropriate mixing order is as follows: fill tank to at least 1/2 full with water; then add in order: AMS, AX PENDI H2O herbicide, glyphosate; then fill the tank to capacity with water.

### **Restriction**

- **DO NOT** tank mix with and apply over-the-top postemergence with fluometuron, glyphosate + Metolachlor/S-metolachlor, metolachlor, prometryn, pyriithobac sodium or s-metolachlor,



### **Postemergence application of AX PENDI H2O on glyphosate-resistant cotton or Roundup Ready Flex cotton only**

**Note:** Instructions for use of AX PENDI H2O on glyphosate-tolerant cotton or Roundup Ready Flex cotton are specific to and should only be used with varieties designated as glyphosate-tolerant cotton or Roundup Ready Flex cotton.

#### **• Glyphosate-tolerant Cotton**

Tank mixing AX PENDI H2O with glyphosate (in water): Apply AX PENDI H2O broadcast postemergence over the top of cotton after cotton reaches the 4-leaf to 5-leaf growth stage. Applications to cotton before the 4-leaf stage or after the 5-leaf stage may result in significant crop injury and/or yield loss.

#### **• Roundup Ready Flex Cotton**

Tank mixing AX PENDI H2O with glyphosate (in water): Apply AX PENDI H2O broadcast postemergence over the top of cotton after cotton reaches the 4-leaf growth stage, but not after the 8-leaf growth stage. Over-the-top application made before the 4-leaf growth stage or after the 8-leaf growth stage may result in crop injury and/or yield loss.

### **Postemergence application of AX PENDI H2O on Glufosinate-tolerant cotton**

**Note:** Instructions for use of AX PENDI H2O on glufosinate-tolerant cotton are specific to and should only be used with varieties designated as glufosinate-tolerant cotton.

#### **Glufosinate-tolerant Cotton**

**Tank mixing AX PENDI H2O with glufosinate (in water):** Apply this product broadcast postemergence over the top of cotton after cotton reaches the 4-leaf growth stage, but not after the 8-leaf growth stage. Over-the-top application made before the 4-leaf growth stage or after the 8-leaf growth stage may result in crop injury and/or yield loss.

### **Postemergence application of AX PENDI H2O ALONE to all cotton (in water)**

Apply AX PENDI H2O broadcast postemergence over the top of cotton after cotton reaches the 4-leaf growth stage, but not after the 8-leaf growth stage. Over-the-top applications made before the 4-leaf growth stage or after the 8-leaf growth stage may result in crop injury and/or yield loss.

Over-the-top postemergence application of AX PENDI H2O can be applied in cotton previously treated with at-planting soil applications of this product or any other soil-applied herbicide(s) registered for use in cotton. Consult the labels of those herbicides for suggested treatments, rates, precautions, or restrictions for use in cotton, and for rotational crop restrictions. Follow the most restrictive label instructions when using products in combination with soil-applied AX PENDI H2O.

#### **Precaution**

- Postemergence application of this product may cause temporary growth reduction and/or leaf discoloration or malformation of cotton after application.

#### **Restrictions**

- **DO NOT** apply over the top in fluid fertilizer.
- **DO NOT** apply in tank mix with any adjuvant, surfactant, oil, or other pesticide (except for cotton insecticides).
- **DO NOT** apply in any manner except as described in this label or crop injury and/or yield reduction may occur.
- **DO NOT** apply if cotton is under stress (including stress related to previous pesticide treatments, poor fertilization, environmental conditions, and/or pest damage) at time of application. If cotton is under stress (including stress related to previous pesticide treatments, poor fertilization, environmental conditions, and/or pest damage) at time of application, this product may retard cotton recovery and/or adversely affect yield.

**Fall Application.** Apply AX PENDI H2O for weed for weed control in cotton in the fall, after October 15 (up to 14 days prior to planting cotton) in Arizona, California, Louisiana, Mississippi, New Mexico, Oklahoma and Texas. Apply this product at the broadcast rate of 2.0 pints (0.95 lb ai) per acre on coarse or medium soils and 3.0 pints (1.42 lb ai) per acre on fine soils.

### Chemigation Application

AX PENDI H2O may be applied through sprinkler irrigation systems. Follow all directions, special instructions, and restrictions about chemigation in the Spraying Instructions section of this label.

### Use Rate

#### Preplant, Preemergence, Layby

Soil Texture	Conventional or Minimal Tillage (Pints per Acre)	No-till** (Pints per Acre)
Coarse	1.0 to 2.0* (0.48 to 0.95 lb ai)	2.0 (0.95 lb ai)
Medium	2.0 (0.95 lb ai)	3.0 (1.42 lb ai)
Fine	3.0 (1.42 lb ai)	4.0 (1.9 lb ai)
* <b>DO NOT</b> exceed 1.6 pints (0.76 lb ai) per acre on coarse-texture soils in California.		
** <b>DO NOT</b> use on soils with more than 3% organic matter.		

### Postemergence

#### AX PENDI H2O Alone or in Tank Mix with Glyphosate or Glufosinate

Soil Texture	Conventional, Minimum or No Tillage (Pints per Acre)
Coarse	1.0 to 2.0* (0.48 to 0.95 lb ai)
Medium	1.5 to 2.0 (0.71 to 0.95 lb ai)
Fine	2.0 (0.95 lb ai)
* <b>DO NOT</b> exceed 1.6 pints (0.76 lb ai) per acre on coarse-texture soils in California.	

### Restrictions

- **DO NOT** apply postemergence in cotton in California.
- **DO NOT** apply this product in no-till in California.
- **DO NOT** apply more than the highest yearly rate per acre for any given soil type.
- **DO NOT** apply more than 2 pints (0.95 lb ai) per acre when applied postemergence to cotton for any given soil type.
- **DO NOT** apply more than 4.2 pints (2 lbs ai) per acre for combined preplant/preemergence and postemergence applications per year.
- **Preharvest Interval (PHI):** 60 days
- In treated cotton fields, forage may be fed to or grazed by livestock.

### DRY BULB ONIONS SUBGROUP 3-07A

Daylily, bulb; fritillaria, bulb; garlic, bulb; garlic, great-headed, bulb; garlic, serpent, bulb; lily, bulb; onion, bulb; onion, Chinese, bulb; onion, pearl; onion, potato, bulb; shallot, bulb; cultivars, varieties, and/or hybrids of these

**Application Methods:** Apply by ground, air or chemigation.

### Use Methods, Timings and Use Rates – Mineral Soils

Apply AX PENDI H2O to direct-seeded and transplanted dry bulk onions and dry bulb shallots.

### Use Rates - Mineral Soils

Soil Texture	Broadcast Rate (Pints per Acre)
Coarse	1.5 (0.71 lb ai)
Medium	2.0 (0.95 lb ai)

Soil Texture	Broadcast Rate (Pints per Acre)
Fine	3.2 (1.52 lb ai)

**Preemergence.** After garlic planting but before crop and weeds emerge.

**Postemergence.** When garlic is in the 1st to 5th true-leaf growth stage.

**Split Application.** In garlic at both preemergence and postemergence timings.

**In all states except California,** apply AX PENDI H2O as a broadcast treatment when dry bulb onions or dry bulb shallots have 2 to 9 true leaves.

#### **Additional Use in Colorado, Kansas, and Nebraska**

AX PENDI H2O may be applied sequentially in seeded dry bulb onions. Make first application of this product at loop stage. Make sequential application of this product early postemergence (2nd to 9th true-leaf stage).

#### **Additional Use in Colorado and the High Plains of Texas**

For transplanted dry bulb onions only, apply and shallow incorporate (less than 2 inches deep) AX PENDI H2O into preformed beds before transplanting.

#### **Additional Use in Idaho, Oregon, and Washington**

Apply AX PENDI H2O as a broadcast treatment when dry bulb onions or dry bulb shallots are between the flag leaf to 9th true-leaf stage. Use AX PENDI H2O at 3.0 to 4.0 pints (1.42 to 1.9 lb ai) per acre for dodder control on medium-texture and fine-texture soils.

Apply AX PENDI H2O in the fall or spring to the furrow area of land bedded in the fall in preparation for planting seed of dry bulb onions the following spring. Apply this product as a banded application at rates based on appropriate soil texture. Band width is 1/2 the width of the row spacing. Keep this product away from the area where dry bulb onion seed will be planted.

Harrow off tops of beds after AX PENDI H2O furrow application before planting dry bulb onions.

For selective weed control in the onion row, apply AX PENDI H2O as a banded postemergence application to flag-leaf dry bulb onions at the labeled rates based on soil texture. Apply this product only once to the furrow area and once to the dry bulb onion row as a postemergence application.

#### **Additional Use in Michigan**

For mineral soils containing more than 10% organic matter, follow the directions for muck soils (see following).

**In California,** apply AX PENDI H2O only as a single application when dry bulb onions or dry bulb shallots have 2 to 6 true leaves

#### **Precaution**

- **In Colorado, Kansas and Nebraska**

- **DO NOT** apply at loop stage through the 9th true-leaf stage if heavy rains are expected or severe crop injury may result.
- **DO NOT** apply preemergence through the loop stage if heavy rains are expected or severe crop injury may result.

#### **Restrictions (Mineral Soils)**

- **In Colorado, Kansas and Nebraska**

- **DO NOT** apply more than the maximum labeled rate for a given soil texture.
- **DO NOT** apply using chemigation at the dodder control rate.
- **DO NOT** mechanically incorporate except as specified for use on dry bulb onions in Colorado and the Texas High Plains.

- **DO NOT** apply more than 3.2 pints (1.52 lb ai) per acre per year (except Idaho, Oregon, and Washington).
- **Preharvest Interval (PHI):**
  - 60 days in California
  - 45 days in all other states.
- **DO NOT** feed or graze these crops.
- If irrigating immediately after application at the preemergence through loop stage, **DO NOT** irrigate more than 1/2 inch of water.

#### **Additional Use in Oregon and Washington – Dry Bulb Onions – Preemergence Weed Control**

Apply AX PENDI H2O to control annual grass and small seeded broadleaf weeds to uniformly planted (1-inch deep; furrow must be thoroughly covered with soil) dry bulb onions. Failure to plant dry bulb onions a minimum of 1 inch deep in the soil increases the potential for injury. Apply in a single application after germination of the onion seed but prior to emergence (delayed preemergence) when 75% of the radicles have developed on the onion seedlings. Determine the radicle emergence by digging onion seedlings at random locations in the field and note radicle elongation. Apply this product in 10 or more gallons of water per acre using ground equipment at the rates specified in the table below. Adequate incorporation by rainfall or irrigation will ensure effective control of weeds. **DO NOT** apply more than 0.25 inch of initial overhead irrigation following delayed preemergence application of this product on dry bulb onions. AX PENDI H2O must be applied to clean-tilled soil for effective weed control. A tank mix with a burndown herbicide controls emerged weeds prior to onion emergence.

The risk of crop injury is greater on coarse-textured soils (>90% sand) than with medium- or fine-texture soils. Potential injury may occur due to variability within soil type. Using higher rates of AX PENDI H2O within soil types may increase the risk of crop injury. If adverse weather results in loss of onions, any crop registered for this product preplant incorporated use can be replanted the same year into AX PENDI H2O-treated soil with no adverse effects. Rework the soil deeper than 2 inches if replanting is necessary. This product may be applied sequentially in dry bulb seeded onions. Make the first application using delayed preemergence directions. Make sequential applications of this product early postemergence (up to 9th true-leaf stage).

#### **Use Rates - Oregon and Washington Dry Bulb Onions**

<b>Soil Texture</b>	<b>Delayed Preemergence - Broadcast Rate (OR and WA only) (Pints per Acre)</b>
Coarse	1.0 to 2.0 (0.48 to 0.95 lb ai)
Medium	1.5 to 2.50 (0.71 to 1.190.95 lb ai)
Fine	1.5 to 3.0 (0.71 to 1.42 lb ai)

#### **Restrictions for Oregon and Washington Dry Bulb Onions:**

- **DO NOT** apply more than the maximum labeled rate for a given soil texture per acre per application.
- **DO NOT** exceed 3.0 pints (1.42 lb ai) per acre per crop.
- **DO NOT** apply through any type of irrigation system or by air.
- **DO NOT** apply preplant incorporated or preplant.
- **Preharvest Interval (PHI):** 45 days.
- **DO NOT** feed treated dry bulb onions to livestock or allow livestock to graze in treated areas.

#### **Additional Use in California – Dry Bulb Onions – Preemergence in Direct-Seeded Onions at the Loop Stage**

Apply AX PENDI H2O to control annual grass and small seeded broadleaf weeds at 1.0 to 1.5 pints (0.48 to 0.71 lb ai) per acre after onion seedlings have emerged and are at the loop stage of growth. Select the use rate according to the soil texture as shown in the table below. Apply this product in 10 or more gallons of water per acre using ground equipment. Adequate incorporation by rainfall or irrigation will ensure effective control of weeds. **DO NOT** apply more than 0.25 inch of initial overhead irrigation following

application of AX PENDI H2O in direct seeded onions at the loop stage. This product must be applied to clean-tilled soil for effective weed control.

#### Use Rates - California Dry Bulb Onions

Soil Texture	Delayed Preemergence Broadcast Rate (OR and WA only) (Pints per Acre)
Coarse	1.0 to 1.5 (0.48 to 0.71 lb ai)
Medium	
Fine	1.5 (0.71 lb ai)

The risk of crop injury is greater on coarse-textured soils (>90% sand) than with medium- or fine-texture soils. Potential injury may occur due to variability within soil type. Using higher rates of AX PENDI H2O within soil types may increase the risk of crop injury. If adverse weather results in loss of onions, any crop registered for this product preplant incorporated use can be replanted the same year into AX PENDI H2O-treated soil with no adverse effects. Rework the soil deeper than 2 inches if replanting is necessary.

AX PENDI H2O may be applied sequentially in dry bulb seeded onions. Make the first application after seedling emergence at the loop stage of growth. Make sequential applications of this product early postemergence (up to 6th true leaf stage).

#### Restrictions for California Dry Bulb Onions:

- **DO NOT** apply more than the maximum labeled rate for a given soil texture per acre per application.
- **DO NOT** apply more than 1.5 pints (0.71 lb ai) per acre per application.
- **DO NOT** apply preemergence in direct seeded onions at the loop stage through any type of irrigation system or by air.
- **DO NOT** apply preplant incorporated or preplant.
- **DO NOT** apply to muck soils.
- **DO NOT** apply to green (bunching) onions or leeks
- **Preharvest Interval (PHI):** 60 days
- **DO NOT** feed treated dry bulb onions to livestock or allow livestock to graze in treated areas.

#### Use Method, Rate, and Timing - Muck Soils

AX PENDI H2O may be applied sequentially in dry bulb onions or dry bulb shallots on muck soils, only once preemergence and only twice postemergence, as follows:

#### Use Rates – Muck Soils

Application Timing and Growth Stage	Rate (Pints per Acre)
Preemergence through Loop Stage	4 (1.9 lb ai)
Early Postemergence (2nd to 6th true-leaf stage)	
Late Postemergence (6th to 9th true-leaf stage)	

#### Precautions – Muck Soils

- **DO NOT** apply product preemergence through the loop stage if heavy rains are expected or severe crop injury may result.

#### Restrictions - Muck Soils

- **DO NOT** apply to muck soils in California.
- **Preharvest Interval (PHI):** 45 days
- **DO NOT** feed or graze these crops.
- **DO NOT** apply more than 12.6 pints (6 lb ai) per acre per growing season on muck soils. To maximize crop safety, ensure good soil coverage during planting or transplanting and delay preemergence applications to the loop stage, if possible.

- If irrigating immediately after application at the preemergence through loop stage, **DO NOT** irrigate more than 1/2 inch of water.
- **DO NOT** plant sugar beets, red beets, spinach, winter wheat, or winter barley as rotational crops on muck soils for 12 months from the time of last application if more than 3.2 pints (1.52 lb ai) per acre is applied to the onion crop.
- If loss of onion crop occurs, **DO NOT** replant any crop other than onions in muck soil during the same cropping year and **DO NOT** work the soil deeper than 2 inches.

### Chemigation Application

AX PENDI H2O may be applied through sprinkler irrigation systems. **DO NOT** irrigate more than 1/2 inch of water. Follow all directions, special instructions, and restrictions about chemigation in the Spraying Instructions section of this label.

### EDIBLE BEANS

**Dry (Navy, Great Northern, Red Kidney, Black, Turtle, Cranberry, Small White Type, Guar), Lima, Snap, Chickpeas (Garbanzo Beans), Southern Peas (Cowpeas), and Sweet Lupins**

**Application Methods:** Apply by ground or air.

### Use Methods, Timings and Use Rates

AX PENDI H2O may only be applied (fall) preplant surface or preplant incorporated in dry beans, lima bean, snap bean, and southern pea (cowpea). This product may be applied (fall) preplant surface or preplant incorporated or (spring) preplant surface in chickpea (garbanzo bean). AX PENDI H2O may be applied (fall) preplant surface or preplant incorporated or preemergence in sweet lupins.

### Fall Application

**For use only in Idaho, Minnesota, Montana, North Dakota, Oregon, South Dakota, Washington, and Wyoming).** Apply AX PENDI H2O preplant surface or preplant incorporated (rainfall, irrigation, or mechanically) in late fall before planting edible (chickpea [garbanzo beans], dry beans [including navy, great northern, red kidney, black turtle, cranberry, small white type], lima bean, snap bean, southern pea [cowpea], and sweet lupins] the following spring. Apply AX PENDI H2O in the late fall when soil temperatures are 45°F or below but before the ground freezes.

Rainfall or irrigation is required for incorporation and activation. Unpredictable weed control can be expected because factors like length of time between application and planting as well as uncontrollable weather factors will determine herbicide activity and longevity.

### Use Rate (Fall)<sup>1</sup>

Soil Texture	Broadcast Rate	
	< 3% Organic Matter (Pints per Acre)	> 3% Organic Matter (Pints per Acre)
Coarse	2.0 (0.95 lb ai)	2.0 (0.95 lb ai)
Medium	2.5 (1.19 lb ai)	3.0 (1.42 lb ai)
Fine	3.0 (1.42 lb ai)	3.0 (1.42 lb ai)

<sup>1</sup> Use limited to certain states. Follow state-specific instructions and/or restrictions.

**Preplant Incorporated.** Apply within 60 days of planting and incorporate.

**Preemergence.** Apply only to sweet lupins at planting or up to 2 days after planting. Apply to a seedbed that is firm and free of clods.

### Use Rate

**Preplant Incorporated, Preemergence**



Soil Texture	Southern States <sup>1</sup> (Pints per Acre)	Northern States <sup>1</sup>	
		< 3% Organic Matter > 3% (Pints per Acre)	
Coarse	1.5 (0.71 lb ai)	2.0 (0.95 lb ai)	2.0 (0.95 lb ai)
Medium	2.0 (0.95 lb ai)	2.5 (1.19 lb ai)	3.0 (1.42 lb ai)
Fine	3.0 (1.42 lb ai)	3.0 (1.42 lb ai)	3.0 (1.42 lb ai)

<sup>1</sup> See **Use Precautions** for map of specific states.

## State-specific Instructions

### Idaho, Montana, North Dakota, Oregon, and Washington

AX PENDI H2O may be applied to chickpeas grown in no-tillage and/or minimum tillage systems in Idaho, Montana, North Dakota, Oregon, and Washington. Preplant surface applications must be made within 30 days of planting. **DO NOT** apply more than 1.5, 2.0, and 3.0 pints per acre of this product in coarse, medium, and fine texture soils, respectively. When planting, ensure the seed furrow is fully closed because conditions that allow the seed furrow to inadequately close and/or allow this product to contact the seed may result in crop injury. Certain unfavorable environmental conditions, including cool temperatures, excessive moisture after application, and wet and/or compacted soil conditions, may result in delayed emergence and stunting with AX PENDI H2O use in chickpea. Adequate rainfall or irrigation after application before weed seedling germination provides the most effective weed control. Herbicide performance from surface application may be decreased compared to soil incorporated application.

### Idaho, Oregon, and Washington

AX PENDI H2O may be applied post-plant preemergence only to chickpea grown in conventional tillage systems in Idaho, Oregon, and Washington. Application must be made within 2 days of planting. Apply up to but not more than 1.5 pints (0.71 lb ai) per acre. Apply to a firm seedbed free of clods. Soil conditions that cause poor seed furrow closure and coverage may result in delayed emergence and stunting of the crop. Under certain environmental conditions, including cool temperatures, excessive moisture after application and wet soil conditions may result in delayed emergence and stunting with AX PENDI H2O use in chickpea. Adequate rainfall or irrigation after application before weed seedling germination provides the most effective weed control.

### Colorado, Idaho, Kansas, Montana, Nebraska, New Mexico, Oregon, Washington, and Wyoming

Apply AX PENDI H2O by ground post-plant preemergence to dry beans grown under sprinkler irrigation in Colorado, Idaho, Kansas, Montana, Nebraska, New Mexico, Oregon, Washington, and Wyoming. Dry beans must have a minimum planting depth of 2 inches. Before applying this product to dry beans, growers should check with their local seed company or seed supplier for sensitive varieties and to verify the selectivity of this product on the grower's specific dry bean variety. AX PENDI H2O application made post-plant preemergence to dry beans must be immediately followed by 0.50 to 0.75 inch of water from overhead irrigation/rainfall. Apply this product within 1 to 4 days of planting and up to but not more than 2.0 pints (0.95 lb ai) per acre. Apply to a firm seedbed free of clods. Soil conditions that cause poor seed furrow closure and coverage may result in delayed emergence and stunting of the crop. **DO NOT** apply as a chemigation application. **DO NOT** apply this product in tank mix with Flumioxazin or Halosulfuron-methyl as a preemergence application to dry beans because of unacceptable crop response. Under certain environmental conditions, including cool temperatures, excessive moisture after application and wet soil conditions may result in crop injury, delayed emergence, and/or stunting with AX PENDI H2O use in dry beans. Adequate rainfall or irrigation after application before weed seedling germination provides the most effective weed control.

## Restrictions

- **DO NOT** feed lupin hay and forage or graze livestock in treated lupin fields.
- **DO NOT** make more than one application per year.
- **DO NOT** apply in any type of irrigation system.
- For fall applications, **DO NOT** apply when the air temperature is below 45°F.
- **DO NOT** apply more than the highest yearly rate per acre for any given soil type.

## FALLOW

**Application Methods:** Apply by ground, air, or chemigation.

### Use Method, Rate, and Timing

Apply AX PENDI H2O to fallow ground following crop harvest as a planned residual treatment to control labeled broadleaf and grass weeds as they germinate.

Apply as a broadcast spray at rates up to but not more than 3.0 pints (1.42 lb ai) per acre of AX PENDI H2O. Emerged weeds will not be controlled by this treatment. This product must be applied with a tank mix partner registered for the same use and timing for control of emerged weeds.

There must be at least a 4-month interval between a AX PENDI H2O fallow application and the rotational planting of any fall-seeded cereal crop. Otherwise, specific rotational crop intervals must be adhered to between a fallow application of AX PENDI H2O and the planting of the following crop (see Rotational Crop Restrictions section of this label).

### State-specific Instructions

In **Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, Oregon, Utah, Washington, and Wyoming**, apply as a broadcast spray at rates up to, but not more than, 3.2 pints (1.52 lb ai) per acre of AX PENDI H2O.

### Restrictions

- **DO NOT** apply more than 3.2 pints (1.52 lb ai) per acre per year.
- **DO NOT** apply more than 3.2 pints (1.52 lb ai) per acre per application.
- **DO NOT** make more than one application during a single fallow period.
- **DO NOT** apply this product to fallow ground after July 1 if treated fields are to be planted the following spring to crops not labeled for preplant or preplant incorporated applications of this product.

## FARMSTEAD

Apply AX PENDI H2O as a broadcast spray at 2.1 quarts (2 lb ai) per acre for short-term (2 to 4 months) or at 4.2 quarts (4 lb ai) per acre for long-term (6 to 8 months) preemergence control of labeled broadleaf and grass weeds as they germinate on farmstead nonagricultural areas including barnyards, lanes, driveways, machinery or implement yards, windbreaks, and nonagricultural fencerows or ditchbanks.

### Restrictions

- **DO NOT** apply more than 8.4 pints (4 lb ai) per acre per application.
- **DO NOT** apply more than 8.4 pints (4 lb ai) per acre per year.

## FORAGE GRASSES (COOL-SEASON)

**Application Methods:** Apply by air, ground or chemigation or on dry bulk fertilizer.

### Use Method, Rate and Timing

**Established Perennial Cool-season Forage Grasses.** including bentgrass, bluegrass (Kentucky), bromegrass, fescue (fine, tall), orchardgrass, perennial ryegrass, timothy, wheatgrass, and others] grown for forage, green chop, silage, hay production, and/or grown in pastures, rangeland, or Federal Conservation Reserve Program (CRP) land for livestock grazing.

Apply AX PENDI H2O to these and similar established (grass with 6 or more tillers per plant) perennial cool-season forage grasses. Apply AX PENDI H2O before target-weed germination in fall after the last cutting/mowing/grazing, in winter, in spring, or in-season between cuttings.

Uniformly apply at a broadcast rate of 1.1 to 4.2 quarts (1.05 to 4 lb ai) of AX PENDI H2O per acre in a single application or sequential applications made 30 or more days apart. Apply the higher rate of AX PENDI



H2O when higher weed pressure is anticipated or when a longer duration of residual weed control is desired.

AX PENDI H2O may cause temporary injury to cool-season forage grass stands. Application made in periods of cold temperatures that temporarily limit normal crop growth or in extended cold temperature periods that initiate winter dormancy in grass crops may result in crop injury. Disease, extremely cold weather, drought, extensive frost heaving, salinity, low pH, or high pH may weaken stands and make the crop more susceptible to herbicide injury.

**Mixed Stands of Established Cool-season Forage Grasses and Alfalfa.** Apply AX PENDI H2O to mixed stands of established cool-season forage grasses and alfalfa (established alfalfa is defined as alfalfa planted in fall or spring which has gone through a first cutting/mowing). Apply this product in fall after the last cutting/mowing/grazing, in winter, in spring before weed germination, or in-season between cuttings.

### **Chemigation Application**

AX PENDI H2O may be applied through sprinkler irrigation systems. Follow all directions, special instructions, and restrictions about chemigation in the Spraying Instructions section of this label.

### **Tank Mixes**

AX PENDI H2O may be applied in a sequential use program with other herbicides labeled for use in cool-season forage grasses or applied as a tank mix with other registered herbicides that control emerged weeds. Application of postemergence herbicides may cause crop injury. Axion recommends testing tank mixes on a small portion of the target crop to determine if damage is likely to occur. Consult your local sales representative for local tank mix options. Always perform a mixing test to check the compatibility of this product with all potential tank mix partners and fertilizers. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Physical incompatibility, reduced weed control, or crop injury may result from mixing AX PENDI H2O with other pesticides, additives, or fertilizers.

### **Restrictions**

- **DO NOT** apply this product if surface water is present in the field.
- **DO NOT** apply more than 4.2 quarts (4 lb ai) per acre per application.
- **DO NOT** apply more than 4.2 quarts (4 lb ai) per acre per year.
- **Preharvest Interval (PHI):** There is no PHI for AX PENDI H2O-treated grass forage, green chop, silage, hay, pasture or rangeland.
- **DO NOT** apply this product to mixed stands of cool-season forage grasses with other forage legumes besides alfalfa.
- **DO NOT** graze or harvest mixed stand alfalfa/cool season forage grasses for forage and hay until 14 or more days after application.
- [Not for use in California.]

## **FORAGE GRASSES (WARM-SEASON)**

**Application Methods:** Apply by air, ground or chemigation, or on dry bulk fertilizer.

### **Use Method, Rate, and Timing**

**Established Bermudagrass and other Perennial Warm-season Forage Grasses.** Apply AX PENDI H2O in fields of Bermudagrass (and other perennial warm-season grasses including Bahiagrass, buffalograss, switchgrass, and others) grown for forage or hay production, and/or grown in pastures, rangeland, or Federal Conservation Reserve Program (CRP) land for livestock grazing.

Apply AX PENDI H2O only to established (defined as planted in fall or spring which has gone through a first cutting/ mowing) Bermudagrass and other perennial warm-season forage grasses.

Apply AX PENDI H2O before target-weed germination in the dormant season [i.e., when grasses are not actively growing in fall (postharvest), during winter dormancy period, or in early spring before greenup] or in-season between cuttings.

Uniformly apply at a broadcast rate of 1.1 to 4.2 quarts (1.05 to 4 lb ai) of AX PENDI H2O per acre in a single application. AX PENDI H2O may also be applied as a sequential or split program when the initial application(s) is made in the dormant season and the subsequent application(s) is made in-season between cuttings. Apply the higher rate of AX PENDI H2O when higher weed pressure is anticipated or when a longer duration of residual weed control is desired.

Apply AX PENDI H2O in a sequential use program or as a tank mix with other registered herbicides that control emerged weeds.

AX PENDI H2O may cause temporary injury of Bermudagrass and other perennial warm-season grass stands. Disease, extremely cold weather, drought, extensive frost heaving, salinity, low pH or high pH may weaken stands and make the crop more susceptible to herbicide injury.

### **Chemigation Applications**

Apply AX PENDI H2O through sprinkler irrigation systems. Follow all directions, special instructions and precautions about chemigation in **Spraying Instructions** section of this label.

### **Tank Mixes**

AX PENDI H2O may be tank mixed with other herbicides labeled for use in Bermudagrass and other perennial warm-season grass fields. Axion recommends testing on a small portion of the target crop to determine if damage is likely to occur. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Application of postemergence herbicides may cause crop injury, including stunting or chlorosis of Bermudagrass and other perennial warm-season grasses. Consult your local sales representative for local tank mix options. Always perform a mixing test to check the compatibility of AX PENDI H2O with all potential tank mix partners and fertilizers.

### **Precaution**

- Physical incompatibility, reduced weed control, or crop injury may result from mixing this product with other pesticides, additives, or fertilizers.

### **Restrictions**

- **DO NOT** apply to Bermudagrass and other perennial warm-season grasses after greenup in spring before the first cutting.
- **DO NOT** apply this product if surface water is present in the field.
- **DO NOT** apply more than 4.2 quarts (4 lb ai) per acre per application.
- **DO NOT** apply more than 4.2 quarts (4 lb ai) per acre per year.
- **Preharvest Interval (PHI):** There is no preharvest interval for grass forage or hay, or for livestock grazing after application.
- [Not for use in California.]
- This product may be applied by ground or air.
- Not for use on sod production fields of Bermudagrass or other cool-season grasses.

### FRUITING VEGETABLES CROP GROUP 8-10

African Eggplant; Bell Pepper; Bush Tomato; Cocona; Currant Tomato; Eggplant; Garden Huckleberry; Goji Berry; Groundcherry; Martynia; Naranjilla; Okra; Pea Eggplant; Pepino; Non-Bell Pepper; Roselle; Scarlet Eggplant; Sunberry; Tomatillo; Tomato; Tree Tomato; cultivars, varieties, and/or hybrids of these

**Application Methods:** Apply by ground or air.

#### Use Method, Rate, and Timing

Uniformly apply AX PENDI H2O by ground or air as a broadcast preplant incorporated application or as a broadcast preplant surface application before transplanting fruiting vegetables, or as a post-directed application to transplanted or established direct-seeded fruiting vegetables.

AX PENDI H2O can be applied as a post-directed spray on the soil at the base of the plant, beneath plants, and between rows. After the post-directed spray and when sufficient rainfall or irrigation does not occur to activate the herbicide, mechanically incorporate at the time of blocking and thinning or at layby. Apply this product before weed germination. Emerged weeds will not be controlled by this treatment.

Use AX PENDI H2O in fruiting vegetables transplanted to raised beds. Prior to transplanting, apply this product preplant non-incorporated in a band to the top of the pressed bed just prior to laying plastic. After transplanting, apply this product in a band to the previously untreated row middles between the transplanted beds.

AX PENDI H2O applied at 2.0 to 3.0 pints (0.95 to 1.42 lb ai) per acre may aid in control or suppression of the following weeds when used as part of a comprehensive weed management program: black nightshade, hairy nightshade.

#### Use Rate

Soil Texture	Broadcast Rate (Pints per Acre)
Coarse	1.0 to 1.5 (0.48 to 0.71 lb ai)
Medium	1.5 to 2.0 (0.71 to 0.95 lb ai)
Fine	1.5 to 3.0 (0.71 to 1.42 lb ai)

#### Precautions

- Avoid root contact with AX PENDI H2O-treated soil when placing transplants into furrow or hole or injury may occur.
- Avoid direct contact with foliage or stems.
- Roots of transplants must be established.

#### Precaution

- **DO NOT** apply postemergence over the top of or to foliage of fruiting vegetables as severe injury may occur.

#### Restrictions

- **DO NOT** apply before direct-seeded fruiting vegetables.
- For either of the banded applications to the bed or row middles, **DO NOT** overlap sprays and exceed the maximum broadcast use rate per acre for the given soil texture.
- **DO NOT** apply more than 3.0 pints (1.42 lb ai) per acre per year.
- **Preharvest Interval (PHI):**
  - Tomatoes: 21 days
  - All other fruiting vegetables: 70 days
- **DO NOT** plant lettuce within 6 months after application if the rows were covered with plastic.

## GRAIN SORGHUM

**Application Methods:** Apply by ground or air.

### Use Method, Rate, and Timing

Apply AX PENDI H2O as a postemergence incorporated (CULTI-SPRAY) in grain sorghum grown in all states.

Apply AX PENDI H2O early postemergence in grain sorghum grown in states east of the Mississippi River and in Arizona, Arkansas, eastern Texas, Louisiana, and the Missouri bootheel.

**Additional Weeds Controlled.** In addition to weeds listed in Table2, AX PENDI H2O as a CULTI-SPRAY application controls the following weeds in grain sorghum: wild proso millet and shattercane.

**CULTI-SPRAY.** AX PENDI H2O treatments can be applied from the 4-inch growth state to as late as cultivation (layby) of grain sorghum. See specific directions for (CULTI-SPRAY) application under **Application Timing**.

**Early Postemergence.** For use only in states east of the Mississippi River and in Arizona, Arkansas, eastern Texas, Louisiana, and the Missouri bootheel.

The seedbed should be firm and free of clods and trash. Use only where adequate tillage is practiced to provide good seed coverage. Plant grain sorghum at least 1.5 inches deep to ensure good seed coverage.

### Use Rate

#### CULTI-SPRAY

Soil Texture	Southern States <sup>1</sup> (Pints per Acre)	Northern States <sup>1</sup> (Pints per Acre)
Coarse	1.5 (0.71 lb ai)	2.0 (0.95 lb ai)
Medium	2.0 (0.95 lb ai)	3.0 (1.42 lb ai)
Fine	3.0 (1.42 lb ai)	3.0 (1.42 lb ai)

<sup>1</sup> See **Use Precautions** for map of specific states.

### Early Postemergence

Soil Texture	AX PENDI H2O (Pints per Acre)
Coarse	DO NOT USE
Medium, Fine	2.0 (0.95 lb ai)

### Restrictions

- Livestock can graze or be fed forage from treated grain sorghum 21 days or more after application.
- **DO NOT** apply in grain sorghum preplant incorporated or preemergence because serious crop injury can result.
- **DO NOT** apply this product as a CULTI-SPRAY treatment in grain sorghum planted in double-row beds.
- **DO NOT** replant grain sorghum if crop loss occurs.
- **DO NOT** apply in liquid fertilizer.
- **DO NOT** apply more than the highest yearly rate per acre for any given soil type.
- **DO NOT** make more than one application per year.

## GREEN ONION SUBGROUP 3-07B

Chive, fresh leaves; chive, Chinese, fresh leaves; elegans hosta; fritillaria, leaves; kurrat; lady's leek; leek; leek, wild; onion, Beltsville bunching; onion, fresh; onion, green; onion, macrostem; onion, tree, tops; onion, Welsh, tops; shallot, fresh leaves; cultivars, varieties, and/or hybrids of these

**Application Methods:** Apply preemergence, postemergence, or split application by ground, air, or chemigation.

#### **Use Method, Rate, and Timing**

Uniformly apply 2.0 pints (0.95 lb ai) per acre of AX PENDI H2O as a broadcast spray to the soil surface as preemergence spray or as a postemergence spray to the crop at the 2 to 3 true-leaf stage at least 30 days before harvest. If this product is to be applied sequentially as both a preemergence and postemergence spray, the preemergence spray must be applied 30 days before the postemergence spray. Onion seed must be fully covered by soil at planting. Injury may occur if onion seed is exposed to this product.

#### **Chemigation Application**

AX PENDI H2O herbicide may be applied through sprinkler irrigation systems. Apply at 2 to 3 true-leaf stage at least 30 days before harvest. Follow all directions, special instructions, and restrictions about chemigation in the Spraying Instructions section of this label.

#### **Restrictions**

- Only apply this product preemergence to green onions grown on muck soils or on mineral soils with more than 3% organic matter.
- **DO NOT** apply more than 2.0 pints (0.95 lb ai) per acre per application.
- **DO NOT** apply more than 4.0 pints (1.9 lb ai) per acre per year.
- **Preharvest Interval (PHI):** 30 days
- **DO NOT** feed forage or graze livestock in treated fields.
- **DO NOT** irrigate more than of 1/2 inch of water.
- [Not for use in California.]

### **HOPS**

**Application Method:** Apply only by ground.

#### **Use Method, Rate, and Timing**

Apply this product before target-weed germination when hops are in the dormant or vegetative growth stages. Apply application as a broadcast or banded treatment (including postemergence-directed) using ground equipment. Apply the spray directly to the ground beneath the vines and/or in areas between rows. Contact with hop foliage or cones by spray mixture or drift may cause injury.

Uniformly apply at a broadcast rate of 1.1 to 4.2 quarts (1.05 to 4 lb ai) of AX PENDI H2O per acre in a single application or sequential applications with an interval of 30 days or more. AX PENDI H2O may be applied in a sequential use program or as a tank mix with other registered herbicides that control emerged weeds.

#### **Tank Mixes**

AX PENDI H2O may be tank mixed with other herbicides labeled for use in hops. Axion recommends testing on a small portion of the target crop to determine if damage is likely to occur. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

#### **Restrictions**

- **DO NOT** apply to hops by air or through any type of irrigation system.
- **DO NOT** apply over the top of vines with leaves or cones.
- **DO NOT** apply more than 4.2 quarts (4 lb ai) per acre per application.
- **DO NOT** apply more than 4.2 quarts (4 lb ai) per acre per year.
- **Preharvest Interval (PHI):** Hop cones - 90 days
- [Not for use in California.]

## LEAF LETTUCE

**Application Methods:** Apply by ground or air.

### Use Method, Rate, and Timing

With a single application, uniformly apply up to 2.1 pints (1 lb ai) per acre of AX PENDI H2O as a broadcast foliar spray to direct-seeded or transplanted leaf lettuce from the 3-leaf stage until 20 days before harvest.

### Precautions

- **DO NOT** apply preplant, pretransplant, preemergence (direct-seeded) to leaf lettuce because severe injury may occur.
- **DO NOT** foliar apply to leaf lettuce before the 3-leaf growth stage because severe injury may occur.

### Restrictions

- **DO NOT** apply more than 2.1 pints (1 lb ai) per acre per application.
- **DO NOT** apply more than 2.1 pints (1 lb ai) per acre per year.
- **Preharvest Interval (PHI):** 20 days

## LEAFY BRASSICA GREENS

**Broccoli Raab, Chinese Cabbage (Bok Choy), Collards, Kale, Mizuna, Mustard Greens, Mustard Spinach, Rape Greens, and Turnip Greens (cultivars or varieties grown for leaves only).**

**Application Methods:** Apply by ground or air.

### Use Method, Rate, and Timing

With a single application, uniformly apply up to 2.1 pints (1 lb ai) per acre of AX PENDI H2O as a broadcast foliar spray to direct-seeded or transplanted leafy Brassica greens at the 4-leaf to 5-leaf stage.

### Precautions

- **DO NOT** apply preplant, pretransplant, or preemergence (direct-seeded) to leafy Brassica greens because severe injury may occur.
- **DO NOT** foliar apply to leafy Brassica greens before the 4-leaf growth stage because severe injury may occur.

### Restrictions

- **DO NOT** apply to turnip greens varieties grown for roots or to dual-purpose varieties grown for roots and tops.
- **DO NOT** use AX PENDI H2O-treated turnip greens roots for any feed or food purpose.
- **DO NOT** apply more than 2.1 pints (1 lb ai) per acre per application.
- **DO NOT** apply more than 2.1 pints (1 lb ai) per acre per year.
- **Preharvest Interval (PHI):** 21 days

## LENTILS AND PEAS

**Dry, Dwarf, Edible-Podded, English, Garden, Green, and Pigeon**

**Application Methods:** Apply by ground or air.

### Use Method, Rate, and Timing

Apply AX PENDI H2O preplant surface or preplant incorporated in lentil and peas.

**Preplant Surface and Preplant Incorporated (Fall Application in Idaho, Minnesota, Montana, North Dakota, Oregon, South Dakota, Washington, and Wyoming).** Apply AX PENDI H2O and incorporate (rainfall, irrigation, or mechanically) in late fall before planting lentils or peas the following spring. Apply AX PENDI H2O in the late fall when soil temperatures are 45° F or below but before the ground freezes.



Rainfall or irrigation is required for incorporation and activation. Unpredictable weed control can be expected because factors like length of time between application and planting as well as uncontrollable weather factors determine herbicide activity and longevity.

**Preplant Incorporated.** AX PENDI H2O may be applied within 60 days of planting. After application, rotary hoeing and shallow cultivation/tillage can be practiced without reducing weed control. Avoid tillage that will bring untreated soil to the surface.

#### Use Rate

##### Preplant Surface<sup>1</sup>, Preplant Incorporated<sup>1</sup>

Soil Texture	Broadcast Rate (Pints per Acre)
Coarse	1.5 (0.71 lb ai)
Medium	2.0 (0.95 lb ai)
Fine	3.0 (1.42 lb ai)

<sup>1</sup> Follow seasonal restrictions and/or state-specific instructions.

#### State-specific Instructions

##### Idaho, Montana, North Dakota, Oregon, and Washington

AX PENDI H2O may be applied to lentil or peas (dry peas only) grown in no-tillage and/or minimum-tillage systems in Idaho, Montana, North Dakota, Oregon, and Washington. Preplant surface application must be made within 30 days of planting. When planting, ensure the seed furrow is fully closed because conditions that allow the seed furrow to inadequately close and/or allow this product to contact the seed may result in crop injury. Certain unfavorable environmental conditions, including cool temperatures, excessive moisture after application, and wet and/or compacted soil conditions, may result in delayed emergence and stunting with AX PENDI H2O use in lentil or peas. Adequate rainfall or irrigation after application before weed seedling germination provides the most effective weed control. Herbicide performance from surface application may be decreased compared to soil incorporated application.

##### Idaho, Oregon, and Washington

AX PENDI H2O may be applied post-plant preemergence only to lentil or all peas grown in conventional-tillage systems in Idaho, Oregon, and Washington. Application must be made within 2 days of planting. Apply up to but not more than 1.5 pints (0.71 lb ai) per acre. Apply to a firm seedbed free of clods. Soil conditions that cause poor seed furrow closure and coverage may result in delayed emergence and stunting of the crop. Under certain environmental conditions including cool temperatures, excessive moisture after application, and wet soil conditions may result in delayed emergence and stunting with AX PENDI H2O use in lentil or peas. Adequate rainfall or irrigation after application before weed seedling germination provides the most effective weed control.

#### Precautions

- Any crop registered for a preplant incorporated application of this product can be double cropped after peas.

#### Restrictions

- **DO NOT** use in California.
- **DO NOT** apply when the air temperature is below 45° F.
- **DO NOT** apply preemergence in peas unless otherwise noted in state-specific instructions.
- **DO NOT** apply more than 3.0 pints (1.42 lb ai) per acre per application.
- **DO NOT** apply more than 3.0 pints (1.42 lb ai) per acre per year.
- **DO NOT** make more than one application per year.
- **DO NOT** apply to lentil or peas, lentil or pea forage, pea silage, pea hay, or pea straw grown for livestock feed.
- **DO NOT** apply in any type of irrigation system.

**MELONS**  
**Cantaloupe, Citron Melon, Muskmelon, and Watermelon**

**Application Methods:** Apply by ground.

**Use Method, Rate, and Timing**

Apply AX PENDI H2O sequentially in melon production. Initially apply up to 2.1 pints (1 lb ai) per acre of AX PENDI H2O as a shielded application to row middles (either before melon transplanting or before a seeded crop has emerged) or between rows covered with plastic mulch (before holes are punched in plastic for melon planting). Make a second shielded application at up to 2.1 pints (1 lb ai) per acre of this product between rows middles or between plastic mulch prior to melon vine running. The interval between the sequential AX PENDI H2O applications must be at least 21 days. Avoid spray contact with melon foliage or running vines because crop injury will occur.

**Restrictions**

- **DO NOT** apply more than 2.1 pints (1 lb ai) per acre per application.
- **DO NOT** apply more than 4.2 pints (2 lb ai) per acre per year.
- **DO NOT** make more than two applications per year.
- **Preharvest Interval (PHI):** 35 days
- **DO NOT** feed forage or graze livestock in treated fields.
- [Not for use in California.]

**MINT**  
**Peppermint and Spearmint**

**Application Methods:** Apply by ground or air.

**Use Method, Rate, and Timing**

Make a single broadcast preemergence application of AX PENDI H2O at 1.5 to 4.0 pints (0.71 to 1.9 lb ai) per acre, depending on soil texture (see chart following), to dormant established mint before weed germination.

**Use Rate**

Soil Texture	Broadcast Rate (Pints per Acre)
Coarse	1.5 to 2.0 (0.71 to 0.95 lb ai)
Medium	2.0 to 4.0 (0.95 to 1.9 lb ai)
Fine	2.0 to 4.0 (0.95 to 1.9 lb ai)

**Precautions**

- After an application of this product, temporary crop injury may be observed early in the growing season as mint breaks dormancy and begins to grow.
- This product will not cause crop injury when applied according to the label under normal growing conditions.
- Nonuniform application may result in injury to crops, poor stands, or soil residues; conversely, uneven application may reduce weed control.
- Diseases, cold weather, excessive moisture, deep planting, low or high pH, salinity, or drought may weaken seedlings and plants and make them more susceptible to herbicide damage

**Precautions**

- **DO NOT** apply to mint that has broken dormancy or crop injury may result. Application to mint near dormancy break can result in crop injury. Risk of crop injury increases the closer application is to mint dormancy break.
- **DO NOT** apply to mint stands that have been weakened by age, disease, cold weather, excessive moisture, or other factors that reduce crop vigor. Mint growing under stress is more susceptible to herbicide damage.

### Restrictions

- **DO NOT** apply to mint in the first year of growth and establishment.
- **DO NOT** apply more than 4.0 (1.9 lb ai) pints per acre per application.
- **DO NOT** apply more than 4.0 pints (1.9 lb ai) per acre per year.
- **Preharvest Interval (PHI):** 90 days
- **DO NOT** allow livestock to graze on treated spent hay or feed treated spent hay to livestock.
- **DO NOT** apply this product on mint through any type of irrigation system.

### PEANUTS

**Application Methods:** Apply by ground, air, or chemigation.

### Use Method, Rate, and Timing

Apply AX PENDI H2O preplant incorporated in peanuts and applied preemergent to peanuts grown under overhead irrigation.

**Preplant Incorporated.** Apply AX PENDI H2O up to 60 days before planting and incorporate.

**Preemergence.** Apply AX PENDI H2O at planting or up to 2 days after planting and before crop emergence. For peanuts grown under overhead irrigation or to prevent decreased crop pegging, adequate incorporation must be achieved by applying a minimum of 0.75 inch of overhead irrigation or rainfall within 48 hours after application.

### Chemigation Application

AX PENDI H2O may be applied through sprinkler irrigation systems. Follow all directions, special instructions, and restrictions about chemigation in the Spraying Instructions section of this label.

### Use Rate

Region	Rate (Pints per Acre)
New Mexico, Oklahoma, and Texas	1.0 to 2.0 (0.48 to 0.95 lb ai)
Other peanut growing states*	2.0 (0.95 lb ai)
*For heavy weed infestations, especially of Texas panicum, up to 3.2 pints (1.52 lb ai) per acre of this product can be used in Alabama, Florida, or Georgia.	

### Restriction

- **DO NOT** use in California.
- **DO NOT** apply more than the highest yearly rate per acre for any given region.

### PERENNIAL GRASSES GROWN FOR SEED PRODUCTION

**Application Methods:** Apply by ground, air or chemigation.

### Use Method, Rate, and Timing

Apply AX PENDI H2O before target-weed germination. Uniformly apply at a broadcast rate of 2.1 to 4.2 quarts (2 to 4 lb ai) per acre in a single application. This product may also be applied in two split applications, with 1/2 the seasonal application rate applied in fall or winter followed by the remaining 1/2 of the seasonal application rate applied in spring.

In warm-season and cool-season perennial grasses, use the high application rate of AX PENDI H2O where more dense infestations of targeted annual grasses, annual broadleaf weeds, or volunteer grass seedlings are anticipated, or when a longer duration of residual weed control is desired. Excess grass straw and crop residue from the previous harvest should be evenly spread or removed by such methods as crew cutting, propane flaming, or open field burning (when local regulations allow) before AX PENDI H2O application, or reduced weed control may result.

AX PENDI H2O herbicide may be applied in a sequential use program or as a tank mix with other registered herbicides that control emerged weeds.

AX PENDI H2O may cause temporary injury to perennial grass stands. Application made in periods of cold temperatures that temporarily limit normal crop growth or in extended cold temperature periods that initiate winter dormancy in grass crops may result in crop injury. Diseases, extremely cold weather, drought, extensive frost heaving, low or high pH, or salinity may weaken stands and make them more susceptible to herbicide damage.

**Additional Weeds Controlled.** AX PENDI H2O applied prior to weed germination will control annual bluegrass, volunteer fescue, and volunteer ryegrass in addition to the weeds listed in Table 2. Weeds Controlled. Apply this product in the following perennial grasses grown for seed production:

- **Warm-season perennial grasses**

Apply to established (defined as planted in the fall or spring which has gone through a first cutting/mowing) warm-season perennial grasses, such as Bermudagrass, switchgrass, and others. Apply to postharvest grass during the fall or during winter dormancy or after the first seed harvest/cutting. **DO NOT** apply to warm-season perennial grasses after greenup in the spring prior to the first seed harvest/cutting.

- **Cool-season perennial grasses**

Apply to established (6 or more tillers per plant) cool-season perennial grasses, such as Kentucky bluegrass, tall fescue, orchardgrass, perennial ryegrass, fine fescue, and others. Apply to postharvest grass during regrowth at the beginning of significant fall rains or in spring prior to germination of targeted weeds.

### **Chemigation Application**

AX PENDI H2O may be applied through sprinkler irrigation systems. Follow all directions, special instructions, and restrictions about chemigation in Spraying Instructions section of this label.

### **Tank Mixes**

AX PENDI H2O may be tank mixed with herbicides labeled for use in perennial grasses grown for seed. Test tank mixes on a small portion of the target crop to determine if damage is likely to occur. Physical incompatibility, reduced weed control, or crop injury may result from mixing this product with other pesticides, additives or fertilizers. Applications of postemergence herbicides may cause crop injury. Always perform a mixing test to check the compatibility of this product with all potential mix partners. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

### **Precautions**

- Physical incompatibility, reduced weed control, or crop injury may result from mixing this product with other pesticides, additives, or fertilizers.
- Some stunting and chlorosis of perennial grasses may occur with postemergence application.
- Application made after perennial grasses exceed 6 inches in height may result in poor weed control because of possible reduced spray coverage to the soil.
- Grass straw remaining after seed harvest of warm-season and cool-season perennial grasses may be used as livestock bedding, and/or grazed by or fed to livestock. The grower must notify the seed processor that there is no pesticide tolerance on grass seed screenings; therefore, it cannot be used in livestock feed.

### **Restrictions**

- **DO NOT** apply to warm-season perennial grasses after greenup in the spring before the first seed harvest/cutting.

- **DO NOT** apply if surface water is present in the field.
- **DO NOT** apply more than 4.2 quarts (4 lb ai) of this product per acre application.
- **DO NOT** apply more than a maximum cumulative total of 4.2 quarts (4 lb ai) of this product per acre per year.
- Except for split applications, **DO NOT** make more than 1 application per year.
- There is no preharvest interval for grass forage or hay, or for livestock grazing after application of this product.
- **Preharvest Interval (PHI):** Seed of warm-season and cool-season perennial grasses - 90 days
- [Not for use in California except as directed in supplemental labeling.]

## POTATOES

**Application Methods:** Apply by ground, air or chemigation.

### Use Method, Rate, and Timing

Apply AX PENDI H2O preemergence, preemergence incorporated or early postemergence in potatoes.

**Additional Weeds Controlled.** In addition to the weeds listed in Table 2, AX PENDI H2O controls stinging nettle in potatoes.

**Preemergence.** Apply AX PENDI H2O after planting, but before potatoes and weeds emerge, or after dragoff.

**Preemergence Incorporated.** Apply AX PENDI H2O and incorporate after planting but before potatoes and weeds emerge. Where dragoff is practiced, apply this product and incorporate before, at, or after dragoff, but before potatoes and weeds emerge. Take care incorporation equipment does not damage seed pieces or elongating sprouts.

**Early Postemergence.** Apply AX PENDI H2O from crop emergence to the 6 inch growth stage.

### Chemigation Application

AX PENDI H2O may be applied through sprinkler irrigation systems. Apply this product preemergence after planting, after dragoff, or early postemergence through sprinkler irrigation systems. Follow all directions, special instructions, and restrictions about chemigation in the Spraying Instructions section of this label.

### Use Rate

Soil Texture	< 3% Organic Matter > 3% (Pints per Acre)	
Coarse	1.5 (0.71 lb ai)	1.5 (0.71 lb ai)
Medium	2.0 (0.95 lb ai)	3.0 (1.42 lb ai)
Fine	3.0 (1.42 lb ai)	3.0 (1.42 lb ai)

### Precautions

- Application of this product on White Rose variety potatoes during or followed by cool and/or wet weather conditions may result in crop injury.
- **DO NOT** apply this product postemergence if potatoes are under stress from cold/wet or hot/dry conditions or crop injury may occur.

### Restrictions

- **DO NOT** apply to sweet potatoes or yams.
- **DO NOT** apply preplant.
- **DO NOT** apply more than the highest yearly rate per acre for any given soil type.
- **DO NOT** make more than one application of this product per season.

## RICE

**Application Methods:** Apply by ground or air.

### **Use Method, Rate, and Timing**

Apply AX PENDI H2O as a delayed preemergence application in drill dry-seeded rice or as an early postemergence application in dry-seeded rice. Treatments include conventional, reduced or minimum tillage, and no-till (stale seedbed) rice. Prepare the seedbed to be firm and free of clods and to allow for good seed coverage. The use of a planter under conditions that **DO NOT** allow good soil coverage of the rice seed can result in reduced stand or stunting if this product contacts germinating rice seed. Use this product applied postemergence in California water-seeded rice as a component of a comprehensive weed management program.

**Additional Weeds Controlled.** In addition to weeds listed in Table 2, AX PENDI H2O controls the following weeds in rice: junglerice and sprangletop.

**Delayed Preemergence.** Apply AX PENDI H2O alone or with tank mix partner for delayed preemergence weed control in grain-drilled, dry-seeded rice. Apply this product alone or in tank mix to levees after the levees are pulled and planted. Exposed seeds that come in contact with this product may be injured. Apply only when growing conditions favor vigorous rice growth. The seedbed should have adequate moisture for seed germination. Not for use in grain-drilled, dry-seeded rice in California.

Uniformly apply the specified rate of AX PENDI H2O after rice planting and before rice emergence (spiking) and weed germination. Apply after rice seed has absorbed water and germinated and after the soil has been previously sealed over the seed by at least 1 inch of rainfall or by irrigation (flush). If the soil has not been sealed by rain or flush, apply when 80 percent of germinated seeds have a primary root (radicle) or shoot at least 1/2-inch long. If there is insufficient moisture, Axion recommends flushing before AX PENDI H2O application to supply moisture for root (radicle) initiation and for vigorous rice and weed growth.

If applied to soil before these conditions, or to cracked soil, stand reduction or stunting of rice may occur. Under some conditions, use of gibberellic acid-treated seed, heavy rainfall after application, or flushing after application may result in herbicide injury to rice. Rice can overcome moderate injury with appropriate cultural practices.

Because of the residual activity of AX PENDI H2O, this treatment may be applied if rice is too small to maintain a flood on the field for weed control. However, proper water management practices must be followed for normal rice growth and activity of AX PENDI H2O.

**Early Postemergence.** Apply AX PENDI H2O as a tank mix partner in dry-seeded rice. Base applications on weed and crop size guidelines of the tank mix partner. **DO NOT** apply to fields with standing water. If necessary, fields may be flushed before treatment to produce vigorous rice and weed growth. Because soil and weeds must be completely exposed to spray coverage, no flood water should be on the field at the time of application. Cloddy soil, standing water (puddles) at the time of application, or cracks in the soil that form after application may result in reduced weed control. Because of residual activity of this product, this treatment may be applied if rice is too small to maintain a flood on the field for weed control. However, proper water management practices must be followed for normal rice growth and activity of this product.

**Postemergence (California water-seeded rice only).** Apply AX PENDI H2O alone or tank mixed with a postemergence herbicide after water-seeded rice has reached the 4-leaf to 6-leaf stage (spike plus 3 to 5 true leaves). Applications made before the 4-leaf rice stage may result in crop injury.

Water-seeded rice must also be well-rooted/pegged (i.e. standing erect after the flood is removed) before application. **DO NOT** apply to rice that is leaning over and/or laying flat to the ground after flood removal since this is characteristic of a poorly established root system. Rice roots must be below the AX PENDI H2O-treated soil zone. Injury, stunting, and/or stand reduction can occur if this product contacts the rice roots.



Fields must be completely drained and free of standing water (moist/saturated soil) before application. If soil is saturated at the time of application, allow the soil surface to dry before restoring the permanent flood. AX PENDI H2O requires alternate wetting/drying cycles to be activated. Weed control will be reduced if the soil surface is not allowed to dry out before restoration of the permanent flood. Resume normal water management practices after permanent flood restoration.

AX PENDI H2O does not control weeds postemergence; therefore, this product must be tank mixed with a postemergence herbicide to control emerged weeds at the time of application.

AX PENDI H2O aids in control or suppression of the following weeds when used as part of a comprehensive weed management program:

Barnyard grass, early and late watergrass (including biotypes resistant to other herbicide modes of action, e.g. rice mimic), sprangletop, smallflower umbrella sedge\*, redstem\*

\* Suppression only

In California water-seeded rice, AX PENDI H2O may be applied with aerial or ground application equipment. For aerial application, apply the specified rate of AX PENDI H2O in 5 to 10 gallons of water per acre. If applied as a tank mix with another herbicide, make sure proper gallonage per acre per label directions (i.e. 10 to 15 with propanil) is used to ensure thorough coverage. To minimize drift, **DO NOT** apply during periods of wind more than 10 mph, or when wind conditions favor drifting, or if there is a temperature inversion. Axion recommends that a flagman or an automatic mechanical flagging unit on the aircraft be used to avoid overlapping and possible crop injury.

For ground equipment, apply the specified rate of AX PENDI H2O in 10 gallons to 20 gallons of water per acre. If AX PENDI H2O herbicide is applied as a tank mix with another herbicide, make sure proper gallonage per acre per label directions (i.e. 20 to 30 for propanil) is used to ensure thorough coverage. Use a calibrated low-pressure (20 PSI to 40 PSI) sprayer equipped with appropriate nozzles for uniform spray distribution and minimize drift. Keep the bypass line on or near the bottom of the tank to minimize foaming. Nozzle screens must be no finer than 50 mesh. **DO NOT** apply AX PENDI H2O during periods of gusty winds or when wind velocity is more than 20 mph.

**Postemergence Tank Mixes:** To control emerged weeds at application, AX PENDI H2O may be tank mixed with other postemergence herbicides registered for the same use and timing. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

#### **Restrictions (for water-seeded rice)**

- **DO NOT** apply this product before the 4-leaf rice stage (spike plus 3 true leaves) or to rice that is not well-rooted/pegged. The rice must be standing erect after the flood is removed and before application.
- **DO NOT** apply to fields with standing water.
- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply in liquid fertilizer.
- **DO NOT** spray target crop within 60 feet of sensitive crops (crops not listed on this label).
- **DO NOT** spray target crop within 60 feet of crops labeled for application of this product where the method of application, rate, or timing of spray application is prohibited.
- **DO NOT** apply more than the maximum rate for any soil type in one season.
- **DO NOT** use water containing residues of this product from rice cultivation to irrigate food or feed crops not registered for use with this product.

In case of a crop failure due to weather conditions or disease following treatment with AX PENDI H2O alone or in a tank mixture, only drilled dry-seeded rice may be immediately replanted; however, the grower assumes all risks and consequences associated with replanting of rice because there is the potential for stand reduction or stunting. Axion Ag Products recommends a 10% increase in seeding rate. Replant seed below the herbicide layer because reduced stand or stunting may occur if this product contacts germinating rice seed. **DO NOT** replant gibberellic acid-treated seed. **DO NOT** reapply this product alone or in a tank mixture.

**DO NOT** apply to stressed rice. Stress factors include cold or hot temperature extremes, excessive moisture or drought, problem soils, poor field drainage, or deep water after application.

## Use Rates

### Delayed Preemergence

Soil Texture	Rate (Pints per Acre)
Sands, loamy sands	<b>DO NOT USE</b>
Sandy loams	1.5 (0.71 lb ai)
Loams, silt loams, silts, sandy clay loams	2.0 (0.95 lb ai)
Silty clay loams, clay loams, sandy clays, silty clays, clays	

### Early Postemergence

Soil Texture	Rate (Pints per Acre)
Coarse	1.5 (0.71 lb ai)
Medium	2.0 (0.95 lb ai)
Fine	

### Postemergence in California Water-seeded Rice

Soil Texture	Rate (Pints per Acre)
Coarse	1.5 (0.71 lb ai)
Medium	2.0 (0.95 lb ai)
Fine	

## Precautions

- In case of crop failure because of weather conditions or disease after treatment with this product alone or in tank mix, only drilled dry-seeded rice may be immediately replanted; however, the grower assumes all risks and consequences associated with replanting of rice because there is the potential for stand reduction or stunting. A 10% increase in seeding rate is suggested. Replant seed below the herbicide layer because reduced stand or stunting may occur if this product contacts germinating rice seed.
- Do not apply early preemergence or preplant incorporated because severe rice injury is possible.

## Restrictions

- **DO NOT** replant with gibberellic acid-treated seed. **DO NOT** reapply this product alone or in tank mix.
- **DO NOT** apply to stressed rice. Stress factors include cold or hot temperature extremes, excessive moisture or drought, problem soils, poor field drainage, or deep water after application.
- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply in liquid fertilizer.
- **DO NOT** apply to rice fields if fields are used for fish production, especially catfish farming.
- This product may be applied to rice fields used for crayfish production.
- **DO NOT** use water containing residues of this product from rice cultivation to irrigate food or feed crops not registered for use with this product.
- **DO NOT** apply this product and then flush for germination.

## SAFFLOWER

**Application Methods:** Apply by ground, air, or on dry bulk fertilizer (only fall and preplant incorporated applications).

### Use Methods, Timings and Use Rates

Plant safflower 1.5 to 2 inches deep and completely cover with soil. In California, plant safflower deep enough to completely cover with soil.

### Use Method and Timings

**Preplant Incorporated.** In all states, apply within 60 days of planting and incorporate.

### Preplant Incorporated

**Fall Application in Minnesota, Montana, North Dakota, and South Dakota.** Apply AX PENDI H2O and immediately incorporate in late fall before planting safflower the following spring. Apply this product in the late fall when soil temperatures are 45° F or below but before the ground freezes. Before safflower planting in the spring, fields treated with this product should receive at least one shallow additional incorporation. Spring incorporation should be at an angle to the last tillage operation.

**Fall Application in California.** Apply AX PENDI H2O and immediately incorporate during tillage operations in the fall to target winter annual weeds before planting safflower the following spring. Before safflower planting in the spring, fields treated with this product should receive at least once, at an angle to the last tillage operation.

**Preemergence.** Apply AX PENDI H2O at planting or up to 2 days after planting.

Preemergence application of AX PENDI H2O to safflower may increase the likelihood of crop injury, especially when crops are grown in stress situations, including compacted soils. Decreased herbicide performance compared to preplant incorporated application may also result from a preemergence application. If dry conditions with limited precipitation exist or unseasonably cool temperatures after planting are forecast, apply this product before planting and mechanically incorporate with tillage. This product may be applied preemergence in conventional-tillage safflower.

In California, preemergence application must be followed with irrigation or rainfall to establish a crop stand.

**No-till Safflower.** AX PENDI H2O may be applied at 3.0 pints (1.42 lb ai) per acre up to 30 days before planting (preplant) to immediately after planting (preemergence). **DO NOT** use in California.

### Use Rate

#### Preplant Incorporated, Preemergence

Soil Texture	Southern States <sup>1</sup> (Pints per Acre)	Northern States <sup>1</sup>	
		< 3% Organic Matter > 3% (Pints per Acre)	
Coarse	1.5 (0.71 lb ai)	2.0 (0.95 lb ai)	2.0 (0.95 lb ai)
Medium	2.0 (0.95 lb ai)	2.5 (1.19 lb ai)	3.0 (1.42 lb ai)
Fine	3.0 (1.42 lb ai)	3.0 (1.42 lb ai)	3.0 (1.42 lb ai)

<sup>1</sup> See **Use Precautions** for map of specific states.

#### Preplant Incorporated (Fall)<sup>1</sup>

Soil Texture	< 3% Organic Matter > 3% (Pints per Acre)	
Coarse	2.5 (1.19 lb ai)	2.5 (1.19 lb ai)
Medium	3.0 (1.42 lb ai)	3.5 (1.66 lb ai)
Fine	3.5 (1.66 lb ai)	3.5 (1.66 lb ai)

<sup>1</sup> For use in California, Minnesota, Montana, North Dakota, and South Dakota only.

### Restrictions (All Tillage Types)

- **DO NOT** use on no-till safflower in California.
- **DO NOT** apply this product postemergence.
- **DO NOT** apply more than the highest rate per acre for any soil type.
- **DO NOT** feed forage or graze livestock in treated safflower fields.
- Fall Applications in Minnesota, Montana, North Dakota, and South Dakota: **DO NOT** apply when the air temperature is below 45°F.

## SOYBEANS

**Application Methods:** Apply by ground or air.

### Use Method, Rate, and Timing

Apply AX PENDI H2O in conventional-tillage, minimum-tillage, or no-till as a fall surface, fall incorporated, preplant surface, preplant incorporated, or preemergence application in soybeans.

**Additional Weeds Controlled.** In addition to weeds listed in Table 2, AX PENDI H2O controls or suppresses the following weeds in soybean: red rice and itchgrass. For specific rates for itchgrass and red rice management, see table at end of this section.

**Fall Applied.** AX PENDI H2O may be surface applied or incorporated in the fall, after fall harvest and before ground freeze in states north of I-80 and the entire states of Illinois, Indiana, Iowa, Kansas, Kentucky, Missouri, Nebraska, Ohio, Oklahoma, and Texas. Fall application of this product will not provide season-long weed control.

**Preplant Surface.** Apply AX PENDI H2O within 15 days of planting. This product may be applied within 45 days of planting when used in tank mix or applied sequentially with preplant herbicides registered for use in soybean. Apply this AX PENDI H2O tank mixes and sequential program as specified under the tank mix section.

**Preplant Incorporated.** Apply AX PENDI H2O within 60 days of planting and incorporate.

**Preemergence.** Apply AX PENDI H2O at planting or within 2 days after planting. Apply to a firm seedbed free of clods.

### Use Rate

#### Fall Surface, Fall Incorporated, Preplant Surface, Preplant Incorporated

Soil Texture	< 3% Organic Matter > 3% (Pints per Acre)	
Coarse	1.5 (0.71 lb ai)	2.0 (0.95 lb ai)
Medium	2.5* (1.19 lb ai)	3.0 (1.42 lb ai)
Fine**	3.0 (1.42 lb ai)	3.0 (1.42 lb ai)
* <b>DO NOT</b> apply more than 2.1 pints (1 lb ai) for Southern states; see <b>Use Precautions</b> for map of specific states.		
** For heavy clay soils, apply this product at the broadcast rate of 3.2 pints (1.52 lb ai) per acre.		

### Preemergence

Soil Texture	< 3% Organic Matter > 3% (Pints per Acre)	
Coarse	1.5 (0.71 lb ai)	1.5 (0.71 lb ai)
Medium	2.0 (0.95 lb ai)	2.0 (0.95 lb ai)
Fine	2.0 (0.95 lb ai)	2.5 (1.19 lb ai)

**Preplant Incorporated  
Red Rice Control and Itchgrass Suppression**

Soil Texture	Up to 3% Organic Matter <sup>1</sup> (Pints per Acre)
Coarse	3.0 (1.42 lb ai)
Medium	3.0 (1.42 lb ai)
Fine	4.0 (1.9 lb ai)

<sup>1</sup> **DO NOT** use on soils with more than 3% organic matter.

**Restrictions**

- **DO NOT** use this product in soybean in California.
- **DO NOT** apply this product preemergence north of Interstate 80, except in the states of Indiana, Michigan, and Ohio.
- Livestock can graze or be fed forage from treated soybean fields.
- **Preharvest Interval (PHI):** 85 days
- **DO NOT** apply more than one application per crop season at the highest rate per acre for any given soil type and application method.

**STRAWBERRY AND OTHER LOW-GROWING BERRIES (SUBGROUP 13-07G)**  
**Bearberry; Bilberry; Blueberry, Lowbush; Cloudberry; Cranberry; Lingonberry; Muntries;**  
**Partridgeberry; Strawberry; cultivars, varieties, and/or hybrids of these**

**Application Methods:** Apply by ground, air, or chemigation.

**Use Method, Rate, and Timing**

Stunting, reduced growth, or reduction in daughter plants may occur with use of AX PENDI H2O in strawberries and other low-growing berries.

Uniformly apply 1.5 to 3.0 pints (0.71 to 1.42 lb ai) per acre of AX PENDI H2O as a broadcast spray to the soil surface at pretransplant time or post-transplant time (must be within 7 days of transplanting of rootstock in the Pacific Northwest). However, in areas where irrigation is used daily (frequently) after transplanting, apply this product just before the end of the watering regime to maximize weed control benefits of AX PENDI H2O. Extended periods of irrigation may reduce residual control provided by this product.

Applications to row middles between the beds are allowed. **DO NOT** apply post-transplant if new foliage from rootstock is exposed to spray area. A second application of 1.5 to 3.0 pints (0.71 to 1.42 lb ai) per acre of this product may be applied in a band to the soil between crop rows (or between the plastic beds) 35 days before harvest, but **DO NOT** concentrate the rate per acre into the treated area, and **DO NOT** allow spray to contact strawberry or other low-growing berry plants. The second application rate is based on per unit of treated area.

AX PENDI H2O may also be applied to strawberries or other low-growing berries in fall or winter dormancy. Uniformly apply 1.5 to 3.0 pints (0.71 to 1.42 lb ai) per acre of this product as a broadcast spray to the soil surface before onset of new seasonal growth from strawberry or other low-growing berry crowns.

AX PENDI H2O may also be applied to perennial strawberries or other low-growing berries after renovation. Uniformly apply 1.5 to 3.0 pints (0.71 to 1.42 lb ai) per acre of AX PENDI H2O as a broadcast spray to the soil surface after renovation (mowing or other defoliation operation) when no foliage is exposed but before onset of new seasonal growth from strawberry or other low-growing berry crowns.

**Chemigation Application**

AX PENDI H2O may be applied through sprinkler irrigation systems. Follow all directions, special instructions, and restrictions about chemigation in the Spraying Instructions section of this label.

**Use Rate**

Soil Texture	Broadcast Rate (Pints per Acre)
Coarse	1.5 (0.71 lb ai)
Medium	2.0 to 2.5 (0.95 to 1.19 lb ai)
Fine	2.5 to 3.0 (1.19 to 1.42 lb ai)

**Restrictions**

- **DO NOT** apply more than 3.0 pints (1.42 lb ai) per acre per application.
- **DO NOT** apply more than 6.0 pints (2.85 lb ai) per acre per season.
- **DO NOT** make more than 2 applications per year.
- **Preharvest Interval (PHI):** 35 days
- **DO NOT** feed forage or graze livestock in treated fields.
- **DO NOT** plant lettuce within 6 months after an application of this product if strawberry beds were covered with plastic.
- **DO NOT** apply if new seasonal growth (leaves) has emerged or leaves are exposed.
- **DO NOT** allow AX PENDI H2O-treated irrigation water to contact strawberry or other low-growing berry plants.

**Additional Use in Oregon and Washington in First Year Non-bearing Strawberries**

Uniformly broadcast apply AX PENDI H2O preemergence before transplanting strawberries.

**Broadcast Use Rate****First Year Non-bearing Strawberries**

Soil Texture	< 3% Organic Matter > 3% (Pints per Acre)	
Coarse	1.5 to 2.0 (0.71 to 0.95 lb ai)	2.0 to 3.0 (0.95 to 1.42 lb ai)
Medium	2.0 to 2.5 (0.95 to 1.19 lb ai)	
Fine	2.0 to 3.0 (0.95 to 1.42 lb ai)	

**Restrictions - Oregon and Washington First Year Non-bearing Strawberries**

- **DO NOT** harvest for food or feed any portion of the strawberry plant within 1 year (365 days) of application of this product.
- **DO NOT** apply this product through any type of irrigation system or by air.

**SUGARCANE**

**Application Methods.** Apply by ground or air.

**Use Method, Rate, and Timing**

Apply AX PENDI H2O preemergence through layby to plant or ratoon sugarcane. Although there may be adequate crop tolerance for postemergence application at layby, the spray must be directed under the sugarcane canopy to obtain effective weed control.

**Use Rate**

Use Area	Broadcast Rate <sup>1</sup> (Pints per Acre)
All states, except Hawaii	4.2 to 6.2 (2 to 2.95 lb ai)
Hawaii	4.2 to 8.4 (2 to 4 lb ai)
Muck soils (Florida only)	

<sup>1</sup> Use the high rate if: heavy clay soils; no mechanical incorporation is planned; heavy weed populations are anticipated; itchgrass infestation is anticipated; no shaving is planned.



**Additional Use as Fallow Ground Application Only in Louisiana.** Apply AX PENDI H2O before weed germination for control of annual grasses including itchgrass (Raoulgrass), seedling Johnsongrass, and *Panicum* spp. in preplant fallow ground sugarcane. If necessary, control emerged weeds before application of AX PENDI H2O with postemergence herbicides and/or mechanical cultivation.

After cultivation and forming the beds in the spring, apply AX PENDI H2O at 2.6 quarts (2.47 lb ai) per acre using ground equipment. Sugarcane beds should be free of trash or clods at the time of application. If sufficient rainfall (1/2 to 3/4 inch) has not occurred within 7 days of application, perform a shallow incorporation (1 to 2 inches) with an additional pass of a Lilliston-type Lely Roterra™ cultivator set to cut 2 or 3 inches deep. A minimum interval of 60 days between application and planting of sugarcane is required or crop injury may occur. After planting, apply this product to sugarcane preemergence through layby.

**Noncropped Water Drainage Areas Application Only in Louisiana.** Apply AX PENDI H2O before weed germination to nonirrigated, noncropped water drainage areas (ditchbanks) adjacent to sugarcane fields. If necessary, control emerged weeds before application of this product with postemergence herbicides and/or mechanical cultivation.

Apply AX PENDI H2O at 5.2 to 7 pints (2.47 to 3.33 lb ai) per acre using ground equipment.

#### **Precautions**

- Ratoon sugarcane must be lightly shaved in early spring to remove the old stubble before incorporation over the line of sugarcane is possible. Carefully adjust equipment to incorporate without causing excessive damage to emerging shoots.

#### **Restrictions**

- **DO NOT** apply more than 8.4 pints (4 lb ai) per acre per application.
- **DO NOT** apply more than 12.5 pints (5.94 lb ai) per acre per year.
- **DO NOT** use less than 11 gallons of water as a carrier when applying this product for weed control.
- **DO NOT** make aerial application at close-in because complete and uniform coverage cannot be obtained.
- **DO NOT** apply through any type of irrigation system.
- **Preharvest Interval (PHI):** 90 days
- **DO NOT** graze treated fields or feed treated forage or fodder to livestock.
- **DO NOT** apply this product below the high water mark or when water is present in the drainage area (ditch bank).

#### **SUNFLOWER AND OTHER OILSEEDS (SUBGROUP 20B), Except Safflower.**

**Calendula; castor oil plant; Chinese tallowtree; euphorbia; evening primrose; jojoba; niger seed; rose hip; stokes aster; sunflower; tallowwood; tea oil plant; vernonia; cultivars, varieties, and/or hybrids of these**

**Application Methods.** Apply by ground or air.

#### **Use Method, Rate, and Timing**

Apply AX PENDI H2O preplant incorporated in all states. Fall preplant incorporated applications may be made in Minnesota, North Dakota and South Dakota. Apply this product preemergence in conventional tillage sunflower or other oilseeds, except in the state of California.

Plant sunflower and other Group 20B oilseeds 1.5 to 2 inches deep and completely cover with soil.

**Preplant Incorporated (Spring).** In all states, apply within 60 days of planting and incorporate.

**Preplant Incorporated (Fall Applications Only in Minnesota, North Dakota, and South Dakota).** Apply AX PENDI H2O and immediately incorporate in late fall before planting sunflower or oilseeds the following spring. Apply this product in late fall when soil temperatures are 45°F or below but before the ground

freezes. Before sunflower or other Group 20B oilseeds planting in the spring, fields treated with this product should receive at least one shallow additional incorporation. Spring incorporation should be at an angle to the last tillage operation.

**Preemergence.** Apply AX PENDI H2O at planting or up to 2 days after planting. Preemergence application of this product to sunflower or other Group 20B oilseeds may increase the likelihood of crop injury, especially when crops are grown in stress situations, including compacted soils. Decreased herbicide performance compared to preplant incorporated application may also result from a preemergence application. If dry conditions with limited precipitation exist or unseasonably cool temperatures after planting are forecast, apply this product before planting and mechanically incorporate with tillage.

**No-till Sunflower or other Group 20B Oilseeds.** Apply AX PENDI H2O at 3.0 pints (1.42 lb ai) per acre up to 30 days before planting (preplant) to immediately after planting (preemergence). **DO NOT** use in California.

#### Use Rate

##### Preplant Incorporated (Spring) or Preemergence (Conventional Tillage)

Soil Texture	Southern States <sup>1</sup> (Pints per Acre)	Northern States <sup>1</sup>	
		< 3% Organic Matter > 3% (Pints per Acre)	
Coarse	1.5 (0.71 lb ai)	2.0 (0.95 lb ai)	2.0 (0.95 lb ai)
Medium	2.0 (0.95 lb ai)	2.5 (1.19 lb ai)	3.0 (1.42 lb ai)
Fine	3.0 (1.42 lb ai)	3.0 (1.42 lb ai)	3.0 (1.42 lb ai)

<sup>1</sup> See **Use Precautions** for map of specific states.

##### Preplant Incorporated (Fall) <sup>1</sup>

Soil Texture	< 3% Organic Matter > 3% (Pints per Acre)	
Coarse	2.5 (1.19 lb ai)	2.5 (1.19 lb ai)
Medium	3.0 (1.42 lb ai)	3.5 (1.66 lb ai)
Fine	3.5 (1.66 lb ai)	3.5 (1.66 lb ai)

<sup>1</sup> For use in Minnesota, North Dakota, and South Dakota only

#### Restrictions (All Tillage Types)

- **DO NOT** apply this product postemergence.
- **DO NOT** feed forage or graze livestock in treated oilseeds 20B fields.
- **DO NOT** apply when air temperature is below 45°F.
- **DO NOT** apply more than the highest rate per acre for any soil type.

#### California Restrictions

- **DO NOT** apply preemergence in conventional tillage sunflower or other oilseed crops.
- **DO NOT** apply in no-till sunflowers or other oil seeded crops.

### TOBACCO

**Application Methods:** Apply with ground equipment only preplant incorporated, or as a layby application in transplanted tobacco.

#### Use Method, Rate, and Timing

**Preplant Incorporated.** Apply with ground sprayer and incorporate within 60 days of transplanting tobacco.

Applied according to directions and under normal growing conditions, AX PENDI H2O will not harm transplanted tobacco. Under stress conditions for plant growth, including cold/wet or hot/dry weather, this product can produce a temporary retardation of tobacco development.

**Layby.** AX PENDI H2O may be applied as a directed spray after the last normal cultivation (layby), usually 4 to 6 weeks after transplanting tobacco. Apply this product in a 16 to 24-inch band between the crop rows.

**Use Rate****Preplant Incorporated**

Use Area	Soil Texture	Rate (Pints per Acre)
Florida Georgia Maryland North Carolina South Carolina Virginia	Coarse	2.0 (0.95 lb ai)
	Medium	
	sandy clay loams, loams	2.0 (0.95 lb ai)
	silt loams, silts	2.5 (1.19 lb ai)
	Fine	2.5 (1.19 lb ai)
Other states	Coarse	2.0 (0.95 lb ai)
	Medium	3.0 (1.42 lb ai)
	Fine	3.0 (1.42 lb ai)

**Layby**

Soil Texture	Broadcast Rate (Pints per Acre)
Coarse	1.5 (0.71 lb ai)
Medium	2.0 (0.95 lb ai)
Fine	

**Restrictions**

- **DO NOT** apply as a broadcast spray or contact may cause malformed tobacco leaves.
- **DO NOT** contact tobacco plants with spray.
- The total amount of this product applied per acre per year cannot exceed the highest labeled rate for any given soil type.

**VEGETABLE SOYBEAN  
(Edamame)**

**Application Methods.** Apply only by ground.

**Use Method, Rate, and Timing**

AX PENDI H2O may be applied to edamame grown under conventional-tillage, minimum-tillage, or no-till systems.

**Preplant Surface.** Apply AX PENDI H2O within 15 days of planting. This product may be applied within 45 days of planting when used in tank mix or applied sequentially with postemergence-applied herbicides registered for use in edamame.

**Preplant Incorporated.** Apply AX PENDI H2O within 60 days of planting and incorporate.

**Preemergence.** Apply AX PENDI H2O at planting or up to 2 days after planting. Apply to a firm seedbed, free of clods. **DO NOT** apply AX PENDI H2O preemergence north of Interstate 80, except in the states of Indiana, Michigan, and Ohio.

**Use Rate****Preplant Surface, Preplant Incorporated**

Soil Texture	< 3% Organic Matter > 3% (Pints per Acre)	
Coarse	1.5 (0.71 lb ai)	2.0 (0.95 lb ai)
Medium	2.5* (1.19 lb ai)	3.0 (1.42 lb ai)
Fine**	3.0 (1.42 lb ai)	
* <b>DO NOT</b> apply more than 2.1 pints (1 lb ai) for Southern states; see <b>Use Precautions</b> for map of specific states.		
**For heavy clay soils, apply this product at the broadcast rate of 3.2 pints (1.52 lb ai) per acre.		

### Preemergence

Soil Texture	< 3% Organic Matter > 3% (Pints per Acre)	
Coarse	1.5 (0.71 lb ai)	1.5 (0.71 lb ai)
Medium	2.0 (0.95 lb ai)	2.0 (0.95 lb ai)
Fine		2.5 (1.19 lb ai)

### Restrictions

- Livestock can graze or be fed forage from treated vegetable soybean (edamame) fields.
- **Preharvest Interval (PHI):** 85 days
- **DO NOT** apply more than one application per crop year at the highest rate per acre for any given soil type and application method.
- **DO NOT** use in California.

## WHEAT AND TRITICALE

**Application Methods:** Apply by ground, air or chemigation.

### Use Method, Rate, and Timing

Apply AX PENDI H2O preemergence, delayed preemergence, or postemergence for weed control in fall-seeded, winter-seeded, or spring-seeded wheat or triticale.

Apply to a seedbed which is firm and free of clods and trash. The seedbed must be prepared to ensure thorough seed coverage by the soil and seed-to-soil contact. Use high quality seed. When application of AX PENDI H2O is intended to be made preemergence or delayed preemergence, plant seed at least 1 inch deep to avoid possible crop injury, but not too deep for proper germination. When application of this product is intended to be made postemergence, plant seed at least 1/2 to 1 inch deep to avoid crop injury.

Uniformly apply AX PENDI H2O preemergence, delayed preemergence (after wheat or triticale seed has germinated), or postemergence from the 1st-leaf stage of wheat or triticale until before the flag leaf is visible/emerged for weed control. Apply this product before weed germination. Emerged weeds will not be controlled by this treatment.

For control of established weeds, AX PENDI H2O herbicide may be tank mixed with any postemergence herbicide registered for use in wheat or triticale. AX PENDI H2O provides residual control of weeds listed in this label. Always perform a mixing test to check the compatibility of this product with all potential tank mix partners.

### Use Rate

Soil Texture	Southern States <sup>1</sup> (Pints per Acre)	Northern States <sup>1</sup> (Pints per Acre)
Coarse	1.5 to 2.0 (0.71 to 0.95 lb ai)	1.5 (0.71 lb ai)
Medium	1.5 to 3.0 (0.71 to 1.42 lb ai)	1.5 to 2.5 (0.71 to 1.19 lb ai)
Fine	2.0 to 3.0 (0.95 to 1.42 lb ai)	2.0 to 3.0 (0.95 to 1.42 lb ai)

<sup>1</sup> See **Use Area** map in **Use Precautions**.

**In wheat stubble**, AX PENDI H2O may be applied in the fall, spring, or early summer during the fallow period after wheat harvest as a planned residual treatment to control labeled broadleaf and grass weeds. This product must be applied with a tank mix partner for control of emerged weeds. There must be at least a 4-month interval between a fallow application of this product and the rotational planting of any fall-seeded cereal crop. Apply up to 3 pints (1.42 lb ai) per acre of this product in any fallow application. Follow rotational crop restrictions when planting a rotational crop after a fallow application of this product.

### Precautions

- If loss of grain crop occurs, any crop registered for AX PENDI H2O preplant incorporated use may be replanted the same year without adverse effects. **DO NOT** replant wheat or triticale.

### Restrictions

- **DO NOT** apply more than 3.0 pints (1.42 lb ai) per acre per application.
- **DO NOT** apply more than 3.0 pints (1.42 lb ai) per acre per year.
- **Preharvest Interval (PHI):**
  - Grain and straw - 60 days
  - Hay - 28 days
  - Forage - 11 days
- **For wheat stubble:**
  - **DO NOT** make more than one application of this product during a single fallow period before rotational planting of any fall-seeded cereal crops.
  - **DO NOT** apply more than 3.0 pints (1.42 lb ai) per acre in any fallow application.

**NOTE:** If loss of grain crop occurs, any crop registered for AX PENDI H2O preplant incorporated use may be replanted the same year without adverse effects. **DO NOT** replant wheat or triticale.

### STORAGE AND DISPOSAL

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

#### Pesticide Storage

This product freezes around 15° F and is stable under conditions of freezing and thawing. Product that has been frozen should be thawed and recirculated prior to use. In case of spill or leak on floor or paved surfaces, soak up with sand, earth, or synthetic absorbent. Remove to chemical waste area.

#### Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. Open dumping is prohibited. If these wastes cannot be disposed of by use according to label directions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### Container Handling

**NONREFILLABLE CONTAINER (EQUAL TO OR LESS THAN 5 GALLONS): 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. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**NONREFILLABLE CONTAINER (GREATER THAN 5 GALLONS): DO NOT** reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Pressure rinse as follows (all sizes):** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration, or by other procedures allowed by state and local authorities.

**REFILLABLE CONTAINER:** Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. After triple rinsing is complete, and the container is not suitable for refilling or reconditioning, offer the container 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.

**CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of AXION AG PRODUCTS, LLC or Seller, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold AXION AG PRODUCTS, LLC and Seller harmless for any claims relating to such factors.

AXION AG PRODUCTS, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or AXION AG PRODUCTS, LLC, and TO THE EXTENT CONSISTENT WITH APPLICABLE LAW Buyer and User assume the risk of any such use. AXION AG PRODUCTS, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, neither AXION AG PRODUCTS, LLC nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF AXION AG PRODUCTS, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF AXION AG PRODUCTS, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

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

All trademarks are the property of their respective owners.



Sublabel B: Non-Agricultural Uses Complete Directions for Use

PENDIMETHALIN	GROUP	3	HERBICIDE
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# AX PENDI H20

**[HERBICIDE**

**FOR PREEMERGENT WEED CONTROL IN TURFGRASSES, LANDSCAPE OR GROUNDS MAINTENANCE, NONCROPLAND AREAS AND ORNAMENTAL PRODUCTION]**

ACTIVE INGREDIENT:	% BY WT.
Pendimethalin: N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzenamine .....	38.7%
OTHER INGREDIENTS: .....	61.3%
TOTAL: .....	100.0%

1 gallon contains 3.8 pounds of pendimethalin formulated as an aqueous capsule suspension.

**KEEP OUT OF REACH OF CHILDREN  
CAUTION / PRECAUCIÓN**

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

**For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300.**

**[SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS.]**

**[See inside for additional Precautionary Statements and complete Directions for Use.]**

**[See attached booklet for additional Precautionary Statements and complete Directions for Use.]**

**[See containers inside for additional Precautionary Statements and complete Directions for Use.]**

**[See inside booklet for First Aid, Precautionary Statements, and complete Directions for Use.]**

**EPA Reg. No.: 89167-77**

**EPA Est. No.: \_\_\_\_\_**

**Net Contents: \_\_\_\_ Gal (\_\_\_\_ L)**

**Manufactured For:**

AXION AG PRODUCTS, LLC  
1880 Fall River Drive, Suite 100  
Loveland, CO 80538

110821

FIRST AID	
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after first 5 minutes; then continue rinsing eyes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOTLINE NUMBER</b> <u>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergencies call the poison control center at 1-800- 222-1222. For non-emergency resource information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 Monday – Friday 8 am – Noon Pacific Time, (NPIC Web site: <a href="http://www.npic.orst.edu">www.npic.orst.edu</a>).</u> <del>For Chemical Spill, Leak, Fire or Exposure, call CHEMTREC 800-424-9300. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 or your poison control center at 1-800-222-1222.</del> <del>For Chemical Spill, Leak, Fire or Exposure, call CHEMTREC 800-424-9300.</del>	

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**  
**CAUTION**

Causes moderate eye irritation. Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes, or clothing.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

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

**Engineering Controls**

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

**USER SAFETY RECOMMENDATIONS**

**Users should:**

- Wash hands 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**

THIS PRODUCT IS TOXIC TO FISH. **DO NOT** apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. **DO NOT** contaminate water when disposing of equipment washwater or rinsate.

**Non-Target Organism Advisory Statement**

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

### Endangered Species Protection

This product may have effects on federally listed threatened or endangered plant species or their critical habitat. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the county or parish in which you are applying the pesticide. To determine whether your country or parish has a bulletin, and to obtain that bulletin, consult <http://www.epa.gov/espp/> or call 1-844-447-3813 no more than 6 months before using this product. Applicators must use bulletins that are in effect in the month in which the pesticide will be applied. New bulletins will generally be available from the above sources 6 months prior to their effective dates.

If endangered plant species occur in proximity to the application site, the following mitigation measures are required:

- If applied by ground, leave an untreated buffer zone of 200 feet. The product must be applied using a low boom (20 inches above the ground) and ASABE fine to medium/coarse nozzles.
- If applied by air, leave an untreated buffer zone of 170 feet. Must use straight-stream nozzles (D-6 or larger). Wind can be no more than 8 mph and release height must be 15 feet or less.

### DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling. This label must be in the possession of the user at the time of pesticide application. **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 protection.

**DO NOT** apply this product through any type of irrigation system. Axion Ag Products, LLC does not authorize the use of this product in manufacturing, processing or preparing custom blends with other product for application to turf or ornamentals. **DO NOT** apply this product in greenhouses, shadehouses or other enclosed structures. Not for commercial seed production.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.**

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, including plants, soil, or water, is: long-sleeved shirt and long pants, waterproof gloves and shoes plus socks.

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are **NOT** within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

**DO NOT enter treated areas without protective clothing until sprays have dried.**

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

**Mode of Action**

AX PENDI H2O is a meristematic inhibitor that interferes with the plant's cellular division or mitosis. This and/or other products with the meristematic inhibiting mode of action may not effectively control naturally occurring biotypes of some of the weeds listed on this label. A weed biotype is a naturally occurring plant within a given species that has a slightly different, but distinct, genetic makeup from other plants. Other herbicides with the meristematic inhibiting mode of action include other dinitroaniline herbicides, such as trifluralin. If naturally occurring meristematic inhibiting resistant biotypes are present in a field, apply a tank mix of this product and/or any other meristematic inhibiting mode of action herbicide or apply sequentially with an appropriate-registered herbicide having a different mode of action to ensure control.

**RESISTANCE MANAGEMENT**

For resistance management, this product is a Group 3 herbicide. Any weed population may contain or develop plants naturally resistant to this product and other Group 3 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance-management strategies should be followed.

**Weed Management**

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

- Rotate the use of this product or other Group 3 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in the field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact AXION AG PRODUCTS, LLC at [855-466-8428 or 844-425-8488 or other appropriate telephone number].

**Management of Resistant Biotypes**

Since the occurrence of resistant weeds cannot be determined until after product use and scientific confirmation, manufacturer is not responsible for any losses that may result from the failure of this product to control resistant weed biotypes.

The following good agronomic practices are recommended to reduce the spread of resistant biotypes:

- If a naturally occurring resistant biotype is present in your application site, this product should be tank-mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control.
- Cultural and mechanical control practices (e.g. crop rotation or tillage) may also be used as appropriate.
- Scout treated application site after herbicide applications and control escaping weeds including resistant biotypes before they set seed.
- Thoroughly clean equipment before leaving fields known to contain resistant biotypes.
- Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to these Mode of Actions have been found in your region. **DO NOT** assume that each listed weed is being controlled by multiple mechanisms of action. Co-formulated active ingredients are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredients in this product.

### **Integrated Pest (Weed) Management**

This product may be integrated into an overall weed pest management strategy whenever the use of an herbicide is required. Practices known to reduce weed development (tillage, crop competition) and herbicide use (weed scouting, proper application timing, banding) should be followed wherever possible. Consult local agricultural and weed authorities for additional IPM strategies established for your area.

## **PRODUCT INFORMATION**

**APPLICATION USE SITES – for preemergence control of grasses and certain broadleaf weed species as they germinate.**

**Turfgrass sites (golf courses, lawns, sod farms and other turf areas) and landscape ornamental maintenance areas.** Such sites include, grounds or lawns around residential and commercial establishments, multifamily dwellings, military and other institutions, parks, airports, roadsides, schools, picnic grounds, athletic fields, houses of worship, cemeteries, golf courses, prairie grass areas and sod farms.

**Grounds maintenance** in areas including parking lots, driveways and roadsides, alley ways, bike and jogging paths, vacant lots, buildings, stone gardens and gravel yards, markers and fence lines, and mulch beds. It may be used under asphalt or concrete treatments as part of a site preparation program.

**Noncropland areas** including railroad, utility, highway, and pipeline rights-of-way, highway guardrails, delineators, and sign posts, bridge abutments and approaches, utility substations, petroleum tank farms, pumping installations, storage areas, fence rows, windbreaks and shelterbelts, paved or gravel surfaces, and established wildflower plantings where weed control is desired.

**Bulb plantings, non-bearing fruit and nut tree nurseries, conifer and hardwood seedling nurseries and tree plantations** for site preparation and maintenance. Applications can be made on plant species listed on this label including trees, shrubs, groundcovers, perennials, bulbs, ornamental grasses and bedding plants.

**In and around field, liner and container ornamental production.**

## **APPLICATION INSTRUCTIONS**

AX PENDI H2O will not control established weeds. Therefore, areas to be treated should be free of established weeds at the time of treatment, or use this product together with herbicides registered for postemergence use in managed turf sites, landscape ornamentals and in other noncropland areas. Consult the labels of those herbicides for suggested treatments, rates to be used and precautions or restrictions for use in these areas. The efficacy of this product will be best if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. If AX PENDI H2O is not activated by rainfall or irrigation within 30 days, weed control may be erratic.

When applied according to label directions and under normal growing conditions, AX PENDI H2O or AX PENDI H2O tank-mix combinations will not cause crop injury. Over-application can cause crop stand loss,

crop injury, or soil residues. Uneven application can decrease weed control or cause crop injury. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Seedling diseases, cold weather, excessive moisture, high soil pH, high soil salt concentration, or drought can weaken seedlings and plants, and increase the possibility of plant damage from AX PENDI H2O.

## MIXING INSTRUCTIONS

AX PENDI H2O may be applied in a tank mix or a sequential application with other herbicides registered for use in a given crop. Refer to the companion label for weeds controlled in addition to this product alone.

When using tank mixtures or sequential applications with AX PENDI H2O, always read the companion product label(s) to determine the specific use rates by soil types, weed species, and weed or crop growth stage. In addition, follow all precautions and restrictions including state and local use restrictions that may apply to specific products. Always follow the most restrictive label.

### Mixing Instructions

1. Fill tank 1/2 to 3/4 full with clean water or liquid fertilizer and agitate. Before mixing AX PENDI H2O or AX PENDI H2O tank mixtures in liquid fertilizer, refer to appropriate label sections for directed uses in liquid fertilizer, application instructions, and compatibility determinations.

2. **AX PENDI H2O**

When using AX PENDI H2O alone, add this product to the partially filled tank while agitating and then fill the remainder of the tank with water or liquid fertilizer.

3. **AX PENDI H2O Tank Mixes**

Add the tank mixture ingredients in the order listed below before adding this product:

- a. **Wettable Powder (WP) formulations** - make a slurry of the WP in water (1:2 ratio). Add the slurry slowly into the partially filled tank while agitating.
- b. **Dry Flowable (DF)/Water Dispersible Granule (WDG) formulations** - add the granules to the partially filled tank while agitating. Make a slurry of the granules in water before adding to liquid fertilizer.
- c. **Flowable (F) formulations** - add the F formulation to the partially filled tank while agitating.
- d. Add ~~Pendi HydroCap~~ **AX PENDI H2O** to the partially filled tank while agitating.
- e. **Water Soluble Concentrate (WSC) formulations** - add the WSC formulation to the partially filled tank while agitating.
- f. **Emulsifiable Concentrate (EC) formulations** - add the EC formulation to the partially filled tank while agitating.

Fill the remainder of the tank with water or liquid fertilizer while agitating.

4. Maintain continuous agitation while adding herbicides and until spraying is completed. If the spray mixture is allowed to settle for any period of time, agitate thoroughly to resuspend the mixture before spraying is resumed.

5. **BACKPACK SPRAYER**

Begin with a clean spray tank. Fill the spray tank one-half full with clean water and add the required amount of this product. Cap sprayer and agitate to ensure mixing. Uncap sprayer and finish filling tank to desired level. Cap sprayer and agitate again. During application it is desirable to agitate the mixture on occasion to ensure mixing. If the spray mixture is allowed to settle for any period of time, agitate thoroughly before spraying is resumed.

6. **LIQUID FERTILIZERS**

Before mixing, always test small quantities using a simple jar test. Add the required amount of this product to a half filled spray tank while agitating; then add the fertilizer product. Complete filling spray tank to desired level.

## SPRAYING INSTRUCTIONS

### Ground Applications



Apply with properly calibrated ground equipment in sufficient water per acre to uniformly treat the area, using a spray pressure of 25 to 50 psi. Suggested spray volumes are 20 to 200 gpa for professional turfgrass, landscape and ornamental applications and 10 to 200 gpa for all other noncrop applications such as roadsides, utility rights-of-way or soft-residual bareground applications. Maintain continuous agitation during spraying with good mechanical or bypass agitation. Avoid overlaps that will increase rates above those listed. **DO NOT** apply when winds may cause drift.

Avoid contact of spray solution with driveways, stone, wood, or other porous surfaces. If contact occurs, rinse immediately with water to avoid staining. **DO NOT** mechanically scrub until the surface area is thoroughly rinsed. Allow treated turfgrass to dry before entering to avoid staining onto non-treated surfaces.

### **Aerial Applications**

Apply uniformly in 5 or more gallons of water per acre. Take care to minimize drift. **DO NOT** apply during periods of gusty winds or when wind conditions favor drifting. Spray drift can cause injury to sensitive crops. To avoid overlapping and possible crop injury, use a flagman or an automatic mechanical flagging unit on the aircraft.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops:

1. The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Observe more stringent state regulations. The applicator must be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information presented below.

### **Information On Droplet Size:**

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see **WIND**, **TEMPERATURE AND HUMIDITY**, and **TEMPERATURE INVERSIONS**).

### **Controlling Droplet Size**

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - **DO NOT** exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is recommended practice. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using lowdrift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

### **Boom Length**

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

### **Application Height**

**DO NOT** apply at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

## Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the upwind and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Increase swath adjustment distance with increasing drift potential (higher wind, smaller droplets, etc.).

## Wind

Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. **DO NOT** apply when wind is below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Every applicator must be familiar with local wind patterns and how they affect spray drift.

## Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

## Temperature Inversions

**DO NOT** apply during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

## Boom-less Ground Applications:

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

## Hand-held Technology Applications:

- Take precautions to minimize spray drift.

**Table 1. RESIDENTIAL, GOLF COURSE, COMMERCIAL AND OTHER NON-RESIDENTIAL TURFGRASS USES FOR PREEMERGENCE WEED CONTROL**

AX PENDI H2O <sup>1</sup>				
Turfgrass Species	Weeds	Product per 1,000 sq ft (fl oz / lb ai)	Product per acre (Pints / lb ai)	Comments
COOL SEASON GRASSES				
Bluegrass, Kentucky Fescue, Fine Fescue, Tall Ryegrass, Perennial	Barnyardgrass Crabgrass Evening Primrose Fall Panicum Foxtail Hop Clover Knotweed Oxalis <i>Poa annua</i> Prostrate Spurge Purslane	All Turf Uses:		Make a repeat application of 2.2 to 3.1 pints/A (0.86 to 1.1 fl oz/1000 sq. ft.) after 5 to 8 weeks for extended control or where heavy weed infestations are expected.
		1.1 to 1.6	3.1 to 4.2	
		Initial application before weed germination in spring.		
	Goosegrass	Residential and Sod Farm Turf Uses Only <sup>2</sup> :		Make a repeat application of 3.1 pints/Acre (1.1 fl oz/1000 sq. ft.) if the lower rate was used initially or for extended goosegrass
		1.1 to 1.6	3.1 to 4.2	
		Golf Course, Commercial and Other Non-Residential Turf Uses Only:		

AX PENDI H2O <sup>1</sup>					
Turfgrass Species	Weeds	Product per 1,000 sq ft (fl oz / lb ai)	Product per acre (Pints / lb ai)	Comments	
		1.1 to 2.3	3.1 to 6.3	control after 5 to 8 weeks.	
		Initial application before weed germination in spring.			
	Chickweed Corn Speedwell Cudweed Henbit Lawn Burweed <i>Poa annua</i>	1.1 to 1.6	3.1 to 4.2	Apply in late summer or early fall before weed germination. Apply a repeat application of 3.1 to 4.2 pints (1.1 to 1.6 fl oz/1,000 sq. ft.) after 5 to 8 weeks for extended <i>Poa annua</i> control.	
Bentgrass or established <i>Poa annua</i> <sup>3</sup> (1/2 inch height or taller)	Barnyardgrass Crabgrass Evening Primrose Fall Panicum Foxtail Hop Clover Knotweed <i>Poa annua</i> Oxalis Prostrate Spurge Purslane	<b>All Turf Uses (Non-Greens and Tees):</b>		Make a repeat application of 2.2 to 3.1 pints/Acre (0.86 to 1.1 fl oz/1000 sq. ft.) after 5 to 8 weeks for extended control or where heavy weed infestations are expected.	
		1.1	3.1		
		Initial application before weed germination in spring.			
	Goosegrass	<b>All Turf Uses (Non-Greens and Tees):</b>		Apply a repeat application of 3.1 pts/Acre (1.1 fl oz/1000 sq. ft.) for <u>e</u> xtended goosegrass control after 5 to 8 weeks.	
		1.1	3.1		
		Initial application before weed germination in spring.			
	Chickweed Corn Speedwell Cudweed Henbit Lawn Burweed <i>Poa annua</i>	<b>All Turf Uses (Non-Greens and Tees):</b>		Apply in late summer or early fall before weed germination.	
		1.1 to 1.6	3.1 to 4.2		
	<b>WARM SEASON GRASSES</b>				
	Bahigrass Bermudagrass Buffalograss Centipedegrass Fescue, Tall <i>Paspalum</i> , seashore St. Augustinegrass Zoysiagrass	Barnyardgrass Crabgrass Evening Primrose Fall Panicum Foxtail Hop Clover Knotweed <i>Poa annua</i> Oxalis Prostrate Spurge Purslane	<b>Residential and Sod Farm Turf Uses Only:</b>		Make a repeat application of 2.2 to 3.1 pints/Acre (0.86 to 1.1 fl oz/1000 sq. ft.) after 5 to 8 weeks if necessary.
1.1 to 1.6			3.1 to 4.2		
<b>Golf Course, Commercial and Other Non-Residential Turf Uses Only:</b>					
1.1 to 2.3			3.1 to 6.3		
Initial application before weed germination in spring.					
Goosegrass		<b>All Turf Uses (Non-Greens and Tees):</b>		An additional application of 3.1 pt/Acre (1.1 fl oz/1000 sq. ft.) may be made for extended goosegrass control 8 weeks after the second application.	
		1.1	3.1		
		Apply before weed germination in spring. Make a second application at 3.1 pints (1.1 fl oz/1000 sq. ft.) 5 to 8 weeks later.			
Chickweed Corn Speedwell Cudweed Henbit Lawn Burweed		<b>All Turf Uses:</b>		Apply in late summer or early fall before weed germination. Make a repeat application of 3.1 to 4.2 pints (1.1 to 1.6 fl	
		1.1 to 1.6	3.1 to 4.2		

AX PENDI H2O <sup>1</sup>				
Turfgrass Species	Weeds	Product per 1,000 sq ft (fl oz / lb ai)	Product per acre (Pints / lb ai)	Comments
	<i>Poa annua</i>			oz/1,000 sq. ft.) 5 to 8 weeks for extended <i>Poa annua</i> control.
<p>1 <b>DO NOT</b> use more than 4.2 pints (2.1 quarts or 1. Fl oz per 1000 <del>quare</del><u>square</u> feet) per acre per application on residential and sod farm turfgrass.</p> <p><b>DO NOT</b> use more than 6.3 pints (3.1 quarts or 2.4 fl oz per 1000 square feet) per acre per application on golf course turfgrass, commercial or other non-residential turfgrass.</p> <p>2 Residential is defined as turf in any residential situation as well as home lawns, schools, parks and playgrounds.</p> <p>3 <b>DO NOT</b> use on bentgrass or <i>Poa annua</i> greens or tees.</p>				

The efficacy of AX PENDI H2O is best if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. If this product is not activated by rainfall or irrigation within 30 days, weed control may be erratic.

To prevent establishment of weeds along the edges of treated area it may be necessary to overlap the spray three to six inches onto sidewalks or driveways, etc., to ensure effective application rates in these especially vulnerable sites. Where temporary discoloration of pavement is undesirable, **DO NOT** rub or scrub surface, but rinse area immediately using a heavy spray of water to avoid staining. Allow treated turfgrass to dry before entering to avoid staining nontreated surfaces.

### Turfgrass Tank Mixes

AX PENDI H2O can be mixed with postemergence herbicides to control emerged weeds in non-residential turfgrasses. For annual grass control, applications can be made with MSMA or Quinclorac or other labeled herbicides to control emerged weeds. Broadleaf weeds can be controlled using 2,4-D, 2,4-D + MCPP-p+ Dicamba and other similar products.

Before tank mixing, perform a simple jar test to insure compatibility of herbicides

Refer to manufacturers' labels for specific use directions, precautions, and limitations before tank mixing with AX PENDI H2O and follow those that are most restrictive.

### Turf Precaution

- **DO NOT** use on bentgrass or *Poa annua* greens and tees or injury may occur.

### Turfgrass Restrictions

- Use on well established turfgrass with a dense and uniform stand. If turf has been thinned or damaged due to winter injury, excessive moisture, etc., allow turf to recover before application.
- On newly planted areas, **DO NOT** apply until the turfgrass has filled in and has been mowed at least four times. Applications made to overseeded warm-season turfgrasses may cause thinning or injury of the overseeded species.
- Delay reseeding or winter overseeding of treated turfgrass for at least three (3) months following the last application of this product.
- Delay sprigging turfgrass for five (5) months after application.

### LANDSCAPE AND GROUNDS MAINTENANCE

AX PENDI H2O can be incorporated into landscape and grounds maintenance programs to provide extended preemergence control of most annual grasses and certain broadleaf weeds in areas such as mulch beds, parking areas and roadsides, fencelines and borders, and around statuary or monuments. Ensure that these areas are free of emerged weeds before application. To remove emerged weeds either cultivate or tank mix AX PENDI H2O with a postemergence product labeled for such use.

Not all ornamental species or cultivars of species have been tested for plant safety. Refer to the list of ornamental plant species found in this label. While AX PENDI H2O may be used on plant species not listed on this label, a small number of plants should be tested at the specified rate to evaluate suitability before a broad-use application is made.

Refer to **Table 2** for application rates. Avoid contact of spray solution with stone, wood, or other porous surfaces as staining may occur. Rinse surfaces immediately using a heavy spray of water to avoid staining.

#### **ORNAMENTAL PLANTINGS AND TREE PLANTATIONS INCLUDING NONCROPLAND AREAS**

Use AX PENDI H2O for grounds maintenance in noncropland areas, preemergence control of the weed species listed in and around established tree plantations for site preparation, and maintenance and conifer and hardwood seedling nurseries and pulpwood and fiber farms. This product may be used for hardwood and conifer regeneration on conservation reserve program (CRP) land. AX PENDI H2O can also be used in Christmas trees and non-bearing fruit and nut crops and vineyards established, or bulb and wildflower field plantings, and in and around established ornamentals planted in noncropland areas such as highway rights-of-way and utility substations. Refer to **Table 2** for application rates.

**Applications at planting or to established trees:** When applying at planting, it is important that slit closure be achieved to prevent AX PENDI H2O from directly contacting the tree roots or being washed into the root zone via the open slit or root stunting may occur. Refer to section on **Instructions and Restrictions in Landscape and Ornamental Plantings** before making an application.

For postemergence control of weeds, use tank-mix combinations of AX PENDI H2O plus glufosinate-sulfonate, glyphosate, sethoxydim or other labeled herbicides. Refer to approved labeling for species lists. Determine rates for the tank mix compounds from the product labels of both AX PENDI H2O and partner herbicides before use. Take care to prevent combination sprays from direct contact with desirable foliage or injury may result. This product plus diuron or simazine combinations will broaden weed control spectrum, however, use of combinations may restrict AX PENDI H2O usage in sensitive areas. Refer to manufacturers' labels for specific use directions, precautions, and limitations before use and follow those that are most restrictive.

#### **Ornamental Bulbs**

AX PENDI H2O may be applied for control of susceptible annual weeds in ornamental bulbs listed under the Perennial Section on the label (crocus, daffodil [narcissus], gladiolus, lilies, tulip, etc.). Apply this product before, during or after bulb emergence. If weeds have already germinated add a labeled postemergence herbicide to control emerged weeds.

#### **Wildflowers**

AX PENDI H2O may be applied for control of susceptible annual weeds in plantings of wildflowers listed in the Perennial section on the label. Those perennial species noted (\*Black-eyed Susan, California Poppy, Coreopsis, Oxeye Daisy, etc.) have been evaluated for plant tolerance to applications of this product at 4.2 pints (2.1 quarts) per acre. AX PENDI H2O may be applied to established perennial wildflowers before emergence of weeds or wildflowers. For wildflowers being established from seed, apply this product no sooner than 4 weeks after wildflowers have emerged but before weed germination. If weeds have already germinated, add a labeled postemergence product to control emerged weeds. Refer to all label restrictions before making an application.

Due to the diversity of species and varieties which exist in areas where wildflowers are grown, the response to AX PENDI H2O may vary greatly. Test desirable species carefully to determine if area-wide applications can be made.

#### **Non-Bearing Fruit and Nut Crops and Vineyards**

AX PENDI H2O may be applied for preemergence control of most annual grasses and certain broadleaf weeds on the following non-bearing crops:

Almond  
Apple

Citrus  
Fig

Olive  
Peach

Pistachio  
Plum

Apricot  
Cherry

Grape  
Nectarine

Pear  
Pecan

Prune  
Walnut, English

### Non-Cropland Weed Control

Use AX PENDI H2O for preemergence control of most annual grasses and certain broadleaf weeds as they germinate on noncropland areas such as railroad, utility, highway, and pipeline rights-of-way, highway guardrails, delineators, and sign posts, utility substations, petroleum tank farms, pumping installations, fence rows, storage areas, windbreaks and shelterbelts.

### Industrial (Unimproved) Turf

AX PENDI H2O will provide preemergence control of the annual grasses and broadleaf weeds listed in Weed Species Controlled section of this label that might germinate in established grasses in rights-of-way, roadsides, construction sites, parks, substations or lots. Apply before weeds germinate. A postemergence herbicide such as 2,4-D, MSMA, Quinclorac, Sethoxydim or similar products may be tank mixed to control established weeds. Apply according to label instructions for the respective products and follow the most restrictive wording.

### Total Vegetation Control

AX PENDI H2O may be tank mixed with diuron, glufosinate, glyphosate, imazapic, imazapyr, quinclorac, sethoxydim, sulfometuron or other products to provide bare ground, or total vegetation control. ~~Pendi HydroCap~~ AX PENDI H2O can be used to provide greater plant selectivity in areas where such action may be desired. Such sites might have roots of landscape vegetation, ornamentals, or desirable trees encroaching into the treated zone. Refer to tank mix partner labels regarding effects on desirable plants. **DO NOT** tank mix with diuron, imazapic or imazapyr in California.

Applications may be made to existing weeds controlled by the partner herbicide. Determine rates from the product labels before use. Follow the most restrictive label instructions.

For Kochia control, use a combination of AX PENDI H2O with imazapyr or diuron if control has been a problem for other herbicides.

### TABLE 2. APPLICATION RATES FOR WEED CONTROL IN LANDSCAPE ORNAMENTALS, TREE PLANTATIONS, AND OTHER NONCROP AREAS\*

For preemergence control of the weed species listed, apply AX PENDI H2O as follows:

Length of Control	Product per Acre	Product per 1000 Square Feet
Short Term Control (2-4 months)	2.1 Quarts	1.6 fl oz
Long Term Control (6-8 months)	4.2 Quarts	3.2 fl oz
*For all turfgrass weed control rates, refer to <b>Table 1</b> instructions. For extended weed control, repeat applications of this product can be made.		

### INSTRUCTIONS AND RESTRICTIONS

#### Landscape and Ornamental Plantings <sup>1</sup>

Site	Application Instructions and Restrictions
Landscape Plantings <sup>2</sup>	1. <b>DO NOT</b> apply to newly-transplanted ornamentals until plants have been watered and soil has been thoroughly packed and settled around roots. 2. Apply as a directed or over-the-top spray. 3. Use the lowest labeled rate when making applications to annuals. Repeat applications can be made for extended landscape weed control.
Ornamental Bulbs <sup>3</sup>	1. AX PENDI H2O may be applied to bulb species listed on the label. 2. Apply before, during or after bulb emergence, but not during bloom.



Wildflowers <sup>3</sup>	1. AX PENDI H2O may be applied in plantings of wildflowers listed on the label. Refer to specific instructions for rate and plant tolerance. 2. For wildflowers being established from seed, apply at 4 weeks after wildflowers have germinated, but before weed seed germination.
<sup>1</sup> Plant only those desirable plant species listed on this label into soil treated the previous season with AX PENDI H2O or injury may occur. <sup>2</sup> <b>DO NOT</b> treat plants grown for food or feed. <b>DO NOT</b> use treated plants for food or feed. <sup>3</sup> Before treating a large number of plants, spray a few plants and observe for 1 to 2 months for plant damage before full scale application.	

### Hand-Held Spray Equipment:

Use table 2 above to determine the amount of AX PENDI H2O to be applied per 1000 square feet, in sufficient water for thorough coverage without runoff. Calibration of backpack or other hand-held equipment will vary with each operator. Determine the amount of water needed to treat 1000 square feet before mixing the spray solution. Follow information in **MIXING INSTRUCTIONS** section of this label.

AX PENDI H2O will not control established weeds. If weeds germinate before activation of herbicide, shallow cultivate to destroy existing weeds or, where practical, remove by hand. Any necessary cultivation must be shallow. This product may be used together with herbicides registered for postemergence use (i.e. glyphosate or Finale) for the control of established weeds. **DO NOT** apply sprays containing glyphosate or Finale over the top of desirable plants. An AX PENDI H2O treatment may be followed by any registered herbicide to control weeds not listed on this label.

The efficacy of AX PENDI H2O will be best if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. Erratic weed control may result if this product is not activated by rainfall or irrigation within 30 days. The following grass and broadleaf weeds are controlled by preemergence treatments AX PENDI H2O at the above-specified rates:

Common Name	Scientific Name
<b>GRASSES CONTROLLED</b>	
Barnyardgrass	<i>Echinochloa crus-galli</i>
Bluegrass, Annual	<i>Poa annua</i>
Crabgrass	<i>Digitaria</i> spp.
Crowfootgrass	<i>Dactyloctenium aegyptium</i>
Foxtail, Giant	<i>Setaria faberi</i>
Foxtail, Green	<i>Setaria viridis</i>
Foxtail, Yellow	<i>Setaria glauca</i>
Goosegrass	<i>Eleusine indica</i>
Itchgrass	<i>Rottboellia exaltata</i>
Johnsongrass (from seed)	<i>Sorghum halepense</i>
Junglerice	<i>Echinochloa colona</i>
Lovegrass (from seed)	<i>Eragrostis</i> spp.
Panicum, Browntop	<i>Panicum fasciculatum</i>
Panicum, Fall	<i>Panicum dichotomiflorum</i>
Panicum, Texas	<i>Panicum texanum</i>
Sandbur, Field	<i>Cenchrus incertus</i>
Signalgrass	<i>Brachiaria platyphylla</i>
Sprangletop, Mexican	<i>Leptochloa uninervia</i>
Sprangletop, Red	<i>Leptochloa filiformis</i>
Witchgrass	<i>Panicum capillare</i>
Woolly Cupgrass	<i>Eriochloa villosa</i>
<b>BROADLEAF WEEDS CONTROLLED</b>	
Burweed, Lawn	<i>Soliva pterosperma</i>
Carpetweed	<i>Mollugo verticillata</i>

Common Name	Scientific Name
Chickweed, Common	<i>Stellaria media</i>
Chickweed, Mouseear	<i>Cerastium vulgatum</i>
Clover, Hop	<i>Trifolium procumbens</i>
Cudweed	<i>Gnaphalium</i> spp.
Evening primrose	<i>Oenothera biennis</i>
Fiddleneck	<i>Amsinckia intermedia</i>
Filaree.	<i>Erodium</i> spp.
Henbit	<i>Lamium amplexicaule</i>
Knotweed, prostrate	<i>Polygonum aviculare</i>
Kochia	<i>Kochia scoparia</i>
Lambsquarters	<i>Chenopodium album</i>
Pigweed	<i>Amaranthus</i> spp.
Puncturevine	<i>Tribulus terrestris</i>
Purslane	<i>Portulaca oleracea</i>
Pusley, Florida	<i>Richardia scabra</i>
Rocket, London	<i>Sisymbrium irio</i>
Shepherdspurse	<i>Capsella bursa-pastoris</i>
Smartweed, Pennsylvania	<i>Polygonum pensylvanicum</i>
Speedwell, Corn	<i>Veronica arvensis</i>
Spurge, Annual	<i>Euphorbia</i> spp.
Spurge, Prostrate	<i>Euphorbia humistrata</i>
Woodsorrel, Yellow	<i>Oxalis stricta</i>
Velvetleaf (Buttonweed)	<i>Abutilon theophrasti</i>

## COMMERCIAL ORNAMENTAL PRODUCTION

### Use Information

#### Application Use Sites

AX PENDI H2O can be used in and around field, liner and container ornamental production.

AX PENDI H2O sprays may be used around and over the top of the established plants listed in **Table 4** of this label. However, not all varieties or strains of the plant species listed have been tested. Refer to ornamental instructions and restrictions in this label before any application of this product. Unintentional consequences such as crop injury may result because of certain environmental or growing conditions, manner of use or application. Therefore, before treating a large number of plants, spray a few plants and observe for plant damage before full-scale application.

#### Application Instructions

AX PENDI H2O will not control established weeds. Therefore, ensure that areas to be treated are free of established weeds at the time of treatment, or this product may be used together with herbicides registered for postemergence use in ornamentals and vegetation control sites. Consult the labels of those herbicides for suggested treatments, rates to be used and precautions or restrictions for use in these areas.

The efficacy of AX PENDI H2O will be best if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. If this product is not activated by rainfall or irrigation within 30 days, erratic weed control may result.

Applied according to label directions and under normal growing conditions, AX PENDI H2O or AX PENDI H2O tank-mix combinations will not cause crop injury. Over-application can result in crop stand loss, crop injury, or soil residues. Uneven application can decrease weed control or cause crop injury.

Seedling diseases, cold weather, excessive moisture, high soil pH, high soil salt concentration, or drought can weaken seedlings and plants, and increase the possibility of plant damage from AX PENDI H2O.

### Spraying Instructions

Apply uniformly with properly calibrated ground equipment in suggested spray volumes of 20 to 200 gpa for ornamental applications to uniformly treat the area with a spray pressure of 25 to 50 psi. Maintain continuous agitation during spraying with good mechanical or bypass agitation. Avoid overlaps that will increase rates above those specified. Avoid application when winds may cause drift.

Avoid contact of spray solution with driveways, stone, wood, or other porous surfaces. Rinse immediately with water to avoid staining. Avoid mechanically scrubbing until surface area is thoroughly rinsed using a heavy spray of water.

### INSTRUCTIONS AND RESTRICTIONS <sup>1</sup> IN PRODUCTION ORNAMENTALS DO NOT apply in greenhouses, shadehouses or other enclosed structures.

Site	Application Instructions and Restrictions
Newly-Transplanted Field-Grown Nursery Stock <sup>2,3</sup>	<ol style="list-style-type: none"><li>1. <b>DO NOT</b> make over-the-top applications at time of field transplanting. Use shielded sprayer until plantings have been established for one (1) year or more in the field.</li><li>2. <b>DO NOT</b> apply until transplants have been watered and soil has been thoroughly packed and settled around transplants. Take care to ensure there are no cracks in the soil where AX PENDI H2O could come into contact with the roots.</li><li>3. <b>DO NOT</b> apply during bud swell, bud break or at time of first flush of new growth.</li><li>4. Direct sprays away from graphed or budded tissue on transplants at all times.</li></ol>
Newly-Transplanted Container-Grown Nursery Stock <sup>2,3</sup>	<ol style="list-style-type: none"><li>1. <b>DO NOT</b> apply until transplants have been watered and soil has been thoroughly packed and settled around transplants. Care must be taken to ensure there are no cracks in the soil where AX PENDI H2O could come into contact with the roots.</li><li>2. For container grown ornamentals, delay first application of the product to bareroot liners for two (2) weeks after transplanting.</li><li>3. <b>DO NOT</b> apply during bud swell, bud break or at time of first flush of new growth.</li><li>4. Direct sprays away from graphed or budded tissue on transplants at all times.</li></ol>
Established Container, or Field Grown Nursery Stock <sup>2, 3</sup>	<ol style="list-style-type: none"><li>1. <b>DO NOT</b> apply during bud swell, bud break or at time of first flush of new growth.</li><li>2. Apply as a directed or over-the-top spray.</li><li>3. If newly budded or graphed rootstock, make an application using a shielded sprayer.</li><li>4. Take care to ensure there are no cracks in the soil where AX PENDI H2O could come into contact with the roots.</li></ol>
Bare Ground for Container Placement	<ol style="list-style-type: none"><li>1. Apply to soil then water in (including mulch, gravel, wood chips, or other permeable base), replace containerized ornamentals onto pad.</li></ol>
<p><sup>1</sup> Plant only those desirable plant species listed on this label into soil treated the previous season with AX PENDI H2O or injury may occur.</p> <p><sup>2</sup> Before treating a large number of plants, spray a few plants and observe for 1 to 2 months for plant damage before full_scale application.</p> <p><sup>3</sup> <b>DO NOT</b> treat plants grown for food or feed. <b>DO NOT</b> use treated plants for food or feed.</p>	

Refer to **Table 3** for application rates.

### Ornamental Tank Mixes

Emerged weeds in ornamentals can be controlled using tank mixes containing fluazifop-p-butyl, glufosinate, glyphosate, isoxaben, sethoxydim, simazine and other similar products. **DO NOT** apply sprays containing glufosinate or glyphosate over the top of ornamental plants.

Before tank mixing, perform a simple jar test to insure compatibility of herbicides.

Refer to manufacturers' labels for specific use directions, precautions, and limitations before tank mixing with AX PENDI H2O and follow those that are most restrictive.

### Christmas Tree Plantations

AX PENDI H2O may be used in and around Christmas tree plantations. This product may be applied at planting or to established trees. When making an application at planting, it is important that slit closure be achieved to prevent AX PENDI H2O from directly contacting the tree roots or being washed into the root zone via the open slit or root stunting may occur.

For postemergence control of weeds, use tank-mix combinations of AX PENDI H2O plus VANTAGE, Roundup, Finale, or other labeled herbicides. Refer to approved labeling for species information. Determine rates for the tank mix compounds from the product labels of both AX PENDI H2O and partner herbicides before use. Precaution must be exercised to prevent combination sprays from direct contact with desirable foliage or injury may result. This product plus diuron or simazine combinations will broaden weed control spectrum; however, use of combinations may restrict AX PENDI H2O usage in sensitive areas. Refer to manufacturers' labels for specific use directions, precautions, and limitations before use and follow those that are most restrictive. Refer to **Table 3** for application rates.

### VEGETATION CONTROL IN ORNAMENTAL PRODUCTION

AX PENDI H2O may be used for preemergence control of most annual grasses and certain broadleaf weeds as they germinate on noncropland areas such as sign posts, pumping installations, fence rows, storage areas, and windbreaks and shelterbelts. AX PENDI H2O may be tank mixed with diuron, glufosinate, glyphosate, sethoxydim or other products to provide bare ground or total vegetation control, or can be used to provide greater plant selectivity in areas where such action may be desired. Such sites might have roots of landscape vegetation, ornamentals, or desirable trees encroaching into the treated zone. Refer to tank mix partner labels regarding effects on desirable plants. Applications may be made to existing weeds controlled by the partner herbicide. Determine rates from the product labels before use. Follow the most restrictive label instructions. Refer to **Table 3** for application rates.

**Table 3. APPLICATION RATES FOR WEED CONTROL IN PRODUCTION ORNAMENTALS\***

For preemergence control of the weed species listed, apply AX PENDI H2O at the following rates:

Length of Control	Product per Acre	Product per 1000 Square Feet
Short Term Control (2-4 months)	2.1 Quarts	1.6 fl oz
Long Term Control (6-8 months)	4.2 Quarts	3.2 fl oz
* For extended weed control, repeat applications of this product can be made.		

### Hand-Held Spray Equipment

Use the table above to determine the amount of AX PENDI H2O to be applied per 1000 square feet. The amount of water used for the application is not critical but should be sufficient for thorough coverage without runoff. Calibration of backpack or other hand-held equipment will vary with each operator. Determine the amount of water needed to treat 1000 square feet before mixing the spray solution. Follow information in **MIXING INSTRUCTIONS** section of this label.

AX PENDI H2O will not control established weeds. If weeds germinate before activation of herbicide, shallow cultivate to destroy existing weeds or, where practical, remove by hand. Any cultivation must be shallow. This product may be used together with herbicides registered for postemergence use (i.e. glufosinate or ~~glyphosate~~glyphosate) for the control of established weeds. **DO NOT** apply sprays

glufosinate or ~~glyphosate~~ glyphosate over the top of desirable plants. An AX PENDI H2O treatment may be followed by any registered herbicide to control weeds not listed on this label.

The efficacy of AX PENDI H2O will be improved if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. Erratic weed control may result if this ~~product~~ product is not activated by rainfall or irrigation within 30 days.

The following grass and broadleaf weeds are controlled by preemergence treatments of AX PENDI H2O at the above-specified rates:

Common Name	Scientific Name
<b>GRASSES CONTROLLED</b>	
Barnyardgrass	<i>Echinochloa crus-galli</i>
Bluegrass, Annual	<i>Poa annua</i>
Crabgrass	<i>Digitaria</i> spp.
Crowfootgrass	<i>Dactyloctenium aegyptium</i>
Foxtail, Giant	<i>Setaria faberi</i>
Foxtail, Green	<i>Setaria viridis</i>
Foxtail, Yellow	<i>Setaria glauca</i>
Goosegrass	<i>Eleusine indica</i>
Itchgrass	<i>Rottboellia exaltata</i>
Johnsongrass (from seed)	<i>Sorghum halepense</i>
Junglerice	<i>Echinochloa colona</i>
Lovegrass (from seed)	<i>Eragrostis</i> spp.
Panicum, Browntop	<i>Panicum fasciculatum</i>
Panicum, Fall	<i>Panicum dichotomiflorum</i>
Panicum, Texas	<i>Panicum texanum</i>
Sandbur, Field	<i>Cenchrus incertus</i>
Signalgrass	<i>Brachiaria platyphylla</i>
Sprangletop, Mexican	<i>Leptochloa uninervia</i>
Sprangletop, Red	<i>Leptochloa filiformis</i>
Witchgrass	<i>Panicum capillare</i>
Woolly Cupgrass	<i>Eriochloa villosa</i>
<b>BROADLEAF WEEDS CONTROLLED</b>	
Burweed, Lawn	<i>Soliva pterosperma</i>
Carpetweed	<i>Mollugo verticillata</i>
Chickweed, Common	<i>Stellaria media</i>
Chickweed, Mouseear	<i>Cerastium vulgatum</i>
Clover, Hop	<i>Trifolium procumbens</i>
Cudweed	<i>Gnaphalium</i> spp.
Evening primrose	<i>Oenothera biennis</i>
Fiddleneck	<i>Amsinckia intermedia</i>
Filaree.	<i>Erodium</i> spp.
Henbit	<i>Lamium amplexicaule</i>
Knotweed, prostrate	<i>Polygonum aviculare</i>
Kochia	<i>Kochia scoparia</i>
Lambsquarters	<i>Chenopodium album</i>
Pigweed	<i>Amaranthus</i> spp.
Puncturevine	<i>Tribulus terrestris</i>
Purslane	<i>Portulaca oleracea</i>
Pusley, Florida	<i>Richardia scabra</i>
Rocket, London	<i>Sisymbrium irio</i>
Shepherdspurse	<i>Capsella bursa-pastoris</i>
Smartweed, Pennsylvania	<i>Polygonum pensylvanicum</i>

Common Name	Scientific Name
Speedwell, Corn	<i>Veronica arvensis</i>
Spurge, Annual	<i>Euphorbia</i> spp.
Spurge, Prostrate	<i>Euphorbia humistrata</i>
Woodsorrel, Yellow	<i>Oxalis stricta</i>
Velvetleaf (Buttonweed)	<i>Abutilon theophrasti</i>

**Table 4. Ornamental Species**

AX PENDI H2O sprays may be used around and over the top of the established plants listed below. Refer to Ornamental Instructions and Restrictions before application. Refer to **Table 3** for application rates.

Common Name	Scientific Name
<b>TREES</b>	
Alder, European Black	<i>Alnus glutinosa</i>
Apple	<i>Malus</i> spp.
Arborvitae, American	<i>Thuja occidentalis</i>
Arbutus	<i>Arbutus</i> spp.
Ash, Red	<i>Fraxinus pennsylvanica</i>
Ash, White	<i>Fraxinus americana</i>
Aspen, Bigtooth	<i>Populus grandidentata</i>
Aspen, Quaking	<i>Populus tremuloides</i>
Basswood	<i>Tilia</i> spp.
Birch, European Weeping	<i>Betula pendula</i>
Birch, River	<i>Betula nigra</i>
Buckeye, Red	<i>Aesculus pavia</i>
Cedar, White	<i>Thuja occidentalis</i>
Chamaecyparis, Boulevard	<i>Chamaecyparis pisifera</i>
Cherry, Black	<i>Prunus serotina</i>
Cherry, Choke	<i>Prunus virginiana</i>
Cherry, Kwanzan	<i>Prunus serrulata</i>
Cherry, Nanking	<i>Prunus tomentosa</i>
Cottonwood	<i>Populus deltoides</i>
Crabapple	<i>Malus</i> spp.
Crepe Myrtle	<i>Lagerstroemia indica</i>
Cryptomeria, Japanese Cedar	<i>Cryptomeria japonica</i>
Cypress, Bald	<i>Taxodium distichum</i>
Cypress, Leyland	<i>Cupressocyparis leylandii</i>
Dogwood, Flowering	<i>Cornus florida</i>
Dogwood, Korean	<i>Cornus kousa</i>
Dogwood, Silky	<i>Cornus amomum</i>
Dogwood, Shrub	<i>Cornus</i> spp.
Elm	<i>Ulmus japonica</i>
Elm, Winged	<i>Ulmus alata</i>
Eucalyptus (Silver-dollar) tree	<i>Eucalyptus cinerea</i>
Fir, Balsam	<i>Abies balsamiae</i>
Fir, Douglas	<i>Pseudotsuga menziesii</i>
Fir, Fraser	<i>Abies fraseri</i>
Fir, White	<i>Abies concolor</i>
Franklinia	<i>Franklinia</i> spp.
Fringe tree	<i>Chlonanthus retusus</i>
Ginkgo	<i>Ginkgo biloba</i>
Gum, Black	<i>Nyssa sylvatica</i>
Gum, Sour	<i>Nyssa sylvatica</i>
Haw, Black	<i>Viburnum prunifolium</i>



Common Name	Scientific Name
Hawthorn	<i>Crataegus</i> spp.
Hemlock, Canada	<i>Tsuga canadensis</i>
Hemlock, Eastern	<i>Tsuga canadensis</i>
Holly, American	<i>Ilex opaca</i>
Honeylocust	<i>Gleditsia triacanthos</i>
Lilac, Common	<i>Syringa vulgaris</i>
Lilac, Japanese Tree	<i>Syringa reticulata</i>
Linden	<i>Tilia</i> spp.
Magnolia, Saucer	<i>Magnolia soulangiana</i>
Magnolia, Southern	<i>Magnolia grandiflora</i>
Magnolia, Star	<i>Magnolia stellata</i>
Maidenhair Tree	<i>Ginkgo biloba</i>
Maple, Norway	<i>Acer platanoides</i>
Maple, Japanese	<i>Acer palmatum</i>
Maple, Red	<i>Acer rubrum</i>
Nannyberry, Rusty	<i>Viburnum rufidulum</i>
Oak, Chinquapin	<i>Quercus muehlenbergii</i>
Oak, Live	<i>Quercus virginiana</i>
Oak, Pin	<i>Quercus palustris</i>
Oak, Red	<i>Quercus rubra</i>
Oak, Swamp Chestnut	<i>Quercus michauxii</i>
Oak, Water	<i>Quercus nigra</i>
Oak, White	<i>Quercus alba</i>
Oak, Willow	<i>Quercus phellos</i>
Olive	<i>Olea europaea</i>
Palm, Date	<i>Phoenix</i> spp.
Palm, Fan	<i>Washingtonia</i> spp.
Palm, Pindo	<i>Butia</i> spp.
Palm, Washington	<i>Washingtonia</i> spp.
Peach	<i>Prunus persica</i>
Pear, Bradford	<i>Pyrus calleryana</i> 'Bradford'
Pecan	<i>Pecan</i> <i>Carya illinoensis</i>
Pine, Austrian	<i>Pinus nigra</i>
Pine, Italian Stone	<i>Pinus pinea</i>
Pine, Loblolly	<i>Pinus taeda</i>
Pine, Monterey	<i>Pinus radiata</i>
Pine, Red	<i>Pinus resinosa</i>
Pine, Scotch	<i>Pinus sylvestris</i>
Pine, Virginia	<i>Pinus virginiana</i>
Pine, White	<i>Pinus strobus</i>
Plum, Purple Leaf	<i>Prunus cerasifera</i>
Poplar, Black	<i>Populus nigra</i>
Redcedar, Eastern	<i>Juniperus virginiana</i>
Redcedar, Western	<i>Thuja plicata</i>
Red Ironbark	<i>Eucalyptus sideroxylon</i> 'Rosea'
Redwood, Dawn	<i>Metasequoia glyptostroboides</i>
Sequoia, Giant	<i>Sequoiadendron giganteum</i>
Serviceberry	<i>Amelanchier laevis</i>
Sourwood	<i>Oxydendrum arboreum</i>
Spruce, Colorado Blue	<i>Picea pungens</i>
Spruce, Dwarf Albert	<i>Picea glauca</i> 'Albertiana'
Spruce, Norway	<i>Picea abies</i>

Common Name	Scientific Name
Spruce, White	<i>Picea glauca</i>
Sweetgum	<i>Liquidambar styraciflua</i>
Sycamore	<i>Plantus occidentalis</i>
Trachycarpus	<i>Trachycarpus</i> spp.
Tulip tree	<i>Liriodendron tulipifera</i>
Walnut, Black	<i>Juglans nigra</i>
Willow, Weeping	<i>Salix babylonica</i>
Yellowwood	<i>Cladrastis lutea</i>
<b>SHURBS</b>	
Abelia, Glossy	<i>Abelia grandiflora</i>
Alder, Witch	<i>Fothergilla gardenii</i>
Aucuba, Gold	<i>Aucuba japonica</i>
Azalea	<i>Rhododendron</i> sp.
Bamboo, Heavenly	<i>Nandina domestica</i>
Barberry	<i>Berberis gladywensis</i>
Barberry, Japanese	<i>Berberis thunbergii</i>
Blue Indigo Bush	<i>Dalea gregii</i>
Bottlebrush, Lemon	<i>Callistemon citrinus</i>
Boxwood, Common	<i>Buxus sempervirens</i>
Boxwood, Japanese	<i>Buxus microphylla</i>
Brittlebush	<i>Encelia farinosa</i>
Buttonbush	<i>Cephalanthus occidentalis</i>
Camellia	<i>Camellia japonica</i>
Cape Jasmine	<i>Gardenia jasminoides</i>
Cassia, Feathery	<i>Cassia artemisioides</i>
Cordyline	<i>Cordyline</i> spp.
Correa	<i>Correa</i> spp.
Cotoneaster	<i>Cotoneaster apiculatus</i>
Cotoneaster, Bayberry	<i>Cotoneaster dammeri</i>
Cotoneaster, Rock	<i>Cotoneaster horizontais</i>
Cypress, Italian	<i>Cupressus sempervirens</i>
Cypress, Leyland	<i>Cupressocyparis leylandii</i>
Deutzia, Slender	<i>Deutzia gracilis</i>
Dogwood, Red Twig	<i>Cornus sericea</i>
Elaeagnus	<i>Elaeagnus ebbingei</i>
Escallonia	<i>Escallonia fradesii</i>
Euonymus	<i>Euonymus fortunei</i>
Euonymus, Golden	<i>Euonymus japonica</i>
Euonymus, Winged	<i>Euonymus alata</i>
Firethorn	<i>Pyracantha coccinea</i>
Forsythia, Border	<i>Forsythia intermedia</i>
Fragrant Olive	<i>Osmanthus fragrans</i>
Fuschia, California	<i>Zauschneria californica</i>
Gardenia	<i>Gardenia jasminoides</i>
Hawthorne, Indian	<i>Raphiolepis indica</i>
Hibiscus	<i>Hibiscus syriacus</i>
Holly, Chinese	<i>Ilex cornuta</i>
Holly, Japanese	<i>Ilex crenata</i>
Holly, Fosters	<i>Ilex attenuata</i> 'Fosteri'
Holly, Savannah	<i>Ilex attenuata</i>
Holly, Yaupon	<i>Ilex vomitoria</i>
Honeysuckle, Bush	<i>Diervilla lonicera</i>

Common Name	Scientific Name
Hopseed Bush	<i>Dodonaea viscosa</i>
Hopbush	<i>Dodonaea viscosa</i>
Hydrangea	<i>Hydrangea macrophylla</i>
Juniper	<i>Juniperus</i> spp.
Juniper, Chinese	<i>Juniperus chinensis</i> . <i>pfitzer</i>
Juniper, Shore	<i>Juniperus conferta</i>
Juniper, Trailing	<i>Juniperus horizontalis</i>
Laurel, Cherry	<i>Prunus laurocerasus</i>
Laurel, Mountain	<i>Kalmia latifolia</i>
Laurel, Otto Luyken	<i>Prunus laurocerasus</i>
Laurel, Schipka	<i>Prunus schipkanensis</i>
Laurustinus	<i>Viburnum tinus</i>
Lavender, English	<i>Lavandula angustifolia</i>
Leucothoe	<i>Leucothoe fontanesiana</i>
Leucothoe, Coast	<i>Leucothoe axillaris</i>
Lilac, Cut-leaf	<i>Syringa laciniata</i>
Lily-of-the-Nile	<i>Agapanthus africanus</i>
Mahonia	<i>Mahonia aquifolium</i>
Mock Orange	<i>Pittosporum tobira</i>
Myrtle, Compact	<i>Myrtus communis</i>
Myrtle, Wax	<i>Myrica cerifera</i>
Nandina	<i>Nandina domestica</i>
Oleander	<i>Nerium oleander</i>
Oregon Grape	<i>Mahonia aquifolium</i>
Osmanthus	<i>Osmanthus fragrans</i>
Palm, European Fan	<i>Chamaerops humilis</i>
Palm, Mediterranean Fan	<i>Chamaerops</i> spp.
Phlox, Prickly	<i>Leptodactylon californicum</i>
Photinia, Fraser	<i>Photinia x Fraseri</i>
Pieris, Japanese	<i>Pieris japonica</i>
Pine, Mugo	<i>Pinus mugo</i>
Plum, Natal	<i>Carissa grandiflora</i>
Privet, California	<i>ovalifolium</i>
Privet, Glossy	<i>Ligustrum lucidum</i>
Privet, Variegated	<i>Ligustrum sinensis</i>
Photinia, Fraser	<i>Photinia x Fraseri</i>
Privet, Waxleaf	<i>Ligustrum japonicum</i>
Pyracantha	<i>Pyracantha coccinea</i>
Quince, Flowering	<i>Chaenomeles japonica</i>
Ranger, Texas	<i>Leucophyllum frutescens</i>
Redroot	<i>Ceanothus</i> spp.
Rhododendron	<i>Rhododendron</i> spp.
Robira	<i>Pittosporum tobira</i>
Rose	<i>Rosa</i> spp.
Spice Plant	<i>Illicium parviflorum</i>
Spiraea	<i>Spiraea vanhouttei</i>
Spiraea, Anthony Waterer	<i>Spiraea X bumalda</i>
Spiraea, Japanese	<i>Spiraea japonica</i>
Sweet Bay	<i>Laurus nobilis</i>
Trumpet Bush	<i>Tecoma stans</i>
Verbena, Lemon	<i>Aloysia triphylla</i>
Viburnum	<i>Viburnum suspensum</i>

Common Name	Scientific Name
Vitex	<i>Vitex</i> spp.
Weigela	<i>Weigela florida</i>
Wild Lilac	<i>Ceanothus</i> spp.
Wisteria	<i>Wisteria</i> spp.
Xylosma	<i>Xylosma congestum</i>
Yellowbells	<i>Tecoma stans</i>
Yew*	<i>Taxus media</i>
Yew, Japanese*	<i>Taxus cuspidata</i>
Yew, Southern*	<i>Podocarpus macrophyllus</i>
Yucca, Adam's Needle	<i>Yucca filamentosa</i>
Yucca, Weeping	<i>Yucca pendula</i>
* <b>DO NOT</b> apply AX PENDI H2O during spring growth or injury to terminals may occur.	
<b>GROUND COVERS</b>	
Ajuga	<i>Ajuga reptans</i>
Baby Sun Rose	<i>Aptenia cordifolia</i>
Beach Strawberry	<i>Fragaria chiloensis</i>
Capeweed	<i>Arctotheca calendula</i>
Cinquefoil, Spring	<i>Potentilla verna</i>
Coyotebrush, Dwarf	<i>Baccharis pitularis</i>
Daisy, Trailing African	<i>Osteospermum fruticosum</i>
Dymondia	<i>Dymondia margaretae</i>
Gazania	<i>Gazania splendens</i>
Iceplant, Large Lea	<i>Carpobrotus edulis</i>
Ivy, English	<i>Hedera helix</i>
Ivy, Geranium	<i>Pelargonium peltatum</i>
Miscanthus	<i>Miscanthus</i> spp.
Mondograss	<i>Ophiopogon japonica</i>
Morning glory	<i>Convolvulus</i> spp.
Myoporum	<i>Myoporum parvifloium</i>
Pachysandra	<i>Pachysandra terminalis</i>
Potentilla	<i>Potentilla fruticosa</i>
Red Apple	<i>Aptenia cordifolia</i>
Rosemary	<i>Rosemarinus officinalis</i>
Rose-Of-Sharon	<i>Hypericum calycinum</i>
Sand Strawberry	<i>Fragaria chiloensis</i>
Sedum	<i>Sedum spurium</i>
St. Johnswort, Creeping	<i>Hypericum calycinum</i>
Stonecrop	<i>Sedum spurium</i>
Verbena, Peruvian	<i>Verbena peruviana</i>
Vervain	<i>Verbena peruviana</i>
Vetch, Crown	<i>Vicia sativa</i>
Vinca	<i>Vinca minor</i>
Wintercreeper	<i>Euonymous fortunei</i>
<b>PERENNIALS</b>	
Acacia	<i>Acacia redolens</i>
Asparagus	<i>Asparagus</i> spp.
Aster, New York	<i>Aster novi-belgii</i>
Aster, Stokes	<i>Stokesia laevis</i>
Astilbe (False Spirea)	<i>Astilbe</i> spp.
Avens	<i>Geum triflorum</i>
Baby's Breath	<i>Gypsophila elegans</i>
Baby's Breath	<i>Gypsophila paniculata</i>

Common Name	Scientific Name
Beard-Tongue	<i>Penstemon</i> spp.
Bellflower	<i>Campanula</i> spp.
Bellflower, Willow	<i>Campanula persicifolia</i>
Bird of Paradise	<i>Caesalpinia pulcherrima</i>
Black-eyed Susan†	<i>Rudbeckia hirta</i>
Blanket Flower†	<i>Gaillardia aristata</i>
Blanket Flower†	<i>Gaillardia x grandiflora</i>
Bleeding Heart	<i>Dicentra spectabilis</i>
Butterfly Weed	<i>Asclepias tuberosa</i>
California Poppy	<i>Eschscholzia californica</i>
Calla Lily	<i>Zantedeschia aethiopica</i>
Canna, Common Garden	<i>Canna generalis</i> 'Lucifer'
Carex	<i>Carex</i> spp.
Chincherinchee	<i>Ornithogalum thyrsoides</i>
Clover, Crimson†	<i>Trifolium incarnatum</i>
Columbine	<i>Aquilegia</i> 'McCana Giant'
Columbine	<i>Aquilegia x hybrida</i>
Coreopsis (tickseed)†	<i>Coreopsis lanceolata</i>
Crinum Lily	<i>Crinum</i> spp.
Crocus	<i>Crocus</i> spp.
Daffodil	<i>Narcissus</i> spp.
Daylily	<i>Hemerocallis</i> spp.
Fairy Duster	<i>Calliandra eriophylla</i>
Fern, Asparagus	<i>Asparagus officinalis</i>
Fern, Boston	<i>Nephrolepis exaltata</i>
Fern, Hay-scented	<i>Dennstaedtia punctilobula</i>
Fern, Leatherleaf*	<i>Rumohra adiantiformis</i>
Fortnight Lily	<i>Moraea</i> spp.
Foxglove	<i>Digitalis purpurea</i>
Freesia	<i>Freesia x hybrida</i>
Gaillardia	<i>Gaillardia pulchella</i>
Geum	<i>Geum</i> spp.
Gladiolus	<i>Gladiolus</i> spp.
Heather, Dwarf	<i>Calluna vulgaris</i>
Hosta	<i>Hosta</i> spp.
Indian Blanket†	<i>Gaillardia pulchella</i>
Iris, Japanese	<i>Iris kaemphera</i>
Lantana, Weeping	<i>Lantana montevidensis</i>
Leopards Bane	<i>Doronicum cordatum</i>
Lily	<i>Lillium</i> spp.
Liriope, Big Blue	<i>Liriope muscari</i>
Liriope, Creeping	<i>Liriope spicata</i>
Liriope, Variegated	<i>Liriope muscari</i>
Moonbeam	<i>Coreopsis verticillata</i>
Montbretia	<i>Crocasmia crocosmiiflora</i>
Mugwort, Western	<i>Artemesia ludoviciana</i>
Nightshade	<i>Solanum</i> spp.
Orchid, Peacock	<i>Acidanthera bicolor</i>
Oxeye Daisy†	<i>Chrysanthemum leucanthemum</i>
Palm Areca	<i>Chysalidocarpus lutescens</i>
Palm, Pygmy Date	<i>Phoenix roebelenae</i>
Palm, Washington	<i>Washington robusta</i>

Common Name	Scientific Name
Peony, Chinese	<i>Paeonia lactiflora</i>
Purple Coneflower†	<i>Echinacea purpurea</i>
Purple Gay-feather	<i>Liatris pycnostachys</i>
Purple Loosestrife	<i>Lythrum virgatum</i>
Rodgersia	<i>Rodgersia henricie</i>
Rosemary	<i>Rosmarinus officinalis</i>
Sedge	<i>Carex</i> spp.
Shasta Daisy†	<i>Chrysanthemum x superbum</i>
Statice	<i>Limonium latifolia</i>
Statice, German	<i>Goniolimon tartaricum</i>
Sweet Flag	<i>Acorus calamus</i>
Tickseed†	<i>Coreopsis lanceolata</i>
Texas Bluebonnet	<i>Lupinus texensis</i>
Tulip	<i>Tulipa</i> spp.
Wonder Flower	<i>Ornithogalum thyrsoides</i>
Yarrow†	<i>Achillea millefolium</i>
Zephyr Lily	<i>Zephyranthes</i> spp.
* Applications of AX PENDI H2O to immature ferns (during periods of new growth of fronds) may result in some injury.	
† These plants have shown tolerance to AX PENDI H2O applications of 4.2 pints (2.1 quarts) in wildflower plantings established from seed.	
<b>ORNAMENTAL GRASSES</b>	
Beach Grass	<i>Ammophila breviligulata</i>
Fescue, Blue	<i>Festuca glauca</i>
Fescue, Sheep	<i>Festuca ovina</i>
Fountain Grass	<i>Pennisetum setaceum</i>
Pampas Grass	<i>Cortaderia selloana</i>
Reed Canary Grass	<i>Phalaris arundinacea</i>
Reed, Giant	<i>Arundo</i> spp.
Ribbon Grass	<i>Phalaris arundinacea</i>
Tufted Hair Grass	<i>Deschampsia caespitosa</i>
<b>BEDDING PLANTS</b>	
Ageratum	<i>Ageratum houstonianum</i>
Alyssum*	<i>Alyssum saxatile</i>
Anemone, Poppy-flowered	<i>Anemone coronaria</i>
Artemesia	<i>Artemesia</i> spp.
Balloonflower	<i>Platycodon grandiflorum</i>
Cabbage, Ornamental	<i>Brassica oleracea</i>
Caladium	<i>Caladium</i> spp.
Cast-Iron Plant	<i>Aspidistra elatior</i>
China Aster*	<i>Callistephus chinensis</i>
Crocsmia, Montebretia	<i>Crocsmia x crocosmiiflora</i>
Dahlia*	<i>Dahlia</i> spp.
Dianthus	<i>Dianthus barbatus</i>
Dusty Miller	<i>Senecio cineraria</i>
Gayfeather	<i>Liatris</i> spp.
Gazania, Treasure Flower	<i>Gazania rigens</i>
Gazania, Trailing	<i>Gazania rigens</i>
Gloxinia	<i>Gloxinia simningia</i>
Kale, Ornamenta	<i>Brassica napus</i>
Marigold, African	<i>Tagetes erecta</i>
Moss Rose*	<i>Portulaca grandiflora</i>
Mum, Garden	<i>Chrysanthemum</i> spp.



Common Name	Scientific Name
Periwinkle*	<i>Vinca major</i>
Periwinkle, Rose	<i>Catharanthus roseus</i>
Petunia*	<i>Petunia</i> spp.
Plumosa Cockscomb	<i>Celosia cristata</i>
Portulaca*	<i>Portulaca grandiflora</i>
Salvia*	<i>Salvia splendens</i>
Snapdragon	<i>Antirrhinum majus</i>
Statice*	<i>Limonium</i> spp.
Sweet William	<i>Dianthus barbatus</i>
Vinca*	<i>Vinca major</i>
* <b>DO NOT</b> apply AX PENDI H2O sooner than four weeks after transplanting for these annuals. Use the lower labeled rate.	

AX PENDI H2O may be used on plant species not listed on this label. Determine the suitability for such uses by treating a small number of such plants at the specified rate. Evaluate treated plants 1 to 2 months following treatment for possible injury.

### STORAGE AND DISPOSAL

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

#### Pesticide Storage

This product freezes around 15° F and is stable under conditions of freezing and thawing. Product that has been frozen should be thawed and recirculated prior to use. In case of spill or leak on floor or paved surfaces, soak up with sand, earth, or synthetic absorbent. Remove to chemical waste area.

#### Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. Open dumping is prohibited. If these wastes cannot be disposed of by use according to label directions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### Container Handling

**NONREFILLABLE CONTAINER (EQUAL TO OR LESS THAN 5 GALLONS): 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. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**NONREFILLABLE CONTAINER (GREATER THAN 5 GALLONS): DO NOT** reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Pressure rinse as follows (all sizes):** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration, or by other procedures allowed by state and local authorities.

**REFILLABLE CONTAINER:** Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person

disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. After triple rinsing is complete, and the container is not suitable for refilling or reconditioning, offer the container 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.

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

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of AXION AG PRODUCTS, LLC or Seller, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold AXION AG PRODUCTS, LLC and Seller harmless for any claims relating to such factors.

AXION AG PRODUCTS, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or AXION AG PRODUCTS, LLC, and TO THE EXTENT CONSISTENT WITH APPLICABLE LAW Buyer and User assume the risk of any such use. AXION AG PRODUCTS, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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